APEX


# MEMORANDUM

**Date:** June 26, 2024

**To:** Nancy Sawka, RG, Sr. Project Manager, Oregon Department of Environmental Quality (DEQ)

**From:** Andrew Bisbee, RG, Sr. Project Manager, Apex Companies, LLC (Apex)

**Cc:** Mary Camarata, Regional Solutions Coordinator, DEQ
Mike Stevens, PE, Principal Engineer, Apex
Tess Chadil, Sr. Project Manager, Apex

**Re:** King Salvage (Former) Site, April 2024 Supplemental Site Investigation

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## SUPPLEMENTAL SITE INVESTIGATION – APRIL 2024

In April 2024, Apex Companies, LLC (Apex) completed the supplemental site investigation (SSI) direct-push soil sampling at the former King Salvage site (ECSI #2751) located at 109 King Place in Toledo, Oregon (the Site; Figures 1 and 2). The scope of work was performed in accordance with the Apex SSI Work Plan (Work Plan, dated October 24, 2023). The scope of the Work Plan included collecting and analyzing additional shallow subsurface soil and streambed sediment samples with the purpose of refining previous incremental sampling data that was collected by Stantec Consulting Services, Inc. (Stantec) as summarized in the *Stantec Phase II Environmental Site Assessment Report* (dated May 6, 2022) and follow-up test pit exploration activities conducted by Apex as summarized in the *Apex Test Pit Investigation Summary* (dated August 10, 2022). The focus of the SSI was to understand the source, magnitude, and extent of contamination that will be addressed in the revised Analysis of Brownfield Cleanup Alternatives (ABCA). This memorandum was prepared for the Oregon Department of Environmental Quality (DEQ) under Task 3 of Task Order 066-23-14. The following sections summarize the recent SSI scope of work performed and laboratory analytical soil data results.

## CONCEPTUAL SITE MODEL

A conceptual site model (CSM) considers physical properties, the nature and extent of contamination, and potential exposure pathways under current and potential future uses. This section presents a CSM for the Site based on the information available at the time of this report.

**Topography and Geology.** According to the United States Geological Survey (USGS) 7.5 Minute Quadrangle Toledo North 44123-F8, the Site gently slopes to the southwest towards Beaver Creek. A tributary to Beaver Creek is located on-site, flowing north-south. Beaver Creek flows into Depot Slough, which flows into the Yaquina River approximately 4 miles south of the Site, just south of Toledo, Oregon.

Site elevations range from approximately 55 feet above mean sea level (msl) to 20 feet above msl. The Site is located within the Coast Range geologic province, which consists of a heavily vegetated, elongated province initially

formed by a volcanic island chain that collided with North America approximately 50 million years ago. The Site is underlain by Oligocene-aged marine sedimentary rocks of the Yaquina Formation (USGS, 1976).

The Site is located between the Cascade Range and the Pacific Ocean. Principal features of the topography of the region are rounded hills and narrow winding coastal valleys, with coastal plains broken at points by rugged headlands. The Site is located within a ravine which terminates at Highway 20 to the south and has an approximate floor elevation of 20 feet above msl at its lowest point. The Site is bordered to the north, east, and west by forested terrain with elevations exceeding 300 feet above msl (TechLaw, 2009).

Hydrogeology. The Lincoln County coastal area is underlain by tertiary volcanic and sedimentary rocks of low permeability that provide little yield in water wells. Quaternary marine terrace deposits of semi-consolidated sand border the western portion of the county and are typically the most productive aquifers. Groundwater flow direction is generally gravity-driven towards surface water within the County (USGS, 1977). Fracturing may form localized permeable zones with well yields reaching up to 100 gallons per minute. Water-bearing characteristics of the aquifer underlying the Site are highly variable (USGS, 1983).

According to the Removal Evaluation Report (TechLaw, 2009), groundwater has been observed to discharge in several surficial seeps at the Site from the surrounding valley embankments, including the area above the automobile crusher.

Contaminants of Interest. According to the Phase II Site Investigation Report prepared by Stantec (May 2022) and the SSI completed by Apex (Apex, 2023), the contaminants of interest (COI) include total petroleum hydrocarbons (TPH) and semi-volatile organic compounds (SVOCs), specifically bis(2-ethylhexl)-phthalate, total high-molecular-weight polycyclic aromatic hydrocarbons (HPAH), lead, mercury, and dioxins and furans (DF).

Nature and Extent of Contamination. Because of the waste removal activities through February 2022, most of the bulky waste on-site has been removed. A total of 117.25 tons of miscellaneous solid waste, 80.01 tons of vehicle tires, and 109.9 tons of metal was removed from the Site by Table Mountain and disposed of or recycled by Dahl. In addition, Table Mountain removed 26 vehicles from the Site (19 vehicles from near-stream areas and seven vehicles from upland areas). Prior to removing the vehicles, Table Mountain removed approximately 20 gallons of oil, 8 gallons of gasoline, and 1 gallon of coolant from the vehicles. ACT Enviro removed three aboveground storage tanks, five totes, and seven drums from the Site. Alpine removed approximately 1.13 tons of debris from the Site, which were characterized as asbestos-containing or asbestos-contaminated waste.

However, the geophysical survey identified 30 areas as anomalies that may contain buried wastes. In addition, approximately 15 areas were observed on-site that contain remaining solid waste aboveground, including scrap metal, tires, plastic, car parts, an empty drum, and a small tank. The purpose of the Phase II completed by Stantec in May 2022 and the SSI completed in 2023 by Apex was to further evaluate potential risk to human health and ecological receptors and identify the potential need for continued cleanup activities.

Locality of the Facility. The locality of the facility (LOF) is defined as locations where a human or ecological receptor contacts or is reasonably likely to come into contact with facility-related hazardous substances. The term "Facility" is defined (in both ORS 465.200 and OAR 340-122-0115) to include the equipment or property where the release occurred and where the release has come to be located. Based on the conservative evaluation of the chemical data discussed above, the on-site impacts of historic salvage use are distributed widely across the Site with the relatively highest impacts being observed in the vicinity of specific operations (e.g. former crusher). Based on the historic use and for the purposes of risk screening, the entirety of the Site will be considered for screening against the applicable RBCs.

Summary of Land Use. The Site is zoned as Timber Conservation (T-C), and while the property is currently vacant, it has historically been used as a salvage yard and uncontrolled waste repository. The land zoning has conditional

use for commercial timber operations and recreational purposes but generally does not allow for residential use. Short-term exposure to construction or excavation workers is reasonable to expect.

The expected future use of the Site is associated with conservation. No inhabited structures are anticipated in association with this Site use; disturbance of Site soil would be limited to construction workers, timber industry workers, and Site operations. It is anticipated that significant soil disturbance would be limited where possible based on the Site history of contamination.

Summary of Water Use. The surrounding properties are supplied with water from local shallow supply wells or cisterns. After performing a well search with the Oregon Water Resource Department (OWRD) well record database, no residential water wells or drinking water supply wells have been identified in the vicinity of the Site (within a half mile). Local knowledge and research identified a shallow residential well or cistern on the residential property south of the Site.

The nearest surface water bodies are on-site wetlands and an unnamed tributary draining off-site to the south into Beaver Creek. Contamination migrating through groundwater from the Site has the potential to intersect these surface water bodies and groundwater due to the nature and extent of contamination from historic use and proximity to on-site and off-site water resources.

The topography of the Site is generally sloping towards the south-southwest. Surface water at the Site is not collected by a stormwater system and is assumed to run off into the surrounding waterways or infiltrate to the subsurface (with the majority of precipitation being infiltrated given the unimproved site surface).

For the anticipated site use (likely for conservation), there is no known plan to use groundwater for irrigation or any other use. Wetlands and surface water features will fluctuate with seasonal precipitation and local hydrology patterns. Permit-authorized temporary impacts to wetlands may be proposed with future Site cleanup activities but are not expected to be associated with future use.

## EXPOSURE PATHWAY ANALYSIS

Potential Receptors. Potential human or ecological receptors include those that may be exposed to the chemicals of potential concern (COPCs) under the current or reasonably likely future land and water use scenarios. The land is currently vacant, and reasonably likely future uses are associated with conservation, so human exposures would be limited to potential future construction and excavation workers (no residential or occupational exposures).

The primary potential for exposures would be related to ecological exposures (terrestrial and aquatic). A complete discussion of potential ecological receptors is included in the Ecological Risk Assessment prepared for the Site (dated June 2024).

The remainder of this section provides additional detail regarding potential human health exposure pathways at the Site.

Exposure Pathways for Soil. Exposure pathways describe the physical connection or potential connection between a receptor and a potential contaminant source. Identifying a pathway as complete or potentially complete does not, by itself, indicate that there is an unacceptable risk, only that a receptor could be exposed to a contaminant source if such a source exists. Potentially complete exposure pathways for soil are listed below.

- Direct Contact (Soil Ingestion, Dermal Contact, and Inhalation). This pathway is potentially complete; however, the exposures associated with the primary future Site uses would be limited to the ground surface which could be developed as part of any redevelopment or Site operations. Construction worker and

industry worker exposures are potentially complete for both surface soil and subsurface soil (such as for utility maintenance or future redevelopment of the property).

- Volatilization to Outdoor Air. This pathway is potentially complete under current and future land uses as contaminants of interest (COIs) have been detected in soil at the Site. While no ongoing occupational or residential uses would be associated with the Site, screening against residential exposure would be conservative for vapor migration to the adjacent properties should future land use increase development in the vicinity. Based on the zoning and proposed land use, this is not deemed to be necessary at this time.
- Leaching to Groundwater. This pathway is potentially complete under current and reasonably likely future land use as groundwater in the vicinity of the Site may be used for domestic supply (no other water supply is available in the vicinity of the Site).

Exposure Pathways for Groundwater. Potentially complete exposure pathways for groundwater are listed below.

- Direct Contact (Ingestion and Inhalation from Tap Water). This pathway is potentially complete. There is no current or future use of groundwater at the Site, but in the greater vicinity, there are potential shallow residential water wells (even though no wells were identified in the Oregon Well Record Search).
- Volatilization to Outdoor Air. This pathway is potentially complete under current and future land uses as COIs have previously been detected in groundwater at the Site. While no occupational or residential uses would be associated with the Site, screening against residential exposure would be conservative for vapor migration to the adjacent properties. Based on the zoning and proposed land use, this is not deemed to be necessary at this time.
- Groundwater in Excavation. This pathway is considered potentially complete under current and reasonably likely future land use based on the on-site interface between ground and surface water. Additionally, given the potential for ongoing Site cleanup activities, continued excavation and potential worker interaction with the groundwater is possible. Future use of groundwater is not anticipated, but surface water is expected to remain on site, though no proposed impacts to wetlands and regulated waters are known in association with potential land use following completion of permit-authorized cleanup activities.

## DIRECT-PUSH SOIL SAMPLING SCOPE OF WORK

Apex completed the above SSI objectives in accordance with the Work Plan, which included the following tasks:

- Competitively procured Steadfast Services NW, LLC (Steadfast), a licensed drilling subcontractor;
- Staked the proposed locations of each borehole using a submeter Global Navigation Satellite System (GNSS) receiver to locate each boring, as shown on Figure 3;
- Oversaw Steadfast as they advanced 43 shallow boreholes to depths of between 3 and 5 feet below ground surface (bgs) with a tracked Geoprobe® push-probe rig:
    - 40 shallow boreholes advanced to 3 feet bgs within DU-4 and its subunits;
    - 3 shallow boreholes advanced to 5 feet bgs within DU-6;
    - Each push-probe borehole was abandoned in accordance with OWRD regulations and procedures and consisted of backfilling each exploratory boring with granular bentonite and hydrating with water;
- Collected nine 5-point composite samples from three depth intervals across DU-4 (27 composite samples, nine of which were selected for laboratory analysis). Samples from DU-4 were collected from 0 to 1 foot bgs, 1 to 2 feet bgs, and 2 to 3 feet bgs. Sample aliquots from three discrete borings advanced within DU-6

were extended to a depth of 5 feet bgs to assess the vertical profile of contamination observed near the car crusher area (intervals of 0 to 1 foot bgs, 1 to 2 feet bgs, and 2 to 5 feet bgs);

  - DU-4 was divided into nine smaller subunits with 27 composite soil samples (135 aliquots);
  - DU-6 remained one unit (no smaller subunits) with field screening and sampling of nine discrete soil samples (from each of three depths at three locations identified above). Note that based on discussions with DEQ while on-site, the proposed DU-6 borehole locations were moved approximately 20 feet west of the locations shown on the Work Plan to more accurately represent the Former Crusher Area;

- Advanced five shallow boreholes to depths of 3 feet bgs using a hand auger within subunit DU-4B, which was inaccessible by the push-probe rig due to significant vegetation and steep terrain;
- Collected three 5-point composite sediment samples from distributed reaches of the on-site stream network, including within units DU-3 and DU-5 and near the Former Crusher Area (unit DU-6);
- Collected four additional discrete soil samples at locations across the Site to allow for characterization of suspect media observed during the sampling event, such as burned or stained soil or other localized impacted areas;
  - The nomenclature for discrete samples is as follows: for example, discrete soil sample DU-4C-4-2 represents soil collected down to 2 feet ("2") from the number "4" borehole within subunit "C" of decision unit "DU-4;"
  - Discrete soil samples DU-4C-4-2, DU-4E-4-2, DU-4F-2-2, and DU-4F-5-2 exhibited strong petroleum-like odors, staining/discoloration (black), and relatively high photoionization detector (PID) readings, and were selected for diesel-range and polycyclic aromatic hydrocarbon (PAH) laboratory analysis. These samples were collected from boreholes near the vicinity and west/northwest of the former crusher area;
- Field-screened, logged, and photographed each borehole;
  - Field screening was performed using a calibrated PID to screen headspace vapors and a sheen test to identify potential separate-phase hydrocarbons, as well as by documenting odors, staining, and/or discoloration.

## LABORATORY ANALYTICAL PROGRAM

A total of 10 of the 27 composite soil samples (the 0- to 1-foot-bgs samples collected from DU-4 and DU-6) were selected for diesel- and oil-range total petroleum hydrocarbons (TPH-Dx), dioxins and furans, select metals, and PAH analysis to refine previous incremental sampling data. The five-point composite samples were selected to represent the top foot of soil within each decision subunit. Four discrete soil samples were also selected to characterize observed localized impacted areas as noted above. Additionally, a total of three composite streambed sediment samples were selected for analysis to inform the ecological risk assessment for the Site. Based on discussions with DEQ and the Site conditions encountered during the SSI activities, specific soil and sediment samples were selected and analyzed for the following analytes:

- TPH-Dx by Method NWTPH-Dx with silica gel cleanup:
  - 27 soil composites, three streambed sediment composites, and four discrete soil samples;
- Dioxins and furans by U.S. Environmental Protection Agency (EPA) Method 8290 (a limited subset of samples determined in consultation with DEQ, based on field screening and laboratory analytical results). Field screening procedures included using a calibrated PID and headspace method to provide a qualitative indication of the presence of volatile organic compounds (VOCs). Other field screening methodology

included inspecting each soil and sediment sample for chemical-like odors and discoloration (such as black char) and for sheens using the sheen test:

  - 10 soil composites and three streambed sediment samples;

- Select metals (Resource Conservation and Recovery Act [RCRA] 8, plus copper, zinc, and nickel) by EPA Method 6010:
  - 12 soil composites (including two follow-ups), three streambed sediment composites, and one follow-up discrete soil sample; and
- PAHs by EPA Method 8270SIM:
  - 10 soil composites and three streambed sediment samples.

All composite and discrete soil and streambed sediment samples collected were submitted via chain-of-custody to Pace Analytical (Pace) under Oregon Price Agreement #8903 for select analyses as determined by DEQ. Samples were placed in new uniquely-labeled unpreserved glass jars in a chilled cooler and shipped overnight to Pace to meet the recommended method holding times.

## FIELD SCREENING RESULTS AND OBSERVATIONS

Apex conducted field screening as defined in the Work Plan and according to Apex Standard Operating Procedure (SOP) No. 2.1 – *Standard Field Screening Procedures*. Field screening used a calibrated PID with headspace method to provide a qualitative indication of the presence of VOCs. Other field screening methodology included inspecting each soil and sediment sample for petroleum-like odors, discoloration, and sheens using the sheen test. Suspect contamination was observed in several boreholes, including DU-4C-4-2, DU-4E-4-2, DU-4F-2-2, and DU-4F-5-2. Observations were as follows:

- DU-4C-4-2. Petroleum-like wispy iridescent sheen with elevated PID reading (28.4 parts per million [ppm]). The first borehole attempt recovered a solid wood core with strong chemical odor; the shoe and rod of the drill penetrated the end of what appeared to be a buried railroad tie.
- DU-4E-4-2. Strong petroleum-like odor with black staining/discoloration and wispy iridescent sheen. An elevated PID reading (22.0 ppm) was collected at a depth of approximately 1.5 feet bgs.
- DU-4F-2-2. Strong petroleum-like odor with black staining/discoloration and relatively high PID reading (309.2 ppm) at approximately 1.5 feet bgs. Suspect contamination was localized between approximately 1 and 2 feet bgs.
- DU-4F-5-2. Strong petroleum-like odor with black staining/discoloration and wispy iridescent sheen. An elevated PID reading (42.3 ppm) was collected at approximately 1 foot bgs. Suspect contamination was localized between approximately 1 and 2 feet bgs.

The deeper borings, advanced to 5 feet bgs within DU-6 near the former car crusher area, consisted of saturated silts and fat clays that were submerged under approximately 1 foot of water at the time of drilling. Relatively low PID readings ranged from 1.0 to 2.3 ppm, and no petroleum-like odors, staining, and/or discoloration were observed in the deeper borings.

## LABORATORY ANALYTICAL RESULTS AND RISK-BASED SCREENING

The analytical data is presented on Tables 1 and 2 for the soil data and sediment data, respectively. Summaries of the risk-based concentration (RBC) and risk screening level (RSL) exceedances are presented in Tables 3 and 4. Data was screened against applicable DEQ RBCs to assess whether the Site may pose an unacceptable risk to human health, and the metals concentrations were compared against the DEQ background metals concentrations for

the Coast Range. Under current and reasonably likely future land uses, the RBCs for residential and occupational exposures would not be applicable, so the data are screened against the construction and excavation worker RBCs.

To assess the potential for unacceptable risks to ecological receptors, the analytical results were also compared to the applicable ecological RSLs (DEQ tables and appendices for *Conducting Ecological Risk Assessments*, September 2020).

The laboratory analytical results and risk screening results are presented below. The RBCs used in the risk screening were chosen based on the current and reasonably likely future receptors and probable exposure pathways. The referenced RBCs and RSLs are listed with the data in Tables 1 and 2.

Diesel by Method NWTPH-Dx. The relatively highest concentrations of diesel-range TPH were detected in composite soil sample DU-4I-Comp-1 and discrete soil sample DU-4F-5-2 at 4,070 milligrams per kilogram (mg/kg) and 15,900 mg/kg, respectively, with the latter result being above the DEQ RBC for the soil ingestion, dermal contact, and inhalation exposure pathway under the construction worker receptor scenario. Field screening results observed from decision unit DU-4I exhibited no evidence of petroleum contamination. The discrete soil sample DU-4F-5-2 was selected for analysis due to field observations of a localized impacted area between 1 and 2 feet bgs, including petroleum-like odor, staining and discoloration, and relatively high PID readings. No ecological RSLs are established for TPH.

Dioxins and Furans by EPA Method 8290. The dioxin toxic equivalency (TEQ) for each sample result was calculated by multiplying each dioxin congener by its corresponding established toxic equivalency factor (TEF), including for the following compounds: 2,3,7,8-TCDD, 1,2,3,7,8-PeCDD, 1,2,3,4,7,8-HxCDD, 1,2,3,6,7,8-HxCDD, 1,2,3,7,8,9-HxCDD, 1,2,3,4,6,7,8-HpCDD, and OCDD. The results were then summed as an overall TEQ and compared with the applicable 2,3,7,8-TCDD (dioxin) equivalent DEQ RBC for the soil ingestion, dermal contact, and inhalation exposure pathway and construction worker and excavation worker receptor scenarios. The relatively highest dioxin TEQ was calculated from composite soil sample DU-4C-Comp-1 at 51.67 nanograms per kilogram (ng/kg), which is below the applicable construction worker DEQ RBC. TEQ for dioxin with a non-detect result was calculated by halving the method detection limit (MDL) then multiplying by its corresponding TEF. Samples reported with no detections were given the maximum MDL.

Calculated dioxin TEQs for all composite soil samples, except for DU-4B-Comp-1, exceeded applicable ecological RSLs for soil when compared to the 2,3,7,8-TCDD (dioxin) equivalent for several receptor scenarios, including for ground feeding birds and mammals and top consumer birds and mammals threatened and endangered (T&E) and non-T&E. Composite soil sample DU-4C-Comp-1 was the highest calculated dioxin TEQ result at 51.67 ng/kg and was approximately an order of magnitude above the Oregon DEQ RBC for the top consuming birds T&E (5.2 ng/kg). The next highest dioxin TEQ concentrations were calculated at 31.4 ng/kg and 5.295 ng/kg from composite soil samples DU-4F-Comp-1 and DU-4G-Comp-1, respectively. All other dioxin TEQs calculated were less than or equal to 3.202 ng/kg.

Select Metals by EPA Method 6010. Select metals were detected in concentrations above the DEQ clean fill screening values (Coast Range) in all the composite soil samples analyzed except for composite streambed sediment sample DU-3-SS-Comp-1. Composite soil sample DU-4C-Comp-1 had the relatively highest detected concentration of copper at 198 ppm. Composite soil sample DU-4E-Comp-1 had the relatively highest detected concentrations of selenium and silver at 10.5 ppm and 52.1 ppm, respectively. Composite soil sample DU-4F-Comp-1 had the relatively highest detected concentrations of cadmium (3.3 ppm), lead (342 ppm), and zinc (986 ppm). The relatively highest concentration of mercury (0.773 ppm) was detected in composite streambed sediment sample DU-6-SS-Comp-1.

Based on a discussion with DEQ regarding initial laboratory results, follow-up metals analysis was requested for composite soil samples DU-4F-Comp-2 and DU-4F-Comp-3 and for discrete soil sample DU-4F-5-2. Select metals

were detected in concentrations above the DEQ background metals (Coast Range) including the following analytes: cadmium, copper, lead, selenium, zinc, and mercury. Lead (1,460 ppm) was detected in discrete soil sample DU-4F-5-2 at concentrations exceeding the DEQ RBC for the soil ingestion, dermal contact, and inhalation exposure pathway and construction and excavation worker receptor scenarios.

Several discrete and composite soil samples and streambed sediment samples exceeded several ecological RSLs for soil and surface water. The highest exceedances of ecological RSLs for soil and surface water were detected in discrete soil sample DU-4F-5-2, composite soil sample DU-4F-Comp-1, and composite streambed sediment sample DU-6-SS-Comp-1. The highest lead concentration (1,460 ppm) was reported from discrete soil sample DU-4F-5-2 with a multiplier of between 8.6 and 132 times applicable ecological RSLs, but below the top consumer mammals non-T&E (1,600 ppm) wildlife exposure to soil.

PAHs by EPA Method 8270SIM. The PAH TEQs were calculated by multiplying each PAH congener concentration by its corresponding established TEF, including for the following compounds: benzo(a)pyrene (BaP), benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3cd)pyrene. The results were then summed as total TEQ and compared with the applicable equivalent DEQ RBC. The highest total TEQ (1.08 ppm) was detected in discrete soil sample DU-4F-5-2. All PAHs tested were detected in concentrations below the applicable DEQ RBCs for the soil ingestion, dermal contact, and inhalation exposure pathway and construction and excavation worker receptor scenarios, including DEQ RBCs for BaP equivalents. TEQs for PAHs with a non-detect result were calculated by halving the MDL then multiplying by their corresponding TEFs, since carcinogenic PAHs (cPAHs) were detected at the Site.

Toxic mobility equivalent concentration (TMEQ) was calculated for each cPAH at the Site by multiplying the concentration of the cPAH analyte by its corresponding TEF and relative mobility factor (RMF). The results were then summed as total TMEQ. The highest TMEQ (0.799 ppm) was detected in discrete soil sample DU-4F-5-2. The highest analytical results for cPAHs benzo(a)pyrene and dibenzo(a,h)anthracene with a TEF of 1 were detected from discrete soil sample DU-4F-5-2 at 0.786 ppm and 0.127, respectively. No PAHs were detected above the method limit of detection in the following composite soil and streambed sediment samples: DU-4B-Comp-1, DU-4D-Comp-1, DU-6-Comp-1, DU-3-SS-Comp-1, and DU-5-SS-Comp-1.

Discrete soil samples DU-4F-2-2 and DU-4F-5-2 and composite soil sample DU-4F-Comp-1 exceeded several ecological RSLs for soil, including direct toxicity to plants and ground feeding birds T&E and non-T&E.

## CONCLUSIONS AND RECOMMENDATIONS

Apex completed the SSI activities at the former King Salvage Site that included direct-push soil and streambed sediment sampling and analysis to more thoroughly understand the magnitude and extent of contamination following the previous incremental sampling data collected by Stantec and the follow-up test pit exploration activities conducted by Apex. These understandings will inform the scope of the revised ABCA.

Apex conducted the shallow borehole investigation within established decision units and subunits of the approximately 0.86-acre area encompassing the central portion of the Site. This included the former car crusher area (approximately 0.14 acres) where the previous test pitting investigation soil analytical results and observations exhibited elevated concentrations of petroleum, PAHs, metals, and dioxins associated with historical salvage operations.

Based on the findings of this work, the contamination identified within the shallow Site soils extends beyond decision unit DU-6 and the former car crusher area to the subunits of decision unit DU-4, particularly:

- Subunit DU-4F where contamination was localized and exceeded construction worker DEQ RBCs for generic diesel and lead;

- Subunit DU-4G adjoining the former car crusher area and containing concentrations of several COPCs above ecological risk RSLs; and
- Subunit DU-4I where contamination exceeded applicable construction worker DEQ RBCs for residual-range TPH.

This SSI was focused primarily on approximately the upper foot of soils, with some discrete soil samples analyzed between 1 and 2 feet and one deeper composite soil sample analyzed between 2 and 3 feet. The laboratory analyzed composite soil samples (DU-4F-Comp-1, DU-4F-Comp-2, and DU-4F-Comp-3) from subunit DU-4F at three separate depth intervals (0 to 1 foot, 1 to 2 feet, and 2 to 3 feet bgs respectively) and reported general decreases in select metal concentrations with depth. The discrete soil samples exhibited localized petroleum contamination as observed in the field, and the laboratory confirmed elevated analyte concentrations within the 1- to 2.5-foot bgs range within subunit DU-4F.

Each of the discrete and composite soil samples tested for select metals exceeded one or more of their applicable ecological RSLs, and dioxin concentrations exceeded the ecological RSLs in all but one soil sample. The highest lead concentration (1,460 ppm) was reported from discrete soil sample DU-4F-5-2 with a multiplier of between 8.6 and 132 times the applicable ecological RSLs, but it was below the top consumer mammals non-T&E (1,600 ppm) wildlife exposure to soil. Composite soil sample DU-4C-Comp-1 had the highest calculated dioxin TEQ result at 51.67 ng/kg and was approximately an order of magnitude above the Oregon DEQ RBC for the top consuming birds T&E (5.2 ng/kg). These results suggest that additional assessment of the potential risk to ecological receptors is needed, which will be addressed in a forthcoming ecological risk assessment.

These results will collectively be used in the update to the Site ABCA to define the corrective action area (to depths between 1 and 2.5 feet bgs). They will also inform the evaluation of cleanup alternatives to address the localized petroleum contamination west of the car crusher (DU-4F) and the more widespread metals and dioxin concentrations that exceed the ecological RSLs in subunits DU-4G and DU-4I.

## ATTACHMENTS

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|---|---|
| Table 1 | Soil Analytical Results |
| Table 2 | Sediment Analytical Results |
| Table 3 | Summary RBC/RSL Exceedances – Soil |
| Table 4 | Summary RBC/RSL Exceedances – Sediment |
| Figure 1 | Site Location Map |
| Figure 2 | Site Plan |
| Figure 3 | Decision Units |
| Figure 4 | TPH-Dx Results |
| Figure 5 | Select Metal Results |
| Figure 6 | PAHs Results |
| Figure 7 | Dioxins Results |
| Attachment A | Backup Documentation and Field Notes |
| Attachment B | Field Methods and Sampling Procedures |
| Attachment C | Analytical Laboratory Testing Program and Documentation |

Table 1
Soil Analytical Results
Former King Salvage
Toledo, Oregon

| Decision Unit: | 4A | | | 4B | | | 4C | | | | 4D | | | 4E | | | | 4F | | | | | 4G | | | 4H | | | 4I | | | 6 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID: | DU-4A-COMP-1 | DU-4A-COMP-2 | DU-4A-COMP-3 | DU-4B-COMP-1 | DU-4B-COMP-2 | DU-4B-COMP-3 | DU-4C-4-2 | DU-4C-COMP-1 | DU-4C-COMP-2 | DU-4C-COMP-3 | DU-4D-COMP-1 | DU-4D-COMP-2 | DU-4D-COMP-3 | DU-4E-4-2 | DU-4E-COMP-1 | DU-4E-COMP-2 | DU-4E-COMP-3 | DU-4F-2-2 | DU-4F-5-2 | DU-4F-COMP-1 | DU-4F-COMP-2 | DU-4F-COMP-3 | DU-4G-COMP-1 | DU-4G-COMP-2 | DU-4G-COMP-3 | DU-4H-COMP-1 | DU-4H-COMP-2 | DU-4H-COMP-3 | DU-4I-COMP-1 | DU-4I-COMP-2 | DU-4I-COMP-3 | DU-6-COMP-1 | DU-6-COMP-2 | DU-6-COMP-5 |
| Sample Date: | 4/8/2024 | 4/8/2024 | 4/8/2024 | 4/10/2024 | 4/10/2024 | 4/10/2024 | 4/8/2024 | 4/8/2024 | 4/8/2024 | 4/8/2024 | 4/9/2024 | 4/9/2024 | 4/9/2024 | 4/8/2024 | 4/8/2024 | 4/8/2024 | 4/8/2024 | 4/9/2024 | 4/9/2024 | 4/9/2024 | 4/9/2024 | 4/9/2024 | 4/9/2024 | 4/9/2024 | 4/9/2024 | 4/9/2024 | 4/9/2024 | 4/9/2024 | 4/9/2024 | 4/9/2024 | 4/9/2024 | 4/10/2024 | 4/10/2024 | 4/10/2024 |
| *Total Petroleum Hydrocarbons, Diesel Extended Range by NWTPH-Dx in mg/kg* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Diesel Range Organics | 25.8 | 14.7 | 2.47 J | 6.75 | <5.25 | <5.08 | 141 | 382 | 5.26 J | 5.32 J | 5.97 | <5.45 | 2.49 J | 357 | 55 | 74.9 | 426 | 326 | 15900 | 231 | 18.1 | 435 | 182 | 3.8 | <5.25 | 4.87 J | <5.90 | 2.1 J | 4070 | 4.28 J | <5.39 | 32.1 | <5.58 | <6.11 |
| Residual Range Organics | 238 | 110 | 17.8 | 28.1 | 4.85 J | <12.7 | 5.41 J | 120 | 14.5 | 35.4 | 27.8 | 6.01 J | 8.05 J | 500 | 374 | 274 | 649 | 1210 | 27100 | 1120 | 35.2 | 1060 | 345 | <14.0 | <13.1 | 23.9 | 7.81 J | 8.86 J | 13200 | 17.5 | <13.5 | 122 | <13.9 | 12.8 J |
| *Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270E-SIM (mg/kg)* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Anthracene | <0.00861 | -- | -- | <0.00901 | -- | -- | <0.00917 | <0.00779 | -- | -- | <0.00827 | -- | -- | <0.00895 | <0.00869 | -- | -- | 0.033 | 0.848 | 0.0704 | -- | -- | <0.00754 | -- | -- | <0.00842 | -- | -- | 0.00326 J | -- | -- | <0.00837 | -- | -- |
| Acenaphthene | <0.00861 | -- | -- | <0.00901 | -- | -- | <0.00917 | <0.00779 | -- | -- | <0.00827 | -- | -- | <0.00895 | <0.00869 | -- | -- | 0.0714 | 0.356 | 0.0143 | -- | -- | <0.00754 | -- | -- | <0.00842 | -- | -- | 0.00351 J | -- | -- | <0.00837 | -- | -- |
| Acenaphthylene | <0.00861 | -- | -- | <0.00901 | -- | -- | <0.00917 | <0.00779 | -- | -- | <0.00827 | -- | -- | <0.00895 | <0.00869 | -- | -- | <0.00687 | 0.308 | 0.00477 J | -- | -- | <0.00754 | -- | -- | <0.00842 | -- | -- | <0.00839 | -- | -- | <0.00837 | -- | -- |
| Benzo(a)anthracene | 0.00403 J | -- | -- | <0.00901 | -- | -- | <0.00917 | <0.00779 | -- | -- | <0.00827 | -- | -- | 0.00664 J | 0.00459 J | -- | -- | 0.125 | 0.957 | 0.336 | -- | -- | 0.00587 J | -- | -- | <0.00842 | -- | -- | 0.0105 | -- | -- | <0.00837 | -- | -- |
| Benzo(a)pyrene | 0.00316 J | -- | -- | <0.00901 | -- | -- | <0.00917 | <0.00779 | -- | -- | <0.00827 | -- | -- | 0.00542 J | 0.00323 J | -- | -- | 0.133 | 0.786 | 0.184 | -- | -- | 0.00593 J | -- | -- | <0.00842 | -- | -- | 0.0126 | -- | -- | <0.00837 | -- | -- |
| Benzo(b)fluoranthene | 0.0033 J | -- | -- | <0.00901 | -- | -- | <0.00917 | 0.00262 J | -- | -- | <0.00827 | -- | -- | 0.0061 J | 0.00398 J | -- | -- | 0.122 | 0.934 | 0.212 | -- | -- | 0.00489 J | -- | -- | <0.00842 | -- | -- | 0.0143 | -- | -- | <0.00837 | -- | -- |
| Benzo(g,h,i)perylene | 0.00314 J | -- | -- | <0.00901 | -- | -- | <0.00917 | <0.00779 | -- | -- | <0.00827 | -- | -- | <0.00895 | <0.00869 | -- | -- | 0.0812 | 0.685 | 0.123 | -- | -- | 0.00869 | -- | -- | <0.00842 | -- | -- | 0.0278 | -- | -- | <0.00837 | -- | -- |
| Benzo(k)fluoranthene | <0.00861 | -- | -- | <0.00901 | -- | -- | <0.00917 | <0.00779 | -- | -- | <0.00827 | -- | -- | <0.00895 | <0.00869 | -- | -- | 0.0432 | 0.327 | 0.0812 | -- | -- | <0.00754 | -- | -- | <0.00842 | -- | -- | 0.0034 J | -- | -- | <0.00837 | -- | -- |
| Chrysene | <0.00861 | -- | -- | <0.00901 | -- | -- | <0.00917 | <0.00779 | -- | -- | <0.00827 | -- | -- | 0.00491 J | 0.00385 J | -- | -- | 0.151 | 0.775 | 0.375 | -- | -- | 0.00452 J | -- | -- | <0.00842 | -- | -- | 0.00661 J | -- | -- | <0.00837 | -- | -- |
| Dibenz(a,h)anthracene | <0.00861 | -- | -- | <0.00901 | -- | -- | <0.00917 | <0.00779 | -- | -- | <0.00827 | -- | -- | <0.00895 | <0.00869 | -- | -- | 0.0157 | 0.127 J | 0.025 | -- | -- | <0.00754 | -- | -- | <0.00842 | -- | -- | <0.00839 | -- | -- | <0.00837 | -- | -- |
| Fluoranthene | 0.00673 J | -- | -- | <0.00901 | -- | -- | <0.00917 | <0.00779 | -- | -- | <0.00827 | -- | -- | 0.016 | 0.00657 J | -- | -- | 0.321 | 2.41 | 0.798 | -- | -- | 0.0127 | -- | -- | <0.00842 | -- | -- | 0.0221 | -- | -- | <0.00837 | -- | -- |
| Fluorene | <0.00861 | -- | -- | <0.00901 | -- | -- | 0.0154 | <0.00779 | -- | -- | <0.00827 | -- | -- | 0.0531 | <0.00869 | -- | -- | 0.0943 | 0.55 | 0.016 | -- | -- | <0.00754 | -- | -- | <0.00842 | -- | -- | <0.00839 | -- | -- | <0.00837 | -- | -- |
| Indeno(1,2,3-cd)pyrene | 0.00284 J | -- | -- | <0.00901 | -- | -- | <0.00917 | <0.00779 | -- | -- | <0.00827 | -- | -- | 0.00312 J | <0.00869 | -- | -- | 0.05 | 0.636 | 0.121 | -- | -- | 0.00327 J | -- | -- | <0.00842 | -- | -- | 0.0155 | -- | -- | <0.00837 | -- | -- |
| Naphthalene | <0.0287 | -- | -- | <0.0300 | -- | -- | <0.0306 | <0.0260 | -- | -- | <0.0276 | -- | -- | 0.875 | 0.0279 J | -- | -- | 13.7 | 2.1 | 0.0727 | -- | -- | 0.00794 J | -- | -- | <0.0281 | -- | -- | 0.0333 | -- | -- | <0.0279 | -- | -- |
| Phenanthrene | 0.00419 J | -- | -- | <0.00901 | -- | -- | 0.0287 | 0.0174 | -- | -- | <0.00827 | -- | -- | 0.0584 | 0.00387 J | -- | -- | 0.35 | 2.8 | 0.305 | -- | -- | 0.0187 | -- | -- | <0.00842 | -- | -- | 0.0176 | -- | -- | <0.00837 | -- | -- |
| Pyrene | 0.00563 J | -- | -- | <0.00901 | -- | -- | <0.00917 | 0.0059 J | -- | -- | <0.00827 | -- | -- | 0.0201 | 0.0117 | -- | -- | 0.411 | 4.12 | 0.655 | -- | -- | 0.0322 | -- | -- | <0.00842 | -- | -- | 0.0375 | -- | -- | <0.00837 | -- | -- |
| 1-Methylnaphthalene | <0.0287 | -- | -- | <0.0300 | -- | -- | <0.0306 | <0.0260 | -- | -- | <0.0276 | -- | -- | 0.746 | 0.00995 J | -- | -- | 8.7 | 1.16 | 0.0461 | -- | -- | <0.0251 | -- | -- | <0.0281 | -- | -- | 0.0804 | -- | -- | <0.0279 | -- | -- |
| 2-Methylnaphthalene | <0.0287 | -- | -- | <0.0300 | -- | -- | <0.0306 | <0.0260 | -- | -- | <0.0276 | -- | -- | 1.09 | 0.0185 J | -- | -- | 17.5 | 3.4 | 0.107 | -- | -- | 0.0123 J | -- | -- | 0.00734 J | -- | -- | 0.094 | -- | -- | <0.0279 | -- | -- |
| 2-Chloronaphthalene | <0.0287 | -- | -- | <0.0300 | -- | -- | <0.0306 | <0.0260 | -- | -- | <0.0276 | -- | -- | <0.0298 | <0.0290 | -- | -- | <0.0229 | <0.256 | <0.0253 | -- | -- | <0.0251 | -- | -- | <0.0281 | -- | -- | <0.0280 | -- | -- | <0.0279 | -- | -- |
| Toxic Equivalent Concentration TEQ (ND=1/2 DL) | 0.005539 | -- | -- | 0.006803 | -- | -- | 0.006923 | 0.005754 | -- | -- | 0.006244 | -- | -- | 0.008181 | 0.005839 | -- | -- | 0.1609 | 1.08095 | 0.23871 | -- | -- | 0.008299 | -- | -- | 0.006357 | -- | -- | 0.016732 | -- | -- | 0.006319 | -- | -- |
| Toxic Equivalent Concentration TEQ (ND = 0) | 0.004635 | -- | -- | 0 | -- | -- | 0 | 0.000262 | -- | -- | 0 | -- | -- | 0.007286 | 0.004536 | -- | -- | 0.1609 | 1.08095 | 0.23871 | -- | -- | 0.007545 | -- | -- | 0 | -- | -- | 0.016312 | -- | -- | 0 | -- | -- |
| Toxic Mobility Equivalent (TMEQ) (ND=1/2) | 0.003252 | -- | -- | 0.004614 | -- | -- | 0.004696 | 0.003979 | -- | -- | 0.004235 | -- | -- | 0.005538 | 0.003332 | -- | -- | 0.134567 | 0.79862 | 0.18688 | -- | -- | 0.006029 | -- | -- | 0.004312 | -- | -- | 0.012807 | -- | -- | 0.004286 | -- | -- |
| *Total Metals by EPA Method 6010d and Method 7471B in mg/kg* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | 6.9 | -- | -- | 8.3 | -- | -- | -- | 9.24 | -- | -- | 7.81 | -- | -- | -- | 3.75 | -- | -- | -- | 11 | 4.77 | 5.3 | 4.71 | 3.43 | -- | -- | 8.31 | -- | -- | 7.74 | -- | -- | 8.99 | -- | -- |
| Barium | 73.5 | -- | -- | 79.5 | -- | -- | -- | 93.8 | -- | -- | 79.4 | -- | -- | -- | 128 | -- | -- | -- | 421 | 130 | 78.9 | 123 J | 114 | -- | -- | 66.9 | -- | -- | 129 | -- | -- | 53.4 | -- | -- |
| Cadmium | 0.233 J | -- | -- | 0.229 J | -- | -- | -- | 1.95 | -- | -- | 0.565 J | -- | -- | -- | 1.74 | -- | -- | -- | 9.02 | 3.3 | <0.674 | 1.38 | 0.737 | -- | -- | 0.53 J | -- | -- | 1.52 | -- | -- | 0.252 J | -- | -- |
| Chromium | 42.4 | -- | -- | 11.7 | -- | -- | -- | 74.3 | -- | -- | 225 J3,J5 | -- | -- | -- | 445 | -- | -- | -- | 95.9 | 103 | 20.4 | 25.3 J | 9.69 | -- | -- | 14.5 | -- | -- | 21.8 | -- | -- | 10.3 | -- | -- |
| Copper | 24.6 | -- | -- | 22.4 | -- | -- | -- | 198 | -- | -- | 31.4 | -- | -- | -- | 129 | -- | -- | -- | 337 | 174 | 12.5 | 38.8 J | 32.1 | -- | -- | 26.6 | -- | -- | 73.2 | -- | -- | 19.3 | -- | -- |
| Lead | 21.6 | -- | -- | 34.3 | -- | -- | -- | 215 | -- | -- | 27.6 | -- | -- | -- | 115 | -- | -- | -- | 1460 | 342 | 9.78 | 91.5 J | 71.6 | -- | -- | 30.2 | -- | -- | 129 | -- | -- | 20.5 | -- | -- |
| Nickel | 8.15 | -- | -- | 8.78 | -- | -- | -- | 30.6 | -- | -- | 9.59 | -- | -- | -- | 32 | -- | -- | -- | 61 | 53.4 | 8.01 | 15.1 J | 8.84 | -- | -- | 11.3 | -- | -- | 17.8 | -- | -- | 6.91 | -- | -- |
| Selenium | 1.72 J | -- | -- | 1.94 J | -- | -- | -- | 2.47 J | -- | -- | 2.68 J | -- | -- | -- | 10.5 | -- | -- | -- | 4.04 | 9.2 J | 1.55 | 1.94 J | 6.91 | -- | -- | 2.29 J | -- | -- | 3.06 | -- | -- | 2 J | -- | -- |
| Silver | <1.44 | -- | -- | <1.50 | -- | -- | -- | 0.268 J | -- | -- | 0.274 J | -- | -- | -- | 52.1 | -- | -- | -- | <1.28 | 40.9 | <1.35 | <1.39 | 30 | -- | -- | <1.40 | -- | -- | <1.40 | -- | -- | <1.40 | -- | -- |
| Zinc | 98.7 | -- | -- | 97.2 | -- | -- | -- | 489 | -- | -- | 125 | -- | -- | -- | 363 | -- | -- | -- | 3970 | 986 | 72.8 | 408 J | 228 | -- | -- | 220 | -- | -- | 357 | -- | -- | 91.4 | -- | -- |
| Mercury | 0.0308 J | -- | -- | <0.0600 | -- | -- | -- | 0.0309 J | -- | -- | 0.0381 J | -- | -- | -- | 0.0391 J | -- | -- | -- | 0.145 | 0.373 J | 0.0302 | 0.061 | 0.0583 | -- | -- | 0.0646 | -- | -- | 0.0653 | -- | -- | 0.041 J | -- | -- |
| *Dioxins and Furans by EPA Method 8290 in ng/kg* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,3,7,8-TCDF | 0.18 J | -- | -- | <0.098 | -- | -- | -- | 6.2 | -- | -- | 0.51 J | -- | -- | -- | 1.3 | -- | -- | -- | -- | 17 | -- | -- | 1.4 | -- | -- | <0.37 | -- | -- | 2.2 | -- | -- | <0.16 | -- | -- |
| Total TCDF | 3.4 | -- | -- | 1.1 | -- | -- | -- | 19 | -- | -- | 8.8 | -- | -- | -- | 43 | -- | -- | -- | -- | 770 | -- | -- | 17 | -- | -- | <0.37 | -- | -- | 60 | -- | -- | 0.44 J | -- | -- |
| 2,3,7,8-TCDD | <0.084 | -- | -- | <0.13 | -- | -- | -- | 0.37 J | -- | -- | <0.082 | -- | -- | -- | 0.25* JI | -- | -- | -- | -- | 3.7 | -- | -- | <0.23 | -- | -- | <0.23 | -- | -- | <0.39 | -- | -- | <0.29 | -- | -- |
| Total TCDD | 0.71 J | -- | -- | 0.29 J | -- | -- | -- | 8.5 | -- | -- | 0.15 J | -- | -- | -- | 5.6 | -- | -- | -- | -- | 210 | -- | -- | 0.71 J | -- | -- | <0.23 | -- | -- | 7.8 | -- | -- | <0.29 | -- | -- |
| 1,2,3,7,8-PeCDF | 0.24 J | -- | -- | <0.044 | -- | -- | -- | 8.7 | -- | -- | 0.28* JI | -- | -- | -- | 1.4 J | -- | -- | -- | -- | 29 | -- | -- | 1.9 J | -- | -- | <0.10 | -- | -- | 2.6 J | -- | -- | <0.10 | -- | -- |
| 2,3,4,7,8-PeCDF | 0.33 J | -- | -- | 0.089 JI | -- | -- | -- | 9.8 | -- | -- | 0.48* JI | -- | -- | -- | 3.5 J | -- | -- | -- | -- | 53 | -- | -- | 2.1 J | -- | -- | 0.57 JI | -- | -- | 6.3 | -- | -- | <0.098 | -- | -- |
| Total PeCDF | 4.8 J | -- | -- | 0.2 J | -- | -- | -- | 140 | -- | -- | 28 | -- | -- | -- | 34 | -- | -- | -- | -- | 680 | -- | -- | 20 | -- | -- | 4.8 J | -- | -- | 66 | -- | -- | <0.098 | -- | -- |
| 1,2,3,7,8-PeCDD | <0.22 | -- | -- | <0.075 | -- | -- | -- | 6.6 | -- | -- | 0.14* JI | -- | -- | -- | 0.64 J | -- | -- | -- | -- | 14 | -- | -- | 0.58 J | -- | -- | <0.30 | -- | -- | 1 J | -- | -- | <0.16 | -- | -- |
| Total PeCDD | 0.55 J | -- | -- | 0.34 J | -- | -- | -- | 38 | -- | -- | 1.7 J | -- | -- | -- | 10 | -- | -- | -- | -- | 280 | -- | -- | 1.5 J | -- | -- | 0.74 J | -- | -- | 18 | -- | -- | 0.3 J | -- | -- |
| 1,2,3,4,7,8-HxCDF | 0.5 J | -- | -- | <0.048 J | -- | -- | -- | 13 | -- | -- | 0.67 J | -- | -- | -- | 1.8 J | -- | -- | -- | -- | 68* P | -- | -- | 3.5 J | -- | -- | 0.49 JI | -- | -- | 13 P | -- | -- | 0.32 J | -- | -- |
| 1,2,3,6,7,8-HxCDF | 0.37 J | -- | -- | <0.049 J | -- | -- | -- | 6.3 | -- | -- | 0.63 J | -- | -- | -- | 2.4 J | -- | -- | -- | -- | 49 | -- | -- | 3.5 J | -- | -- | 0.32 JI | -- | -- | 6.1 | -- | -- | <0.23 | -- | -- |
| 2,3,4,6,7,8-HxCDF | 0.45 JI | -- | -- | 0.14 JI | -- | -- | -- | 11 | -- | -- | 1.1 J | -- | -- | -- | 3.3 J | -- | -- | -- | -- | 53 | -- | -- | 2.3 J | -- | -- | 0.74 J | -- | -- | 6.8 | -- | -- | 0.23 J | -- | -- |
| 1,2,3,7,8,9-HxCDF | <0.42 | -- | -- | <0.057 | -- | -- | -- | 6 | -- | -- | 0.26 J | -- | -- | -- | 0.87 J | -- | -- | -- | -- | 18 | -- | -- | 1.6 J | -- | -- | <0.43 | -- | -- | 4 J | -- | -- | <0.35 | -- | -- |
| Total HxCDF | 3.6 J | -- | -- | 1.7 J | -- | -- | -- | 410 | -- | -- | 25 | -- | -- | -- | 32 | -- | -- | -- | -- | 560 | -- | -- | 38 | -- | -- | 4.2 J | -- | -- | 72 | -- | -- | 0.55 J | -- | -- |
| 1,2,3,4,7,8-HxCDD | 0.32 BJ | -- | -- | 0.25 | -- | -- | -- | 20 | -- | -- | 0.36* JI | -- | -- | -- | 1 BJ | -- | -- | -- | -- | 15 | -- | -- | 1 BJ | -- | -- | 0.48 J | -- | -- | 1.7 J | -- | -- | 0.28 J | -- | -- |
| 1,2,3,6,7,8-HxCDD | 0.59 J | -- | -- | 0.18 | -- | -- | -- | 120 | -- | -- | 1.3 J | -- | -- | -- | 2.6 J | -- | -- | -- | -- | 37 | -- | -- | 9.8 | -- | -- | 0.52 J | -- | -- | 4.7 J | -- | -- | 0.26 JI | -- | -- |
| 1,2,3,7,8,9-HxCDD | 0.34 JI | -- | -- | 0.13 | -- | -- | -- | 35 | -- | -- | 0.62* JI | -- | -- | -- | 1.7 J | -- | -- | -- | -- | 23 | -- | -- | 3 J | -- | -- | 0.44 JI | -- | -- | 3.2 J | -- | -- | 0.21 JI | -- | -- |
| Total HxCDD | 3.1 J | -- | -- | 0.54 | -- | -- | -- | 480 | -- | -- | 7.1 | -- | -- | -- | 21 | -- | -- | -- | -- | 420 | -- | -- | 54 | -- | -- | 5.6 J | -- | -- | 49 | -- | -- | 1.2 J | -- | -- |
| 1,2,3,4,6,7,8-HpCDF | 2.7 J | -- | -- | 1.1 | -- | -- | -- | 150 | -- | -- | 20 | -- | -- | -- | 16 | -- | -- | -- | -- | 360 | -- | -- | 23 | -- | -- | 3.4 J | -- | -- | 32 | -- | -- | 2.7 | -- | -- |
| 1,2,3,4,7,8,9-HpCDF | <0.41 | -- | -- | <0.14 | -- | -- | -- | 4.4 JI | -- | -- | 0.87* JI | -- | -- | -- | 1.2 J | -- | -- | -- | -- | 21* I | -- | -- | 5.3 | -- | -- | <0.58 | -- | -- | 8.7 | -- | -- | <0.72 | -- | -- |
| Total HpCDF | 2.7 J | -- | -- | 1.1 | -- | -- | -- | 370 | -- | -- | 81 | -- | -- | -- | 19 | -- | -- | -- | -- | 360 | -- | -- | 51 | -- | -- | 3.4 J | -- | -- | 72 | -- | -- | 2.7 J | -- | -- |
| 1,2,3,4,6,7,8-HpCDD | 8.5 | -- | -- | 5 | -- | -- | -- | 2300 | -- | -- | 50 | -- | -- | -- | 50 | -- | -- | -- | -- | 500 | -- | -- | 280 | -- | -- | 9.6 | -- | -- | 84 | -- | -- | 21 | -- | -- |
| Total HpCDD | 16 | -- | -- | 8.8 | -- | -- | -- | 3900 | -- | -- | 82 | -- | -- | -- | 97 | -- | -- | -- | -- | 1100 | -- | -- | 500 | -- | -- | 19 | -- | -- | 180 | -- | -- | 32 | -- | -- |
| OCDF | 2.4 JI | -- | -- | 5.3 | -- | -- | -- | 65 | -- | -- | 82 | -- | -- | -- | 13 | -- | -- | -- | -- | 220 | -- | -- | 49 | -- | -- | 3.1 JI | -- | -- | 52 | -- | -- | 9.3 J | -- | -- |
| OCDD | 68 | -- | -- | 49 | -- | -- | -- | 14000 E | -- | -- | 940 | -- | -- | -- | 530 | -- | -- | -- | -- | 4000 | -- | -- | 1400 | -- | -- | 75 | -- | -- | 690 | -- | -- | 230 | -- | -- |
| Dioxin TEQ (2,3,7,8-TCDD TEQ) | 0.3824 | -- | -- | 0.2232 | -- | -- | -- | 51.67 | -- | -- | 1.191 | -- | -- | -- | 2.079 | -- | -- | -- | -- | 31.4 | -- | -- | 5.295 | -- | -- | 0 | -- | -- | 0 | -- | -- | 0 | -- | -- |

*Please see notes at the end of the table.*

Table 1
Soil Analytical Results
Former King Salvage
Toledo, Oregon

| Decision Unit: | Applicable RBCs and RSLs | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | RBC- Soil Ingestion, Dermal Contact and Inhalation | | Ecological RSL - Soils (mg/kg) | | | | | | | | Ecological RSL Surface Water (ug/L) | | | | Mean Regional Background Levels (Metals Only) |
| | Construction Worker | Excavation Worker | Direct Toxicity | | Ground Feeding Birds | | Ground Feeding Mammals | Top Consumer Birds | | Top Consumer Mammals | Birds | | Mammals | Sediment - Freshwater | Oregon Coast Range |
| Sample Date: | | | Plants | Inverts | T&E | Non-T&E | Non-T&E | T&E | Non-T&E | Non-T&E | T&E | Non-T&E | Non-T&E | | |
| *Total Petroleum Hydrocarbons, Diesel Extended Range by NWTPH-Dx in mg/kg* | | | | | | | | | | | | | | | |
| Diesel Range Organics | 4600 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Residual Range Organics | 11,000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| *Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270E-SIM (mg/kg)* | | | | | | | | | | | | | | | |
| Anthracene | 110000 | -- | -- | 29 | 13 | 67 | 540 | 7500 | 37000 | 59000 | -- | -- | -- | -- | -- |
| Acenaphthene | 21000 | 590000 | 0.25 | 29 | 13 | 67 | 540 | 7500 | 37000 | 59000 | -- | -- | 3100000 | -- | -- |
| Acenaphthylene | -- | -- | -- | 29 | 13 | 67 | 540 | 7500 | 37000 | 59000 | -- | -- | 3100000 | -- | -- |
| Benzo(a)anthracene | 170 | 4800 | -- | 18 | 0.11 | 0.55 | 5.9 | 6 | 64 | 550 | -- | -- | 7600 | -- | -- |
| Benzo(a)pyrene | 17 | 490 | -- | 18 | 0.11 | 0.55 | 5.9 | 6 | 64 | 550 | -- | -- | 44000 | -- | -- |
| Benzo(b)fluoranthene | 170 | 4900 | 18 | 18 | 0.11 | 0.55 | 5.9 | 6 | 64 | 550 | -- | -- | 170000 | -- | -- |
| Benzo(g,h,i)perylene | -- | -- | -- | 18 | 0.11 | 0.55 | 5.9 | 6 | 64 | 550 | -- | -- | 320000 | -- | -- |
| Benzo(k)fluoranthene | 1700 | 49000 | -- | 18 | 0.11 | 0.55 | 5.9 | 6 | 64 | 550 | -- | -- | 320000 | -- | -- |
| Chrysene | 17000 | 490000 | -- | 18 | 0.11 | 0.55 | 5.9 | 6 | 64 | 550 | -- | -- | 7600 | -- | -- |
| Dibenz(a,h)anthracene | 17 | 490 | -- | 18 | 0.11 | 0.55 | 5.9 | 6 | 64 | 550 | -- | -- | 59000 | -- | -- |
| Fluoranthene | 10000 | 280000 | -- | 18 | 0.11 | 0.55 | 5.9 | 6 | 64 | 550 | -- | -- | 560000 | -- | -- |
| Fluorene | 14000 | 390000 | -- | 29 | 13 | 67 | 540 | 7500 | 37000 | 59000 | -- | -- | 1100000 | -- | -- |
| Indeno(1,2,3-cd)pyrene | 170 | 4900 | -- | 18 | 0.11 | 0.55 | 5.9 | 6 | 64 | 550 | -- | -- | 320000 | -- | -- |
| Naphthalene | 580 | 16000 | 1 | 29 | 13 | 67 | 540 | 7500 | 37000 | 59000 | 57 | 570 | 22000 | -- | -- |
| Phenanthrene | -- | -- | -- | 29 | 13 | 67 | 540 | 7500 | 37000 | 59000 | -- | -- | 230000 | -- | -- |
| Pyrene | 7500 | 210000 | -- | 18 | 0.11 | 0.55 | 5.9 | 6 | 64 | 550 | -- | -- | 330000 | -- | -- |
| 1-Methylnaphthalene | -- | -- | -- | 29 | 13 | 67 | 540 | 7500 | 37000 | 59000 | -- | -- | -- | -- | -- |
| 2-Methylnaphthalene | -- | -- | -- | 29 | 13 | 67 | 540 | 7500 | 37000 | 59000 | -- | -- | -- | -- | -- |
| 2-Chloronaphthalene | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Toxic Equivalent Concentration TEQ (ND=1/2 DL) | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Toxic Equivalent Concentration TEQ (ND = 0) | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Toxic Mobility Equivalent (TMEQ) (ND=1/2) | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| *Total Metals by EPA Method 6010d and Method 7471B in mg/kg* | | | | | | | | | | | | | | | |
| Arsenic | 15 | 420 | 18 | 6.8 | 15 | 32 | 31 | 100 | 1000 | 290 | 21000 | 52000 | 5600 | -- | 12 |
| Barium | 69000 | -- | 110 | 330 | 720 | 1200 | 8700 | 630 | 13000 | 44000 | 380000 | 760000 | 8800 | -- | 840 |
| Cadmium | 350 | 9700 | 32 | 140 | 0.29 | 1.6 | 4 | 1 | 7.7 | 1700 | 5900 | 82000 | 17000 | 0.6 | 0.54 |
| Chromium | 530000 | -- | -- | -- | 23 | 73 | 1600 | 170 | 560 | 10000 | 7100 | 71000 | 630000 | 37 | 240 |
| Copper | 14000 | 390000 | 70 | 80 | 14 | 43 | 70 | 80 | 240 | 1600 | 12000 | 130000 | 33000 | 36 | 100 |
| Lead | 800 | 800 | 120 | 1700 | 11 | 23 | 170 | 83 | 160 | 1600 | 64000 | 640000 | 16000 | 35 | 34 |
| Nickel | 7000 | 190000 | 38 | 280 | 20 | 81 | 21 | 110 | 440 | 580 | 110000 | 160000 | 3000 | 18 | 160 |
| Selenium | -- | -- | 0.52 | 4.1 | 0.71 | 1.4 | 1 | 4 | 7.5 | 33 | 1800 | 6100 | 1400 | -- | 1.5 |
| Silver | 1800 | 49000 | 560 | -- | 2.6 | 26 | 140 | 13 | 130 | 10000 | 22000 | 220000 | 850000 | 4.5 | 0.41 |
| Zinc | -- | -- | 160 | 120 | 46 | 120 | 980 | 220 | 590 | 30000 | 490000 | 4900000 | 5600000 | -- | 140 |
| Mercury | 110 | 2900 | 34 | 0.05 | 0.013 | 0.13 | 17 | 0.058 | 0.58 | 130 | 78 | 780 | 63000 | -- | 0.11 |
| *Dioxins and Furans by EPA Method 8290 in ng/kg* | | | | | | | | | | | | | | | |
| 2,3,7,8-TCDF | -- | -- | -- | -- | 0.64 | 6.4 | 3.00 | 6.3 | 63 | 4.6 | -- | -- | -- | -- | -- |
| Total TCDF | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 2,3,7,8-TCDD | 170 | 4800 | -- | 5000000 | 0.52 | 5.2 | 0.25 | 5.2 | 52 | 0.38 | -- | -- | -- | -- | -- |
| Total TCDD | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 1,2,3,7,8-PeCDF | -- | -- | -- | -- | 4.1 | 41 | 6.5 | 40 | 400 | 9.8 | -- | -- | -- | -- | -- |
| 2,3,4,7,8-PeCDF | -- | -- | -- | -- | 0.41 | 4.1 | 0.65 | 4 | 40 | 0.98 | -- | -- | -- | -- | -- |
| Total PeCDF | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 1,2,3,7,8-PeCDD | -- | -- | -- | -- | 0.59 | 5.9 | 0.28 | 5.9 | 59 | 0.43 | -- | -- | -- | -- | -- |
| Total PeCDD | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 1,2,3,4,7,8-HxCDF | -- | -- | -- | -- | 2.3 | 23 | 1.1 | 23 | 230 | 1.7 | -- | -- | -- | -- | -- |
| 1,2,3,6,7,8-HxCDF | -- | -- | -- | -- | 2.3 | 23 | 1.1 | 23 | 230 | 1.7 | -- | -- | -- | -- | -- |
| 2,3,4,6,7,8-HxCDF | -- | -- | -- | -- | 2.3 | 23 | 1.1 | 23 | 230 | 1.7 | -- | -- | -- | -- | -- |
| 1,2,3,7,8,9-HxCDF | -- | -- | -- | -- | 3 | 30 | 1.4 | 30 | 300 | 2.2 | -- | -- | -- | -- | -- |
| Total HxCDF | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 1,2,3,4,7,8-HxCDD | -- | -- | -- | -- | 5.1 | 51 | 1.2 | 50 | 500 | 1.8 | -- | -- | -- | -- | -- |
| 1,2,3,6,7,8-HxCDD | -- | -- | -- | -- | 19 | 190 | 0.89 | 190 | 1900 | 1.4 | -- | -- | -- | -- | -- |
| 1,2,3,7,8,9-HxCDD | -- | -- | -- | -- | 1.9 | 19 | 0.89 | 19 | 190 | 1.4 | -- | -- | -- | -- | -- |
| Total HxCDD | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 1,2,3,4,6,7,8-HpCDF | -- | -- | -- | -- | 23 | 230 | 11 | 230 | 2300 | 17 | -- | -- | -- | -- | -- |
| 1,2,3,4,7,8,9-HpCDF | -- | -- | -- | -- | 23 | 230 | 11 | 230 | 2300 | 17 | -- | -- | -- | -- | -- |
| Total HpCDF | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 1,2,3,4,6,7,8-HpCDD | -- | -- | -- | -- | 150 | 1500 | 7 | 1500 | 15000 | 11 | -- | -- | -- | -- | -- |
| Total HpCDD | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| OCDF | -- | -- | -- | -- | 1400 | 14000 | 220 | 14000 | 140000 | 340 | -- | -- | -- | -- | -- |
| OCDD | -- | -- | -- | -- | 1900 | 19000 | 300 | 19000 | 190000 | 460 | -- | -- | -- | -- | -- |
| Dioxin TEQ (2,3,7,8-TCDD TEQ) | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

*Notes:*

1. mg/kg = Milligrams per kilogram.
2. ng/kg = Nanograms per kilogram.
3. * indicates that concentration was reported as Estimated Maximum Possible Concentration (EMPC)
4. feet bgs = Feet below ground surface.
5. DEQ RBCs = Oregon Department of Environmental Quality's Risk-Based Concentrations for Individual Chemicals, revised August 2023.
6. ESLs = United States Environmental Protection Agency Ecological Screening Levels
7. Bold values indicate concentration detected above the method detection limit.
8. Shaded values indicate concentrations detected above one or more applicable RBC or ESL.
9. < = Concentration was not detected above the shown minimum reporting limit.
10. -- = Not analyzed or not available.
11. J = Result is an estimated value.
12. UJ = The result is not detected but the reporting limit is estimated.
13. I = Isotope Ratio Out of Specification
14. E = Exceeds Calibration Range
15. P = PCDE Interference
16. B = Concentration less than 10x higher than method blank level

Table 2
Sediment Analytical Results
Former King Salvage
Toledo, Oregon

| Decision Unit: | 3 | 5 | 6 | Applicable RBCs and RSLs | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID: | DU-3-SS-COMP-1 | DU-5-SS-COMP-1 | DU-6-SS-COMP-1 | RBC- Soil Ingestion, Dermal Contact and Inhalation | | Ecological RSL - Soils (mg/kg) | | | | | | | | Ecological RSL Surface Water (ug/L) | | | | Mean Regional Background Levels (Metals Only) |
| | | | | Construction Worker | Excavation Worker | Direct Toxicity | | Ground Feeding Birds | | Ground Feeding Mammals | Top Consumer Birds | | Top Consumer Mammals | Birds | | Mammals | Sediment - Freshwater | Oregon Coast Range |
| Sample Date: | 4/10/2024 | 4/10/2024 | 4/10/2024 | | | Plants | Inverts | T&E | Non-T&E | Non-T&E | T&E | Non-T&E | Non-T&E | T&E | Non-T&E | Non-T&E | | |
| *Total Petroleum Hydrocarbons, Diesel Extended Range by NWTPH-Dx in mg/kg* | | | | | | | | | | | | | | | | | | |
| Diesel Range Organics | <6.06 | 8.18 | 8.15 J | 4600 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Residual Range Organics | <15.1 | 33.5 | 31.9 | 11,000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| *Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270E-SIM* | | | | | | | | | | | | | | | | | | |
| Anthracene | <0.00909 | <0.00894 | 0.00655 J | 110000 | -- | -- | 29 | 13 | 67 | 540 | 7500 | 37000 | 59000 | -- | -- | -- | 57 | -- |
| Acenaphthene | <0.00909 | <0.00894 | <0.0171 | 21000 | 590000 | 0.25 | 29 | 13 | 67 | 540 | 7500 | 37000 | 59000 | -- | -- | 3100000 | 290 | -- |
| Acenaphthylene | <0.00909 | <0.00894 | <0.0171 | -- | -- | -- | 29 | 13 | 67 | 540 | 7500 | 37000 | 59000 | -- | -- | 3100000 | 160 | -- |
| Benzo(a)anthracene | <0.00909 | <0.00894 | 0.0168 J | 170 | 4800 | -- | 18 | 0.11 | 0.55 | 5.9 | 6 | 64 | 550 | -- | -- | 7600 | 32 | -- |
| Benzo(a)pyrene | <0.00909 | <0.00894 | 0.0117 J | 17 | 490 | -- | 18 | 0.11 | 0.55 | 5.9 | 6 | 64 | 550 | -- | -- | 44000 | 32 | -- |
| Benzo(b)fluoranthene | <0.00909 | <0.00894 | 0.0153 J | 170 | 4900 | 18 | 18 | 0.11 | 0.55 | 5.9 | 6 | 64 | 550 | -- | -- | 170000 | -- | -- |
| Benzo(g,h,i)perylene | <0.00909 | <0.00894 | 0.0069 J | -- | -- | -- | 18 | 0.11 | 0.55 | 5.9 | 6 | 64 | 550 | -- | -- | 320000 | 300 | -- |
| Benzo(k)fluoranthene | <0.00909 | <0.00894 | 0.00709 J | 1700 | 49000 | -- | 18 | 0.11 | 0.55 | 5.9 | 6 | 64 | 550 | -- | -- | 320000 | 27 | -- |
| Chrysene | <0.00909 | <0.00894 | 0.0192 | 17000 | 490000 | -- | 18 | 0.11 | 0.55 | 5.9 | 6 | 64 | 550 | -- | -- | 7600 | 57 | -- |
| Dibenz(a,h)anthracene | <0.00909 | <0.00894 | <0.0171 | 17 | 490 | -- | 18 | 0.11 | 0.55 | 5.9 | 6 | 64 | 550 | -- | -- | 59000 | 33 | -- |
| Fluoranthene | <0.00909 | <0.00894 | 0.0218 | 10000 | 280000 | -- | 18 | 0.11 | 0.55 | 5.9 | 6 | 64 | 550 | -- | -- | 560000 | 111 | -- |
| Fluorene | <0.00909 | <0.00894 | <0.0171 | 14000 | 390000 | -- | 29 | 13 | 67 | 540 | 7500 | 37000 | 59000 | -- | -- | 1100000 | 77 | -- |
| Indeno(1,2,3-cd)pyrene | <0.00909 | <0.00894 | 0.00915 J | 170 | 4900 | -- | 18 | 0.11 | 0.55 | 5.9 | 6 | 64 | 550 | -- | -- | 320000 | 17 | -- |
| Naphthalene | <0.0303 | <0.0298 | <0.0570 | 580 | 16000 | 1 | 29 | 13 | 67 | 540 | 7500 | 37000 | 59000 | 57 | 570 | 22000 | 176 | -- |
| Phenanthrene | <0.00909 | <0.00894 | 0.0183 | -- | -- | -- | 29 | 13 | 67 | 540 | 7500 | 37000 | 59000 | -- | -- | 230000 | 42 | -- |
| Pyrene | <0.00909 | <0.00894 | 0.0148 J | 7500 | 210000 | -- | 18 | 0.11 | 0.55 | 5.9 | 6 | 64 | 550 | -- | -- | 330000 | 53 | -- |
| 1-Methylnaphthalene | <0.0303 | <0.0298 | <0.0570 | -- | -- | -- | 29 | 13 | 67 | 540 | 7500 | 37000 | 59000 | -- | -- | -- | -- | -- |
| 2-Methylnaphthalene | <0.0303 | <0.0298 | <0.0570 | -- | -- | -- | 29 | 13 | 67 | 540 | 7500 | 37000 | 59000 | -- | -- | -- | -- | -- |
| 2-Chloronaphthalene | <0.0303 | <0.0298 | <0.0570 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Toxic Equivalent Concentration TEQ (ND=1/2 DL) | 0.00686295 | 0.0067497 | 0.016556 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| Toxic Equivalent Concentration TEQ (ND = 0) | 0 | 0 | 0.015701 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| Toxic Mobility Equivalent (TMEQ) (ND=1/2) | 0.00465518 | 0.00457837 | 0.011953337 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| *Total Metals by EPA Method 6010d and Method 7471B in mg/kg* | | | | | | | | | | | | | | | | | | |
| Arsenic | 4.36 | 3.31 | 7.31 | 15 | 420 | 18 | 6.8 | 15 | 32 | 31 | 100 | 1000 | 290 | 21000 | 52000 | 5600 | -- | 12 |
| Barium | 47 | 30.5 | 73.7 | 69000 | -- | 110 | 330 | 720 | 1200 | 8700 | 630 | 13000 | 44000 | 380000 | 760000 | 8800 | -- | 840 |
| Cadmium | <0.757 | 0.525 J | 2.63 | 350 | 9700 | 32 | 140 | 0.29 | 1.6 | 4 | 1 | 7.7 | 1700 | 5900 | 82000 | 17000 | 0.6 | 0.54 |
| Chromium | 6.05 | 3.69 | 60.3 | 530000 | -- | -- | -- | 23 | 73 | 1600 | 170 | 560 | 10000 | 7100 | 71000 | 630000 | 37 | 240 |
| Copper | 5.21 | 15.3 | 167 | 14000 | 390000 | 70 | 80 | 14 | 43 | 70 | 80 | 240 | 1600 | 12000 | 130000 | 33000 | 36 | 100 |
| Lead | 4.26 | 22.6 | 171 | 800 | 800 | 120 | 1700 | 11 | 23 | 170 | 83 | 160 | 1600 | 64000 | 640000 | 16000 | 35 | 34 |
| Nickel | 4.25 | 3.33 | 42.1 | 7000 | 190000 | 38 | 280 | 20 | 81 | 21 | 110 | 440 | 580 | 110000 | 160000 | 3000 | 18 | 160 |
| Selenium | 1.21 J | 1.74 J | 5.23 J | -- | -- | 0.52 | 4.1 | 0.71 | 1.4 | 1 | 4 | 7.5 | 33 | 1800 | 6100 | 1400 | -- | 1.5 |
| Silver | <1.51 | <1.49 | 0.546 J | 1800 | 49000 | 560 | -- | 2.6 | 26 | 140 | 13 | 130 | 10000 | 22000 | 220000 | 850000 | 4.5 | 0.41 |
| Zinc | 30.7 | 79.9 | 847 | -- | -- | 160 | 120 | 46 | 120 | 980 | 220 | 590 | 30000 | 490000 | 4900000 | 5600000 | 123 | 140 |
| Mercury | <0.0606 | <0.0596 | 0.773 | 110 | 2900 | 34 | 0.05 | 0.013 | 0.13 | 17 | 0.058 | 0.58 | 130 | 78 | 780 | 63000 | -- | 0.11 |

*Please see notes at the end of the table.*

Table 2
Sediment Analytical Results
Former King Salvage
Toledo, Oregon

| Decision Unit: | 3 | 5 | 6 | Applicable RBCs and RSLs | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample ID: | DU-3-SS-COMP-1 | DU-5-SS-COMP-1 | DU-6-SS-COMP-1 | RBC- Soil Ingestion, Dermal Contact and Inhalation | | Ecological RSL - Soils (mg/kg) | | | | | | | | | Ecological RSL Surface Water (ug/L) | | | | Mean Regional Background Levels (Metals Only) |
| | | | | Construction Worker | Excavation Worker | Direct Toxicity | | Ground Feeding Birds | | Ground Feeding Mammals | Top Consumer Birds | | Top Consumer Mammals | | Birds | | Mammals | Sediment - Freshwater | Oregon Coast Range |
| Sample Date: | 4/10/2024 | 4/10/2024 | 4/10/2024 | | | Plants | Inverts | T&E | Non-T&E | Non-T&E | T&E | Non-T&E | Non-T&E | T&E | Non-T&E | Non-T&E | | | |
| *Dioxins and Furans by EPA Method 8290 in ng/kg* | | | | | | | | | | | | | | | | | | | |
| 2,3,7,8-TCDF | <0.10 | <0.32 | <0.41 | -- | -- | -- | -- | 0.64 | 6.4 | 3.00 | 6.3 | 63 | 4.6 | -- | -- | -- | -- | -- | |
| Total TCDF | 0.47 J | <0.32 | 23 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2,3,7,8-TCDD | 0.11* JI | <0.45 | <0.37 | 170 | 4800 | -- | 5000000 | 0.52 | 5.2 | 0.25 | 5.2 | 52 | 0.38 | -- | -- | -- | 9000 | -- | |
| Total TCDD | 0.23 J | <0.45 | 3.6 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1,2,3,7,8-PeCDF | <0.053 | <0.32 | 0.78 J | -- | -- | -- | -- | 4.1 | 41 | 6.5 | 40 | 400 | 9.8 | -- | -- | -- | -- | -- | |
| 2,3,4,7,8-PeCDF | <0.049 | <0.32 | 1.8* JI | -- | -- | -- | -- | 0.41 | 4.1 | 0.65 | 4 | 40 | 0.98 | -- | -- | -- | -- | -- | |
| Total PeCDF | <0.049 | <0.32 | 13 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1,2,3,7,8-PeCDD | <0.11 | <0.13 | 0.59 J | -- | -- | -- | -- | 0.59 | 5.9 | 0.28 | 5.9 | 59 | 0.43 | -- | -- | -- | -- | -- | |
| Total PeCDD | 0.13 J | <0.13 | 5.2 J | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1,2,3,4,7,8-HxCDF | <0.047 | <0.16 | 2.1 J | -- | -- | -- | -- | 2.3 | 23 | 1.1 | 23 | 230 | 1.7 | -- | -- | -- | -- | -- | |
| 1,2,3,6,7,8-HxCDF | <0.044 | <0.19 | 1.7 J | -- | -- | -- | -- | 2.3 | 23 | 1.1 | 23 | 230 | 1.7 | -- | -- | -- | -- | -- | |
| 2,3,4,6,7,8-HxCDF | <0.046 | <0.18 | 1.7 J | -- | -- | -- | -- | 2.3 | 23 | 1.1 | 23 | 230 | 1.7 | -- | -- | -- | -- | -- | |
| 1,2,3,7,8,9-HxCDF | 0.11 J | <0.35 | <0.31 | -- | -- | -- | -- | 3 | 30 | 1.4 | 30 | 300 | 2.2 | -- | -- | -- | -- | -- | |
| Total HxCDF | 0.11 J | <0.16 | 19 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1,2,3,4,7,8-HxCDD | 0.15 BJ | <0.24 | 0.76* JI | -- | -- | -- | -- | 5.1 | 51 | 1.2 | 50 | 500 | 1.8 | -- | -- | -- | -- | -- | |
| 1,2,3,6,7,8-HxCDD | 0.077 J | <0.21 | 1.5* JI | -- | -- | -- | -- | 19 | 190 | 0.89 | 190 | 1900 | 1.4 | -- | -- | -- | -- | -- | |
| 1,2,3,7,8,9-HxCDD | 0.16* JI | <0.22 | 1.6 J | -- | -- | -- | -- | 1.9 | 19 | 0.89 | 19 | 190 | 1.4 | -- | -- | -- | -- | -- | |
| Total HxCDD | 0.8 BJ | <0.21 | 11 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1,2,3,4,6,7,8-HpCDF | <0.064 | 0.47* JI | 12 | -- | -- | -- | -- | 23 | 230 | 11 | 230 | 2300 | 17 | -- | -- | -- | -- | -- | |
| 1,2,3,4,7,8,9-HpCDF | <0.090 | <0.67 | <0.76 | -- | -- | -- | -- | 23 | 230 | 11 | 230 | 2300 | 17 | -- | -- | -- | -- | -- | |
| Total HpCDF | 0.16 J | <0.39 | 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1,2,3,4,6,7,8-HpCDD | 0.66 J | 1.2* JI | 41 | -- | -- | -- | -- | 150 | 1500 | 7 | 1500 | 15000 | 11 | -- | -- | -- | -- | -- | |
| Total HpCDD | 0.66 J | <0.51 | 79 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| OCDF | 0.15* JI | <1.1 | 17 | -- | -- | -- | -- | 1400 | 14000 | 220 | 14000 | 140000 | 340 | -- | -- | -- | -- | -- | |
| OCDD | 2.6 J | 9.5* JI | 690 | -- | -- | -- | -- | 1900 | 19000 | 300 | 19000 | 190000 | 460 | -- | -- | -- | -- | -- | |
| Dioxin TEQ (2,3,7,8-TCDD TEQ) | 0.21108 | 0.33835 | 1.778 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |

*Notes:*

1. mg/kg = Milligrams per kilogram.
2. ng/kg = Nanograms per kilogram.
3. * indicates that concentration was reported as Estimated Maximum Possible Concentration (EMPC)
4. feet bgs = Feet below ground surface.
5. DEQ RBCs = Oregon Department of Environmental Quality's Risk-Based Concentrations for Individual Chemicals, revised August 2023.
6. ESLs = United States Environmental Protection Agency Ecological Screening Levels
7. Bold values indicate concentration detected above the method detection limit.
8. Shaded values indicate concentrations detected above one or more applicable RBC or ESL.
9. < = Concentration was not detected above the shown minimum reporting limit.
10. -- = Not analyzed or not available.
11. J = Result is an estimated value.
12. UJ = The result is not detected but the reporting limit is estimated.
13. I = Isotope Ratio Out of Specification
14. E = Exceeds Calibration Range
15. P = PCDE Interference
16. B = Concentration less than 10x higher than method blank level
17. No RSLs are established for streambed sediment exposure pathways; therefore, streambed sediment sample results were compared to soil RSLs for reference purposes only.

Table 3
Summary RBC/RSL Exceedances - Soil
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| Decision Unit 4A | | | | | | |
| Total Petroleum Hydrocarbons by NWTPH-Dx | | | | | | |
| None | -- | -- | -- | -- | -- | -- |
| Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270E-SIM | | | | | | |
| None | -- | -- | -- | -- | -- | -- |
| Total Metals by EPA Method 6010d and Method 7471B | | | | | | |
| Arsenic | 6.9 | mg/kg | RSL Soils: Direct Toxicity (Inverts) | 6.8 | mg/kg | 1.01 |
| Chromium | 42.4 | mg/kg | RSL Soils: Ground Feeding Birds- T&E | 23 | mg/kg | 1.84 |
| Copper | 24.6 | mg/kg | RSL Soils: Ground Feeding Birds- T&E | 14 | mg/kg | 1.76 |
| Lead | 21.6 | mg/kg | RSL Soils: Ground Feeding Birds- T&E | 11 | mg/kg | 1.96 |
| Selenium | 1.72 | mg/kg | RSL Soils: Direct Toxicity (Plants)<br>RSL Soils: Ground Feeding Birds T&E<br>RSLSoils: Ground Feeding Birds Non T&E<br>RSL Soils: Ground Feeding Mammals Non-T&E<br>Mean Regional Background Levels (Oregon Coast Range) | 0.52 | mg/kg | 3.31 |
| Zinc | 98.7 | mg/kg | RSL Soils: Ground Feeding Birds- T&E | 46 | mg/kg | 2.15 |
| Mercury | 0.0308 | mg/kg | RSL Soils: Ground Feeding Birds T&E | 0.013 | mg/kg | 2.37 |
| Dioxins and Furans by EPA Method 8290 in ng/kg | | | | | | |
| 1,2,3,4,6,7,8-HpCDF | 8.5 | ng/kg | RSL Soils: Ground Feeding Mammals Non-T&E | 7.00 | ng/kg | 1.21 |

Table 3
Summary RBC/RSL Exceedances - Soil
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| Decision Unit 4B | | | | | | |
| Total Petroleum Hydrocarbons by NWTPH-Dx | | | | | | |
| None | -- | -- | -- | -- | -- | -- |
| Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270E-SIM | | | | | | |
| None | -- | -- | -- | -- | -- | -- |
| Total Metals by EPA Method 6010d and Method 7471B | | | | | | |
| Arsenic | 8.3 | mg/kg | **RSL Soils: Direct Toxicity (Inverts)** | 6.8 | mg/kg | 1.22 |
| Copper | 22.4 | mg/kg | **RSL Soils: Ground Feeding Birds- T&E** | 14 | mg/kg | 1.60 |
| Lead | 34.3 | mg/kg | **RSL Soils: Ground Feeding Birds- T&E**<br>RSL Soils: Ground Feeding Birds- Non T&E<br>Mean Regional Background Levels (Oregon Coast Range) | 11 | mg/kg | 3.12 |
| Selenium | 1.94 | mg/kg | **RSL Soils: Direct Toxicity (Plants)**<br>RSL Soils: Ground Feeding Birds T&E<br>RSLSoils: Ground Feeding Birds Non T&E<br>RSL Soils: Ground Feeding Mammals Non-T&E<br>Mean Regional Background Levels (Oregon Coast Range) | 0.52 | mg/kg | 3.73 |
| Zinc | 97.2 | mg/kg | **RSL Soils: Ground Feeding Birds- T&E** | 46 | mg/kg | 2.11 |
| Dioxins and Furans by EPA Method 8290 in ng/kg | | | | | | |
| None | -- | -- | -- | -- | -- | -- |

Table 3
Summary RBC/RSL Exceedances - Soil
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| Decision Unit 4C | | | | | | |
| Total Petroleum Hydrocarbons by NWTPH-Dx | | | | | | |
| None | -- | -- | -- | -- | -- | -- |
| Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270E-SIM | | | | | | |
| None | -- | -- | -- | -- | -- | -- |
| Total Metals by EPA Method 6010d and Method 7471B | | | | | | |
| Arsenic | 9.24 | mg/kg | **RSL Soils: Direct Toxicity (Inverts)** | 6.8 | mg/kg | 1.36 |
| Cadmium | 1.95 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSLSoils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>Mean Regional Background Levels (Oregon Coast Range) | 0.29 | mg/kg | 6.72 |
| Chromium | 74.3 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E | 23 | mg/kg | 3.23 |
| Copper | 198 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>Mean Regional Background Levels (Oregon Coast Range) | 14 | mg/kg | 14.14 |

Table 3
Summary RBC/RSL Exceedances - Soil
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| Decision Unit 4C | | | | | | |
| Total Metals by EPA Method 6010d and Method 7471B | | | | | | |
| Lead | 215 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Top Consumer Birds Non T&E<br>RSL Soils: Direct Toxicity (Plants)<br>Mean Regional Background Levels (Oregon Coast Range) | 11 | mg/kg | 19.55 |
| Nickel | 30.6 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Mammals Non T&E | 20 | mg/kg | 1.53 |
| Selenium | 2.47 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Direct Toxicity (Plants)<br>Mean Regional Background Levels (Oregon Coast Range) | 0.52 | mg/kg | 4.75 |
| Zinc | 489 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Direct Toxicity (Plants)<br>RSL Soils: Direct Toxicity (Inverts)<br>Mean Regional Background Levels (Oregon Coast Range) | 46 | mg/kg | 10.63 |
| Mercury | 0.0309 | mg/kg | **RSL Soils: Ground Feeding Birds T&E** | 0.013 | mg/kg | 2.38 |

Table 3
Summary RBC/RSL Exceedances - Soil
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| Decision Unit 4C | | | | | | |
| Dioxins and Furans by EPA Method 8290 in ng/kg | | | | | | |
| 2,3,7,8-TCDF | 6.2 | ng/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 0.64 | ng/kg | 9.69 |
| 2,3,7,8-TCDD | 0.37 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E** | 0.25 | ng/kg | 1.48 |
| 1,2,3,7,8-PeCDF | 8.7 | ng/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Mammals Non T&E | 4.1 | ng/kg | 2.12 |
| 2,3,4,7,8-PeCDF | 9.8 | ng/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 0.41 | ng/kg | 23.90 |
| 1,2,3,7,8-PeCDD | 6.6 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 0.28 | ng/kg | 23.57 |
| 1,2,3,4,7,8-HxCDF | 13 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 1.1 | ng/kg | 11.82 |
| 1,2,3,6,7,8-HxCDF | 6.3 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 1.1 | ng/kg | 5.73 |

Table 3
Summary RBC/RSL Exceedances - Soil
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| Decision Unit 4C | | | | | | |
| Dioxins and Furans by EPA Method 8290 in ng/kg | | | | | | |
| 2,3,4,6,7,8-HxCDF | 11 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 1.1 | ng/kg | 10.00 |
| 1,2,3,7,8,9-HxCDF | 6 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 1.4 | ng/kg | 4.29 |
| 1,2,3,4,7,8-HxCDD | 20 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 1.2 | ng/kg | 16.67 |
| 1,2,3,6,7,8-HxCDD | 120 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 0.89 | ng/kg | 134.83 |
| 1,2,3,7,8,9-HxCDD | 35 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 0.89 | ng/kg | 39.33 |
| 1,2,3,4,6,7,8-HpCDF | 150 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 11 | ng/kg | 13.64 |

Table 3
Summary RBC/RSL Exceedances - Soil
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| **Decision Unit 4C** | | | | | | |
| Dioxins and Furans by EPA Method 8290 in ng/kg | | | | | | |
| 1,2,3,4,6,7,8-HpCDD | 2300 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 7 | ng/kg | 328.57 |
| OCDD | 14,000 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 300 | ng/kg | 46.67 |
| **Decision Unit 4D** | | | | | | |
| Total Petroleum Hydrocarbons by NWTPH-Dx | | | | | | |
| None | -- | -- | -- | -- | -- | -- |
| Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270E-SIM | | | | | | |
| None | -- | -- | -- | -- | -- | -- |
| Total Metals by EPA Method 6010d and Method 7471B | | | | | | |
| Arsenic | 7.81 | mg/kg | **RSL Soils: Direct Toxicity (Inverts)** | 6.8 | mg/kg | 1.15 |
| Cadmium | 0.565 | mg/kg | **RSL Soils: Ground Feeding Birds T&E** | 0.29 | mg/kg | 1.95 |
| Chromium | 225 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E | 23 | mg/kg | 9.78 |
| Copper | 31.4 | mg/kg | **RSL Soils: Ground Feeding Birds- T&E** | 14 | mg/kg | 2.24 |
| Lead | 27.6 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E | 11 | mg/kg | 2.51 |

Table 3
Summary RBC/RSL Exceedances - Soil
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| Decision Unit 4D | | | | | | |
| Total Metals by EPA Method 6010d and Method 7471B | | | | | | |
| Selenium | 2.68 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Direct Toxicity (Plants)<br>Mean Regional Background Levels (Oregon Coast Range) | 0.52 | mg/kg | 5.15 |
| Zinc | 125 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Direct Toxicity (Inverts) | 46 | mg/kg | 2.72 |
| Mercury | 0.0381 | mg/kg | **RSL Soils: Ground Feeding Birds T&E** | 0.013 | mg/kg | 2.93 |
| Dioxins and Furans by EPA Method 8290 in ng/kg | | | | | | |
| 2,3,4,7,8-PeCDF | 0.48 | ng/kg | **RSL Soils: Ground Feeding Birds T&E** | 0.41 | ng/kg | 1.17 |
| 2,3,4,6,7,8-HxCDF | 1.1 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E** | 1.1 | ng/kg | 1.00 |
| 1,2,3,6,7,8-HxCDD | 1.3 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E** | 1.2 | ng/kg | 1.08 |
| 1,2,3,4,6,7,8-HpCDF | 20 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Top Consumer Mammals Non T&E | 11 | ng/kg | 1.82 |
| 1,2,3,4,6,7,8-HpCDD | 50 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Top Consumer Mammals Non T&E | 7 | ng/kg | 7.14 |
| OCDD | 940 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Top Consumer Mammals Non T&E | 300 | ng/kg | 3.13 |
| Decision Unit 4E | | | | | | |
| Total Petroleum Hydrocarbons by NWTPH-Dx | | | | | | |
| None | -- | -- | -- | -- | -- | -- |

Table 3
Summary RBC/RSL Exceedances - Soil
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| Decision Unit 4E | | | | | | |
| Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270E-SIM | | | | | | |
| None | -- | -- | -- | -- | -- | -- |
| Total Metals by EPA Method 6010d and Method 7471B | | | | | | |
| Barium | 128 | mg/kg | **RSL Soils: Direct Toxicity (Plants)** | 110 | mg/kg | 1.16 |
| Cadmium | 1.74 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSLSoils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>Mean Regional Background Levels (Oregon Coast Range) | 0.29 | mg/kg | 6.00 |
| Chromium | 445 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>Mean Regional Background Levels (Oregon Coast Range) | 23 | mg/kg | 19.35 |
| Copper | 129 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>Mean Regional Background Levels (Oregon Coast Range) | 14 | mg/kg | 9.21 |
| Lead | 115 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Gtop Consumer Birds Birds T&E<br>Mean Regional Background Levels (Oregon Coast Range) | 11 | mg/kg | 10.45 |

Table 3
Summary RBC/RSL Exceedances - Soil
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| Decision Unit 4E | | | | | | |
| Total Metals by EPA Method 6010d and Method 7471B | | | | | | |
| Nickel | 32 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Mammals Non T&E | 20 | mg/kg | 1.60 |
| Selenium | 10.5 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Top Consumer Birds Non T&E<br>RSL Soils: Direct Toxicity (Plants)<br>RSL Soils: Direct Toxicity (Inverts)<br>Mean Regional Background Levels (Oregon Coast Range) | 0.52 | mg/kg | 20.19 |
| Silver | 52.1 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>Mean Regional Background Levels (Oregon Coast Range) | 0.41 | mg/kg | 127.07 |
| Zinc | 363 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Direct Toxicity (Plants)<br>RSL Soils: Direct Toxicity (Inverts)<br>Mean Regional Background Levels (Oregon Coast Range) | 46 | mg/kg | 7.89 |
| Mercury | 0.0381 | mg/kg | **RSL Soils: Ground Feeding Birds T&E** | 0.013 | mg/kg | 2.93 |

Table 3
Summary RBC/RSL Exceedances - Soil
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| Decision Unit 4E | | | | | | |
| Dioxins and Furans by EPA Method 8290 in ng/kg | | | | | | |
| 2,3,7,8-TCDD | 0.25 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E** | 0.25 | ng/kg | 1.00 |
| 2,3,4,7,8-PeCDF | 3.5 | ng/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Top Consumer Birds T&E | 0.41 | ng/kg | 8.54 |
| 1,2,3,7,8-PeCDD | 0.64 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals T&E | 0.28 | ng/kg | 2.29 |
| 1,2,3,4,7,8-HxCDF | 1.8 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Top Consumer Mammals T&E | 1.1 | ng/kg | 1.64 |
| 1,2,3,6,7,8-HxCDF | 2.4 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals T&E | 1.1 | ng/kg | 2.18 |
| 2,3,4,6,7,8-HxCDF | 3.3 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals T&E | 1.1 | ng/kg | 3.00 |
| 1,2,3,6,7,8-HxCDD | 2.6 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Top Consumer Mammals T&E | 1.2 | ng/kg | 2.17 |
| 1,2,3,7,8,9-HxCDD | 1.7 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Top Consumer Mammals T&E | 0.89 | ng/kg | 1.91 |
| 1,2,3,4,6,7,8-HpCDF | 16 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E** | 11 | ng/kg | 1.45 |
| 1,2,3,4,6,7,8-HpCDD | 50 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Top Consumer Mammals T&E | 7 | ng/kg | 7.14 |
| OCDD | 530 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Top Consumer Mammals T&E | 300 | ng/kg | 1.77 |

Table 3
Summary RBC/RSL Exceedances - Soil
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| Decision Unit 4F | | | | | | |
| Total Petroleum Hydrocarbons by NWTPH-Dx | | | | | | |
| Diesel Range Organics | 15,900 | mg/kg | RBC Soils: Ingestion, Contact and Inhalation-Construction Worker | 11,000 | mg/kg | 1.45 |
| Residual Range Organics | 27,100 | mg/kg | RBC Soils: Ingestion, Contact and Inhalation-Construction Worker | 11,000 | mg/kg | 2.46 |
| Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270E-SIM | | | | | | |
| Acenaphthene | 0.356 | mg/kg | RSL Soils: Direct Toxicity (Plants) | 0.25 | mg/kg | 1.42 |
| Benzo(a)anthracene | 0.957 | mg/kg | RSL Soils: Ground Feeding Birds T&E | 0.11 | mg/kg | 8.70 |
| Benzo(a)pyrene | 0.786 | mg/kg | RSL Soils: Ground Feeding Birds T&E | 0.11 | mg/kg | 7.15 |
| Benzo(b)fluoranthene | 0.934 | mg/kg | RSL Soils: Ground Feeding Birds T&E | 0.11 | mg/kg | 8.49 |
| Benzo(g,h,i)perylene | 0.685 | mg/kg | RSL Soils: Ground Feeding Birds T&E | 0.11 | mg/kg | 6.23 |
| Benzo(k)fluoranthene | 0.327 | mg/kg | RSL Soils: Ground Feeding Birds T&E | 0.11 | mg/kg | 2.97 |
| Chrysene | 0.775 | mg/kg | RSL Soils: Ground Feeding Birds T&E | 0.11 | mg/kg | 7.05 |
| Dibenz(a,h)anthracene | 0.127 | mg/kg | RSL Soils: Ground Feeding Birds T&E | 0.11 | mg/kg | 1.15 |
| Fluoranthene | 2.41 | mg/kg | RSL Soils: Ground Feeding Birds T&E | 0.11 | mg/kg | 21.91 |
| Indeno(1,2,3-cd)pyrene | 0.636 | mg/kg | RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Ground Feeding Birds Non T&E | 0.11 | mg/kg | 5.78 |
| Naphthalene | 13.7 | mg/kg | RSL Soils: Direct Toxicity (Plants)<br>RSL Soils: Ground Feeding Birds T&E | 1 | mg/kg | 13.70 |
| Pyrene | 4.12 | mg/kg | RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Ground Feeding Birds Non T&E | 0.11 | mg/kg | 37.45 |
| 2-Methylnaphthalene | 17.5 | mg/kg | RSL Soils: Ground Feeding Birds T&E | 13 | mg/kg | 1.35 |

Table 3
Summary RBC/RSL Exceedances - Soil
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| Decision Unit 4F | | | | | | |
| Total Metals by EPA Method 6010d and Method 7471B | | | | | | |
| Arsenic | 11 | mg/kg | **RSL Soils: Direct Toxicity (Inverts)** | 6.8 | mg/kg | 1.62 |
| Barium | 421 | mg/kg | **RSL Soils: Direct Toxicity (Plants)**<br>RSL Soils: Direct Toxicity (Inverts) | 110 | mg/kg | 3.83 |
| Cadmium | 9.02 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSLSoils: Ground Feeding Birds Non T&E<br>RSL Soils: Ground Feeding Mammals Non-T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Top Consumer Birds Non-T&E<br>Mean Regional Background Levels (Oregon Coast Range) | 0.29 | mg/kg | 31.10 |
| Chromium | 103 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSLSoils: Ground Feeding Birds Non T&E | 23 | mg/kg | 4.48 |
| Copper | 337 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Top Consumer Birds Non T&E<br>Mean Regional Background Levels (Oregon Coast Range) | 14 | mg/kg | 24.07 |

Table 3
Summary RBC/RSL Exceedances - Soil
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| Decision Unit 4F | | | | | | |
| Total Metals by EPA Method 6010d and Method 7471B | | | | | | |
| Lead | 1460 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Top Consumer Birds Non T&E<br>RSL Soils: Direct Toxicity (Plants)<br>RBC Soils: Ingestion, Contact and Inhalation - Construction Worker<br>RBC Soils: Ingestion, Contact and Inhalation - Excavation Worker<br>Mean Regional Background Levels (Oregon Coast Range) | 11 | mg/kg | 132.73 |
| Nickel | 61 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Direct Toxicity (Plants) | 20 | mg/kg | 3.05 |
| Selenium | 9.2 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Top Consumer Birds Non T&E<br>RSL Soils: Direct Toxicity (Plants)<br>RSL Soils: Direct Toxicity (Inverts)<br>Mean Regional Background Levels (Oregon Coast Range) | 0.52 | mg/kg | 17.69 |

Table 3
Summary RBC/RSL Exceedances - Soil
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| Decision Unit 4F | | | | | | |
| Total Metals by EPA Method 6010d and Method 7471B | | | | | | |
| Silver | 40.9 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>Mean Regional Background Levels (Oregon Coast Range) | 0.41 | mg/kg | 99.76 |
| Zinc | 3970 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Top Consumer Birds Non T&E<br>RSL Soils: Direct Toxicity (Plants)<br>RSL Soils: Direct Toxicity (Inverts)<br>Mean Regional Background Levels (Oregon Coast Range) | 46 | mg/kg | 86.30 |
| Mercury | 0.373 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Direct Toxicity (Inverts)<br>Mean Regional Background Levels (Oregon Coast Range) | 0.013 | mg/kg | 28.69 |

Table 3
Summary RBC/RSL Exceedances - Soil
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| Decision Unit 4F | | | | | | |
| Dioxins and Furans by EPA Method 8290 in ng/kg | | | | | | |
| 2,3,7,8-TCDF | 17 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 0.64 | ng/kg | 26.56 |
| 2,3,7,8-TCDD | 3.7 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 0.25 | ng/kg | 14.80 |
| 1,2,3,7,8-PeCDF | 29 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 4.1 | ng/kg | 7.07 |
| 2,3,4,7,8-PeCDF | 53 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Top Consumer Birds Non T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 0.41 | ng/kg | 129.27 |
| 1,2,3,7,8-PeCDD | 14 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 0.28 | ng/kg | 50.00 |

Table 3
Summary RBC/RSL Exceedances - Soil
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| Decision Unit 4F | | | | | | |
| Dioxins and Furans by EPA Method 8290 in ng/kg | | | | | | |
| 1,2,3,4,7,8-HxCDF | 68 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 1.1 | ng/kg | 61.82 |
| 1,2,3,6,7,8-HxCDF | 49 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 1.1 | ng/kg | 44.55 |
| 2,3,4,6,7,8-HxCDF | 53 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 1.1 | ng/kg | 48.18 |
| 1,2,3,7,8,9-HxCDF | 18 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 1.4 | ng/kg | 12.86 |
| 1,2,3,4,7,8-HxCDD | 15 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 1.2 | ng/kg | 12.50 |
| 1,2,3,6,7,8-HxCDD | 37 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 0.89 | ng/kg | 41.57 |

Table 3
Summary RBC/RSL Exceedances - Soil
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| **Decision Unit 4F** | | | | | | |
| Dioxins and Furans by EPA Method 8290 in ng/kg | | | | | | |
| 1,2,3,7,8,9-HxCDD | 23 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 0.89 | ng/kg | 25.84 |
| 1,2,3,4,6,7,8-HpCDF | 360 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Top Consumer Mammals T&E | 44 | ng/kg | 8.18 |
| 1,2,3,4,7,8,9-HpCDF | 21 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Top Consumer Mammals T&E | 44 | ng/kg | 0.48 |
| 1,2,3,4,6,7,8-HpCDD | 500 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals T&E | 7 | ng/kg | 71.43 |
| OCDF | 220 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Top Consumer Mammals T&E | 220 | ng/kg | 1.00 |
| OCDD | 4000 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals T&E | 300 | ng/kg | 13.33 |
| **Decision Unit 4G** | | | | | | |
| Total Petroleum Hydrocarbons by NWTPH-Dx | | | | | | |
| None | -- | -- | -- | -- | -- | -- |
| Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270E-SIM | | | | | | |
| None | -- | -- | -- | -- | -- | -- |

Table 3
Summary RBC/RSL Exceedances - Soil
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| Decision Unit 4G | | | | | | |
| Total Metals by EPA Method 6010d and Method 7471B | | | | | | |
| Barium | 114 | mg/kg | RSL Soils: Direct Toxicity (Plants) | 110 | mg/kg | 1.04 |
| Cadmium | 0.737 | mg/kg | RSL Soils: Ground Feeding Birds T&E | 0.29 | mg/kg | 2.54 |
| Copper | 32.1 | mg/kg | RSL Soils: Ground Feeding Birds- T&E | 14 | mg/kg | 2.29 |
| Lead | 71.6 | mg/kg | RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Ground Feeding Birds Non T&E<br>Mean Regional Background Levels (Oregon Coast Range) | 11 | mg/kg | 6.51 |
| Selenium | 6.91 | mg/kg | RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Direct Toxicity (Plants)<br>RSL Soils: Direct Toxicity (Inverts)<br>Mean Regional Background Levels (Oregon Coast Range) | 0.52 | mg/kg | 13.29 |
| Silver | 30 | mg/kg | RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>Mean Regional Background Levels (Oregon Coast Range) | 0.41 | mg/kg | 73.17 |

Table 3
Summary RBC/RSL Exceedances - Soil
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| Decision Unit 4G | | | | | | |
| Total Metals by EPA Method 6010d and Method 7471B | | | | | | |
| Zinc | 228 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Direct Toxicity (Plants)<br>RSL Soils: Direct Toxicity (Inverts)<br>Mean Regional Background Levels (Oregon Coast Range) | 46 | mg/kg | 4.96 |
| Mercury | 0.0583 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Direct Toxicity (Inverts) | 0.013 | mg/kg | 4.48 |
| Dioxins and Furans by EPA Method 8290 in ng/kg | | | | | | |
| 2,3,4,7,8-PeCDF | 2.1 | ng/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 0.41 | ng/kg | 5.12 |
| 1,2,3,7,8-PeCDD | 0.58 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Top Consumer Mammals T&E | 0.28 | ng/kg | 2.07 |
| 1,2,3,4,7,8-HxCDF | 3.5 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 1.1 | ng/kg | 3.18 |
| 1,2,3,6,7,8-HxCDF | 3.5 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 1.1 | ng/kg | 3.18 |
| 2,3,4,6,7,8-HxCDF | 2.3 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 1.1 | ng/kg | 2.09 |

Table 3
Summary RBC/RSL Exceedances - Soil
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| **Decision Unit 4G** | | | | | | |
| Dioxins and Furans by EPA Method 8290 in ng/kg | | | | | | |
| 1,2,3,7,8,9-HxCDF | 1.6 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E** | 1.4 | ng/kg | 1.14 |
| 1,2,3,6,7,8-HxCDD | 9.8 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Top Consumer Mammals T&E | 0.89 | ng/kg | 11.01 |
| 1,2,3,7,8,9-HxCDD | 3 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 0.89 | ng/kg | 3.37 |
| 1,2,3,4,6,7,8-HpCDF | 23 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 11 | ng/kg | 2.09 |
| 1,2,3,4,6,7,8-HpCDD | 280 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 7 | ng/kg | 40.00 |
| OCDD | 1400 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Top Consumer Mammals Non T&E | 200 | ng/kg | 7.00 |
| **Decision Unit 4H** | | | | | | |
| Total Petroleum Hydrocarbons by NWTPH-Dx | | | | | | |
| None | -- | -- | -- | -- | -- | -- |
| Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270E-SIM | | | | | | |
| None | -- | -- | -- | -- | -- | -- |
| Total Metals by EPA Method 6010d and Method 7471B | | | | | | |
| Arsenic | 8.31 | mg/kg | **RSL Soils: Direct Toxicity (Inverts)** | 6.8 | mg/kg | 1.22 |
| Copper | 36.6 | mg/kg | **RSL Soils: Ground Feeding Birds- T&E** | 14 | mg/kg | 2.61 |
| Lead | 30.2 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E | 11 | mg/kg | 2.75 |

Table 3
Summary RBC/RSL Exceedances - Soil
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| **Decision Unit 4H** | | | | | | |
| Total Metals by EPA Method 6010d and Method 7471B | | | | | | |
| Selenium | 2.29 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Direct Toxicity (Plants)<br>Mean Regional Background Levels (Oregon Coast Range) | 0.52 | mg/kg | 4.40 |
| Zinc | 220 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Direct Toxicity (Plants)<br>RSL Soils: Direct Toxicity (Inverts)<br>Mean Regional Background Levels (Oregon Coast Range) | 46 | mg/kg | 4.78 |
| Mercury | 0.0646 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Direct Toxicity (Inverts) | 0.013 | mg/kg | 4.97 |
| Dioxins and Furans by EPA Method 8290 in ng/kg | | | | | | |
| 2,3,4,7,8-PeCDF | 0.57 | ng/kg | **RSL Soils: Ground Feeding Birds T&E** | 0.41 | ng/kg | 1.39 |
| 1,2,3,4,6,7,8-HpCDD | 9.6 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E** | 7 | ng/kg | 1.37 |
| **Decision Unit 4I** | | | | | | |
| Total Petroleum Hydrocarbons by NWTPH-Dx | | | | | | |
| Residual Range Organics | 13,200 | mg/kg | **RBC Soil: Ingestion, Contact and Inhalation-Construction Worker** | 11,000 | mg/kg | 1.2 |
| Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270E-SIM | | | | | | |
| None | -- | -- | -- | -- | -- | -- |

Table 3
Summary RBC/RSL Exceedances - Soil
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| Decision Unit 4I | | | | | | |
| Total Metals by EPA Method 6010d and Method 7471B | | | | | | |
| Arsenic | 7.74 | mg/kg | **RSL Soils: Direct Toxicity (Inverts)** | 6.8 | mg/kg | 1.14 |
| Barium | 129 | mg/kg | **RSL Soils: Direct Toxicity (Plants)** | 110 | mg/kg | 1.17 |
| Cadmium | 1.52 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSLSoils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>Mean Regional Background Levels (Oregon Coast Range) | 0.29 | mg/kg | 5.24 |
| Copper | 73.2 | mg/kg | **RSL Soils: Ground Feeding Birds- T&E**<br>RSL Soils: Ground Feeding Birds- Non T&E<br>RSL Soils: Ground Feeding Mammals- Non T&E | 14 | mg/kg | 5.23 |
| Lead | 129 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Direct Toxicity (Plants)<br>Mean Regional Background Levels (Oregon Coast Range) | 11 | mg/kg | 11.73 |
| Selenium | 3.06 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Direct Toxicity (Plants)<br>Mean Regional Background Levels (Oregon Coast Range) | 0.52 | mg/kg | 5.88 |

Table 3
Summary RBC/RSL Exceedances - Soil
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| Decision Unit 4I | | | | | | |
| Total Metals by EPA Method 6010d and Method 7471B | | | | | | |
| Zinc | 357 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Direct Toxicity (Plants)<br>RSL Soils: Direct Toxicity (Inverts)<br>Mean Regional Background Levels (Oregon Coast Range) | 46 | mg/kg | 7.76 |
| Mercury | 0.0653 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Direct Toxicity (Inverts) | 0.013 | mg/kg | 5.02 |
| Dioxins and Furans by EPA Method 8290 in ng/kg | | | | | | |
| 2,3,7,8-TCDF | 2.2 | ng/kg | **RSL Soils: Ground Feeding Birds T&E** | 0.64 | ng/kg | 3.44 |
| 2,3,4,7,8-PeCDF | 6.3 | ng/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Top Consumer Birds T&E | 0.41 | ng/kg | 15.37 |
| 1,2,3,7,8-PeCDD | 1 | ng/kg | **RSL Soils: Ground Feeding Birds T&E** | 0.52 | ng/kg | 1.92 |
| 1,2,3,4,7,8-HxCDF | 13 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 1.1 | ng/kg | 11.82 |
| 1,2,3,6,7,8-HxCDF | 6.1 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 1.1 | ng/kg | 5.55 |

Table 3
Summary RBC/RSL Exceedances - Soil
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| Decision Unit 4I | | | | | | |
| Dioxins and Furans by EPA Method 8290 in ng/kg | | | | | | |
| 2,3,4,6,7,8-HxCDF | 6.8 | ng/kg | RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 1.1 | ng/kg | 6.18 |
| 1,2,3,7,8,9-HxCDF | 4 | ng/kg | RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 1.4 | ng/kg | 2.86 |
| 1,2,3,4,7,8-HxCDD | 1.7 | ng/kg | RSL Soils: Ground Feeding Mammals Non T&E | 1.2 | ng/kg | 1.42 |
| 1,2,3,6,7,8-HxCDD | 4.7 | ng/kg | RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Ground Feeding Birds T&E | 0.89 | ng/kg | 5.28 |
| 1,2,3,7,8,9-HxCDD | 3.2 | ng/kg | RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 0.89 | ng/kg | 3.60 |
| 1,2,3,4,6,7,8-HpCDF | 32 | ng/kg | RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 11 | ng/kg | 2.91 |
| 1,2,3,4,6,7,8-HpCDD | 84 | ng/kg | RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 7 | ng/kg | 12.00 |
| OCDD | 690 | ng/kg | RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 300 | ng/kg | 2.30 |
| Decision Unit 6 | | | | | | |
| Total Petroleum Hydrocarbons by NWTPH-Dx | | | | | | |
| None | -- | -- | -- | -- | -- | -- |
| Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270E-SIM | | | | | | |
| None | -- | -- | -- | -- | -- | -- |

Table 3
Summary RBC/RSL Exceedances - Soil
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| Decision Unit 6 | | | | | | |
| Total Metals by EPA Method 6010d and Method 7471B | | | | | | |
| Arsenic | 8.99 | mg/kg | **RSL Soils: Direct Toxicity (Inverts)** | 6.8 | mg/kg | 1.32 |
| Cadmium | 0.252 | mg/kg | **RSL Soils: Ground Feeding Birds T&E** | 0.29 | mg/kg | 0.87 |
| Copper | 19.3 | mg/kg | **RSL Soils: Ground Feeding Birds- T&E** | 14 | mg/kg | 1.38 |
| Lead | 20.5 | mg/kg | **RSL Soils: Ground Feeding Birds T&E** | 11 | mg/kg | 1.86 |
| Selenium | 2 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Direct Toxicity (Plants)<br>Mean Regional Background Levels (Oregon Coast Range) | 0.52 | mg/kg | 3.85 |
| Zinc | 91.4 | mg/kg | **RSL Soils: Ground Feeding Birds T&E** | 46 | mg/kg | 1.99 |
| Mercury | 0.041 | mg/kg | **RSL Soils: Ground Feeding Birds T&E** | 0.013 | mg/kg | 3.15 |
| Dioxins and Furans by EPA Method 8290 in ng/kg | | | | | | |
| 1,2,3,4,6,7,8-HpCDD | 21 | ng/kg | **RSL Soils: Ground Feeding Mammals Non T&E**<br>RSL Soils: Top Consumer Mammals Non T&E | 7 | ng/kg | 3.00 |

Table 4
Summary RBC/RSL Exceedances - Sedime
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| Decision Unit: 3, Sediment | | | | | | |
| Total Petroleum Hydrocarbons by NWTPH-Dx | | | | | | |
| None | -- | -- | -- | -- | -- | -- |
| Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270E-SIM | | | | | | |
| None | -- | -- | -- | -- | -- | -- |
| Total Metals by EPA Method 6010d and Method 7471B | | | | | | |
| None | -- | -- | -- | -- | -- | -- |
| Dioxins and Furans by EPA Method 8290 in ng/kg | | | | | | |
| None | -- | -- | -- | -- | -- | -- |
| Decision Unit: 5, Sediment | | | | | | |
| Total Petroleum Hydrocarbons by NWTPH-Dx | | | | | | |
| None | -- | -- | -- | -- | -- | -- |
| Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270E-SIM | | | | | | |
| None | -- | -- | -- | -- | -- | -- |
| Total Metals by EPA Method 6010d and Method 7471B | | | | | | |
| Selenium | 1.74 | mg/kg | RSL Soils: Direct Toxicity (Plants)<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Ground Feeding Mammals Non T&E<br>Mean Regional Background Levels (Oregon Coast Range) | 0.52 | mg/kg | 3.35 |
| Dioxins and Furans by EPA Method 8290 in ng/kg | | | | | | |
| None | -- | -- | -- | -- | -- | -- |

Table 4
Summary RBC/RSL Exceedances - Sedime
Former King Salvage
Toledo, Oregon

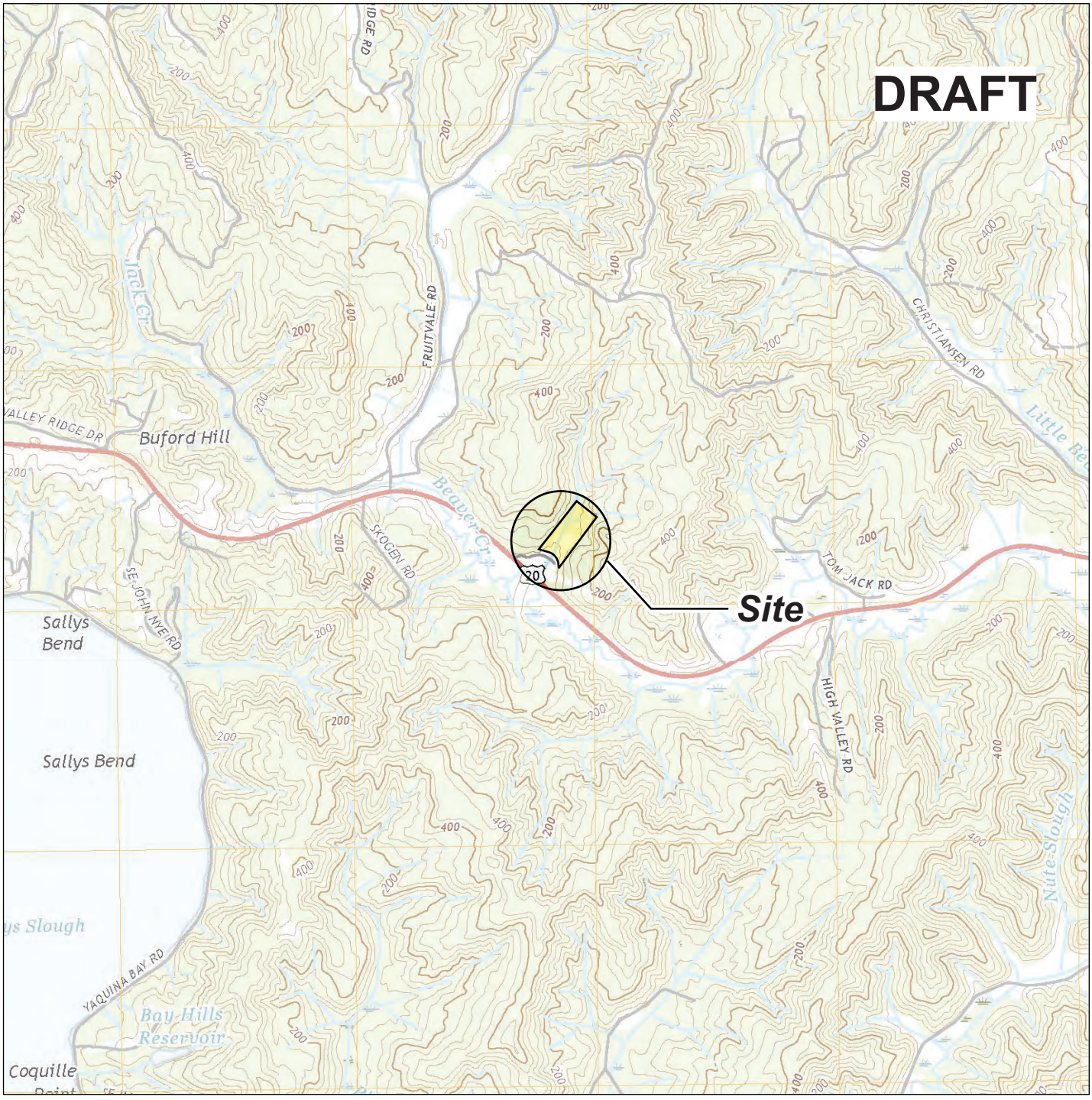
| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| Decision Unit: 6, Sediment | | | | | | |
| Total Petroleum Hydrocarbons by NWTPH-Dx | | | | | | |
| None | -- | -- | -- | -- | -- | -- |
| Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270E-SIM | | | | | | |
| None | -- | -- | -- | -- | -- | -- |
| Total Metals by EPA Method 6010d and Method 7471B | | | | | | |
| Cadmium | 2.63 | mg/kg | Mean Regional Background Levels (Oregon Coast Range)<br>RSL Freshwater- Sediments<br>RSL Soils: Ground Feeding Birds T&E | 0.54 | mg/kg | 4.87 |
| Chromium | 60.3 | mg/kg | RSL Soils: Ground Feeding Birds T&E<br>RSL Freshwater- Sediments | 23 | mg/kg | 2.62 |
| Copper | 167 | mg/kg | RSL Soils: Ground Feeding Birds T&E<br>RSL Freshwater- Sediments<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Ground Feeding Mammals<br>RSL Soils: Direct Toxicity (Plants)<br>RSL Soils: Direct Toxicity (Inverts)<br>Mean Regional Background Levels (Oregon Coast Range) | 14 | mg/kg | 11.93 |
| Lead | 171 | mg/kg | RSL Soils: Ground Feeding Birds T&E<br>RSL Freshwater- Sediments<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Top Consumer Birds Non T&E<br>RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Direct Toxicity (Plants)<br>Mean Regional Background Levels (Oregon Coast Range) | 11 | mg/kg | 15.55 |

Table 4
Summary RBC/RSL Exceedances - Sedime
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| Decision Unit: 6, Sediment | | | | | | |
| Total Petroleum Hydrocarbons by NWTPH-Dx | | | | | | |
| Selenium | 5.23 | mg/kg | **RSL Soils: Direct Toxicity (Plants)**<br>RSL Soils: Direct Toxicity (Inverts)<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Ground Feeding Mammals Non T&E<br>Mean Regional Background Levels (Oregon Coast Range) | 0.52 | mg/kg | 10.06 |
| Silver | 0.546 | mg/kg | **Mean Regional Background Levels (Oregon Coast Range)** | 0.41 | mg/kg | 1.33 |
| Zinc | 847 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Top Consumer Birds Non T&E<br>RSL Soils: Direct Toxicity (Plants)<br>RSL Soils: Direct Toxicity (Inverts)<br>RSL Freshwater- Sediments<br>Mean Regional Background Levels (Oregon Coast Range) | 46 | mg/kg | 18.41 |
| Mercury | 0.773 | mg/kg | **RSL Soils: Ground Feeding Birds T&E**<br>RSL Soils: Ground Feeding Birds Non T&E<br>RSL Soils: Top Consumer Birds T&E<br>RSL Soils: Top Consumer Birds Non T&E<br>RSL Soils: Direct Toxicity (Inverts)<br>Mean Regional Background Levels (Oregon Coast Range) | 0.013 | mg/kg | 59.46 |

Table 4
Summary RBC/RSL Exceedances - Sedimer
Former King Salvage
Toledo, Oregon

| | Maximum Concentration | Units | RBC/RSL Pathways Exceeded (Most Conservative Pathway in Bold) | Most Conservative Pathway Concentration | Units | Exceedence Factor (Max Conc./Min RBC/RSL) |
|---|---|---|---|---|---|---|
| Decision Unit: 6, Sediment | | | | | | |
| Dioxins and Furans by EPA Method 8290 in ng/kg | | | | | | |
| 2,3,4,7,8-PeCDF | 1.8 | ng/kg | RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 0.41 | ng/kg | 4.39 |
| 1,2,3,7,8-PeCDD | 0.59 | ng/kg | RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Ground Feeding Birds T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 0.28 | ng/kg | 2.11 |
| 1,2,3,4,7,8-HxCDF | 2.1 | ng/kg | RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 1.1 | ng/kg | 1.91 |
| 1,2,3,6,7,8-HxCDF | 1.7 | ng/kg | RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 1.1 | ng/kg | 1.55 |
| 2,3,4,6,7,8-HxCDF | 1.7 | ng/kg | RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 1.1 | ng/kg | 1.55 |
| 1,2,3,6,7,8-HxCDD | 1.5 | ng/kg | RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 0.89 | ng/kg | 1.69 |
| 1,2,3,7,8,9-HxCDD | 1.6 | ng/kg | RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 0.89 | ng/kg | 1.80 |
| 1,2,3,4,6,7,8-HpCDF | 12 | ng/kg | RSL Soils: Ground Feeding Mammals Non T&E | 11 | ng/kg | 1.09 |
| 1,2,3,4,6,7,8-HpCDD | 41 | ng/kg | RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 7 | ng/kg | 5.86 |
| OCDD | 690 | ng/kg | RSL Soils: Ground Feeding Mammals Non T&E<br>RSL Soils: Top Consumer Mammals Non T&E | 300 | ng/kg | 2.30 |




***Note:*** Base map prepared from USGS 7.5-minute quadrangles of Newport North and South and Toledo North and South, OR, dated 2020 as provided by USGS.gov.



0 2,000 4,000

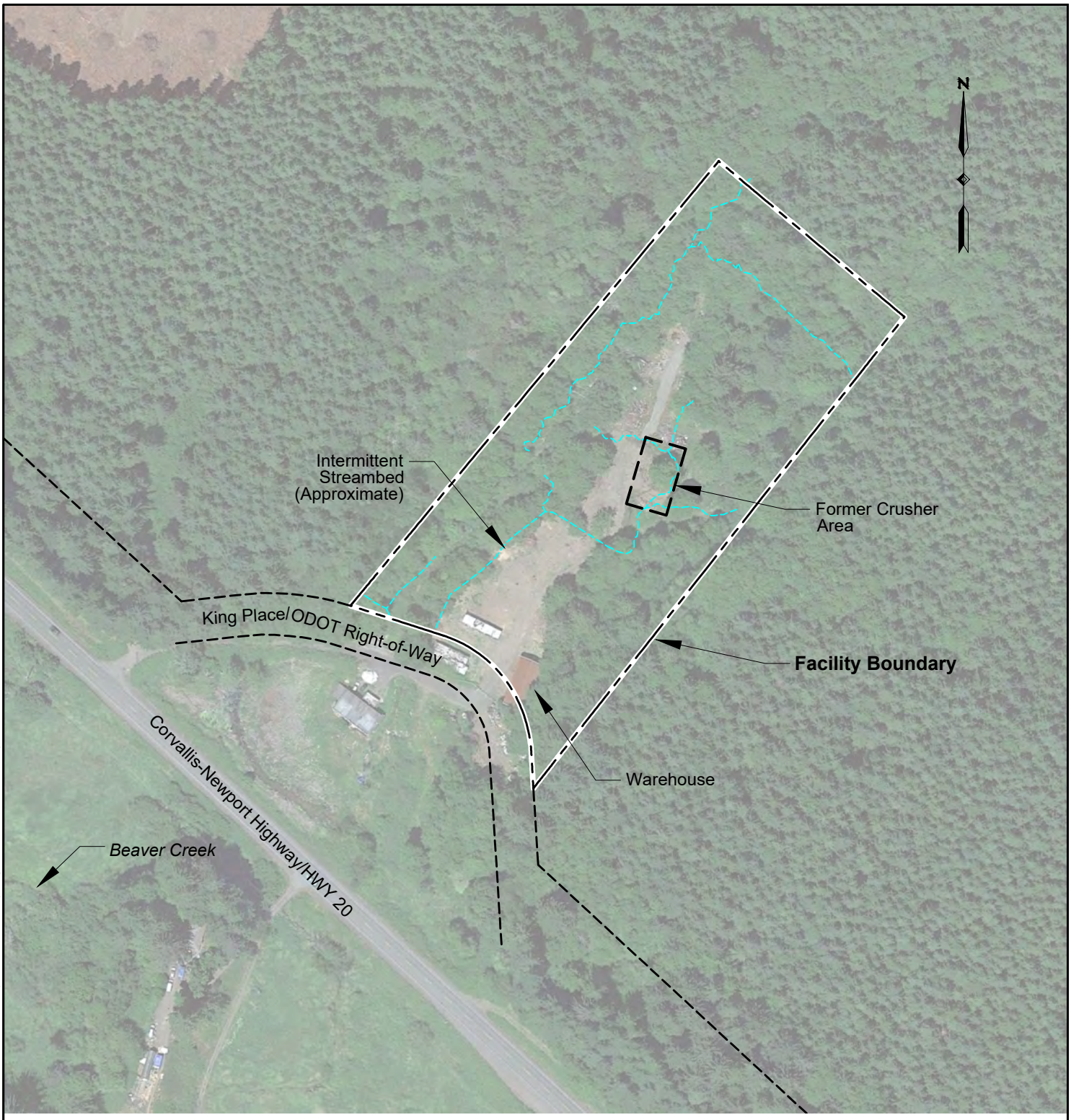
Approximate Scale in Feet

# Site Location Map

SSI Data Memorandum
Former DEQ King Salvage Site - 109 King Place
Toledo, Oregon

| | | | | |
|---|---|---|---|---|
| Apex Companies, LLC<br>15618 SW 72nd Avenue<br>Tigard, Oregon 97224 | Project Number:<br>32-23010077 | Drawn:<br>JP | Approved:<br>AB | Figure<br>1 |
| | June 2024 | | | |

I:\Client\DEQ\Oregon\32-23010077 King Salvage\2024 ABCA Update\32-23010077 01 (Site Location).des




***NOTE:*** Base map prepared from Google Earth Pro Imagery.
Aerial dated September 24, 2019. Tax Lot lines are approximate.

0 200 400
Scale in Feet

# Site Plan

SSI Data Memorandum
Former DEQ King Salvage Site - 109 King Place
Toledo, Oregon

| | | | | |
|---|---|---|---|---|
| Apex Companies, LLC<br>15618 SW 72nd Avenue<br>Tigard, Oregon 97224 | Project Number:<br>32-23010077 | Drawn:<br>JP | Approved:<br>AB | Figure<br>**2** |
| | June 2024 | | | |

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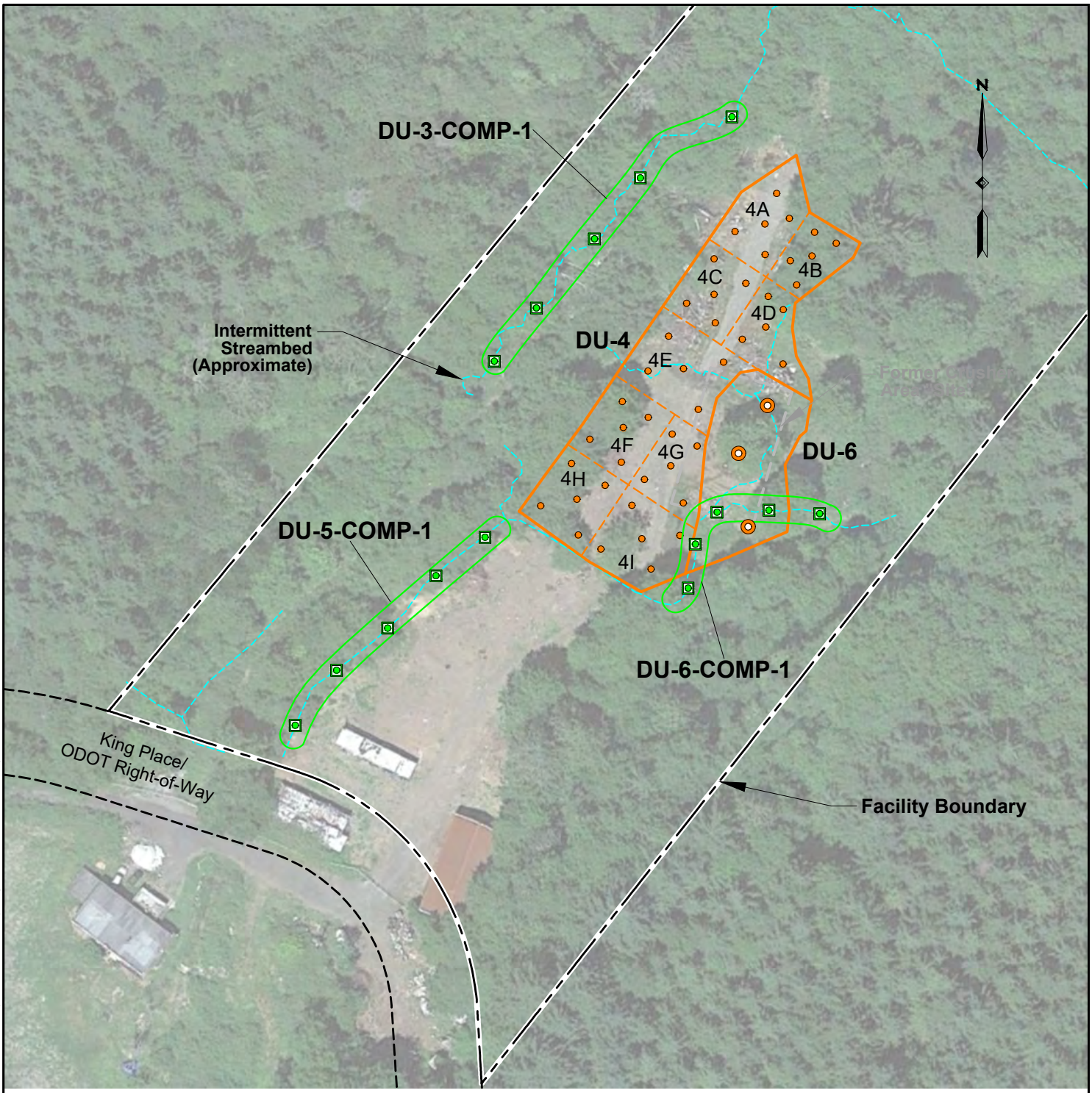


***NOTE:*** Base map prepared from Google Earth Pro Imagery.
Tax Lot lines are approximate.

***Legend:***

- **DU-4** Decision Unit Boundary and Designation
- 4A Subunit Boundary and Designation
- 5-Point Subsurface Soil Composite (3')
  (Each sample location represents three interval depths, a sample aliquot will be collected and incorporated into a composite.)
- Discrete Soil Boring Location (5')
- 5-Point Streambed Sediment Composite (6")

0 100 200
Scale in Feet

# Decision Units

SSI Data Memorandum
Former DEQ King Salvage Site - 109 King Place
Toledo, Oregon


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


| Project Number: | Drawn: | Approved: | Figure |
|---|---|---|---|
| 32-23010077 | JP | AB | 3 |
| June 2024 | | | |

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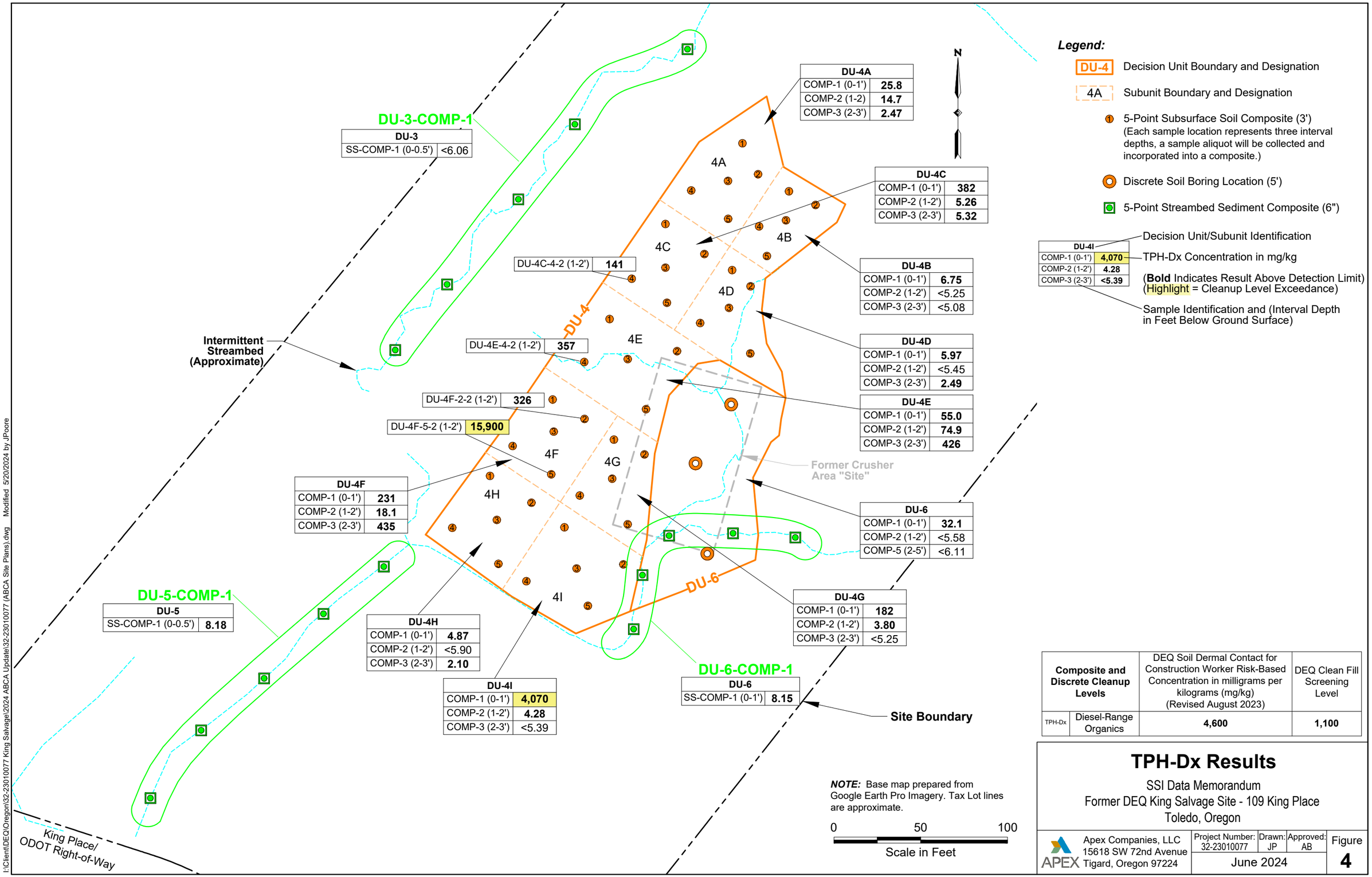


***NOTE:*** Base map prepared from Google Earth Pro Imagery. Tax Lot lines are approximate.

0 50 100

Scale in Feet

| Composite and Discrete Cleanup Levels | | DEQ Soil Dermal Contact for Construction Worker Risk-Based Concentration in milligrams per kilograms (mg/kg) (Revised August 2023) | DEQ Clean Fill Screening Level |
|---|---|---|---|
| TPH-Dx | Diesel-Range Organics | **4,600** | **1,100** |

# TPH-Dx Results

SSI Data Memorandum
Former DEQ King Salvage Site - 109 King Place
Toledo, Oregon

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

| Project Number: | Drawn: | Approved: | Figure |
|---|---|---|---|
| 32-23010077 | JP | AB | **4** |

June 2024

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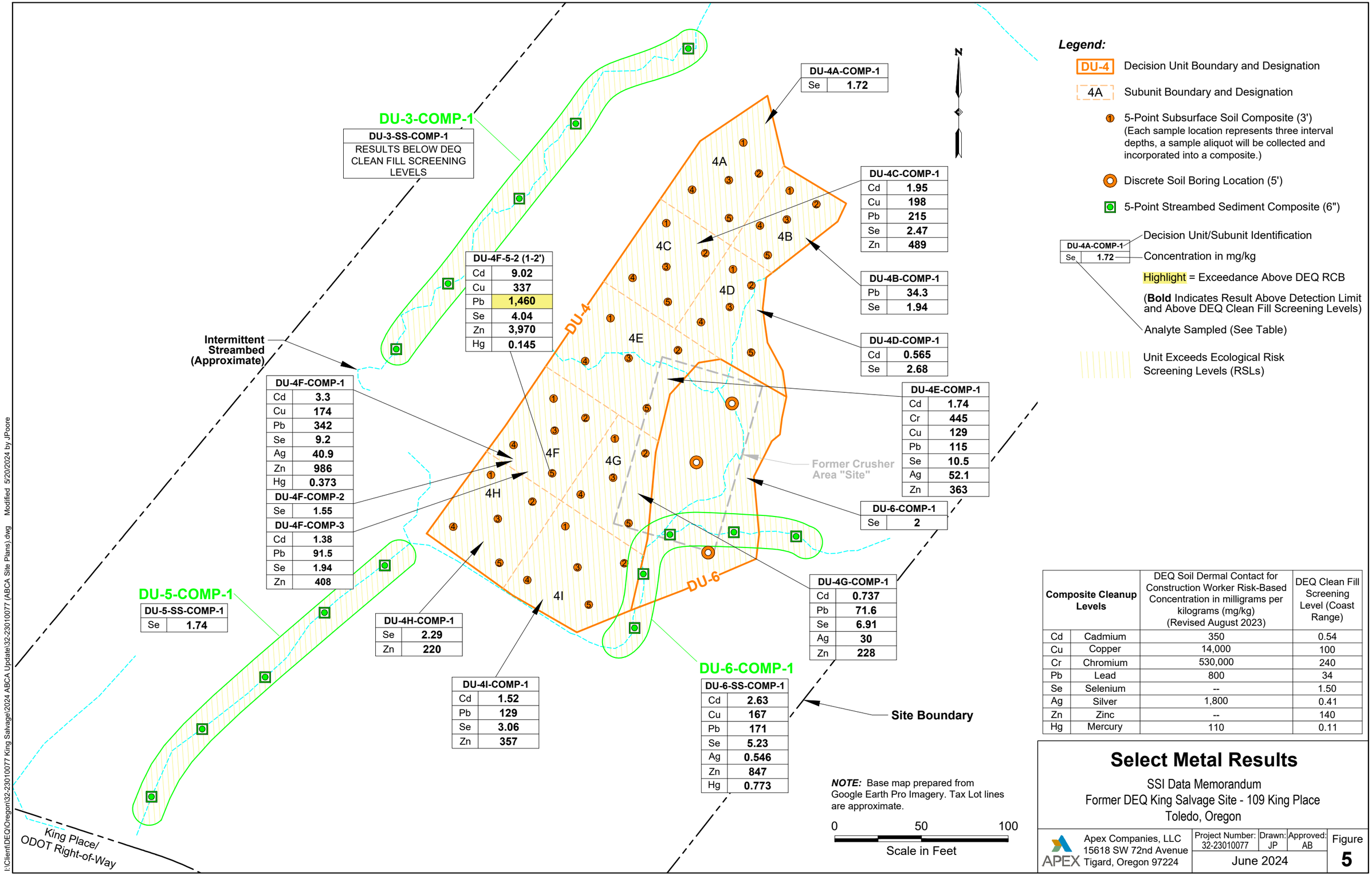



***Legend:***

- DU-4 — Decision Unit Boundary and Designation
- 4A — Subunit Boundary and Designation
- 5-Point Subsurface Soil Composite (3') (Each sample location represents three interval depths, a sample aliquot will be collected and incorporated into a composite.)
- Discrete Soil Boring Location (5')
- 5-Point Streambed Sediment Composite (6")

DU-4A-COMP-1 / Se 1.72 — Decision Unit/Subunit Identification; Concentration in mg/kg

Highlight = Exceedance Above DEQ RCB

(**Bold** Indicates Result Above Detection Limit and Above DEQ Clean Fill Screening Levels)

Analyte Sampled (See Table)

Unit Exceeds Ecological Risk Screening Levels (RSLs)

| Composite Cleanup Levels | | DEQ Soil Dermal Contact for Construction Worker Risk-Based Concentration in milligrams per kilograms (mg/kg) (Revised August 2023) | DEQ Clean Fill Screening Level (Coast Range) |
|---|---|---|---|
| Cd | Cadmium | 350 | 0.54 |
| Cu | Copper | 14,000 | 100 |
| Cr | Chromium | 530,000 | 240 |
| Pb | Lead | 800 | 34 |
| Se | Selenium | -- | 1.50 |
| Ag | Silver | 1,800 | 0.41 |
| Zn | Zinc | -- | 140 |
| Hg | Mercury | 110 | 0.11 |

***NOTE:*** Base map prepared from Google Earth Pro Imagery. Tax Lot lines are approximate.

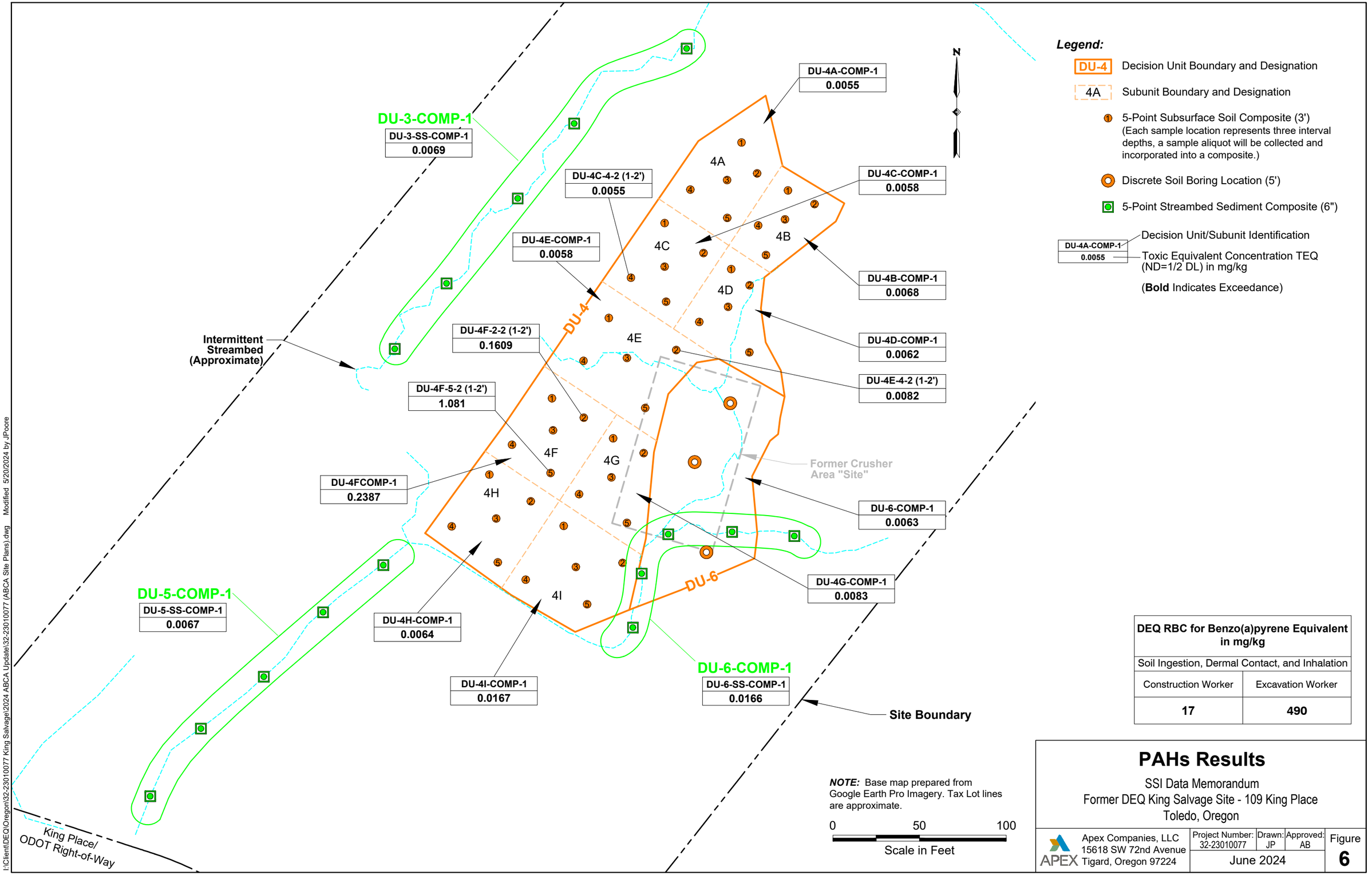
# Select Metal Results

SSI Data Memorandum
Former DEQ King Salvage Site - 109 King Place
Toledo, Oregon


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


| Project Number: | Drawn: | Approved: | Figure |
|---|---|---|---|
| 32-23010077 | JP | AB | 5 |

June 2024




***Legend:***

- DU-4 — Decision Unit Boundary and Designation
- 4A — Subunit Boundary and Designation
- 1 — 5-Point Subsurface Soil Composite (3') (Each sample location represents three interval depths, a sample aliquot will be collected and incorporated into a composite.)
- Discrete Soil Boring Location (5')
- 5-Point Streambed Sediment Composite (6")
- DU-4A-COMP-1 / 0.0055 — Decision Unit/Subunit Identification; Toxic Equivalent Concentration TEQ (ND=1/2 DL) in mg/kg

(**Bold** Indicates Exceedance)

| DEQ RBC for Benzo(a)pyrene Equivalent in mg/kg | |
|---|---|
| Soil Ingestion, Dermal Contact, and Inhalation | |
| Construction Worker | Excavation Worker |
| 17 | 490 |

***NOTE:*** Base map prepared from Google Earth Pro Imagery. Tax Lot lines are approximate.

0 50 100

Scale in Feet

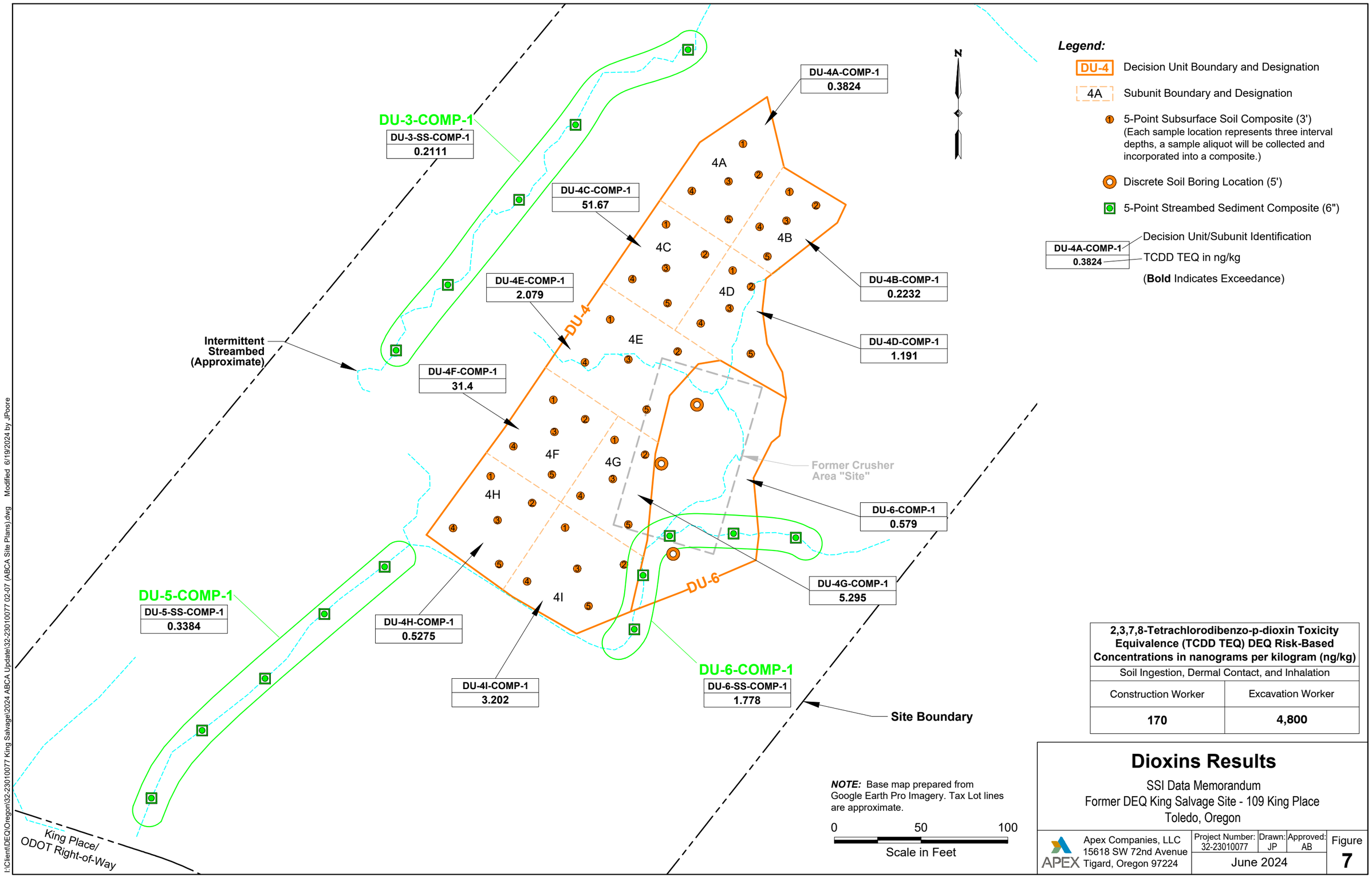
# PAHs Results

SSI Data Memorandum
Former DEQ King Salvage Site - 109 King Place
Toledo, Oregon

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

| Project Number: | Drawn: | Approved: | Figure |
|---|---|---|---|
| 32-23010077 | JP | AB | 6 |

June 2024




| 2,3,7,8-Tetrachlorodibenzo-p-dioxin Toxicity Equivalence (TCDD TEQ) DEQ Risk-Based Concentrations in nanograms per kilogram (ng/kg) | |
|---|---|
| Soil Ingestion, Dermal Contact, and Inhalation | |
| Construction Worker | Excavation Worker |
| **170** | **4,800** |

***NOTE:*** Base map prepared from Google Earth Pro Imagery. Tax Lot lines are approximate.

0 50 100

Scale in Feet

# Dioxins Results

SSI Data Memorandum
Former DEQ King Salvage Site - 109 King Place
Toledo, Oregon

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

| Project Number: | Drawn: | Approved: | Figure |
|---|---|---|---|
| 32-23010077 | JP | AB | 7 |

June 2024

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# *Attachment A*

## Backup Documentation and Field Notes

# ATTACHMENT A
# PHOTOGRAPH LOG

**Project Name:** King Salvage (Former) Site
**Project Number:** 32-23010077

**Client:** DEQ
**Location:** 109 King Place, Toledo, OR

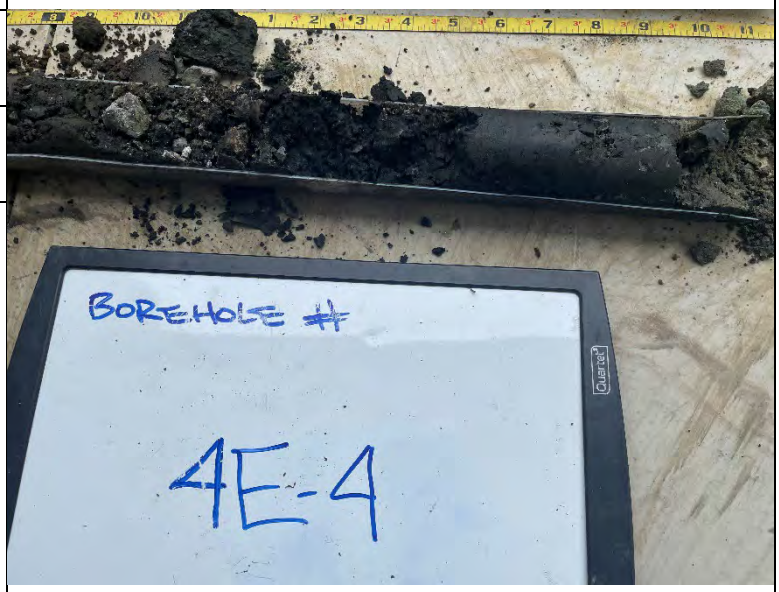
| | |
|---|---|
| **Photo No:** 1 | |
| **Photo Date:** 4/8/2024 |  |
| **Orientation:** View looking north | |
| **Description:**<br><br>Steadfast Services utilized a Geoprobe® Model 7720DT direct push drill fitted with a Macro-Core® MC5 2.25-inch outside diameter soil sampling system. | |

| | |
|---|---|
| **Photo No:** 2 | |
| **Photo Date:** 4/8/2024 |  |
| **Orientation:** Borehole DU-4C-4 | |
| **Description:**<br><br>The first borehole attempt of DU-4C-4 recovered a solid wood core with strong chemical odor – the shoe and rod of the drill penetrated the end of what appeared to be a vertically buried railroad tie. | |

# ATTACHMENT A
# PHOTOGRAPH LOG

**Project Name:** King Salvage (Former) Site
**Project Number:** 32-23010077

**Client:** DEQ
**Location:** 109 King Place, Toledo, OR

| | |
|---|---|
| **Photo No:** 3 | |
| **Photo Date:** 4/8/2024 |   |
| **Orientation:** Borehole DU-4E-4 | |
| **Description:**<br><br>Apex observed black staining and discoloration and petroleum-like odor with wispy iridescent sheen and elevated PID reading (22.0 ppm) at approximately 1.5-feet bgs. | |

| | |
|---|---|
| **Photo No:** 4 | |
| **Photo Date:** 4/9/2024 |   |
| **Orientation:** Borehole DU-4F-2 | |
| **Description:**<br><br>Apex observed a strong petroleum-like odor with black staining and discoloration and relatively high PID reading (309.2 ppm) at approximately 1.5-feet bgs. Suspect contamination was localized between approximately 1- to 2-feet bgs. | |

# ATTACHMENT A
# PHOTOGRAPH LOG

**Project Name:** King Salvage (Former) Site
**Project Number:** 32-23010077

**Client:** DEQ
**Location:** 109 King Place, Toledo, OR

| | |
|---|---|
| **Photo No:** 5 | |
| **Photo Date:** 4/9/2024 |   |
| **Orientation:** Borehole DU-4F-5 | |
| **Description:**<br><br>Apex observed a strong petroleum-like odor with black staining and discoloration and wispy iridescent sheen. An elevated PID reading (42.3 ppm) was collected at approximately 1-foot bgs. | |

| | |
|---|---|
| **Photo No:** 6 | |
| **Photo Date:** 4/9/2024 |  |
| **Orientation:** Borehole | |
| **Description:**<br><br>Steadfast Services backfilled each borehole with granular bentonite and hydrated. | |

# ATTACHMENT A
# PHOTOGRAPH LOG

**Project Name:** King Salvage (Former) Site
**Project Number:** 32-23010077

**Client:** DEQ
**Location:** 109 King Place, Toledo, OR

| | |
|---|---|
| **Photo No:** 7 | |
| **Photo Date:** 4/10/2024 |  |
| **Orientation:** Subunit DU-4B | |
| **Description:**<br><br>Apex advanced boreholes with hand augers within subunit DU-4B, which was inaccessible by the push probe rig due to significant vegetation and steep terrain. | |

| | |
|---|---|
| **Photo No:** 8 | |
| **Photo Date:** 4/10/2024 |  |
| **Orientation:** Western stream | |
| **Description:**<br><br>Apex collected five-point composite streambed sediment samples (0- to 0.5-feet) with a decontaminated shovel. | |

# ATTACHMENT A
# PHOTOGRAPH LOG

**Project Name:** King Salvage (Former) Site
**Project Number:** 32-23010077

**Client:** DEQ
**Location:** 109 King Place, Toledo, OR

| | |
|---|---|
| **Photo No:** 9 | |
| **Photo Date:** 4/10/2024 |  |
| **Orientation:** View looking east | |
| **Description:**<br><br>View of former car crusher area where previous test pitting was performed. Debris pile visible in background. Boreholes marked with wooden stakes following push probe drilling work. | |

| | |
|---|---|
| **Photo No:** 10 | |
| **Photo Date:** 4/10/2024 |  |
| **Orientation:** IDW | |
| **Description:**<br><br>Apex collected soil cuttings from the push probe work and stored them in a labeled 55-gallon drum and left them on-Site. Soil cuttings were analyzed for select metals and HCID. | |

Apex Companies, LLC
15618 SW &2nd Avenue
APEX Portland, Oregon 97224

Project Name: DEQ King Salvage, Toledo, OR
Project Number: 32-2301077

Decision Unit:

Logged By: AJB
Dates: 4-8-24
Site Conditions: CLOUDY
Drilling Contractor: Steadfast Services NW, LLC
Drilling Equipment:
Sampler Type:
Depth to Water (ATD):
Surface Elevation:

## Lithologic Description

*Fine-Grained Soils:*
type, (group symbol), color, moisture content, degree of plasticity, consistency, description w/ approximate percentage, notes/observations

*Coarse-Grained Soils:*
type, (group symbol), color, moisture content, grading, density, description w/ approximate percentage, notes/observations

Boring Number: 4A-1
Date: 4-8-24

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | |
|---|---|---|---|---|---|
| 1 | | | 0.1 | SS | GRAVEL |
| 2 | | | 0.1 | | ML, GRAY, MOIST, LOW PLASTICITY, SOFT, WETLAND DEPOSITS, BLUISH MOTTLING, NO OSD REWORKED SOIL |
| 3 | | | 0.0 | | WOOD FRAGMENTS |

Boring Number: 4A-2
Date: 4-8-24

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | |
|---|---|---|---|---|---|
| 1 | | | 0.1 | BS | GRAVEL |
| 2 | | | 0.1 | | ML, TAN/BROWN, MOIST, LOW PLASTICITY, SOFT, WETLAND DEPOSITS ORANGE MOTTLED, REWORKED SOIL WOOD FRAGMENTS, INCREASING SAND, NO OSD |
| 3 | | | | | |

Boring Number: 4A-3
Date: 4-8-24

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | |
|---|---|---|---|---|---|
| 1 | | | 0.1 | | GRASS, ROOTS, ORGANICS |
| 2 | | | 0.1 | BS | ML, TAN/ORANGE, MOIST, NON-PLASTICITY, SOFT, REWORKED SOIL GRAY AND ORANGE MOTTLED, NO OSD |
| 3 | | | 0.1 | | |

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Apex Companies, LLC
15618 SW &2nd Avenue
Portland, Oregon 97224

Project Name: DEQ King Salvage, Toledo, OR
Project Number: 32-2301077

Decision Unit:

Logged By: AJB
Dates: 4-8-24
Site Conditions: CLOUDY
Drilling Contractor: Steadfast Services NW, LLC
Drilling Equipment:
Sampler Type:
Depth to Water (ATD):
Surface Elevation:

## Lithologic Description

*Fine-Grained Soils:*
type, (group symbol), color, moisture content, degree of plasticity, consistency, description w/ approximate percentage, notes/observations

*Coarse-Grained Soils:*
type, (group symbol), color, moisture content, grading, density, description w/ approximate percentage, notes/observations

Boring Number: 4A-4
Date: 4A-4

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | |
|---|---|---|---|---|---|
| 1 | | | 0.1 | | GRAVEL |
| | | | | | ML, GRAY, MOIST, NON-PLASTIC SOFT, ORANGE MOTTLED, REWORKED SOIL |
| 2 | | | 0.6 | BS | |
| | | | | | ML, DARK GRAY, MOIST, LOW-PLASTIC, SOFT, WOOD FRAGMENTS / BLACK NO OSD |
| 3 | | | 0.5 | | |

Boring Number: 4A-5
Date: 4-8-24

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | |
|---|---|---|---|---|---|
| 1 | | | 0.4 | | GRASS, ROOTS, ORGANICS |
| | | | | | ML, TAN, GRAY / ORANGE MOTTLED NON-PLASTIC, SOFT REWORKED SOIL, SANDY LENSES, TRACE GRAVEL FRAGMENTS, UNIFORM FINE GRAINED SAND |
| 2 | | | 13.6 | NS | |
| | | | 0.4 | | |
| 3 | | | | | |

Boring Number: 4D-2
Date: 4-8-24

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | |
|---|---|---|---|---|---|
| 1 | | | 0.0 | | GRASS, ROOTS, ORGANICS |
| | | | | | ML, DARK BROWN AND TAN, WOOD MED. - PLASTIC, SOFT, REWORKED |
| | | | | NS | GRAVEL |
| 2 | | | 0.1 | | CL, TAN, SANDY CLAY, FEW GRAVEL (0.25 INCH) MED. PLASTIC, SOFT |
| 3 | | | 0.0 | | |

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Apex Companies, LLC
15618 SW &2nd Avenue
Portland, Oregon 97224

Project Name: DEQ King Salvage, Toledo, OR
Project Number: 32-2301077

Decision Unit:

Logged By: AJB
Dates: 4-8-24
Site Conditions: CLOUDY
Drilling Contractor: Steadfast Services NW, LLC
Drilling Equipment: GEOPROBE
Sampler Type: MCS 2¼" DIA.
Depth to Water (ATD):
Surface Elevation:

## Lithologic Description

*Fine-Grained Soils:*
type, (group symbol), color, moisture content, degree of plasticity, consistency, description w/ approximate percentage, notes/observations

*Coarse-Grained Soils:*
type, (group symbol), color, moisture content, grading, density, description w/ approximate percentage, notes/observations

Boring Number: AC-2
Date: 4-8-24

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | |
|---|---|---|---|---|---|
| 1 | | | 0.4 | NS | ORGANICS, PLASTIC, WOOD FRAGMENTS GRAVEL (0.25 INCH) |
| 2 | | | 0.1 | | ML, GRAY-BROWN, MOIST, LOW-PLASTIC, SOFT, BLUISH GRAY MOTTED REWORKED SOIL, INCREASING DARK BROWN COLOR, WOOD FRAGMENTS INCREASE W/ DEPTH |
| 3 | | | | | |

Boring Number: AC-1
Date: 4-8-24

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | |
|---|---|---|---|---|---|
| 1 | | | 0.1 | SS | GRASS, ROOTS, ORGANICS, GRAVEL |
| 2 | | | 0.1 | | SM, ORANGE, DRY, NONPLASTIC, DK BRN |
| 3 | | | 0.1 | | GRAY, ML, BLUISH GRAY MOTTLING FINE GRAINED SAND, LOW-PLASTIC WOOD FRAGMENTS FEW |

Boring Number: AC-3
Date: 4-8-24

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | |
|---|---|---|---|---|---|
| 1 | | | 0.0 | BS | ROOTS, ORGANICS, GRAVEL |
| 2 | | | 2.5 | | SM, DARK BROWN TO TAN, ORANGE MOTTLED, MOIST VFG SAND |
| 3 | | | 1.4 | | ML, VFG SAND, BLACK-DK GRAY BLUISH GRAY MOTTLED; NON-PLASTIC |

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Apex Companies, LLC
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Project Name: DEQ King Salvage, Toledo, OR
Project Number: 32-2301077

Decision Unit:

Logged By: A.B
Dates: 4-8-24
Site Conditions: CLOUDY
Drilling Contractor: Steadfast Services NW, LLC
Drilling Equipment:
Sampler Type:
Depth to Water (ATD):
Surface Elevation:

# Lithologic Description

*Fine-Grained Soils:*
type, (group symbol), color, moisture content, degree of plasticity, consistency, description w/ approximate percentage, notes/observations

*Coarse-Grained Soils:*
type, (group symbol), color, moisture content, grading, density, description w/ approximate percentage, notes/observations

Boring Number: AE-5
Date: 4-8-24

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | Lithologic Description |
|---|---|---|---|---|---|
| 1 | | | 1.1 | | GRAVEL, BROWN ML MATRIX (UP TO 2" LONG) |
| | | | 2.8 | | |
| | | | 2.1 | NS | ML, GRAY, VFG SAND, TAN MOTTLED |
| 2 | | | | | |
| 3 | | | | | |

Boring Number: AF-1
Date: 4-9-24

WOOD - PLYWOOD AT 1' BGS

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | Lithologic Description |
|---|---|---|---|---|---|
| 1 | | | 0.0 | SS | GRASS, ROOTLETS, ORGANICS |
| | | | | | ML, DARK BROWN, WET, LOW-PLASTIC REWORKED, GRAVEL/PLASTIC FRAGMENTS |
| | | | 0.6 | | WOOD AT TOP, ML, GRAY, VFG SAND, SOME GRAVEL, BLUISH GRAY MOTTLING, PLASTIC FRAGMENTS GLASS FRAGMENTS, SM |
| 2 | | | | | |
| 3 | | | | | |

Boring Number: AF-2
Date: 4-9-24

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | Lithologic Description |
|---|---|---|---|---|---|
| 1 | | | 0.5 | | GRAVEL |
| | | | | | ML, DARK BROWN, GRAVELLY, VFG SAND, RUBBER/GLASS FRAGMENTS, REWORKED |
| | | | 309.2 | SS | BLACK STAINING, STRONG RETRO-LIKE ODOR, LOOSE |
| 2 | | | | | TAN, SM, SOFT, LOOSE, VFG SAND TO COARSER, ORANGE/GRAY MOTTLE |
| | | | 15.1 | | |
| 3 | | | | | |

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Project Name: DEQ King Salvage, Toledo, OR
Project Number: 32-2301077

Decision Unit:

Logged By: AJB
Dates: 4-9-24
Site Conditions: RAIN
Drilling Contractor: Steadfast Services NW, LLC
Drilling Equipment:
Sampler Type:
Depth to Water (ATD):
Surface Elevation:

# Lithologic Description

*Fine-Grained Soils:*
type, (group symbol), color, moisture content, degree of plasticity, consistency, description w/ approximate percentage, notes/observations

*Coarse-Grained Soils:*
type, (group symbol), color, moisture content, grading, density, description w/ approximate percentage, notes/observations

Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen

## Boring Number: 4F-3

Date: 4-9-24

| Depth, feet | PID | Sheen | Lithologic Description |
|---|---|---|---|
| 1 | 0.6 | SS | GRASS, ROOTLETS<br>DARK BROWN, ML, GRAVELLY (1.5")<br>ORANGE - BLACK MOTTLING |
| 2 | 0.6 | | TAN, ML, SOFT, MOIST, HIGH PLASTICITY, VFG SAND, ORANGE - GRAY MOTTLING, COHESIVE |
| 3 | 0.6 | | |

## Boring Number: 4F-4

Date: 4-9-24

| Depth, feet | PID | Lithologic Description |
|---|---|---|
| 1 | 0.2 | SM, TAN, SOFT, MOIST, LOW-PLASTICITY, ORANGE-GRAY MOTTLING, LOOSE, VFG SAND SOME GRAVEL |
| 2 | 0.2 | |
| 3 | 0.1 | |

## Boring Number: 4F-5

Date: 4-9-24

| Depth, feet | PID | Lithologic Description |
|---|---|---|
| 1 | (42.3) | GRAVELLY, VFG SAND MATRIX DARK BROWN, LOOSE, PLASTIC FRAGMENTS, METAL FRAGMENTS |
| 2 | 0.7 | BLACK STAINING, PETRO-LIKE ODOR (STRONG), STRONG SHEEN<br>ORANGE LOOSE MG SAND AT BTM |
| 3 | | |

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Apex Companies, LLC
15618 SW &2nd Avenue
APEX Portland, Oregon 97224

Project Name: DEQ King Salvage, Toledo, OR
Project Number: 32-2301077

Decision Unit:

Logged By: AJB
Dates: 4-9-24
Site Conditions: SHOWERS
Drilling Contractor: Steadfast Services NW, LLC
Drilling Equipment:
Sampler Type:
Depth to Water (ATD):
Surface Elevation:

## Lithologic Description

*Fine-Grained Soils:*
type, (group symbol), color, moisture content, degree of plasticity, consistency, description w/ approximate percentage, notes/observations

*Coarse-Grained Soils:*
type, (group symbol), color, moisture content, grading, density, description w/ approximate percentage, notes/observations

Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen

Boring Number: AG-2
Date: 4-9-24

| Depth, feet | PID | Sheen | Lithologic Description |
|---|---|---|---|
| 1 | 0.0 | SS | GRAVEL, GLASS FRAGMENTS |
| | 0.0 | | POOR RECOVERY, 2 ATTEMPTS |
| | | | COPPER WIRE, BROWN, STIFF, |
| | | | HARD DRILLING, ORANGE-GRAY |
| | | | MOTTLING, MOIST MG-SAND |
| 2 | | | LOOSER AT BTM |
| 3 | | | |

Boring Number: AG-1
Date: 4-9-24

| Depth, feet | PID | Sheen | Lithologic Description |
|---|---|---|---|
| 1 | 0.0 | | GRAVEL |
| | | | ML, BROWN, MOIST, TAN-GRAY- |
| | | | ORANGE MOTTLED, BLUISH GRAY |
| | | | MOTTLE, VFG SAND, DENSE |
| 2 | 0.0 | | GRAVEL (~1") MOSTLY, W/ SANDY |
| | | | MATRIX |
| 3 | 0.0 | | SM, TAN, DENSE, ORANGE-GRAY |
| | | | MOTTLING, VFG SAND |

Boring Number: AG-3
Date: 4-9-24

| Depth, feet | PID | Sheen | Lithologic Description |
|---|---|---|---|
| 1 | 0.0 | NS | GRAVEL |
| | | | ML, TAN, GRAY-ORANGE MOTTLE |
| | | | SOFT, DENSE, LOW PLASTICITY |
| 2 | 0.0 | | MOSTLY GRAVEL, SANDY MATRIX |
| | | | |
| 3 | 0.1 | | |

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Apex Companies, LLC
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Portland, Oregon 97224

Project Name: DEQ King Salvage, Toledo, OR
Project Number: 32-2301077

Decision Unit:

Logged By: DK, AJB
Dates: 4.9-24
Site Conditions: PARTIAL SUN
Drilling Contractor: Steadfast Services NW, LLC
Drilling Equipment:
Sampler Type:
Depth to Water (ATD):
Surface Elevation:

## Lithologic Description

*Fine-Grained Soils:*
type, (group symbol), color, moisture content, degree of plasticity, consistency, description w/ approximate percentage, notes/observations

*Coarse-Grained Soils:*
type, (group symbol), color, moisture content, grading, density, description w/ approximate percentage, notes/observations

Boring Number: 4G-5
Date: 4-9-24

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | |
|---|---|---|---|---|---|
| 1 | | | 0.0 | NS | Gravel, slight blocky sheen on top water<br>ML, orange to bluish gray, med. plasticity, VFG sand, moist |
| 2 | | | 0.5 | NS | |
| 3 | | | 0.7 | NS | |

Boring Number: 4G-4
Date: 4-9-24

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | |
|---|---|---|---|---|---|
| 1 | | | 0.0 | SS | GRAVEL, BROWN SANDY MATRIX<br>BLACK, MOSTLY GRAVEL W/ SANDY MATRIX, GLASS FRAGMENTS STRONG SHEEN, SLIGHT PETRO-LIKE ODOR |
| 2 | | | 1.0 | | |
| 3 | | | 1.0 | | TAN, SM, GRAY MOTTLING, COARSER GRAINED SAND W/ DEPTH |

Boring Number: 4H-2
Date: 4-9-24

METAL

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | |
|---|---|---|---|---|---|
| 1 | | | 0.0 | | GRASS, ROOTLETS, LOOSE SOIL, WASHER<br>GRAVELLY (FEW), SM, BROWN, LOOSE ORANGE-TAN MOTTLING, VFG SAND NON-PLASTIC, GRAVEL UP TO 1.5" |
| 2 | | | 0.0 | NS | |
| 3 | | | 0.0 | | |

Apex Companies, LLC
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Portland, Oregon 97224

Project Name: DEQ King Salvage, Toledo, OR
Project Number: 32-2301077

Decision Unit:

Logged By: AJB
Dates: 4-9-24
Site Conditions: PARTIAL SUN
Drilling Contractor: Steadfast Services NW, LLC
Drilling Equipment:
Sampler Type:
Depth to Water (ATD):
Surface Elevation:

## Lithologic Description

*Fine-Grained Soils:*
type, (group symbol), color, moisture content, degree of plasticity, consistency, description w/ approximate percentage, notes/observations

*Coarse-Grained Soils:*
type, (group symbol), color, moisture content, grading, density, description w/ approximate percentage, notes/observations

Boring Number: 4H-3
Date: 4-9-24

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | Lithologic Description |
|---|---|---|---|---|---|
| 1 | | | | | VEGETATION, ROOTLETS |
| 2 | | | | NS | ML, BROWN, LOW-PLASTICITY, MOIST, ORANGE MOTTLING ROOTLETS DOWN TO 2', TRACE GRAVEL |
| 3 | | | | | |

Boring Number: 4H-1
Date: 4-9-24

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | Lithologic Description |
|---|---|---|---|---|---|
| 1 | | | 0.0 | | GRASS, ROOTLETS |
| 2 | | | 0.0 | NS | ML, BROWN, VFG SAND, ORANGE SAND LENSES, LOOSE, NON-PLASTIC ORGANIC SOIL, ROOTLETS DOWN TO 3' BGS, COARSER SAND AT BTM |
| 3 | | | 0.0 | | |

Boring Number: 4H-4
Date: 4-9-24

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | Lithologic Description |
|---|---|---|---|---|---|
| 1 | | | 0.0 | | ORGANICS, VEG. ROOTLETS |
| 2 | | | 0.0 | NS | SM, BROWN, MOIST, ORANGE MOTTLING, DENSE, LOW-PLASTICITY ROOTLETS DOWN TO 3' BGS, TRACE GRAVEL, LOOSE, NON-COHESIVE, FLUVIAL DEPOSITS |
| 3 | | | 0.0 | | |

Apex Companies, LLC
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APEX Portland, Oregon 97224

Project Name: DEQ King Salvage, Toledo, OR
Project Number: 32-2301077

Decision Unit:

Logged By: AJB
Dates: 4-9-24
Site Conditions: PARTIAL SUN
Drilling Contractor: Steadfast Services NW, LLC
Drilling Equipment:
Sampler Type:
Depth to Water (ATD):
Surface Elevation:

Boring Number: 4H-5
Date: 4-9-24

## Lithologic Description

*Fine-Grained Soils:*
type, (group symbol), color, moisture content, degree of plasticity, consistency, description w/ approximate percentage, notes/observations

*Coarse-Grained Soils:*
type, (group symbol), color, moisture content, grading, density, description w/ approximate percentage, notes/observations

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | |
|---|---|---|---|---|---|
| 1 | | | 0.0 | | VEG., BLACK ORGANIC SOIL, GRASS |
| | | | | NS | ML, BROWN, ORANGE MOTTLING ROOTLETS DOWN TO 3' BGS MOIST, LOOSE, SILTY, VFG SAND |
| 2 | | | 0.0 | | |
| 3 | | | 0.0 | | |

Boring Number:
Date: 4I-4

GLASS FRAGMENTS

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | |
|---|---|---|---|---|---|
| 1 | | | 0.0 | | GRASS, ROOTLETS, BLACK ORG. SOIL |
| | | | | | BROWN, ML, SILTY, VFG SAND ROOTLETS DOWN TO 3' BGS, ORANGE MOTTLING, WEATHERED SAND FRAGMENTS |
| 2 | | | 0.0 | NS | |
| 3 | | | 0.0 | | |

Boring Number: 4I-1
Date: 4-9-24

50%

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | |
|---|---|---|---|---|---|
| 1 | | | 0.0 | NS | GRAVEL, BLACK SANDY MATRIX LOOSE, GLASS-PLASTIC FRAGMENTS |
| | | | | | ML, BLACK, VFG SAND, LOW-PLASTIC |
| 2 | | | 0.0 | | ML, TAN, ORANGE MOTTLED, HARD SAND LENSES, ROOTLETS TO 2.25' BGS |
| 3 | | | 0.0 | | |

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Project Name: DEQ King Salvage, Toledo, OR
Project Number: 32-2301077

Decision Unit:

Logged By: AJB
Dates: 4-9-24
Site Conditions: PARTIAL SUN
Drilling Contractor: Steadfast Services NW, LLC
Drilling Equipment:
Sampler Type:
Depth to Water (ATD):
Surface Elevation:

## Lithologic Description

*Fine-Grained Soils:*
type, (group symbol), color, moisture content, degree of plasticity, consistency, description w/ approximate percentage, notes/observations

*Coarse-Grained Soils:*
type, (group symbol), color, moisture content, grading, density, description w/ approximate percentage, notes/observations

25%

Boring Number: AI-2
Date: 4-9-24

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | Lithologic Description |
|---|---|---|---|---|---|
| 1 | | | 0.0 | | VEG., GRAVEL, BROWN SANDY MATRIX |
| | | | 0.0 | 75% | MOSTLY GRAVEL (UP TO 2"), GRAY SANDY MATRIX |
| 2 | | | 0.0 | NS | SM, GRAY, ORANGE MOTTLED, COARSENING SANDS W/ DEPTH |
| 3 | | | | | |

Boring Number: AI-3
Date: 4-9-24

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | Lithologic Description |
|---|---|---|---|---|---|
| 1 | | | 0.0 | | VEG. ROOTLETS<br>MOSTLY GRAVEL, POOR RECOVERY<br>BLACK SANDY MATRIX |
| 2 | | | 0.0 | SS | ML, BROWN, ORANGE-GRAY MOTTLED, GRAY SANDY LENSES<br>COARSENING SANDS W/ DEPTH |
| 3 | | | | | |

Boring Number: AI-5
Date: 4-9-24

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | Lithologic Description |
|---|---|---|---|---|---|
| 1 | | | 0.0 | | GRAVEL (25%), BLACK LOOSE SOIL<br>MOIST, PLASTIC FRAGMENTS |
| | | | | | ML, DARK BROWN, ORANGE MOTTLED, GRAVEL (UP TO 2") 10%<br>DENSE, CONSOLIDATED |
| 2 | | | 0.0 | | |
| | | | 0.0 | | |
| 3 | | | | | |

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Project Name: DEQ King Salvage, Toledo, OR
Project Number: 32-2301077

Decision Unit:

Logged By: AJB
Dates: 4-9-24
Site Conditions: SUNNY
Drilling Contractor: Steadfast Services NW, LLC
Drilling Equipment:
Sampler Type:
Depth to Water (ATD):
Surface Elevation:

## Lithologic Description

*Fine-Grained Soils:*
type, (group symbol), color, moisture content, degree of plasticity, consistency, description w/ approximate percentage, notes/observations

*Coarse-Grained Soils:*
type, (group symbol), color, moisture content, grading, density, description w/ approximate percentage, notes/observations

Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen

**Boring Number: AD-1**
Date: 4-9-24

| Depth, feet | PID | Sheen | Lithologic Description |
|---|---|---|---|
| 1 | 0.0 | | WETLAND VEG. |
| | 0.0 | NS | CH, BROWN, FAT CLAY, MOIST, HIGH PLASTICITY, COHESIVE, TRACE GRAVEL |
| 2 | 0.0 | | |
| 3 | | | |

**Boring Number: AD-4**
Date: 4-9-24

| Depth, feet | PID | Sheen | Lithologic Description |
|---|---|---|---|
| 1 | 0.0 | | GRAVEL, BLACK SAND MATRIX BRITTLE WHITE LAYER, GLASS FILL MATERIAL |
| 2 | 0.0 | NS | SM, GRAY, TAN MOTTLED, VFG SAND COARSENING W/ DEPTH, DENSE, NON-COHESIVE |
| 3 | 0.0 | | |

**Boring Number: AD-3**
Date: 4-9-24

| Depth, feet | PID | Sheen | Lithologic Description |
|---|---|---|---|
| 1 | 0.0 | NS | WETLAND VEG. |
| | | | ML, TAN, VFG SAND, ORANGE GRAY MOTTLING, MED. DENSE NON-COHESIVE, ROOTS DOWN TO 2' BGS, COARSENING SAND W/ DEPTH |
| 2 | 0.0 | | |
| 3 | 0.0 | | |

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Project Name: DEQ King Salvage, Toledo, OR
Project Number: 32-2301077

Decision Unit:

Logged By: AJB
Dates: 4-9-24
Site Conditions: SUNNY
Drilling Contractor: Steadfast Services NW, LLC
Drilling Equipment:
Sampler Type:
Depth to Water (ATD):
Surface Elevation:

## Lithologic Description

*Fine-Grained Soils:*
type, (group symbol), color, moisture content, degree of plasticity, consistency, description w/ approximate percentage, notes/observations

*Coarse-Grained Soils:*
type, (group symbol), color, moisture content, grading, density, description w/ approximate percentage, notes/observations

Boring Number: AD-5
Date: 4-9-24

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | Lithologic Description |
|---|---|---|---|---|---|
| 1 | | | 0.0 | NS | WETLAND VEG. SM, TAN, VFG SAND, ORANGE GRAY MOTTLING, SATURATED MED. DENSE, NON-COHESIVE NON-PLASTIC |
| 2 | | | 0.0 | | |
| 3 | | | 0.0 | | |

Boring Number: DU-6-1
Date: 4-10-24

SEE DEEPER BORING LOG

Boring Number: AB-1
Date: 4-10-24

HA

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | Lithologic Description |
|---|---|---|---|---|---|
| 1 | | | 2.5 | NS | OL ~2" dk brown organic silt - topsoil - SM, orange and tan to orange silty sand, moist, med. dense |
| 2 | | | 3.2 | | |
| 3 | | | 1.2 | | |

Apex Companies, LLC
15618 SW &2nd Avenue
Portland, Oregon 97224

Project Name: DEQ King Salvage, Toledo, OR
Project Number: 32-2301077

Decision Unit: 4B
Logged By: EK
Dates: 4/10/24
Site Conditions: Sunny, ~50°
Drilling Contractor: ~~Steadfast Services NW, LLC~~
Drilling Equipment: HA
Sampler Type: 3" bucket
Depth to Water (ATD):
Surface Elevation:

## Lithologic Description

*Fine-Grained Soils:*
type, (group symbol), color, moisture content, degree of plasticity, consistency, description w/ approximate percentage, notes/observations

*Coarse-Grained Soils:*
type, (group symbol), color, moisture content, grading, density, description w/ approximate percentage, notes/observations

Boring Number: 4B-2
Date: 4/10/24

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | Lithologic Description |
|---|---|---|---|---|---|
| 1 | | | 1.5 | NS | 2" OL dk brown organic silt - topsoil<br>6" ML, lt. brown sandy silt, few gravel, moist |
| 2 | | | 1.3 | | SM, orange and tan to orange silty sand, moist, med. dense |
| 3 | | | 1.1 | | |

Boring Number: 4B-3
Date:

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | Lithologic Description |
|---|---|---|---|---|---|
| 1 | | | 1.6 | NS | 3" OL, dk brown organic silt - topsoil -<br>SM, orange and tan to orange sandy silt, moist, med dense, low plasticity |
| 2 | | | 1.0 | | ML, orange sandy silt, moist, med dense, med. plasticity |
| 3 | | | 3.1 | | |

Boring Number: 4B-4
Date:

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | Lithologic Description |
|---|---|---|---|---|---|
| 1 | | | 1.7 | NS | 3" OL, dk brown organic silt - topsoil -<br>SM, orange and tan to orange sandy silt, moist, med dense. |
| 2 | | | 2.8 | | |
| 3 | | | 1.2 | | |

Apex Companies, LLC
15618 SW &2nd Avenue
Portland, Oregon 97224

Project Name: DEQ King Salvage, Toledo, OR
Project Number: 32-2301077

Decision Unit: 4B

Logged By: DK
Dates: 4/10/24
Site Conditions: Sunny, ~50°
Drilling Contractor: Steadfast Services NW, LLC
Drilling Equipment: HA
Sampler Type: 3" Bucket
Depth to Water (ATD):
Surface Elevation:

Boring Number: 4B-5
Date:

# Lithologic Description

*Fine-Grained Soils:*
type, (group symbol), color, moisture content, degree of plasticity, consistency, description w/ approximate percentage, notes/observations

*Coarse-Grained Soils:*
type, (group symbol), color, moisture content, grading, density, description w/ approximate percentage, notes/observations

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen | |
|---|---|---|---|---|---|
| 1 | | | 1.7 | NS | 3" OL, dk brown organic silt, -topsoil/- SM, orange and tan to orange silty sand, moist |
| 2 | | | 2.0 | | |
| 3 | | | 1.3 | | |

Boring Number:
Date:

Boring Number:
Date:

Apex Companies, LLC
15618 SW 72nd Avenue
Portland, Oregon 972224

Project Name: DEQ King Salvage, Toledo, OR
Project Number: 32-2301077

Boring Number:
Project Number:
Logged By: AJB
Date: 4-10-24
Site Conditions: PARTIAL SUN
Drilling Contractor: Steadfast Services NW, LLC
Drilling Equipment:
Sampler Type:
Depth to Water (ATD):
Surface Elevation:
Boring Details and Notes:

## Lithologic Description

*Fine-Grained Soils:*
type, (group symbol), color, moisture content, degree of plasticity, consistency, description w/ approximate percentage, notes/observations

*Coarse-Grained Soils:*
type, (group symbol), color, moisture content, grading, density, description w/ approximate percentage, notes/observations

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen (S/NS) | Lithologic Description |
|---|---|---|---|---|---|
| 0 | | | 1.5 | NS | WETLAND VEG. 0-6" BGS, SAND ML, GRAY, VFG SAND, ORANGE MOTTLE |
| | | | 1.0 | NS | ML, DARK BROWN, VFG SAND INCREASED SILT/CLAY, MOIST SATURATED, MED. PLASTICITY DECOMPOSING WOOD AT BTM., DENSE |
| 5 | | | 1.1 | | |
| 10 | | | | | |

DU-6-1

Boring Number: DU-6-2
Logged By: AJB
Date: 4-10-24
Site Conditions: PARTIAL SUN
Drilling Contractor: Steadfast Services NW, LLC
Drilling Equipment:
Sampler Type:
Depth to Water (ATD):
Surface Elevation:
Boring Details and Notes:

## Lithologic Description

*Fine-Grained Soils:*
type, (group symbol), color, moisture content, degree of plasticity, consistency, description w/ approximate percentage, notes/observations

*Coarse-Grained Soils:*
type, (group symbol), color, moisture content, grading, density, description w/ approximate percentage, notes/observations

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen (S/NS) | Lithologic Description |
|---|---|---|---|---|---|
| 0 | | | 1.9 | SS | VEG., ROOTLETS (0-3") GRAY ML, VFG SAND, TAN, ORANGE-GRAY MOTTLING, LOOSE, INCREASED SILT/CLAY AT BTM, SATURATED |
| | | | 1.2 | | |
| 5 | | | 1.8 | | |
| 10 | | | | | |

Apex Companies, LLC
15618 SW 72nd Avenue
Portland, Oregon 972224

Project Name: DEQ King Salvage, Toledo, OR
Project Number: 32-2301077

Boring Number:
Project Number:
Logged By: AJB
Date: 4-10-24
Site Conditions: SUNNY
Drilling Contractor: Steadfast Services NW, LLC
Drilling Equipment:
Sampler Type:
Depth to Water (ATD):
Surface Elevation:
Boring Details and Notes:

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen (S/NS) |
|---|---|---|---|---|
| 0 | | | 2.0 | SS |
| | | | 2.2 | |
| 5 | | | 2.3 | |
| 10 | | | | |

## Lithologic Description

*Fine-Grained Soils:*
type, (group symbol), color, moisture content, degree of plasticity, consistency, description w/ approximate percentage, notes/observations

*Coarse-Grained Soils:*
type, (group symbol), color, moisture content, grading, density, description w/ approximate percentage, notes/observations

GRAVEL 0-6"
CH, FAT CLAY, SATURATED, WET
BROWN-GRAY, STICKY, ORANGE
MOTTLED, HIGH PLASTICITY,
COHESIVE, SOME GRAVEL
THROUGHOUT (10%) < 0.25"
VFG SAND

DU-6-3

5
10

Boring Number:
Logged By:
Date:
Site Conditions:
Drilling Contractor: Steadfast Services NW, LLC
Drilling Equipment:
Sampler Type:
Depth to Water (ATD):
Surface Elevation:
Boring Details and Notes:

| Depth, feet | Core Interval/Recovery | Laboratory Sample ID | PID | Sheen (S/NS) |
|---|---|---|---|---|
| 5 | | | | |
| 10 | | | | |

## Lithologic Description

*Fine-Grained Soils:*
type, (group symbol), color, moisture content, degree of plasticity, consistency, description w/ approximate percentage, notes/observations

*Coarse-Grained Soils:*
type, (group symbol), color, moisture content, grading, density, description w/ approximate percentage, notes/observations

5
10

STEADFAST SERVICES NORTHWEST, LLC
RESPONSIVE~SAFE~COMPETITIVE

# STEADFAST SERVICES DAILY WORK REPORT

PO Box 5942 – Vancouver, WA 98663– 971-645-9242

| CLIENT | APEX | PROJECT NO | O24105 | DATE | 08 April 2024 | DAY | Monday |
|---|---|---|---|---|---|---|---|
| JOB LOCATION | King Salvage- Toledo, Oregon | DIG ALERT# | | | | | SSNW |

| Well # Bore # | Depth Drilled | DESCRIPTION OF WORK<br>Please explain reasons for Down Time and Standby Time and Shop Time | HOURS Start | HOURS Stop | Total Hrs | Chg Hrs |
|---|---|---|---|---|---|---|
| | | AM Shop Time | | | | |
| | | Travel to Site Get fuel | 6:30 | 10:30 | | |
| | | H&S meeting | 10:30 | 10:45 | | |
| | | Soil only borings x 16 total for day | 8:15 | 11:30 | | |
| | | lunch | 11:30 | 12:00 | | |
| | | Sample locations | 12:00 | 4:00 | | |
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| | | | | | | |
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| | | | | | | |
| | | | | | | |
| | | Travel to Shop | 4:00 | 4:15 | | |
| | | PM Shop Time | | | | |
| Total Ft | 96' | TOTAL CHARGEABLE RIG HOURS | | | | |

RIG ENGINE HOURS: START | STOP: | TOTAL

| EQUIPMENT | | | | CASING | | | | | MATERIALS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | ITEM | QTY | ITEM | QTY |
| DRILL RIG # | 7720 | COMPRESSOR/JACKHAMMER | | TYPE___SLOT___ | | | | | SAND | | WELL COVER 5" | |
| SUPPORT TRUCK # | 403 | SNOW FENCE RENTAL | | 20' SCREEN | | | | | READYMIX | | WELL COVER 12" | |
| SUPPORT TRUCK # | | CONTINUOUS SAMPLER | | 10' SCREEN | | | | | QUICKSET | | MONUMENT CASING | |
| TRAILER # | 206 | CONTINUOUS SAMPLER FOOTAGE | | 5' SCREEN | | | | | PORTLAND | | BOLLARDS | |
| BOBCAT | | # OF CORE CUTS | | 20' BLANK | | | | | ASPHALT | | SOIL DRUMS | |
| AUTO HAMMER | | # OF BULLDOG CUTS | | 10' BLANK | | | | | BENTONITE GROUT | | DEVELOPMENT DRUMS | |
| GROUT MIXER | | # OF SERVICE RUNS | | 5' BLANK | | | | | BENTONITE CHIPS | 1.5 | DECON DRUMS | |
| GROUT PUMP | | # OF SAW CUTS | | 5' PP SCREEN | | | | | BENTONITE POWDER | | HOLE COVER PLATES | |
| PERISTALTIC PUMP | | PORTABLE RESTROOM | | 10' PP SCREEN | | | | | BENTONITE PELLETS | | PLASTIC SHEETING | |
| FORKLIFT/HOPPER | | | | SLIP CAP | | | | | BENTONITE GRANULAR | | TRAFFIC CONTROL | |
| LABOR | | | | THREADED CAPS | | | | | SAMPLER TUBES | | CORE BOXES | |
| CREW WITH PER DIEM | | CHARGEABLE EXTRA LABOR HRS | | LOCKING CAPS | | | | | SHELBY TUBES | | PLYWOOD | |

| NAME | SIGNATURE | SHOP | FIELD | TOTAL HRS |
|---|---|---|---|---|
| Darryl M | | | | |
| Tradd R | | | | |
| | | | | |
| | | | | |

| DRIVE SHOE | | | | | Soil vapor POINTS | " | | SOIL SAMPLES | |
|---|---|---|---|---|---|---|---|---|---|
| CENTRALIZERS | | | | | GW PROBE POINTS | | | WATER SAMPLES | |
| LOCKS | | | | | MACRO LINERS | | | HYDROPUNCH SAMPLES | |
| | | | | | SAMPLER SHOE | | | AUGER PLUGS | |
| UTILITIES FOUND OR HIT | | | | | | | | DRILL OUT BITS | |

REMARKS

Client Signature_____ Operator Signature_____

STEADFAST SERVICES NORTHWEST, LLC
RESPONSIVE~SAFE~COMPETITIVE

# STEADFAST SERVICES DAILY WORK REPORT

PO Box 5942 – Vancouver, WA 98663– 971-645-9242

| CLIENT | APEX | PROJECT NO | O24105 | DATE | 09 April 2024 | DAY | Tuesday |
|---|---|---|---|---|---|---|---|
| JOB LOCATION | King Salvage- Toledo, Oregon | DIG ALERT# | | | | | SSNW |

| Well # Bore # | Depth Drilled | DESCRIPTION OF WORK<br>Please explain reasons for Down Time and Standby Time and Shop Time | HOURS Start | HOURS Stop | Total Hrs | Chg Hrs |
|---|---|---|---|---|---|---|
| | | AM Shop Time | | | | |
| | | Travel to Site Get fuel | 7:30 | 8:00 | | |
| | | H&S meeting | 8:00 | 8:15 | | |
| | 3' | Soil only borings x 32 total for day | 8:15 | 11:30 | | |
| | | lunch | 11:30 | 12:00 | | |
| | | Sample locations | 12:00 | 4:00 | | |
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| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | Travel to Shop | 4:00 | 4:15 | | |
| | | PM Shop Time | | | | |
| Total Ft | 96' | TOTAL CHARGEABLE RIG HOURS | | | | |

RIG ENGINE HOURS: START | STOP: | TOTAL

| EQUIPMENT | | | | CASING | | | | | MATERIALS ITEM | QTY | ITEM | QTY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DRILL RIG # | 7720 | COMPRESSOR/JACKHAMMER | | TYPE___SLOT___ | | | | | SAND | | WELL COVER 5" | |
| SUPPORT TRUCK # | 403 | SNOW FENCE RENTAL | | 20' SCREEN | | | | | READYMIX | | WELL COVER 12" | |
| SUPPORT TRUCK # | | CONTINUOUS SAMPLER | | 10' SCREEN | | | | | QUICKSET | | MONUMENT CASING | |
| TRAILER # | 206 | CONTINUOUS SAMPLER FOOTAGE | | 5' SCREEN | | | | | PORTLAND | | BOLLARDS | |
| BOBCAT | | # OF CORE CUTS | | 20' BLANK | | | | | ASPHALT | | SOIL DRUMS | |
| AUTO HAMMER | | # OF BULLDOG CUTS | | 10' BLANK | | | | | BENTONITE GROUT | | DEVELOPMENT DRUMS | |
| GROUT MIXER | | # OF SERVICE RUNS | | 5' BLANK | | | | | BENTONITE CHIPS | 3 | DECON DRUMS | |
| GROUT PUMP | | # OF SAW CUTS | | 5' PP SCREEN | | | | | BENTONITE POWDER | | HOLE COVER PLATES | |
| PERISTALTIC PUMP | | PORTABLE RESTROOM | | 10' PP SCREEN | | | | | BENTONITE PELLETS | | PLASTIC SHEETING | |
| FORKLIFT/HOPPER | | | | SLIP CAP | | | | | BENTONITE GRANULAR | | TRAFFIC CONTROL | |

LABOR

| CREW WITH PER DIEM | | CHARGEABLE EXTRA LABOR HRS | |
|---|---|---|---|

| NAME | SIGNATURE | SHOP | FIELD | TOTAL HRS |
|---|---|---|---|---|
| Darryl M | | | | |
| Tradd R | | | | |
| | | | | |
| | | | | |

| | | | | |
|---|---|---|---|---|
| THREADED CAPS | | | | |
| LOCKING CAPS | | | | |
| DRIVE SHOE | | | | |
| CENTRALIZERS | | | | |
| LOCKS | | | | |
| | | | | |
| UTILITIES FOUND OR HIT | | | | |

| | | | |
|---|---|---|---|
| SHELBY TUBES | | | |
| Soil vapor POINTS | " | | |
| GW PROBE POINTS | | | |
| MACRO LINERS | | | |
| SAMPLER SHOE | | | |
| | | | |

| SOIL SAMPLES | |
|---|---|
| WATER SAMPLES | |
| HYDROPUNCH SAMPLES | |
| AUGER PLUGS | |
| DRILL OUT BITS | |

REMARKS

Client Signature_____ Operator Signature_____

STEADFAST SERVICES NORTHWEST, LLC
RESPONSIVE~SAFE~COMPETITIVE

# STEADFAST SERVICES DAILY WORK REPORT

PO Box 5942 – Vancouver, WA 98663– 971-645-9242

| CLIENT | APEX | PROJECT NO | O24105 | DATE | 10 April 2024 | DAY | Wed |
|---|---|---|---|---|---|---|---|
| JOB LOCATION | King Salvage- Toledo, Oregon | DIG ALERT# | | | | | SSNW |

| Well # Bore # | Depth Drilled | DESCRIPTION OF WORK<br>Please explain reasons for Down Time and Standby Time and Shop Time | HOURS Start | HOURS Stop | Total Hrs | Chg Hrs |
|---|---|---|---|---|---|---|
| | | AM Shop Time | | | | |
| | | Travel to Site | 7:45 | 8:00 | | |
| | | H&S meeting | 8:00 | 8:15 | | |
| | 5' | Soil only borings | 8:15 | 10:00 | | |
| | 5' | | | | | |
| | 5' | | | | | |
| | | Clean up and load rig | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | Travel to Shop | 10:00 | 2:00 | | |
| | | PM Shop Time | | | | |
| Total Ft | 15' | TOTAL CHARGEABLE RIG HOURS | | | | |

RIG ENGINE HOURS: START ____ STOP: ____ TOTAL ____

| EQUIPMENT | | | | CASING | | | | | MATERIALS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | ITEM | QTY | ITEM | QTY |
| DRILL RIG # | 7720 | COMPRESSOR/JACKHAMMER | | TYPE___SLOT___ | | | | | SAND | | WELL COVER 5" | |
| SUPPORT TRUCK # | 403 | SNOW FENCE RENTAL | | 20' SCREEN | | | | | READYMIX | | WELL COVER 12" | |
| SUPPORT TRUCK # | | CONTINUOUS SAMPLER | | 10' SCREEN | | | | | QUICKSET | | MONUMENT CASING | |
| TRAILER # | 206 | CONTINUOUS SAMPLER FOOTAGE | | 5' SCREEN | | | | | PORTLAND | | BOLLARDS | |
| BOBCAT | | # OF CORE CUTS | | 20' BLANK | | | | | ASPHALT | | SOIL DRUMS | |
| AUTO HAMMER | | # OF BULLDOG CUTS | | 10' BLANK | | | | | BENTONITE GROUT | | DEVELOPMENT DRUMS | |
| GROUT MIXER | | # OF SERVICE RUNS | | 5' BLANK | | | | | BENTONITE CHIPS | 1 | DECON DRUMS | |
| GROUT PUMP | | # OF SAW CUTS | | 5' PP SCREEN | | | | | BENTONITE POWDER | | HOLE COVER PLATES | |
| PERISTALTIC PUMP | | PORTABLE RESTROOM | | 10' PP SCREEN | | | | | BENTONITE PELLETS | | PLASTIC SHEETING | |
| FORKLIFT/HOPPER | | | | SLIP CAP | | | | | BENTONITE GRANULAR | | TRAFFIC CONTROL | |
| LABOR | | | | THREADED CAPS | | | | | SAMPLER TUBES | | CORE BOXES | |
| CREW WITH PER DIEM | | CHARGEABLE EXTRA LABOR HRS | | LOCKING CAPS | | | | | SHELBY TUBES | | PLYWOOD | |
| NAME | SIGNATURE | SHOP | FIELD | TOTAL HRS | DRIVE SHOE | | | | Soil vapor POINTS | " | SOIL SAMPLES | |
| Darryl M | | | | | CENTRALIZERS | | | | GW PROBE POINTS | | WATER SAMPLES | |
| Tradd R | | | | | LOCKS | | | | MACRO LINERS | | HYDROPUNCH SAMPLES | |
| | | | | | | | | | SAMPLER SHOE | | AUGER PLUGS | |
| | | | | | UTILITIES FOUND OR HIT | | | | | | DRILL OUT BITS | |

REMARKS

Client Signature_____ Operator Signature_____

# *Attachment B*

## Field Methods and Sampling Procedures

## 1. PURPOSE AND SCOPE

This Standard Operating Procedure (SOP) provides instructions for standard field screening. Field screening results are used to aid in the selection of soil samples for chemical analysis. This procedure is applicable during Apex Companies, LLC (Apex) soil sampling operations.

Standard field screening techniques include the use of a photoionization detector (PID) to assess for volatile organic compounds (VOCs), for the presence of separate-phase petroleum hydrocarbons using a sheen test. These methods will not detect all potential contaminants, so selection of screening techniques shall be based on an understanding of the site history. The PID is not compound or concentration-specific, but it can provide a qualitative indication of the presence of VOCs. PID measurements are affected by other field parameters such as temperature and soil moisture. Other field screening methods, such as screening for dense non-aqueous phase liquid (DNAPL) using dye or UV light, are not considered "standard" and will be detailed in the site-specific sampling and analysis plan (SAP).

## 2. EQUIPMENT AND MATERIALS

The following materials are necessary for this procedure:

- PID with calibration gas (record daily calibration/calibration check in field notes);
- Plastic resealable bags (for PID measurement); and
- Glass jars or stainless steel bowls (for sheen testing).

## 3. METHODOLOGY

Each soil sample will be field screened for VOCs using a PID and for the presence of separate-phase petroleum hydrocarbons using a sheen test. If the presence of DNAPL is suspected, then screening using dye and UV light may also to be completed. For information regarding screening using dye or UV light, refer to the site specific sampling and analysis plan.

PID lamps come in multiple sizes, typically 9.8, 10.6, and 11.7 electron volts (eV). The eV rating for the lamp must be greater than the ionization potential (in eV) of a compound in order for the PID to detect the compound. For petroleum hydrocarbons, a lamp of at least 9.8 eV should be used. For typical chlorinated alkenes (dichloroethene, trichloroethene, tetrachloroethene, or vinyl chloride.), a lamp of at least 10.6 eV should be used. The compatibility of the lamp size with the site constituents should be verified prior to the field event and will be detailed in the site-specific SAP.

PID Calibration Procedure: The PID used on-site should be calibrated daily or more frequently if needed. Calibration of the PID should be documented in field notes. Calibrations procedures should be conducted according to the manufacturer's instructions. .

<u>PID Screening Procedure:</u>

- Place a representative portion (approximately one ounce) of freshly exposed, uncompacted soil into a clean resealable plastic bag.
- Seal the bag and break up the soil to expose vapors from the soil matrix.
- Allow the bag to sit to reach ambient temperature. Note: Ambient temperature and weather conditions/humidity should be recorded in field notes. Changes in ambient temperature and weather during the field work should also be recorded, as temperature and humidity can affect PID readings.
- Carefully insert the intake port of the PID into the plastic bag.
- Record the PID measurement in the field notes or boring logs.

<u>Sheen Test Procedure:</u>

- Following the PID screen, place approximately one ounce of freshly exposed, uncompacted soil into a clean glass jar or stainless steel bowl.

- Add enough water to cover the sample.
- Observe the water surface for signs of discoloration/sheen and characterize

| | |
|---|---|
| No Sheen (NS) | No visible sheen on the water surface |
| Biogenic Film (BF) | Dull, platy/blocky or foamy film. |
| Slight Sheen (SS) | Light sheen with irregular spread, not rapid. May have small spots of color/iridescence. Majority of water surface not covered by sheen. |
| Moderate Sheen (MS) | Medium to heavy coverage, some color/iridescence, spread is irregular to flowing. Sheen covering a large portion of water surface. |
| Heavy Sheen (HS) | Heavy sheen coverage with color/iridescence, spread is rapid, entire water surface covered with sheen. Separate-phase hydrocarbons may be evident during sheen test. |

## 1. PURPOSE AND SCOPE

This Standard Operating Procedure (SOP) describes the methods used for obtaining surface soil samples for physical and/or chemical analysis. For purposes of this SOP, surface soil (including shallow subsurface soil) is loosely defined as soil that is present within 3 feet of the ground surface at the time of sampling. Various types of sampling equipment are used to collect surface soil samples including spoons, scoops, trowels, shovels, and hand augers.

## 2. EQUIPMENT AND MATERIALS

The following materials are necessary for this procedure:

- Spoons, scoops, trowels, shovels, and/or hand augers. Stainless steel is preferred.
- Stainless steel bowls
- Laboratory-supplied sample containers
- Field documentation materials
- Decontamination materials
- Personal protective equipment (as required by Health and Safety Plan)

## 3. METHODOLOGY

Project-specific requirements will generally dictate the preferred type of sampling equipment used at a particular site. The following parameters should be considered: sampling depth, soil density, soil moisture, use of analyses (e.g., chemical versus physical testing), type of analyses (e.g., volatile versus non-volatile). Analytical testing requirements will indicate sample volume requirements that also will influence the selection of the appropriate type of sampling tool. The project sampling plan should define the specific requirements for collection of surface soil samples at a particular site.

Collection of Samples

- Volatile Analyses. Surface soil sampling for volatile organics analysis (VOA) is different than other routine physical or chemical testing because of the potential loss of volatiles during sampling. To limit volatile loss, the soil sample must be obtained as quickly and as directly as possible. If a VOA sample is to collected as part of a multiple analyte sample, the VOA sample portion will be obtained first. The VOA sample should be obtained from a discrete portion of the entire collected sample and should not be composited or homogenized. Sample bottles should be filled to capacity, with no headspace. Specific procedures for collecting VOA samples using the EPA Method 5035 are discussed in SOP 2-7.
- Other Analyses. Once the targeted sample interval has been collected, the soil sample will be thoroughly homogenized in a stainless steel bowl prior to bottling. Sample homogenizing is accomplished by manually mixing the entire soil sample in the stainless steel bowl with the sampling tool or with a clean teaspoon or spatula until a uniform mixture is achieved. If packing of the samples into the bottles is necessary, a clean stainless steel teaspoon or spatula may be used.

General Sampling Procedure:

- Decontaminate sampling equipment in accordance with the Sampling and Analysis Plan (SAP) before and after each individual soil sample.
- Remove surface debris that blocks access to the actual soil surface or loosen dense surface soils, such as those encountered in heavy traffic areas. If sampling equipment is used to remove surface debris,

the equipment should be decontaminated prior to sampling to reduce the potential for sample interferences.

- When using a hand auger, push and rotate downward until the auger becomes filled with soil. Usually a 6- to 12-inch long core of soil is obtained each time the auger is inserted. Once filled, remove the auger from the ground and empty into a stainless steel bowl. If a VOA sample is required, the sample should be taken directly from the auger using a teaspoon or spatula and/or directly filling the sample container from the auger. Repeat the augering process until the desired sample interval has been augered and placed into the stainless steel bowl.

Backfilling Sample Locations:

Backfill in accordance with federal and state regulations including OAR 690-240 (e.g., bentonite requirements). The soils from the excavation will be used as backfill unless project-specific or state requirements include the use of clean backfill material.

## 1. PURPOSE AND SCOPE

This Standard Operating Procedure (SOP) describes the methods for observing and sampling from push-probes (i.e., GeoProbe™). Subsurface soil cores may be obtained using this system for purposes of determining subsurface soil conditions and for obtaining soil samples for physical and/or chemical evaluation. Grab groundwater samples may be collected using temporary well screens. Soil vapor samples may be obtained using temporary well points. Shallow (less than 50 feet), small-diameter (2-inch max) pre-packed wells may also be installed using push-probe equipment. This procedure is applicable during all Apex Companies, LLC (Apex) push-probe activities.

## 2. EQUIPMENT AND MATERIALS

The following materials are necessary for this procedure:

- Traffic cones, measuring tape, spatula, and buckets/drums
- Sampling equipment (water level probe, pumps, tubing) and laboratory-supplied sample containers
- Field documentation materials
- Decontamination materials
- Personal protective equipment (as required by project Health and Safety Plan)

## 3. METHODOLOGY

Coring Procedure (Conducted by Drilling Subcontractor):

The sampling procedure includes driving a 2-inch outside-diameter, 5-foot-long, push-probe soil sampler to the desired depth using a combination of hydraulic pressure and mechanical hammer blows. When the sampling depth is reached, the pin attaching the sampler's tip is released (if a tip is used), which allows the tip to slide inside the sampler (Macro-Core Sampler with removable plastic liner). The sampler is driven the length of the sampler to collect a soil core, which is then withdrawn from the exploration. When the sampler is retrieved from the borehole the drive head/cutting shoe is detached and the liner is removed. Soil cores are collected continuously to the full depth of the exploration unless otherwise specified in a project-specific sampling and analysis plan (SAP). Verify that the subcontractor decontaminates the sampling device (per SOP 1.2) prior to its initial use and following collection of each soil sample.

Logging and Soil Sample Collection:

Remove the soil core from the sampler for field screening, description, and placement into sample jars. Soil samples will be collected for field screening and possible chemical analysis on two foot intervals unless otherwise specified in a project-specific SAP. The sampling interval will be determined in the field based on recovery, soil variability, and evidence of contamination. Complete field screening as specified in SOP-2.1. Soil samples should be collected using different procedures for volatile on non-volatile analyses, as follows.

- Volatile Analyses. Sampling for volatile organics analysis (VOA) is different than other routine physical or chemical testing because of the potential loss of volatiles during sampling. To limit volatile loss, the soil sample must be obtained as quickly and as directly as possible. If a VOA sample is to collected as part of a multiple analyte sample, the VOA sample portion will be obtained first. The VOA sample should be obtained from a discrete portion of the entire collected sample and should not be composited or homogenized. Sample bottles should be filled to capacity, with no headspace. Specific procedures for collecting VOA samples using the EPA Method 5035 are discussed in SOP 2.7.
- Other Analyses. Soil samples for non-volatile analyses will be thoroughly homogenized in a stainless steel bowl prior to bottling. Sample homogenizing is accomplished by manually mixing the entire soil

sample in the stainless steel bowl with a clean sampling tool until a uniform mixture is achieved. The sample jar should be filled completely.

Any extra soil generated during probing activities will be placed in Department of Transportation (DOT) approved drums.

Grab Groundwater Sample Collection:

Collect grab groundwater samples using a sampling attachment with a 4 to 5-foot-long temporary screen (specify to drillers whether to use decontaminated stainless steel or disposable PVC. Also, specify whether a filter pack is necessary based on field observations). Obtain samples using a peristaltic pump unless otherwise specified in the SAP with new tubing for each boring. Record field parameters (e.g., temperature, conductivity, and pH) prior to sampling.

Backfilling the Excavation (Conducted by Drilling Subcontractor):

After sampling activities are completed, abandon each exploration in accordance with Oregon Water Resources Department (OWRD) regulations and procedures. The abandonment procedure typically consists of filling the exploration with granular bentonite and hydrating the bentonite with water. Match the surface completion to the surrounding materials.

# *Attachment C*

## Analytical Laboratory Testing Program and Documentation

# ANALYTICAL REPORT

April 25, 2024



## Oregon Dept. of Env. Quality - ODEQ

| | |
|---|---|
| Sample Delivery Group: | L1725561 |
| Samples Received: | 04/13/2024 |
| Project Number: | 32-23010077 |
| Description: | King Salvage |
| Report To: | Andrew Bisbee |

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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## DU-3-SS-COMP-1 L1725561-06 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/10/24 14:10 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2267999 | 1 | 04/16/24 13:26 | 04/16/24 13:35 | KDW | Mt. Juliet, TN |
| Mercury by Method 7471B | WG2268639 | 1 | 04/17/24 08:51 | 04/17/24 17:48 | AKB | Mt. Juliet, TN |
| Metals (ICP) by Method 6010D | WG2268234 | 1 | 04/16/24 16:20 | 04/16/24 23:10 | DJS | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2269461 | 1 | 04/18/24 08:11 | 04/18/24 21:32 | JAS | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM | WG2269760 | 1 | 04/18/24 20:21 | 04/19/24 13:39 | JRM | Mt. Juliet, TN |

## DU-4A-COMP-1 L1725561-22 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/08/24 12:30 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268002 | 1 | 04/16/24 13:17 | 04/16/24 13:25 | KDW | Mt. Juliet, TN |
| Mercury by Method 7471B | WG2268639 | 1 | 04/17/24 08:51 | 04/17/24 18:38 | AKB | Mt. Juliet, TN |
| Metals (ICP) by Method 6010D | WG2268234 | 1 | 04/16/24 16:20 | 04/16/24 23:42 | DJS | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2270219 | 1 | 04/19/24 11:28 | 04/19/24 18:35 | KAP | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2270219 | 5 | 04/19/24 11:28 | 04/20/24 11:43 | JAS | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM | WG2269760 | 1 | 04/18/24 20:21 | 04/19/24 15:17 | JRM | Mt. Juliet, TN |

## DU-4A-COMP-2 L1725561-23 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/08/24 12:35 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268002 | 1 | 04/16/24 13:17 | 04/16/24 13:25 | KDW | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2270219 | 1 | 04/19/24 11:28 | 04/19/24 17:21 | KAP | Mt. Juliet, TN |

## DU-4A-COMP-3 L1725561-24 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/08/24 12:45 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268002 | 1 | 04/16/24 13:17 | 04/16/24 13:25 | KDW | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2270219 | 1 | 04/19/24 11:28 | 04/20/24 10:37 | JAS | Mt. Juliet, TN |

## DU-4B-COMP-1 L1725561-40 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/10/24 12:33 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268002 | 1 | 04/16/24 13:17 | 04/16/24 13:25 | KDW | Mt. Juliet, TN |
| Mercury by Method 7471B | WG2268639 | 1 | 04/17/24 08:51 | 04/17/24 18:40 | AKB | Mt. Juliet, TN |
| Metals (ICP) by Method 6010D | WG2268234 | 1 | 04/16/24 16:20 | 04/16/24 23:45 | DJS | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2270219 | 1 | 04/19/24 11:28 | 04/19/24 17:58 | KAP | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM | WG2269839 | 1 | 04/19/24 09:47 | 04/20/24 01:07 | ALM | Mt. Juliet, TN |

## DU-4B-COMP-2 L1725561-41 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/10/24 12:35 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268002 | 1 | 04/16/24 13:17 | 04/16/24 13:25 | KDW | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2270219 | 1 | 04/19/24 11:28 | 04/19/24 16:56 | KAP | Mt. Juliet, TN |

## DU-4B-COMP-3 L1725561-42 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/10/24 12:40 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268002 | 1 | 04/16/24 13:17 | 04/16/24 13:25 | KDW | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2270219 | 1 | 04/19/24 11:28 | 04/19/24 16:44 | KAP | Mt. Juliet, TN |

## DU-4C-4-2 L1725561-53 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/08/24 14:50 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268006 | 1 | 04/16/24 13:03 | 04/16/24 13:14 | KDW | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2270219 | 1 | 04/19/24 11:28 | 04/19/24 16:32 | KAP | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM | WG2269839 | 1 | 04/19/24 09:47 | 04/20/24 01:25 | ALM | Mt. Juliet, TN |

## DU-4C-COMP-1 L1725561-58 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/08/24 15:00 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268006 | 1 | 04/16/24 13:03 | 04/16/24 13:14 | KDW | Mt. Juliet, TN |
| Mercury by Method 7471B | WG2268639 | 1 | 04/17/24 08:51 | 04/17/24 18:43 | AKB | Mt. Juliet, TN |
| Metals (ICP) by Method 6010D | WG2268234 | 1 | 04/16/24 16:20 | 04/16/24 23:49 | DJS | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2270219 | 1 | 04/19/24 11:28 | 04/19/24 18:23 | KAP | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM | WG2269839 | 1 | 04/19/24 09:47 | 04/20/24 01:43 | ALM | Mt. Juliet, TN |

## DU-4C-COMP-2 L1725561-59 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/08/24 15:05 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268006 | 1 | 04/16/24 13:03 | 04/16/24 13:14 | KDW | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2270219 | 1 | 04/19/24 11:28 | 04/19/24 17:09 | KAP | Mt. Juliet, TN |

## DU-4C-COMP-3 L1725561-60 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/08/24 15:15 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268006 | 1 | 04/16/24 13:03 | 04/16/24 13:14 | KDW | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2270219 | 1 | 04/19/24 11:28 | 04/19/24 17:58 | KAP | Mt. Juliet, TN |

## DU-4D-COMP-1 L1725561-76 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/09/24 16:35 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268006 | 1 | 04/16/24 13:03 | 04/16/24 13:14 | KDW | Mt. Juliet, TN |
| Mercury by Method 7471B | WG2268639 | 1 | 04/17/24 08:51 | 04/17/24 17:31 | AKB | Mt. Juliet, TN |
| Metals (ICP) by Method 6010D | WG2268234 | 1 | 04/16/24 16:20 | 04/16/24 22:52 | DJS | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2270232 | 1 | 04/19/24 07:48 | 04/19/24 18:03 | JAS | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM | WG2269839 | 1 | 04/19/24 09:47 | 04/20/24 02:01 | ALM | Mt. Juliet, TN |

## DU-4D-COMP-2 L1725561-77 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/09/24 16:40 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268006 | 1 | 04/16/24 13:03 | 04/16/24 13:14 | KDW | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2270232 | 1 | 04/19/24 07:48 | 04/19/24 17:21 | JAS | Mt. Juliet, TN |

## DU-4D-COMP-3 L1725561-78 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/09/24 16:45 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268006 | 1 | 04/16/24 13:03 | 04/16/24 13:14 | KDW | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2270232 | 1 | 04/19/24 07:48 | 04/19/24 17:07 | JAS | Mt. Juliet, TN |

## DU-4E-4-2 L1725561-89 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/08/24 16:10 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268006 | 1 | 04/16/24 13:03 | 04/16/24 13:14 | KDW | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2270232 | 20 | 04/19/24 07:48 | 04/20/24 11:03 | JAS | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM | WG2269839 | 1 | 04/19/24 09:47 | 04/20/24 02:19 | ALM | Mt. Juliet, TN |

## DU-4E-COMP-1 L1725561-94 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/08/24 16:25 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268006 | 1 | 04/16/24 13:03 | 04/16/24 13:14 | KDW | Mt. Juliet, TN |
| Mercury by Method 7471B | WG2268623 | 1 | 04/17/24 08:54 | 04/17/24 16:33 | AKB | Mt. Juliet, TN |
| Metals (ICP) by Method 6010D | WG2268821 | 1 | 04/17/24 12:07 | 04/17/24 21:57 | JTM | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2270232 | 2 | 04/19/24 07:48 | 04/19/24 18:31 | JAS | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM | WG2270229 | 1 | 04/19/24 07:30 | 04/20/24 04:42 | ALM | Mt. Juliet, TN |

## DU-4E-COMP-2 L1725561-95 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/08/24 16:30 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268006 | 1 | 04/16/24 13:03 | 04/16/24 13:14 | KDW | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2270232 | 10 | 04/19/24 07:48 | 04/20/24 12:44 | JAS | Mt. Juliet, TN |

## DU-4E-COMP-3 L1725561-96 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/08/24 16:35 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268008 | 1 | 04/16/24 12:53 | 04/16/24 13:00 | KDW | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2270232 | 5 | 04/19/24 07:48 | 04/19/24 22:14 | JAS | Mt. Juliet, TN |

## DU-4F-2-2 L1725561-101 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/09/24 08:35 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2267999 | 1 | 04/16/24 13:26 | 04/16/24 13:35 | KDW | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2269461 | 25 | 04/18/24 08:11 | 04/19/24 00:09 | JAS | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM | WG2269760 | 1 | 04/18/24 20:21 | 04/21/24 04:55 | MBE | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM | WG2269760 | 10 | 04/18/24 20:21 | 04/21/24 05:15 | MBE | Mt. Juliet, TN |

## DU-4F-5-2 L1725561-110 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/09/24 09:25 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2267999 | 1 | 04/16/24 13:26 | 04/16/24 13:35 | KDW | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2269461 | 500 | 04/18/24 08:11 | 04/19/24 01:15 | JAS | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM | WG2269760 | 10 | 04/18/24 20:21 | 04/21/24 05:34 | CAH | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM | WG2269760 | 20 | 04/18/24 20:21 | 04/24/24 10:07 | ALM | Mt. Juliet, TN |

## DU-4F-COMP-1 L1725561-112 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/09/24 09:30 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2267999 | 1 | 04/16/24 13:26 | 04/16/24 13:35 | KDW | Mt. Juliet, TN |
| Mercury by Method 7471B | WG2268623 | 1 | 04/17/24 08:54 | 04/17/24 16:24 | AKB | Mt. Juliet, TN |
| Metals (ICP) by Method 6010D | WG2268821 | 1 | 04/17/24 12:07 | 04/17/24 21:54 | JTM | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2269461 | 10 | 04/18/24 08:11 | 04/19/24 12:00 | JAS | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM | WG2269760 | 1 | 04/18/24 20:21 | 04/19/24 16:35 | JRM | Mt. Juliet, TN |

## DU-4F-COMP-2 L1725561-113 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/09/24 09:35 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2267999 | 1 | 04/16/24 13:26 | 04/16/24 13:35 | KDW | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2269461 | 1 | 04/18/24 08:11 | 04/18/24 22:25 | JAS | Mt. Juliet, TN |

## DU-4F-COMP-3 L1725561-114 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/09/24 09:40 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268002 | 1 | 04/16/24 13:17 | 04/16/24 13:25 | KDW | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2269461 | 10 | 04/18/24 08:11 | 04/18/24 23:43 | JAS | Mt. Juliet, TN |

## DU-4G-COMP-1 L1725561-130 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/09/24 12:00 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268002 | 1 | 04/16/24 13:17 | 04/16/24 13:25 | KDW | Mt. Juliet, TN |
| Mercury by Method 7471B | WG2268623 | 1 | 04/17/24 08:54 | 04/17/24 16:31 | AKB | Mt. Juliet, TN |
| Metals (ICP) by Method 6010D | WG2268821 | 1 | 04/17/24 12:07 | 04/17/24 21:55 | JTM | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2269461 | 1 | 04/18/24 08:11 | 04/18/24 23:04 | JAS | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2269461 | 5 | 04/18/24 08:11 | 04/19/24 11:46 | JAS | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM | WG2269760 | 1 | 04/18/24 20:21 | 04/19/24 15:56 | JRM | Mt. Juliet, TN |

## DU-4G-COMP-2 L1725561-131 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/09/24 12:05 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268002 | 1 | 04/16/24 13:17 | 04/16/24 13:25 | KDW | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2269461 | 1 | 04/18/24 08:11 | 04/18/24 20:40 | JAS | Mt. Juliet, TN |

## DU-4G-COMP-3 L1725561-132 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/09/24 12:10 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268002 | 1 | 04/16/24 13:17 | 04/16/24 13:25 | KDW | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2269461 | 1 | 04/18/24 08:11 | 04/18/24 21:19 | JAS | Mt. Juliet, TN |

## DU-4H-COMP-1 L1725561-148 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/09/24 13:50 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268548 | 1 | 04/17/24 09:36 | 04/17/24 09:47 | KDW | Mt. Juliet, TN |
| Mercury by Method 7471B | WG2268639 | 1 | 04/17/24 08:51 | 04/17/24 17:51 | AKB | Mt. Juliet, TN |
| Metals (ICP) by Method 6010D | WG2268234 | 1 | 04/16/24 16:20 | 04/16/24 23:14 | DJS | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2269461 | 1 | 04/18/24 08:11 | 04/18/24 22:38 | JAS | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM | WG2269760 | 1 | 04/18/24 20:21 | 04/19/24 13:59 | JRM | Mt. Juliet, TN |

## DU-4H-COMP-2 L1725561-149 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/09/24 13:55 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268548 | 1 | 04/17/24 09:36 | 04/17/24 09:47 | KDW | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2269461 | 1 | 04/18/24 08:11 | 04/18/24 21:58 | JAS | Mt. Juliet, TN |

## DU-4H-COMP-3 L1725561-150 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/09/24 14:00 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268548 | 1 | 04/17/24 09:36 | 04/17/24 09:47 | KDW | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2269461 | 1 | 04/18/24 08:11 | 04/18/24 22:11 | JAS | Mt. Juliet, TN |

## DU-4I-COMP-1 L1725561-166 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/09/24 15:20 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268548 | 1 | 04/17/24 09:36 | 04/17/24 09:47 | KDW | Mt. Juliet, TN |
| Mercury by Method 7471B | WG2268639 | 1 | 04/17/24 08:51 | 04/17/24 17:53 | AKB | Mt. Juliet, TN |
| Metals (ICP) by Method 6010D | WG2268234 | 1 | 04/16/24 16:20 | 04/16/24 23:17 | DJS | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2269804 | 200 | 04/18/24 15:55 | 04/19/24 08:26 | JAS | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM | WG2269760 | 1 | 04/18/24 20:21 | 04/19/24 16:16 | JRM | Mt. Juliet, TN |

## DU-4I-COMP-2 L1725561-167 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/09/24 15:25 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268548 | 1 | 04/17/24 09:36 | 04/17/24 09:47 | KDW | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2269804 | 1 | 04/18/24 15:55 | 04/19/24 07:47 | JAS | Mt. Juliet, TN |

## DU-4I-COMP-3 L1725561-168 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/09/24 15:35 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268548 | 1 | 04/17/24 09:36 | 04/17/24 09:47 | KDW | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2269804 | 1 | 04/18/24 15:55 | 04/19/24 03:25 | JAS | Mt. Juliet, TN |

## DU-5-SS-COMP-1 L1725561-174 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/10/24 14:40 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268548 | 1 | 04/17/24 09:36 | 04/17/24 09:47 | KDW | Mt. Juliet, TN |
| Mercury by Method 7471B | WG2268639 | 1 | 04/17/24 08:51 | 04/17/24 18:28 | AKB | Mt. Juliet, TN |
| Metals (ICP) by Method 6010D | WG2268234 | 1 | 04/16/24 16:20 | 04/16/24 23:28 | DJS | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2269804 | 1 | 04/18/24 15:55 | 04/19/24 07:34 | JAS | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM | WG2269760 | 1 | 04/18/24 20:21 | 04/19/24 14:18 | JRM | Mt. Juliet, TN |

## DU-6-COMP-1 L1725561-184 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/10/24 09:50 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268549 | 1 | 04/17/24 08:21 | 04/17/24 08:28 | KDW | Mt. Juliet, TN |
| Mercury by Method 7471B | WG2268639 | 1 | 04/17/24 08:51 | 04/17/24 18:30 | AKB | Mt. Juliet, TN |
| Metals (ICP) by Method 6010D | WG2268234 | 1 | 04/16/24 16:20 | 04/16/24 23:31 | DJS | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2269804 | 1 | 04/18/24 15:55 | 04/19/24 08:00 | JAS | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM | WG2269760 | 1 | 04/18/24 20:21 | 04/19/24 14:38 | JRM | Mt. Juliet, TN |

## DU-6-COMP-2 L1725561-185 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/10/24 10:00 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268549 | 1 | 04/17/24 08:21 | 04/17/24 08:28 | KDW | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2269804 | 1 | 04/18/24 15:55 | 04/19/24 07:21 | JAS | Mt. Juliet, TN |

## DU-6-COMP-5 L1725561-186 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/10/24 10:10 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268549 | 1 | 04/17/24 08:21 | 04/17/24 08:28 | KDW | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2269804 | 1 | 04/18/24 15:55 | 04/19/24 08:13 | JAS | Mt. Juliet, TN |

## DU-6-SS-COMP-1 L1725561-192 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/10/24 13:30 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268549 | 1 | 04/17/24 08:21 | 04/17/24 08:28 | KDW | Mt. Juliet, TN |
| Mercury by Method 7471B | WG2268639 | 1 | 04/17/24 08:51 | 04/17/24 18:33 | AKB | Mt. Juliet, TN |
| Metals (ICP) by Method 6010D | WG2268234 | 1 | 04/16/24 16:20 | 04/16/24 23:35 | DJS | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT | WG2270219 | 1 | 04/19/24 11:28 | 04/19/24 17:46 | KAP | Mt. Juliet, TN |
| Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM | WG2269760 | 1 | 04/18/24 20:21 | 04/19/24 14:57 | JRM | Mt. Juliet, TN |

# SAMPLE SUMMARY

## IDW L1725561-193 Solid

Collected by: Andrew Bisbee
Collected date/time: 04/10/24 14:00
Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268549 | 1 | 04/17/24 08:21 | 04/17/24 08:28 | KDW | Mt. Juliet, TN |
| Mercury by Method 7471B | WG2268639 | 1 | 04/17/24 08:51 | 04/17/24 18:35 | AKB | Mt. Juliet, TN |
| Metals (ICP) by Method 6010D | WG2268234 | 1 | 04/16/24 16:20 | 04/16/24 23:38 | DJS | Mt. Juliet, TN |
| Semi-Volatile Organic Compounds (GC) by Method NWTPH-HCID | WG2270226 | 1 | 04/19/24 06:16 | 04/19/24 15:35 | JSS | Mt. Juliet, TN |

# CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 66.0 | | 1 | 04/16/2024 13:35 | WG2267999 |

## Mercury by Method 7471B

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Mercury | U | | 0.0273 | 0.0606 | 1 | 04/17/2024 17:48 | WG2268639 |

## Metals (ICP) by Method 6010D

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Arsenic | 4.36 | | 0.784 | 3.03 | 1 | 04/16/2024 23:10 | WG2268234 |
| Barium | 47.0 | | 0.129 | 0.757 | 1 | 04/16/2024 23:10 | WG2268234 |
| Cadmium | U | | 0.0713 | 0.757 | 1 | 04/16/2024 23:10 | WG2268234 |
| Chromium | 6.05 | | 0.201 | 1.51 | 1 | 04/16/2024 23:10 | WG2268234 |
| Copper | 5.21 | | 0.606 | 3.03 | 1 | 04/16/2024 23:10 | WG2268234 |
| Lead | 4.26 | | 0.315 | 0.757 | 1 | 04/16/2024 23:10 | WG2268234 |
| Nickel | 4.25 | | 0.200 | 3.03 | 1 | 04/16/2024 23:10 | WG2268234 |
| Selenium | 1.21 | J | 1.16 | 3.03 | 1 | 04/16/2024 23:10 | WG2268234 |
| Silver | U | | 0.192 | 1.51 | 1 | 04/16/2024 23:10 | WG2268234 |
| Zinc | 30.7 | | 1.26 | 7.57 | 1 | 04/16/2024 23:10 | WG2268234 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | U | | 2.01 | 6.06 | 1 | 04/18/2024 21:32 | WG2269461 |
| Residual Range Organics (RRO) | U | | 5.04 | 15.1 | 1 | 04/18/2024 21:32 | WG2269461 |
| *(S) o-Terphenyl* | *34.1* | | | *18.0-148* | | *04/18/2024 21:32* | WG2269461 |

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Anthracene | U | | 0.00348 | 0.00909 | 1 | 04/19/2024 13:39 | WG2269760 |
| Acenaphthene | U | | 0.00316 | 0.00909 | 1 | 04/19/2024 13:39 | WG2269760 |
| Acenaphthylene | U | | 0.00327 | 0.00909 | 1 | 04/19/2024 13:39 | WG2269760 |
| Benzo(a)anthracene | U | | 0.00262 | 0.00909 | 1 | 04/19/2024 13:39 | WG2269760 |
| Benzo(a)pyrene | U | | 0.00271 | 0.00909 | 1 | 04/19/2024 13:39 | WG2269760 |
| Benzo(b)fluoranthene | U | | 0.00232 | 0.00909 | 1 | 04/19/2024 13:39 | WG2269760 |
| Benzo(g,h,i)perylene | U | | 0.00268 | 0.00909 | 1 | 04/19/2024 13:39 | WG2269760 |
| Benzo(k)fluoranthene | U | | 0.00326 | 0.00909 | 1 | 04/19/2024 13:39 | WG2269760 |
| Chrysene | U | | 0.00351 | 0.00909 | 1 | 04/19/2024 13:39 | WG2269760 |
| Dibenz(a,h)anthracene | U | | 0.00260 | 0.00909 | 1 | 04/19/2024 13:39 | WG2269760 |
| Fluoranthene | U | | 0.00344 | 0.00909 | 1 | 04/19/2024 13:39 | WG2269760 |
| Fluorene | U | | 0.00310 | 0.00909 | 1 | 04/19/2024 13:39 | WG2269760 |
| Indeno(1,2,3-cd)pyrene | U | | 0.00274 | 0.00909 | 1 | 04/19/2024 13:39 | WG2269760 |
| Naphthalene | U | | 0.00618 | 0.0303 | 1 | 04/19/2024 13:39 | WG2269760 |
| Phenanthrene | U | | 0.00350 | 0.00909 | 1 | 04/19/2024 13:39 | WG2269760 |
| Pyrene | U | | 0.00303 | 0.00909 | 1 | 04/19/2024 13:39 | WG2269760 |
| 1-Methylnaphthalene | U | | 0.00680 | 0.0303 | 1 | 04/19/2024 13:39 | WG2269760 |
| 2-Methylnaphthalene | U | | 0.00647 | 0.0303 | 1 | 04/19/2024 13:39 | WG2269760 |
| 2-Chloronaphthalene | U | | 0.00706 | 0.0303 | 1 | 04/19/2024 13:39 | WG2269760 |
| *(S) p-Terphenyl-d14* | *69.8* | | | *23.0-120* | | *04/19/2024 13:39* | WG2269760 |
| *(S) Nitrobenzene-d5* | *54.3* | | | *14.0-149* | | *04/19/2024 13:39* | WG2269760 |
| *(S) 2-Fluorobiphenyl* | *53.5* | | | *34.0-125* | | *04/19/2024 13:39* | WG2269760 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 69.7 | | 1 | 04/16/2024 13:25 | WG2268002 |

## Mercury by Method 7471B

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Mercury | 0.0308 | J | 0.0258 | 0.0574 | 1 | 04/17/2024 18:38 | WG2268639 |

## Metals (ICP) by Method 6010D

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Arsenic | 6.90 | | 0.743 | 2.87 | 1 | 04/16/2024 23:42 | WG2268234 |
| Barium | 73.5 | | 0.122 | 0.718 | 1 | 04/16/2024 23:42 | WG2268234 |
| Cadmium | 0.233 | J | 0.0676 | 0.718 | 1 | 04/16/2024 23:42 | WG2268234 |
| Chromium | 42.4 | | 0.191 | 1.44 | 1 | 04/16/2024 23:42 | WG2268234 |
| Copper | 24.6 | | 0.574 | 2.87 | 1 | 04/16/2024 23:42 | WG2268234 |
| Lead | 21.6 | | 0.299 | 0.718 | 1 | 04/16/2024 23:42 | WG2268234 |
| Nickel | 8.15 | | 0.189 | 2.87 | 1 | 04/16/2024 23:42 | WG2268234 |
| Selenium | 1.72 | J | 1.10 | 2.87 | 1 | 04/16/2024 23:42 | WG2268234 |
| Silver | U | | 0.182 | 1.44 | 1 | 04/16/2024 23:42 | WG2268234 |
| Zinc | 98.7 | | 1.19 | 7.18 | 1 | 04/16/2024 23:42 | WG2268234 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 25.8 | | 1.91 | 5.74 | 1 | 04/19/2024 18:35 | WG2270219 |
| Residual Range Organics (RRO) | 238 | | 23.8 | 71.8 | 5 | 04/20/2024 11:43 | WG2270219 |
| *(S) o-Terphenyl* | *38.3* | | | *18.0-148* | | *04/19/2024 18:35* | WG2270219 |
| *(S) o-Terphenyl* | *59.7* | | | *18.0-148* | | *04/20/2024 11:43* | WG2270219 |

**Sample Narrative:**

L1725561-22 WG2270219: Sample resembles laboratory standard for Hydraulic Oil.

L1725561-22 WG2270219: ample resembles laboratory standard for Hydraulic Oil.

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Anthracene | U | | 0.00330 | 0.00861 | 1 | 04/19/2024 15:17 | WG2269760 |
| Acenaphthene | U | | 0.00300 | 0.00861 | 1 | 04/19/2024 15:17 | WG2269760 |
| Acenaphthylene | U | | 0.00310 | 0.00861 | 1 | 04/19/2024 15:17 | WG2269760 |
| Benzo(a)anthracene | 0.00403 | J | 0.00248 | 0.00861 | 1 | 04/19/2024 15:17 | WG2269760 |
| Benzo(a)pyrene | 0.00316 | J | 0.00257 | 0.00861 | 1 | 04/19/2024 15:17 | WG2269760 |
| Benzo(b)fluoranthene | 0.00330 | J | 0.00220 | 0.00861 | 1 | 04/19/2024 15:17 | WG2269760 |
| Benzo(g,h,i)perylene | 0.00314 | J | 0.00254 | 0.00861 | 1 | 04/19/2024 15:17 | WG2269760 |
| Benzo(k)fluoranthene | U | | 0.00309 | 0.00861 | 1 | 04/19/2024 15:17 | WG2269760 |
| Chrysene | U | | 0.00333 | 0.00861 | 1 | 04/19/2024 15:17 | WG2269760 |
| Dibenz(a,h)anthracene | U | | 0.00247 | 0.00861 | 1 | 04/19/2024 15:17 | WG2269760 |
| Fluoranthene | 0.00673 | J | 0.00326 | 0.00861 | 1 | 04/19/2024 15:17 | WG2269760 |
| Fluorene | U | | 0.00294 | 0.00861 | 1 | 04/19/2024 15:17 | WG2269760 |
| Indeno(1,2,3-cd)pyrene | 0.00284 | J | 0.00260 | 0.00861 | 1 | 04/19/2024 15:17 | WG2269760 |
| Naphthalene | U | | 0.00586 | 0.0287 | 1 | 04/19/2024 15:17 | WG2269760 |
| Phenanthrene | 0.00419 | J | 0.00332 | 0.00861 | 1 | 04/19/2024 15:17 | WG2269760 |
| Pyrene | 0.00563 | J | 0.00287 | 0.00861 | 1 | 04/19/2024 15:17 | WG2269760 |
| 1-Methylnaphthalene | U | | 0.00644 | 0.0287 | 1 | 04/19/2024 15:17 | WG2269760 |
| 2-Methylnaphthalene | U | | 0.00613 | 0.0287 | 1 | 04/19/2024 15:17 | WG2269760 |

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) mg/kg | Qualifier | MDL (dry) mg/kg | RDL (dry) mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| 2-Chloronaphthalene | U | | 0.00669 | 0.0287 | 1 | 04/19/2024 15:17 | WG2269760 |
| *(S) p-Terphenyl-d14* | *62.1* | | | *23.0-120* | | *04/19/2024 15:17* | WG2269760 |
| *(S) Nitrobenzene-d5* | *43.1* | | | *14.0-149* | | *04/19/2024 15:17* | WG2269760 |
| *(S) 2-Fluorobiphenyl* | *39.2* | | | *34.0-125* | | *04/19/2024 15:17* | WG2269760 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 68.5 | | 1 | 04/16/2024 13:25 | WG2268002 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 14.7 | | 1.94 | 5.84 | 1 | 04/19/2024 17:21 | WG2270219 |
| Residual Range Organics (RRO) | 110 | | 4.86 | 14.6 | 1 | 04/19/2024 17:21 | WG2270219 |
| *(S) o-Terphenyl* | *44.7* | | | *18.0-148* | | *04/19/2024 17:21* | WG2270219 |

**Sample Narrative:**

L1725561-23 WG2270219: Sample resembles laboratory standard for Hydraulic Oil.

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 65.9 | | 1 | 04/16/2024 13:25 | WG2268002 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 2.47 | J | 2.02 | 6.07 | 1 | 04/20/2024 10:37 | WG2270219 |
| Residual Range Organics (RRO) | 17.8 | | 5.06 | 15.2 | 1 | 04/20/2024 10:37 | WG2270219 |
| *(S) o-Terphenyl* | *71.8* | | | *18.0-148* | | *04/20/2024 10:37* | WG2270219 |

**Sample Narrative:**

L1725561-24 WG2270219: Sample resembles laboratory standard for Hydraulic Oil.

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 66.6 | | 1 | 04/16/2024 13:25 | WG2268002 |

## Mercury by Method 7471B

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Mercury | U | | 0.0270 | 0.0600 | 1 | 04/17/2024 18:40 | WG2268639 |

## Metals (ICP) by Method 6010D

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Arsenic | 8.30 | | 0.778 | 3.00 | 1 | 04/16/2024 23:45 | WG2268234 |
| Barium | 79.5 | | 0.128 | 0.751 | 1 | 04/16/2024 23:45 | WG2268234 |
| Cadmium | 0.229 | J | 0.0707 | 0.751 | 1 | 04/16/2024 23:45 | WG2268234 |
| Chromium | 11.7 | | 0.200 | 1.50 | 1 | 04/16/2024 23:45 | WG2268234 |
| Copper | 22.4 | | 0.600 | 3.00 | 1 | 04/16/2024 23:45 | WG2268234 |
| Lead | 34.3 | | 0.312 | 0.751 | 1 | 04/16/2024 23:45 | WG2268234 |
| Nickel | 8.78 | | 0.198 | 3.00 | 1 | 04/16/2024 23:45 | WG2268234 |
| Selenium | 1.94 | J | 1.15 | 3.00 | 1 | 04/16/2024 23:45 | WG2268234 |
| Silver | U | | 0.191 | 1.50 | 1 | 04/16/2024 23:45 | WG2268234 |
| Zinc | 97.2 | | 1.25 | 7.51 | 1 | 04/16/2024 23:45 | WG2268234 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 6.75 | | 2.00 | 6.00 | 1 | 04/19/2024 17:58 | WG2270219 |
| Residual Range Organics (RRO) | 28.1 | | 5.00 | 15.0 | 1 | 04/19/2024 17:58 | WG2270219 |
| *(S) o-Terphenyl* | *39.7* | | | *18.0-148* | | *04/19/2024 17:58* | WG2270219 |

**Sample Narrative:**

L1725561-40 WG2270219: Sample resembles laboratory standard for Hydraulic Oil.

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Anthracene | U | | 0.00345 | 0.00901 | 1 | 04/20/2024 01:07 | WG2269839 |
| Acenaphthene | U | | 0.00314 | 0.00901 | 1 | 04/20/2024 01:07 | WG2269839 |
| Acenaphthylene | U | | 0.00324 | 0.00901 | 1 | 04/20/2024 01:07 | WG2269839 |
| Benzo(a)anthracene | U | | 0.00260 | 0.00901 | 1 | 04/20/2024 01:07 | WG2269839 |
| Benzo(a)pyrene | U | | 0.00269 | 0.00901 | 1 | 04/20/2024 01:07 | WG2269839 |
| Benzo(b)fluoranthene | U | | 0.00230 | 0.00901 | 1 | 04/20/2024 01:07 | WG2269839 |
| Benzo(g,h,i)perylene | U | | 0.00266 | 0.00901 | 1 | 04/20/2024 01:07 | WG2269839 |
| Benzo(k)fluoranthene | U | | 0.00323 | 0.00901 | 1 | 04/20/2024 01:07 | WG2269839 |
| Chrysene | U | | 0.00348 | 0.00901 | 1 | 04/20/2024 01:07 | WG2269839 |
| Dibenz(a,h)anthracene | U | | 0.00258 | 0.00901 | 1 | 04/20/2024 01:07 | WG2269839 |
| Fluoranthene | U | | 0.00341 | 0.00901 | 1 | 04/20/2024 01:07 | WG2269839 |
| Fluorene | U | | 0.00308 | 0.00901 | 1 | 04/20/2024 01:07 | WG2269839 |
| Indeno(1,2,3-cd)pyrene | U | | 0.00272 | 0.00901 | 1 | 04/20/2024 01:07 | WG2269839 |
| Naphthalene | U | | 0.00612 | 0.0300 | 1 | 04/20/2024 01:07 | WG2269839 |
| Phenanthrene | U | | 0.00347 | 0.00901 | 1 | 04/20/2024 01:07 | WG2269839 |
| Pyrene | U | | 0.00300 | 0.00901 | 1 | 04/20/2024 01:07 | WG2269839 |
| 1-Methylnaphthalene | U | | 0.00674 | 0.0300 | 1 | 04/20/2024 01:07 | WG2269839 |
| 2-Methylnaphthalene | U | | 0.00641 | 0.0300 | 1 | 04/20/2024 01:07 | WG2269839 |
| 2-Chloronaphthalene | U | | 0.00699 | 0.0300 | 1 | 04/20/2024 01:07 | WG2269839 |
| *(S) p-Terphenyl-d14* | *63.5* | | | *23.0-120* | | *04/20/2024 01:07* | WG2269839 |

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) mg/kg | Qualifier | MDL (dry) mg/kg | RDL (dry) mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| *(S) Nitrobenzene-d5* | *61.3* | | | *14.0-149* | | *04/20/2024 01:07* | WG2269839 |
| *(S) 2-Fluorobiphenyl* | *54.0* | | | *34.0-125* | | *04/20/2024 01:07* | WG2269839 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 76.2 | | 1 | 04/16/2024 13:25 | WG2268002 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | U | | 1.74 | 5.25 | 1 | 04/19/2024 16:56 | WG2270219 |
| Residual Range Organics (RRO) | 4.85 | J | 4.37 | 13.1 | 1 | 04/19/2024 16:56 | WG2270219 |
| *(S) o-Terphenyl* | *62.5* | | | *18.0-148* | | *04/19/2024 16:56* | WG2270219 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 78.8 | | 1 | 04/16/2024 13:25 | WG2268002 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | U | | 1.69 | 5.08 | 1 | 04/19/2024 16:44 | WG2270219 |
| Residual Range Organics (RRO) | U | | 4.23 | 12.7 | 1 | 04/19/2024 16:44 | WG2270219 |
| *(S) o-Terphenyl* | *65.0* | | | *18.0-148* | | *04/19/2024 16:44* | WG2270219 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 65.4 | | 1 | 04/16/2024 13:14 | WG2268006 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 141 | | 2.03 | 6.12 | 1 | 04/19/2024 16:32 | WG2270219 |
| Residual Range Organics (RRO) | 5.41 | J | 5.09 | 15.3 | 1 | 04/19/2024 16:32 | WG2270219 |
| *(S) o-Terphenyl* | *76.6* | | | *18.0-148* | | *04/19/2024 16:32* | WG2270219 |

Sample Narrative:

L1725561-53 WG2270219: Sample resembles laboratory standard for Diesel.

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Anthracene | U | | 0.00352 | 0.00917 | 1 | 04/20/2024 01:25 | WG2269839 |
| Acenaphthene | U | | 0.00320 | 0.00917 | 1 | 04/20/2024 01:25 | WG2269839 |
| Acenaphthylene | U | | 0.00330 | 0.00917 | 1 | 04/20/2024 01:25 | WG2269839 |
| Benzo(a)anthracene | U | | 0.00265 | 0.00917 | 1 | 04/20/2024 01:25 | WG2269839 |
| Benzo(a)pyrene | U | | 0.00274 | 0.00917 | 1 | 04/20/2024 01:25 | WG2269839 |
| Benzo(b)fluoranthene | U | | 0.00234 | 0.00917 | 1 | 04/20/2024 01:25 | WG2269839 |
| Benzo(g,h,i)perylene | U | | 0.00271 | 0.00917 | 1 | 04/20/2024 01:25 | WG2269839 |
| Benzo(k)fluoranthene | U | | 0.00329 | 0.00917 | 1 | 04/20/2024 01:25 | WG2269839 |
| Chrysene | U | | 0.00355 | 0.00917 | 1 | 04/20/2024 01:25 | WG2269839 |
| Dibenz(a,h)anthracene | U | | 0.00263 | 0.00917 | 1 | 04/20/2024 01:25 | WG2269839 |
| Fluoranthene | U | | 0.00347 | 0.00917 | 1 | 04/20/2024 01:25 | WG2269839 |
| Fluorene | 0.0154 | | 0.00313 | 0.00917 | 1 | 04/20/2024 01:25 | WG2269839 |
| Indeno(1,2,3-cd)pyrene | U | | 0.00277 | 0.00917 | 1 | 04/20/2024 01:25 | WG2269839 |
| Naphthalene | U | | 0.00624 | 0.0306 | 1 | 04/20/2024 01:25 | WG2269839 |
| Phenanthrene | 0.0287 | | 0.00353 | 0.00917 | 1 | 04/20/2024 01:25 | WG2269839 |
| Pyrene | U | | 0.00306 | 0.00917 | 1 | 04/20/2024 01:25 | WG2269839 |
| 1-Methylnaphthalene | U | | 0.00687 | 0.0306 | 1 | 04/20/2024 01:25 | WG2269839 |
| 2-Methylnaphthalene | U | | 0.00653 | 0.0306 | 1 | 04/20/2024 01:25 | WG2269839 |
| 2-Chloronaphthalene | U | | 0.00713 | 0.0306 | 1 | 04/20/2024 01:25 | WG2269839 |
| *(S) p-Terphenyl-d14* | *64.8* | | | *23.0-120* | | *04/20/2024 01:25* | WG2269839 |
| *(S) Nitrobenzene-d5* | *80.3* | | | *14.0-149* | | *04/20/2024 01:25* | WG2269839 |
| *(S) 2-Fluorobiphenyl* | *68.7* | | | *34.0-125* | | *04/20/2024 01:25* | WG2269839 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 77.0 | | 1 | 04/16/2024 13:14 | WG2268006 |

## Mercury by Method 7471B

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Mercury | 0.0309 | J | 0.0234 | 0.0520 | 1 | 04/17/2024 18:43 | WG2268639 |

## Metals (ICP) by Method 6010D

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Arsenic | 9.24 | | 0.673 | 2.60 | 1 | 04/16/2024 23:49 | WG2268234 |
| Barium | 93.8 | | 0.111 | 0.650 | 1 | 04/16/2024 23:49 | WG2268234 |
| Cadmium | 1.95 | | 0.0612 | 0.650 | 1 | 04/16/2024 23:49 | WG2268234 |
| Chromium | 74.3 | | 0.173 | 1.30 | 1 | 04/16/2024 23:49 | WG2268234 |
| Copper | 198 | | 0.520 | 2.60 | 1 | 04/16/2024 23:49 | WG2268234 |
| Lead | 215 | | 0.270 | 0.650 | 1 | 04/16/2024 23:49 | WG2268234 |
| Nickel | 30.6 | | 0.171 | 2.60 | 1 | 04/16/2024 23:49 | WG2268234 |
| Selenium | 2.47 | J | 0.992 | 2.60 | 1 | 04/16/2024 23:49 | WG2268234 |
| Silver | 0.268 | J | 0.165 | 1.30 | 1 | 04/16/2024 23:49 | WG2268234 |
| Zinc | 489 | | 1.08 | 6.50 | 1 | 04/16/2024 23:49 | WG2268234 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 382 | | 1.73 | 5.20 | 1 | 04/19/2024 18:23 | WG2270219 |
| Residual Range Organics (RRO) | 120 | | 4.33 | 13.0 | 1 | 04/19/2024 18:23 | WG2270219 |
| *(S) o-Terphenyl* | *53.6* | | | *18.0-148* | | *04/19/2024 18:23* | WG2270219 |

**Sample Narrative:**

L1725561-58 WG2270219: Sample resembles laboratory standards for Diesel and Hydraulic oil.

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Anthracene | U | | 0.00299 | 0.00779 | 1 | 04/20/2024 01:43 | WG2269839 |
| Acenaphthene | U | | 0.00272 | 0.00779 | 1 | 04/20/2024 01:43 | WG2269839 |
| Acenaphthylene | U | | 0.00281 | 0.00779 | 1 | 04/20/2024 01:43 | WG2269839 |
| Benzo(a)anthracene | U | | 0.00225 | 0.00779 | 1 | 04/20/2024 01:43 | WG2269839 |
| Benzo(a)pyrene | U | | 0.00233 | 0.00779 | 1 | 04/20/2024 01:43 | WG2269839 |
| Benzo(b)fluoranthene | 0.00262 | J | 0.00199 | 0.00779 | 1 | 04/20/2024 01:43 | WG2269839 |
| Benzo(g,h,i)perylene | U | | 0.00230 | 0.00779 | 1 | 04/20/2024 01:43 | WG2269839 |
| Benzo(k)fluoranthene | U | | 0.00279 | 0.00779 | 1 | 04/20/2024 01:43 | WG2269839 |
| Chrysene | U | | 0.00301 | 0.00779 | 1 | 04/20/2024 01:43 | WG2269839 |
| Dibenz(a,h)anthracene | U | | 0.00223 | 0.00779 | 1 | 04/20/2024 01:43 | WG2269839 |
| Fluoranthene | U | | 0.00295 | 0.00779 | 1 | 04/20/2024 01:43 | WG2269839 |
| Fluorene | U | | 0.00266 | 0.00779 | 1 | 04/20/2024 01:43 | WG2269839 |
| Indeno(1,2,3-cd)pyrene | U | | 0.00235 | 0.00779 | 1 | 04/20/2024 01:43 | WG2269839 |
| Naphthalene | U | | 0.00530 | 0.0260 | 1 | 04/20/2024 01:43 | WG2269839 |
| Phenanthrene | 0.0174 | | 0.00300 | 0.00779 | 1 | 04/20/2024 01:43 | WG2269839 |
| Pyrene | 0.00590 | J | 0.00260 | 0.00779 | 1 | 04/20/2024 01:43 | WG2269839 |
| 1-Methylnaphthalene | U | | 0.00583 | 0.0260 | 1 | 04/20/2024 01:43 | WG2269839 |
| 2-Methylnaphthalene | U | | 0.00555 | 0.0260 | 1 | 04/20/2024 01:43 | WG2269839 |
| 2-Chloronaphthalene | U | | 0.00605 | 0.0260 | 1 | 04/20/2024 01:43 | WG2269839 |
| *(S) p-Terphenyl-d14* | *73.6* | | | *23.0-120* | | *04/20/2024 01:43* | WG2269839 |

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) mg/kg | Qualifier | MDL (dry) mg/kg | RDL (dry) mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| *(S) Nitrobenzene-d5* | *76.9* | | | *14.0-149* | | *04/20/2024 01:43* | WG2269839 |
| *(S) 2-Fluorobiphenyl* | *58.0* | | | *34.0-125* | | *04/20/2024 01:43* | WG2269839 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 75.7 | | 1 | 04/16/2024 13:14 | WG2268006 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 5.26 | J | 1.76 | 5.29 | 1 | 04/19/2024 17:09 | WG2270219 |
| Residual Range Organics (RRO) | 14.5 | | 4.40 | 13.2 | 1 | 04/19/2024 17:09 | WG2270219 |
| *(S) o-Terphenyl* | *45.8* | | | *18.0-148* | | *04/19/2024 17:09* | WG2270219 |

**Sample Narrative:**

L1725561-59 WG2270219: Sample resembles laboratory standard for Hydraulic Oil.

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 70.0 | | 1 | 04/16/2024 13:14 | WG2268006 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 5.32 | J | 1.90 | 5.72 | 1 | 04/19/2024 17:58 | WG2270219 |
| Residual Range Organics (RRO) | 35.4 | | 4.76 | 14.3 | 1 | 04/19/2024 17:58 | WG2270219 |
| *(S) o-Terphenyl* | *47.7* | | | *18.0-148* | | *04/19/2024 17:58* | WG2270219 |

**Sample Narrative:**

L1725561-60 WG2270219: Sample resembles laboratory standard for Hydraulic Oil.

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 72.6 | | 1 | 04/16/2024 13:14 | WG2268006 |

## Mercury by Method 7471B

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Mercury | 0.0381 | J | 0.0248 | 0.0551 | 1 | 04/17/2024 17:31 | WG2268639 |

## Metals (ICP) by Method 6010D

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Arsenic | 7.81 | | 0.714 | 2.76 | 1 | 04/16/2024 22:52 | WG2268234 |
| Barium | 79.4 | | 0.117 | 0.689 | 1 | 04/16/2024 22:52 | WG2268234 |
| Cadmium | 0.565 | J | 0.0649 | 0.689 | 1 | 04/16/2024 22:52 | WG2268234 |
| Chromium | 225 | J3 J5 | 0.183 | 1.38 | 1 | 04/16/2024 22:52 | WG2268234 |
| Copper | 31.4 | | 0.551 | 2.76 | 1 | 04/16/2024 22:52 | WG2268234 |
| Lead | 27.6 | | 0.287 | 0.689 | 1 | 04/16/2024 22:52 | WG2268234 |
| Nickel | 9.59 | | 0.182 | 2.76 | 1 | 04/16/2024 22:52 | WG2268234 |
| Selenium | 2.68 | J | 1.05 | 2.76 | 1 | 04/16/2024 22:52 | WG2268234 |
| Silver | 0.274 | J | 0.175 | 1.38 | 1 | 04/16/2024 22:52 | WG2268234 |
| Zinc | 125 | | 1.15 | 6.89 | 1 | 04/16/2024 22:52 | WG2268234 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 5.97 | | 1.83 | 5.51 | 1 | 04/19/2024 18:03 | WG2270232 |
| Residual Range Organics (RRO) | 27.8 | | 4.59 | 13.8 | 1 | 04/19/2024 18:03 | WG2270232 |
| *(S) o-Terphenyl* | *50.2* | | | *18.0-148* | | *04/19/2024 18:03* | WG2270232 |

**Sample Narrative:**

L1725561-76 WG2270232: Sample resembles laboratory standard for Hydraulic Oil.

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Anthracene | U | | 0.00317 | 0.00827 | 1 | 04/20/2024 02:01 | WG2269839 |
| Acenaphthene | U | | 0.00288 | 0.00827 | 1 | 04/20/2024 02:01 | WG2269839 |
| Acenaphthylene | U | | 0.00298 | 0.00827 | 1 | 04/20/2024 02:01 | WG2269839 |
| Benzo(a)anthracene | U | | 0.00238 | 0.00827 | 1 | 04/20/2024 02:01 | WG2269839 |
| Benzo(a)pyrene | U | | 0.00247 | 0.00827 | 1 | 04/20/2024 02:01 | WG2269839 |
| Benzo(b)fluoranthene | U | | 0.00211 | 0.00827 | 1 | 04/20/2024 02:01 | WG2269839 |
| Benzo(g,h,i)perylene | U | | 0.00244 | 0.00827 | 1 | 04/20/2024 02:01 | WG2269839 |
| Benzo(k)fluoranthene | U | | 0.00296 | 0.00827 | 1 | 04/20/2024 02:01 | WG2269839 |
| Chrysene | U | | 0.00320 | 0.00827 | 1 | 04/20/2024 02:01 | WG2269839 |
| Dibenz(a,h)anthracene | U | | 0.00237 | 0.00827 | 1 | 04/20/2024 02:01 | WG2269839 |
| Fluoranthene | U | | 0.00313 | 0.00827 | 1 | 04/20/2024 02:01 | WG2269839 |
| Fluorene | U | | 0.00282 | 0.00827 | 1 | 04/20/2024 02:01 | WG2269839 |
| Indeno(1,2,3-cd)pyrene | U | | 0.00249 | 0.00827 | 1 | 04/20/2024 02:01 | WG2269839 |
| Naphthalene | U | | 0.00562 | 0.0276 | 1 | 04/20/2024 02:01 | WG2269839 |
| Phenanthrene | U | | 0.00318 | 0.00827 | 1 | 04/20/2024 02:01 | WG2269839 |
| Pyrene | U | | 0.00276 | 0.00827 | 1 | 04/20/2024 02:01 | WG2269839 |
| 1-Methylnaphthalene | U | | 0.00619 | 0.0276 | 1 | 04/20/2024 02:01 | WG2269839 |
| 2-Methylnaphthalene | U | | 0.00588 | 0.0276 | 1 | 04/20/2024 02:01 | WG2269839 |
| 2-Chloronaphthalene | U | | 0.00642 | 0.0276 | 1 | 04/20/2024 02:01 | WG2269839 |
| *(S) p-Terphenyl-d14* | *64.6* | | | *23.0-120* | | *04/20/2024 02:01* | WG2269839 |

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) mg/kg | Qualifier | MDL (dry) mg/kg | RDL (dry) mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| *(S) Nitrobenzene-d5* | *51.9* | | | *14.0-149* | | *04/20/2024 02:01* | WG2269839 |
| *(S) 2-Fluorobiphenyl* | *44.8* | | | *34.0-125* | | *04/20/2024 02:01* | WG2269839 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 73.4 | | 1 | 04/16/2024 13:14 | WG2268006 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | U | | 1.81 | 5.45 | 1 | 04/19/2024 17:21 | WG2270232 |
| Residual Range Organics (RRO) | 6.01 | J | 4.54 | 13.6 | 1 | 04/19/2024 17:21 | WG2270232 |
| *(S) o-Terphenyl* | *60.4* | | | *18.0-148* | | *04/19/2024 17:21* | WG2270232 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 74.3 | | 1 | 04/16/2024 13:14 | WG2268006 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 2.49 | J | 1.79 | 5.38 | 1 | 04/19/2024 17:07 | WG2270232 |
| Residual Range Organics (RRO) | 8.05 | J | 4.48 | 13.5 | 1 | 04/19/2024 17:07 | WG2270232 |
| *(S) o-Terphenyl* | *58.1* | | | *18.0-148* | | *04/19/2024 17:07* | WG2270232 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 67.0 | | 1 | 04/16/2024 13:14 | WG2268006 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 357 | | 39.7 | 119 | 20 | 04/20/2024 11:03 | WG2270232 |
| Residual Range Organics (RRO) | 500 | | 99.4 | 298 | 20 | 04/20/2024 11:03 | WG2270232 |
| *(S) o-Terphenyl* | *61.1* | J7 | | *18.0-148* | | *04/20/2024 11:03* | WG2270232 |

**Sample Narrative:**

L1725561-89 WG2270232: Sample resembles laboratory standard for Motor Oil and Kerosene.

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Anthracene | U | | 0.00343 | 0.00895 | 1 | 04/20/2024 02:19 | WG2269839 |
| Acenaphthene | U | | 0.00312 | 0.00895 | 1 | 04/20/2024 02:19 | WG2269839 |
| Acenaphthylene | U | | 0.00322 | 0.00895 | 1 | 04/20/2024 02:19 | WG2269839 |
| Benzo(a)anthracene | 0.00664 | J | 0.00258 | 0.00895 | 1 | 04/20/2024 02:19 | WG2269839 |
| Benzo(a)pyrene | 0.00542 | J | 0.00267 | 0.00895 | 1 | 04/20/2024 02:19 | WG2269839 |
| Benzo(b)fluoranthene | 0.00610 | J | 0.00228 | 0.00895 | 1 | 04/20/2024 02:19 | WG2269839 |
| Benzo(g,h,i)perylene | U | | 0.00264 | 0.00895 | 1 | 04/20/2024 02:19 | WG2269839 |
| Benzo(k)fluoranthene | U | | 0.00321 | 0.00895 | 1 | 04/20/2024 02:19 | WG2269839 |
| Chrysene | 0.00491 | J | 0.00346 | 0.00895 | 1 | 04/20/2024 02:19 | WG2269839 |
| Dibenz(a,h)anthracene | U | | 0.00257 | 0.00895 | 1 | 04/20/2024 02:19 | WG2269839 |
| Fluoranthene | 0.0160 | | 0.00339 | 0.00895 | 1 | 04/20/2024 02:19 | WG2269839 |
| Fluorene | 0.0531 | | 0.00306 | 0.00895 | 1 | 04/20/2024 02:19 | WG2269839 |
| Indeno(1,2,3-cd)pyrene | 0.00312 | J | 0.00270 | 0.00895 | 1 | 04/20/2024 02:19 | WG2269839 |
| Naphthalene | 0.875 | | 0.00609 | 0.0298 | 1 | 04/20/2024 02:19 | WG2269839 |
| Phenanthrene | 0.0584 | | 0.00345 | 0.00895 | 1 | 04/20/2024 02:19 | WG2269839 |
| Pyrene | 0.0201 | | 0.00298 | 0.00895 | 1 | 04/20/2024 02:19 | WG2269839 |
| 1-Methylnaphthalene | 0.746 | | 0.00670 | 0.0298 | 1 | 04/20/2024 02:19 | WG2269839 |
| 2-Methylnaphthalene | 1.09 | | 0.00637 | 0.0298 | 1 | 04/20/2024 02:19 | WG2269839 |
| 2-Chloronaphthalene | U | | 0.00695 | 0.0298 | 1 | 04/20/2024 02:19 | WG2269839 |
| *(S) p-Terphenyl-d14* | *62.9* | | | *23.0-120* | | *04/20/2024 02:19* | WG2269839 |
| *(S) Nitrobenzene-d5* | *143* | | | *14.0-149* | | *04/20/2024 02:19* | WG2269839 |
| *(S) 2-Fluorobiphenyl* | *53.8* | | | *34.0-125* | | *04/20/2024 02:19* | WG2269839 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 69.1 | | 1 | 04/16/2024 13:14 | WG2268006 |

## Mercury by Method 7471B

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Mercury | 0.0391 | J | 0.0261 | 0.0579 | 1 | 04/17/2024 16:33 | WG2268623 |

## Metals (ICP) by Method 6010D

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Arsenic | 3.75 | | 0.750 | 2.90 | 1 | 04/17/2024 21:57 | WG2268821 |
| Barium | 128 | | 0.123 | 0.724 | 1 | 04/17/2024 21:57 | WG2268821 |
| Cadmium | 1.74 | | 0.0682 | 0.724 | 1 | 04/17/2024 21:57 | WG2268821 |
| Chromium | 445 | | 0.193 | 1.45 | 1 | 04/17/2024 21:57 | WG2268821 |
| Copper | 129 | | 0.579 | 2.90 | 1 | 04/17/2024 21:57 | WG2268821 |
| Lead | 115 | | 0.301 | 0.724 | 1 | 04/17/2024 21:57 | WG2268821 |
| Nickel | 32.0 | | 0.191 | 2.90 | 1 | 04/17/2024 21:57 | WG2268821 |
| Selenium | 10.5 | | 1.11 | 2.90 | 1 | 04/17/2024 21:57 | WG2268821 |
| Silver | 52.1 | | 0.184 | 1.45 | 1 | 04/17/2024 21:57 | WG2268821 |
| Zinc | 363 | | 1.20 | 7.24 | 1 | 04/17/2024 21:57 | WG2268821 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 55.0 | | 3.85 | 11.6 | 2 | 04/19/2024 18:31 | WG2270232 |
| Residual Range Organics (RRO) | 374 | | 9.64 | 29.0 | 2 | 04/19/2024 18:31 | WG2270232 |
| *(S) o-Terphenyl* | *56.8* | | | *18.0-148* | | *04/19/2024 18:31* | WG2270232 |

**Sample Narrative:**

L1725561-94 WG2270232: Sample resembles laboratory standard for Hydraulic Oil.

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Anthracene | U | | 0.00333 | 0.00869 | 1 | 04/20/2024 04:42 | WG2270229 |
| Acenaphthene | U | | 0.00303 | 0.00869 | 1 | 04/20/2024 04:42 | WG2270229 |
| Acenaphthylene | U | | 0.00313 | 0.00869 | 1 | 04/20/2024 04:42 | WG2270229 |
| Benzo(a)anthracene | 0.00459 | J | 0.00250 | 0.00869 | 1 | 04/20/2024 04:42 | WG2270229 |
| Benzo(a)pyrene | 0.00323 | J | 0.00259 | 0.00869 | 1 | 04/20/2024 04:42 | WG2270229 |
| Benzo(b)fluoranthene | 0.00398 | J | 0.00222 | 0.00869 | 1 | 04/20/2024 04:42 | WG2270229 |
| Benzo(g,h,i)perylene | U | | 0.00256 | 0.00869 | 1 | 04/20/2024 04:42 | WG2270229 |
| Benzo(k)fluoranthene | U | | 0.00311 | 0.00869 | 1 | 04/20/2024 04:42 | WG2270229 |
| Chrysene | 0.00385 | J | 0.00336 | 0.00869 | 1 | 04/20/2024 04:42 | WG2270229 |
| Dibenz(a,h)anthracene | U | | 0.00249 | 0.00869 | 1 | 04/20/2024 04:42 | WG2270229 |
| Fluoranthene | 0.00657 | J | 0.00329 | 0.00869 | 1 | 04/20/2024 04:42 | WG2270229 |
| Fluorene | U | | 0.00297 | 0.00869 | 1 | 04/20/2024 04:42 | WG2270229 |
| Indeno(1,2,3-cd)pyrene | U | | 0.00262 | 0.00869 | 1 | 04/20/2024 04:42 | WG2270229 |
| Naphthalene | 0.0279 | J | 0.00591 | 0.0290 | 1 | 04/20/2024 04:42 | WG2270229 |
| Phenanthrene | 0.00387 | J | 0.00334 | 0.00869 | 1 | 04/20/2024 04:42 | WG2270229 |
| Pyrene | 0.0117 | | 0.00290 | 0.00869 | 1 | 04/20/2024 04:42 | WG2270229 |
| 1-Methylnaphthalene | 0.00995 | J | 0.00650 | 0.0290 | 1 | 04/20/2024 04:42 | WG2270229 |
| 2-Methylnaphthalene | 0.0185 | J | 0.00618 | 0.0290 | 1 | 04/20/2024 04:42 | WG2270229 |
| 2-Chloronaphthalene | U | | 0.00675 | 0.0290 | 1 | 04/20/2024 04:42 | WG2270229 |
| *(S) p-Terphenyl-d14* | *48.7* | | | *23.0-120* | | *04/20/2024 04:42* | WG2270229 |

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) mg/kg | Qualifier | MDL (dry) mg/kg | RDL (dry) mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| *(S) Nitrobenzene-d5* | *56.8* | | | *14.0-149* | | *04/20/2024 04:42* | WG2270229 |
| *(S) 2-Fluorobiphenyl* | *38.5* | | | *34.0-125* | | *04/20/2024 04:42* | WG2270229 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 83.7 | | 1 | 04/16/2024 13:14 | WG2268006 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 74.9 | | 15.9 | 47.8 | 10 | 04/20/2024 12:44 | WG2270232 |
| Residual Range Organics (RRO) | 274 | | 39.8 | 120 | 10 | 04/20/2024 12:44 | WG2270232 |
| *(S) o-Terphenyl* | *48.9* | | | *18.0-148* | | *04/20/2024 12:44* | WG2270232 |

**Sample Narrative:**

L1725561-95 WG2270232: Sample resembles laboratory standard for Motor Oil and Kerosene.

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 65.7 | | 1 | 04/16/2024 13:00 | WG2268008 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 426 | | 10.1 | 30.5 | 5 | 04/19/2024 22:14 | WG2270232 |
| Residual Range Organics (RRO) | 649 | | 25.3 | 76.2 | 5 | 04/19/2024 22:14 | WG2270232 |
| *(S) o-Terphenyl* | *62.9* | | | *18.0-148* | | *04/19/2024 22:14* | WG2270232 |

**Sample Narrative:**

L1725561-96 WG2270232: Sample resembles laboratory standard for Hydraulic Fluid.

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 87.4 | | 1 | 04/16/2024 13:35 | WG2267999 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 326 | | 38.1 | 114 | 25 | 04/19/2024 00:09 | WG2269461 |
| Residual Range Organics (RRO) | 1210 | | 95.4 | 286 | 25 | 04/19/2024 00:09 | WG2269461 |
| *(S) o-Terphenyl* | *22.6* | J7 | | *18.0-148* | | *04/19/2024 00:09* | WG2269461 |

Sample Narrative:

L1725561-101 WG2269461: Sample resembles laboratory standard for Mineral Spirits and Motor Oil.

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Anthracene | 0.0330 | | 0.00263 | 0.00687 | 1 | 04/21/2024 04:55 | WG2269760 |
| Acenaphthene | 0.0714 | | 0.00239 | 0.00687 | 1 | 04/21/2024 04:55 | WG2269760 |
| Acenaphthylene | U | | 0.00247 | 0.00687 | 1 | 04/21/2024 04:55 | WG2269760 |
| Benzo(a)anthracene | 0.125 | | 0.00198 | 0.00687 | 1 | 04/21/2024 04:55 | WG2269760 |
| Benzo(a)pyrene | 0.133 | | 0.00205 | 0.00687 | 1 | 04/21/2024 04:55 | WG2269760 |
| Benzo(b)fluoranthene | 0.122 | | 0.00175 | 0.00687 | 1 | 04/21/2024 04:55 | WG2269760 |
| Benzo(g,h,i)perylene | 0.0812 | | 0.00203 | 0.00687 | 1 | 04/21/2024 04:55 | WG2269760 |
| Benzo(k)fluoranthene | 0.0432 | | 0.00246 | 0.00687 | 1 | 04/21/2024 04:55 | WG2269760 |
| Chrysene | 0.151 | | 0.00266 | 0.00687 | 1 | 04/21/2024 04:55 | WG2269760 |
| Dibenz(a,h)anthracene | 0.0157 | | 0.00197 | 0.00687 | 1 | 04/21/2024 04:55 | WG2269760 |
| Fluoranthene | 0.321 | | 0.00260 | 0.00687 | 1 | 04/21/2024 04:55 | WG2269760 |
| Fluorene | 0.0943 | | 0.00235 | 0.00687 | 1 | 04/21/2024 04:55 | WG2269760 |
| Indeno(1,2,3-cd)pyrene | 0.0500 | | 0.00207 | 0.00687 | 1 | 04/21/2024 04:55 | WG2269760 |
| Naphthalene | 13.7 | | 0.0467 | 0.229 | 10 | 04/21/2024 05:15 | WG2269760 |
| Phenanthrene | 0.350 | | 0.00264 | 0.00687 | 1 | 04/21/2024 04:55 | WG2269760 |
| Pyrene | 0.411 | | 0.00229 | 0.00687 | 1 | 04/21/2024 04:55 | WG2269760 |
| 1-Methylnaphthalene | 8.70 | | 0.0514 | 0.229 | 10 | 04/21/2024 05:15 | WG2269760 |
| 2-Methylnaphthalene | 17.5 | | 0.0489 | 0.229 | 10 | 04/21/2024 05:15 | WG2269760 |
| 2-Chloronaphthalene | U | | 0.00533 | 0.0229 | 1 | 04/21/2024 04:55 | WG2269760 |
| *(S) p-Terphenyl-d14* | *58.3* | | | *23.0-120* | | *04/21/2024 04:55* | WG2269760 |
| *(S) p-Terphenyl-d14* | *55.9* | | | *23.0-120* | | *04/21/2024 05:15* | WG2269760 |
| *(S) Nitrobenzene-d5* | *0.000* | J2 | | *14.0-149* | | *04/21/2024 04:55* | WG2269760 |
| *(S) Nitrobenzene-d5* | *0.000* | J2 | | *14.0-149* | | *04/21/2024 05:15* | WG2269760 |
| *(S) 2-Fluorobiphenyl* | *57.5* | | | *34.0-125* | | *04/21/2024 04:55* | WG2269760 |
| *(S) 2-Fluorobiphenyl* | *65.7* | | | *34.0-125* | | *04/21/2024 05:15* | WG2269760 |

Sample Narrative:

L1725561-101 WG2269760: Surrogate failure due to matrix interference.

L1725561-101 WG2269760: Dilution and surrogate failure due to matrix interference.

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 78.0 | | 1 | 04/16/2024 13:35 | WG2267999 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 15900 | | 853 | 2560 | 500 | 04/19/2024 01:15 | WG2269461 |
| Residual Range Organics (RRO) | 27100 | | 2130 | 6410 | 500 | 04/19/2024 01:15 | WG2269461 |
| *(S) o-Terphenyl* | *0.000* | J7 | | *18.0-148* | | *04/19/2024 01:15* | WG2269461 |

Sample Narrative:

L1725561-110 WG2269461: Sample resembles laboratory standard for Hydraulic Fluid.

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Anthracene | 0.848 | | 0.0295 | 0.0769 | 10 | 04/21/2024 05:34 | WG2269760 |
| Acenaphthene | 0.356 | | 0.0268 | 0.0769 | 10 | 04/21/2024 05:34 | WG2269760 |
| Acenaphthylene | 0.308 | | 0.0277 | 0.0769 | 10 | 04/21/2024 05:34 | WG2269760 |
| Benzo(a)anthracene | 0.957 | | 0.0222 | 0.0769 | 10 | 04/21/2024 05:34 | WG2269760 |
| Benzo(a)pyrene | 0.786 | | 0.0459 | 0.154 | 20 | 04/24/2024 10:07 | WG2269760 |
| Benzo(b)fluoranthene | 0.934 | | 0.0392 | 0.154 | 20 | 04/24/2024 10:07 | WG2269760 |
| Benzo(g,h,i)perylene | 0.685 | | 0.0454 | 0.154 | 20 | 04/24/2024 10:07 | WG2269760 |
| Benzo(k)fluoranthene | 0.327 | | 0.0551 | 0.154 | 20 | 04/24/2024 10:07 | WG2269760 |
| Chrysene | 0.775 | | 0.0298 | 0.0769 | 10 | 04/21/2024 05:34 | WG2269760 |
| Dibenz(a,h)anthracene | 0.127 | J | 0.0441 | 0.154 | 20 | 04/24/2024 10:07 | WG2269760 |
| Fluoranthene | 2.41 | | 0.0291 | 0.0769 | 10 | 04/21/2024 05:34 | WG2269760 |
| Fluorene | 0.550 | | 0.0263 | 0.0769 | 10 | 04/21/2024 05:34 | WG2269760 |
| Indeno(1,2,3-cd)pyrene | 0.636 | | 0.0464 | 0.154 | 20 | 04/24/2024 10:07 | WG2269760 |
| Naphthalene | 2.10 | | 0.0523 | 0.256 | 10 | 04/21/2024 05:34 | WG2269760 |
| Phenanthrene | 2.80 | | 0.0296 | 0.0769 | 10 | 04/21/2024 05:34 | WG2269760 |
| Pyrene | 4.12 | | 0.0256 | 0.0769 | 10 | 04/21/2024 05:34 | WG2269760 |
| 1-Methylnaphthalene | 1.16 | | 0.0576 | 0.256 | 10 | 04/21/2024 05:34 | WG2269760 |
| 2-Methylnaphthalene | 3.40 | | 0.0548 | 0.256 | 10 | 04/21/2024 05:34 | WG2269760 |
| 2-Chloronaphthalene | U | | 0.0598 | 0.256 | 10 | 04/21/2024 05:34 | WG2269760 |
| *(S) p-Terphenyl-d14* | *0.000* | J2 | | *23.0-120* | | *04/21/2024 05:34* | WG2269760 |
| *(S) p-Terphenyl-d14* | *0.000* | J7 | | *23.0-120* | | *04/24/2024 10:07* | WG2269760 |
| *(S) Nitrobenzene-d5* | *0.000* | J2 | | *14.0-149* | | *04/21/2024 05:34* | WG2269760 |
| *(S) Nitrobenzene-d5* | *0.000* | J7 | | *14.0-149* | | *04/24/2024 10:07* | WG2269760 |
| *(S) 2-Fluorobiphenyl* | *47.3* | | | *34.0-125* | | *04/21/2024 05:34* | WG2269760 |
| *(S) 2-Fluorobiphenyl* | *44.8* | J7 | | *34.0-125* | | *04/24/2024 10:07* | WG2269760 |

Sample Narrative:

L1725561-110 WG2269760: Dilution and surrogate failure due to matrix interference.

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 79.0 | | 1 | 04/16/2024 13:35 | WG2267999 |

## Mercury by Method 7471B

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Mercury | 0.373 | | 0.0228 | 0.0507 | 1 | 04/17/2024 16:24 | WG2268623 |

## Metals (ICP) by Method 6010D

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Arsenic | 4.77 | | 0.656 | 2.53 | 1 | 04/17/2024 21:54 | WG2268821 |
| Barium | 130 | | 0.108 | 0.633 | 1 | 04/17/2024 21:54 | WG2268821 |
| Cadmium | 3.30 | | 0.0597 | 0.633 | 1 | 04/17/2024 21:54 | WG2268821 |
| Chromium | 103 | | 0.168 | 1.27 | 1 | 04/17/2024 21:54 | WG2268821 |
| Copper | 174 | | 0.507 | 2.53 | 1 | 04/17/2024 21:54 | WG2268821 |
| Lead | 342 | | 0.263 | 0.633 | 1 | 04/17/2024 21:54 | WG2268821 |
| Nickel | 53.4 | | 0.167 | 2.53 | 1 | 04/17/2024 21:54 | WG2268821 |
| Selenium | 9.20 | | 0.968 | 2.53 | 1 | 04/17/2024 21:54 | WG2268821 |
| Silver | 40.9 | | 0.161 | 1.27 | 1 | 04/17/2024 21:54 | WG2268821 |
| Zinc | 986 | | 1.05 | 6.33 | 1 | 04/17/2024 21:54 | WG2268821 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 231 | | 16.8 | 50.7 | 10 | 04/19/2024 12:00 | WG2269461 |
| Residual Range Organics (RRO) | 1120 | | 42.2 | 127 | 10 | 04/19/2024 12:00 | WG2269461 |
| *(S) o-Terphenyl* | *60.0* | | | *18.0-148* | | *04/19/2024 12:00* | WG2269461 |

**Sample Narrative:**

L1725561-112 WG2269461: Sample resembles laboratory standard for Motor Oil.

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Anthracene | 0.0704 | | 0.00291 | 0.00760 | 1 | 04/19/2024 16:35 | WG2269760 |
| Acenaphthene | 0.0143 | | 0.00265 | 0.00760 | 1 | 04/19/2024 16:35 | WG2269760 |
| Acenaphthylene | 0.00477 | J | 0.00274 | 0.00760 | 1 | 04/19/2024 16:35 | WG2269760 |
| Benzo(a)anthracene | 0.336 | | 0.00219 | 0.00760 | 1 | 04/19/2024 16:35 | WG2269760 |
| Benzo(a)pyrene | 0.184 | | 0.00227 | 0.00760 | 1 | 04/19/2024 16:35 | WG2269760 |
| Benzo(b)fluoranthene | 0.212 | | 0.00194 | 0.00760 | 1 | 04/19/2024 16:35 | WG2269760 |
| Benzo(g,h,i)perylene | 0.123 | | 0.00224 | 0.00760 | 1 | 04/19/2024 16:35 | WG2269760 |
| Benzo(k)fluoranthene | 0.0812 | | 0.00272 | 0.00760 | 1 | 04/19/2024 16:35 | WG2269760 |
| Chrysene | 0.375 | | 0.00294 | 0.00760 | 1 | 04/19/2024 16:35 | WG2269760 |
| Dibenz(a,h)anthracene | 0.0250 | | 0.00218 | 0.00760 | 1 | 04/19/2024 16:35 | WG2269760 |
| Fluoranthene | 0.798 | | 0.00288 | 0.00760 | 1 | 04/19/2024 16:35 | WG2269760 |
| Fluorene | 0.0160 | | 0.00260 | 0.00760 | 1 | 04/19/2024 16:35 | WG2269760 |
| Indeno(1,2,3-cd)pyrene | 0.121 | | 0.00229 | 0.00760 | 1 | 04/19/2024 16:35 | WG2269760 |
| Naphthalene | 0.0727 | | 0.00517 | 0.0253 | 1 | 04/19/2024 16:35 | WG2269760 |
| Phenanthrene | 0.305 | | 0.00293 | 0.00760 | 1 | 04/19/2024 16:35 | WG2269760 |
| Pyrene | 0.655 | | 0.00253 | 0.00760 | 1 | 04/19/2024 16:35 | WG2269760 |
| 1-Methylnaphthalene | 0.0461 | | 0.00569 | 0.0253 | 1 | 04/19/2024 16:35 | WG2269760 |
| 2-Methylnaphthalene | 0.107 | | 0.00541 | 0.0253 | 1 | 04/19/2024 16:35 | WG2269760 |
| 2-Chloronaphthalene | U | | 0.00590 | 0.0253 | 1 | 04/19/2024 16:35 | WG2269760 |
| *(S) p-Terphenyl-d14* | *60.1* | | | *23.0-120* | | *04/19/2024 16:35* | WG2269760 |

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) mg/kg | Qualifier | MDL (dry) mg/kg | RDL (dry) mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| *(S) Nitrobenzene-d5* | *87.1* | | | *14.0-149* | | *04/19/2024 16:35* | WG2269760 |
| *(S) 2-Fluorobiphenyl* | *54.1* | | | *34.0-125* | | *04/19/2024 16:35* | WG2269760 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 74.2 | | 1 | 04/16/2024 13:35 | WG2267999 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 18.1 | | 1.79 | 5.39 | 1 | 04/18/2024 22:25 | WG2269461 |
| Residual Range Organics (RRO) | 35.2 | | 4.49 | 13.5 | 1 | 04/18/2024 22:25 | WG2269461 |
| *(S) o-Terphenyl* | *42.5* | | | *18.0-148* | | *04/18/2024 22:25* | WG2269461 |

**Sample Narrative:**

L1725561-113 WG2269461: Sample resembles laboratory standard for Motor Oil.

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 72.0 | | 1 | 04/16/2024 13:25 | WG2268002 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 435 | | 18.5 | 55.6 | 10 | 04/18/2024 23:43 | WG2269461 |
| Residual Range Organics (RRO) | 1060 | | 46.3 | 139 | 10 | 04/18/2024 23:43 | WG2269461 |
| *(S) o-Terphenyl* | *44.3* | | | *18.0-148* | | *04/18/2024 23:43* | WG2269461 |

**Sample Narrative:**

L1725561-114 WG2269461: Sample resembles laboratory standard for Mineral Spirits and Motor Oil.

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 79.6 | | 1 | 04/16/2024 13:25 | WG2268002 |

## Mercury by Method 7471B

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Mercury | 0.0583 | | 0.0226 | 0.0503 | 1 | 04/17/2024 16:31 | WG2268623 |

## Metals (ICP) by Method 6010D

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Arsenic | 3.43 | | 0.651 | 2.51 | 1 | 04/17/2024 21:55 | WG2268821 |
| Barium | 114 | | 0.107 | 0.628 | 1 | 04/17/2024 21:55 | WG2268821 |
| Cadmium | 0.737 | | 0.0592 | 0.628 | 1 | 04/17/2024 21:55 | WG2268821 |
| Chromium | 9.69 | | 0.167 | 1.26 | 1 | 04/17/2024 21:55 | WG2268821 |
| Copper | 32.1 | | 0.503 | 2.51 | 1 | 04/17/2024 21:55 | WG2268821 |
| Lead | 71.6 | | 0.261 | 0.628 | 1 | 04/17/2024 21:55 | WG2268821 |
| Nickel | 8.84 | | 0.166 | 2.51 | 1 | 04/17/2024 21:55 | WG2268821 |
| Selenium | 6.91 | | 0.960 | 2.51 | 1 | 04/17/2024 21:55 | WG2268821 |
| Silver | 30.0 | | 0.160 | 1.26 | 1 | 04/17/2024 21:55 | WG2268821 |
| Zinc | 228 | | 1.05 | 6.28 | 1 | 04/17/2024 21:55 | WG2268821 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 182 | | 1.67 | 5.03 | 1 | 04/18/2024 23:04 | WG2269461 |
| Residual Range Organics (RRO) | 345 | | 20.9 | 62.8 | 5 | 04/19/2024 11:46 | WG2269461 |
| *(S) o-Terphenyl* | *42.4* | | | *18.0-148* | | *04/18/2024 23:04* | WG2269461 |
| *(S) o-Terphenyl* | *47.1* | | | *18.0-148* | | *04/19/2024 11:46* | WG2269461 |

**Sample Narrative:**

L1725561-130 WG2269461: Sample resembles laboratory standard for Hydraulic Fluid.

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Anthracene | U | | 0.00289 | 0.00754 | 1 | 04/19/2024 15:56 | WG2269760 |
| Acenaphthene | U | | 0.00263 | 0.00754 | 1 | 04/19/2024 15:56 | WG2269760 |
| Acenaphthylene | U | | 0.00271 | 0.00754 | 1 | 04/19/2024 15:56 | WG2269760 |
| Benzo(a)anthracene | 0.00587 | J | 0.00217 | 0.00754 | 1 | 04/19/2024 15:56 | WG2269760 |
| Benzo(a)pyrene | 0.00593 | J | 0.00225 | 0.00754 | 1 | 04/19/2024 15:56 | WG2269760 |
| Benzo(b)fluoranthene | 0.00489 | J | 0.00192 | 0.00754 | 1 | 04/19/2024 15:56 | WG2269760 |
| Benzo(g,h,i)perylene | 0.00869 | | 0.00222 | 0.00754 | 1 | 04/19/2024 15:56 | WG2269760 |
| Benzo(k)fluoranthene | U | | 0.00270 | 0.00754 | 1 | 04/19/2024 15:56 | WG2269760 |
| Chrysene | 0.00452 | J | 0.00291 | 0.00754 | 1 | 04/19/2024 15:56 | WG2269760 |
| Dibenz(a,h)anthracene | U | | 0.00216 | 0.00754 | 1 | 04/19/2024 15:56 | WG2269760 |
| Fluoranthene | 0.0127 | | 0.00285 | 0.00754 | 1 | 04/19/2024 15:56 | WG2269760 |
| Fluorene | U | | 0.00258 | 0.00754 | 1 | 04/19/2024 15:56 | WG2269760 |
| Indeno(1,2,3-cd)pyrene | 0.00327 | J | 0.00227 | 0.00754 | 1 | 04/19/2024 15:56 | WG2269760 |
| Naphthalene | 0.00794 | J | 0.00513 | 0.0251 | 1 | 04/19/2024 15:56 | WG2269760 |
| Phenanthrene | 0.0187 | | 0.00290 | 0.00754 | 1 | 04/19/2024 15:56 | WG2269760 |
| Pyrene | 0.0322 | | 0.00251 | 0.00754 | 1 | 04/19/2024 15:56 | WG2269760 |
| 1-Methylnaphthalene | U | | 0.00564 | 0.0251 | 1 | 04/19/2024 15:56 | WG2269760 |
| 2-Methylnaphthalene | 0.0123 | J | 0.00536 | 0.0251 | 1 | 04/19/2024 15:56 | WG2269760 |
| 2-Chloronaphthalene | U | | 0.00585 | 0.0251 | 1 | 04/19/2024 15:56 | WG2269760 |

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) mg/kg | Qualifier | MDL (dry) mg/kg | RDL (dry) mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| *(S) p-Terphenyl-d14* | *59.1* | | | *23.0-120* | | *04/19/2024 15:56* | WG2269760 |
| *(S) Nitrobenzene-d5* | *53.1* | | | *14.0-149* | | *04/19/2024 15:56* | WG2269760 |
| *(S) 2-Fluorobiphenyl* | *49.6* | | | *34.0-125* | | *04/19/2024 15:56* | WG2269760 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 71.5 | | 1 | 04/16/2024 13:25 | WG2268002 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 3.80 | J | 1.86 | 5.59 | 1 | 04/18/2024 20:40 | WG2269461 |
| Residual Range Organics (RRO) | U | | 4.66 | 14.0 | 1 | 04/18/2024 20:40 | WG2269461 |
| *(S) o-Terphenyl* | *37.1* | | | *18.0-148* | | *04/18/2024 20:40* | WG2269461 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 76.2 | | 1 | 04/16/2024 13:25 | WG2268002 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | U | | 1.75 | 5.25 | 1 | 04/18/2024 21:19 | WG2269461 |
| Residual Range Organics (RRO) | U | | 4.37 | 13.1 | 1 | 04/18/2024 21:19 | WG2269461 |
| *(S) o-Terphenyl* | *46.8* | | | *18.0-148* | | *04/18/2024 21:19* | WG2269461 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 71.2 | | 1 | 04/17/2024 09:47 | WG2268548 |

## Mercury by Method 7471B

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Mercury | 0.0646 | | 0.0253 | 0.0561 | 1 | 04/17/2024 17:51 | WG2268639 |

## Metals (ICP) by Method 6010D

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Arsenic | 8.31 | | 0.727 | 2.81 | 1 | 04/16/2024 23:14 | WG2268234 |
| Barium | 66.9 | | 0.120 | 0.702 | 1 | 04/16/2024 23:14 | WG2268234 |
| Cadmium | 0.530 | J | 0.0661 | 0.702 | 1 | 04/16/2024 23:14 | WG2268234 |
| Chromium | 14.5 | | 0.187 | 1.40 | 1 | 04/16/2024 23:14 | WG2268234 |
| Copper | 26.6 | | 0.561 | 2.81 | 1 | 04/16/2024 23:14 | WG2268234 |
| Lead | 30.2 | | 0.292 | 0.702 | 1 | 04/16/2024 23:14 | WG2268234 |
| Nickel | 11.3 | | 0.185 | 2.81 | 1 | 04/16/2024 23:14 | WG2268234 |
| Selenium | 2.29 | J | 1.07 | 2.81 | 1 | 04/16/2024 23:14 | WG2268234 |
| Silver | U | | 0.178 | 1.40 | 1 | 04/16/2024 23:14 | WG2268234 |
| Zinc | 220 | | 1.17 | 7.02 | 1 | 04/16/2024 23:14 | WG2268234 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 4.87 | J | 1.87 | 5.61 | 1 | 04/18/2024 22:38 | WG2269461 |
| Residual Range Organics (RRO) | 23.9 | | 4.67 | 14.0 | 1 | 04/18/2024 22:38 | WG2269461 |
| *(S) o-Terphenyl* | *50.2* | | | *18.0-148* | | *04/18/2024 22:38* | WG2269461 |

**Sample Narrative:**

L1725561-148 WG2269461: Sample resembles laboratory standard for Hydraulic Oil.

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Anthracene | U | | 0.00323 | 0.00842 | 1 | 04/19/2024 13:59 | WG2269760 |
| Acenaphthene | U | | 0.00293 | 0.00842 | 1 | 04/19/2024 13:59 | WG2269760 |
| Acenaphthylene | U | | 0.00303 | 0.00842 | 1 | 04/19/2024 13:59 | WG2269760 |
| Benzo(a)anthracene | U | | 0.00243 | 0.00842 | 1 | 04/19/2024 13:59 | WG2269760 |
| Benzo(a)pyrene | U | | 0.00251 | 0.00842 | 1 | 04/19/2024 13:59 | WG2269760 |
| Benzo(b)fluoranthene | U | | 0.00215 | 0.00842 | 1 | 04/19/2024 13:59 | WG2269760 |
| Benzo(g,h,i)perylene | U | | 0.00248 | 0.00842 | 1 | 04/19/2024 13:59 | WG2269760 |
| Benzo(k)fluoranthene | U | | 0.00302 | 0.00842 | 1 | 04/19/2024 13:59 | WG2269760 |
| Chrysene | U | | 0.00326 | 0.00842 | 1 | 04/19/2024 13:59 | WG2269760 |
| Dibenz(a,h)anthracene | U | | 0.00241 | 0.00842 | 1 | 04/19/2024 13:59 | WG2269760 |
| Fluoranthene | U | | 0.00319 | 0.00842 | 1 | 04/19/2024 13:59 | WG2269760 |
| Fluorene | U | | 0.00288 | 0.00842 | 1 | 04/19/2024 13:59 | WG2269760 |
| Indeno(1,2,3-cd)pyrene | U | | 0.00254 | 0.00842 | 1 | 04/19/2024 13:59 | WG2269760 |
| Naphthalene | U | | 0.00573 | 0.0281 | 1 | 04/19/2024 13:59 | WG2269760 |
| Phenanthrene | U | | 0.00324 | 0.00842 | 1 | 04/19/2024 13:59 | WG2269760 |
| Pyrene | U | | 0.00281 | 0.00842 | 1 | 04/19/2024 13:59 | WG2269760 |
| 1-Methylnaphthalene | U | | 0.00630 | 0.0281 | 1 | 04/19/2024 13:59 | WG2269760 |
| 2-Methylnaphthalene | 0.00734 | J | 0.00599 | 0.0281 | 1 | 04/19/2024 13:59 | WG2269760 |
| 2-Chloronaphthalene | U | | 0.00654 | 0.0281 | 1 | 04/19/2024 13:59 | WG2269760 |
| *(S) p-Terphenyl-d14* | *57.3* | | | *23.0-120* | | *04/19/2024 13:59* | WG2269760 |

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) mg/kg | Qualifier | MDL (dry) mg/kg | RDL (dry) mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| *(S) Nitrobenzene-d5* | *61.4* | | | *14.0-149* | | *04/19/2024 13:59* | WG2269760 |
| *(S) 2-Fluorobiphenyl* | *45.5* | | | *34.0-125* | | *04/19/2024 13:59* | WG2269760 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 67.8 | | 1 | 04/17/2024 09:47 | WG2268548 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | U | | 1.96 | 5.90 | 1 | 04/18/2024 21:58 | WG2269461 |
| Residual Range Organics (RRO) | 7.81 | J | 4.91 | 14.7 | 1 | 04/18/2024 21:58 | WG2269461 |
| *(S) o-Terphenyl* | *53.2* | | | *18.0-148* | | *04/18/2024 21:58* | WG2269461 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 69.6 | | 1 | 04/17/2024 09:47 | WG2268548 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 2.10 | J | 1.91 | 5.75 | 1 | 04/18/2024 22:11 | WG2269461 |
| Residual Range Organics (RRO) | 8.86 | J | 4.78 | 14.4 | 1 | 04/18/2024 22:11 | WG2269461 |
| *(S) o-Terphenyl* | *46.9* | | | *18.0-148* | | *04/18/2024 22:11* | WG2269461 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 71.5 | | 1 | 04/17/2024 09:47 | WG2268548 |

## Mercury by Method 7471B

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Mercury | 0.0653 | | 0.0252 | 0.0559 | 1 | 04/17/2024 17:53 | WG2268639 |

## Metals (ICP) by Method 6010D

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Arsenic | 7.74 | | 0.724 | 2.80 | 1 | 04/16/2024 23:17 | WG2268234 |
| Barium | 129 | | 0.119 | 0.699 | 1 | 04/16/2024 23:17 | WG2268234 |
| Cadmium | 1.52 | | 0.0659 | 0.699 | 1 | 04/16/2024 23:17 | WG2268234 |
| Chromium | 21.8 | | 0.186 | 1.40 | 1 | 04/16/2024 23:17 | WG2268234 |
| Copper | 73.2 | | 0.559 | 2.80 | 1 | 04/16/2024 23:17 | WG2268234 |
| Lead | 129 | | 0.291 | 0.699 | 1 | 04/16/2024 23:17 | WG2268234 |
| Nickel | 17.8 | | 0.185 | 2.80 | 1 | 04/16/2024 23:17 | WG2268234 |
| Selenium | 3.06 | | 1.07 | 2.80 | 1 | 04/16/2024 23:17 | WG2268234 |
| Silver | U | | 0.178 | 1.40 | 1 | 04/16/2024 23:17 | WG2268234 |
| Zinc | 357 | | 1.16 | 6.99 | 1 | 04/16/2024 23:17 | WG2268234 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 4070 | | 372 | 1120 | 200 | 04/19/2024 08:26 | WG2269804 |
| Residual Range Organics (RRO) | 13200 | | 931 | 2800 | 200 | 04/19/2024 08:26 | WG2269804 |
| *(S) o-Terphenyl* | *0.000* | J7 | | *18.0-148* | | *04/19/2024 08:26* | WG2269804 |

**Sample Narrative:**

L1725561-166 WG2269804: Sample resembles laboratory standard for Motor Oil.

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Anthracene | 0.00326 | J | 0.00322 | 0.00839 | 1 | 04/19/2024 16:16 | WG2269760 |
| Acenaphthene | 0.00351 | J | 0.00292 | 0.00839 | 1 | 04/19/2024 16:16 | WG2269760 |
| Acenaphthylene | U | | 0.00302 | 0.00839 | 1 | 04/19/2024 16:16 | WG2269760 |
| Benzo(a)anthracene | 0.0105 | | 0.00242 | 0.00839 | 1 | 04/19/2024 16:16 | WG2269760 |
| Benzo(a)pyrene | 0.0126 | | 0.00250 | 0.00839 | 1 | 04/19/2024 16:16 | WG2269760 |
| Benzo(b)fluoranthene | 0.0143 | | 0.00214 | 0.00839 | 1 | 04/19/2024 16:16 | WG2269760 |
| Benzo(g,h,i)perylene | 0.0278 | | 0.00247 | 0.00839 | 1 | 04/19/2024 16:16 | WG2269760 |
| Benzo(k)fluoranthene | 0.00340 | J | 0.00301 | 0.00839 | 1 | 04/19/2024 16:16 | WG2269760 |
| Chrysene | 0.00661 | J | 0.00324 | 0.00839 | 1 | 04/19/2024 16:16 | WG2269760 |
| Dibenz(a,h)anthracene | U | | 0.00240 | 0.00839 | 1 | 04/19/2024 16:16 | WG2269760 |
| Fluoranthene | 0.0221 | | 0.00317 | 0.00839 | 1 | 04/19/2024 16:16 | WG2269760 |
| Fluorene | U | | 0.00287 | 0.00839 | 1 | 04/19/2024 16:16 | WG2269760 |
| Indeno(1,2,3-cd)pyrene | 0.0155 | | 0.00253 | 0.00839 | 1 | 04/19/2024 16:16 | WG2269760 |
| Naphthalene | 0.0333 | | 0.00570 | 0.0280 | 1 | 04/19/2024 16:16 | WG2269760 |
| Phenanthrene | 0.0176 | | 0.00323 | 0.00839 | 1 | 04/19/2024 16:16 | WG2269760 |
| Pyrene | 0.0375 | | 0.00280 | 0.00839 | 1 | 04/19/2024 16:16 | WG2269760 |
| 1-Methylnaphthalene | 0.0804 | | 0.00628 | 0.0280 | 1 | 04/19/2024 16:16 | WG2269760 |
| 2-Methylnaphthalene | 0.0940 | | 0.00597 | 0.0280 | 1 | 04/19/2024 16:16 | WG2269760 |
| 2-Chloronaphthalene | U | | 0.00652 | 0.0280 | 1 | 04/19/2024 16:16 | WG2269760 |
| *(S) p-Terphenyl-d14* | *71.8* | | | *23.0-120* | | *04/19/2024 16:16* | WG2269760 |

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) mg/kg | Qualifier | MDL (dry) mg/kg | RDL (dry) mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| *(S) Nitrobenzene-d5* | *76.0* | | | *14.0-149* | | *04/19/2024 16:16* | WG2269760 |
| *(S) 2-Fluorobiphenyl* | *59.6* | | | *34.0-125* | | *04/19/2024 16:16* | WG2269760 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 77.2 | | 1 | 04/17/2024 09:47 | WG2268548 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 4.28 | J | 1.72 | 5.18 | 1 | 04/19/2024 07:47 | WG2269804 |
| Residual Range Organics (RRO) | 17.5 | | 4.31 | 13.0 | 1 | 04/19/2024 07:47 | WG2269804 |
| *(S) o-Terphenyl* | *45.2* | | | *18.0-148* | | *04/19/2024 07:47* | WG2269804 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 74.2 | | 1 | 04/17/2024 09:47 | WG2268548 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | U | | 1.79 | 5.39 | 1 | 04/19/2024 03:25 | WG2269804 |
| Residual Range Organics (RRO) | U | | 4.49 | 13.5 | 1 | 04/19/2024 03:25 | WG2269804 |
| *(S) o-Terphenyl* | *29.4* | | | *18.0-148* | | *04/19/2024 03:25* | WG2269804 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 67.1 | | 1 | 04/17/2024 09:47 | WG2268548 |

## Mercury by Method 7471B

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Mercury | U | | 0.0268 | 0.0596 | 1 | 04/17/2024 18:28 | WG2268639 |

## Metals (ICP) by Method 6010D

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Arsenic | 3.31 | | 0.772 | 2.98 | 1 | 04/16/2024 23:28 | WG2268234 |
| Barium | 30.5 | | 0.127 | 0.745 | 1 | 04/16/2024 23:28 | WG2268234 |
| Cadmium | 0.525 | J | 0.0702 | 0.745 | 1 | 04/16/2024 23:28 | WG2268234 |
| Chromium | 3.69 | | 0.198 | 1.49 | 1 | 04/16/2024 23:28 | WG2268234 |
| Copper | 15.3 | | 0.596 | 2.98 | 1 | 04/16/2024 23:28 | WG2268234 |
| Lead | 22.6 | | 0.310 | 0.745 | 1 | 04/16/2024 23:28 | WG2268234 |
| Nickel | 3.33 | | 0.197 | 2.98 | 1 | 04/16/2024 23:28 | WG2268234 |
| Selenium | 1.74 | J | 1.14 | 2.98 | 1 | 04/16/2024 23:28 | WG2268234 |
| Silver | U | | 0.189 | 1.49 | 1 | 04/16/2024 23:28 | WG2268234 |
| Zinc | 79.9 | | 1.24 | 7.45 | 1 | 04/16/2024 23:28 | WG2268234 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 8.18 | | 1.98 | 5.96 | 1 | 04/19/2024 07:34 | WG2269804 |
| Residual Range Organics (RRO) | 33.5 | | 4.96 | 14.9 | 1 | 04/19/2024 07:34 | WG2269804 |
| *(S) o-Terphenyl* | *43.6* | | | *18.0-148* | | *04/19/2024 07:34* | WG2269804 |

**Sample Narrative:**

L1725561-174 WG2269804: Sample resembles laboratory standard for Hydraulic Oil.

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Anthracene | U | | 0.00343 | 0.00894 | 1 | 04/19/2024 14:18 | WG2269760 |
| Acenaphthene | U | | 0.00312 | 0.00894 | 1 | 04/19/2024 14:18 | WG2269760 |
| Acenaphthylene | U | | 0.00322 | 0.00894 | 1 | 04/19/2024 14:18 | WG2269760 |
| Benzo(a)anthracene | U | | 0.00258 | 0.00894 | 1 | 04/19/2024 14:18 | WG2269760 |
| Benzo(a)pyrene | U | | 0.00267 | 0.00894 | 1 | 04/19/2024 14:18 | WG2269760 |
| Benzo(b)fluoranthene | U | | 0.00228 | 0.00894 | 1 | 04/19/2024 14:18 | WG2269760 |
| Benzo(g,h,i)perylene | U | | 0.00264 | 0.00894 | 1 | 04/19/2024 14:18 | WG2269760 |
| Benzo(k)fluoranthene | U | | 0.00320 | 0.00894 | 1 | 04/19/2024 14:18 | WG2269760 |
| Chrysene | U | | 0.00346 | 0.00894 | 1 | 04/19/2024 14:18 | WG2269760 |
| Dibenz(a,h)anthracene | U | | 0.00256 | 0.00894 | 1 | 04/19/2024 14:18 | WG2269760 |
| Fluoranthene | U | | 0.00338 | 0.00894 | 1 | 04/19/2024 14:18 | WG2269760 |
| Fluorene | U | | 0.00306 | 0.00894 | 1 | 04/19/2024 14:18 | WG2269760 |
| Indeno(1,2,3-cd)pyrene | U | | 0.00270 | 0.00894 | 1 | 04/19/2024 14:18 | WG2269760 |
| Naphthalene | U | | 0.00608 | 0.0298 | 1 | 04/19/2024 14:18 | WG2269760 |
| Phenanthrene | U | | 0.00344 | 0.00894 | 1 | 04/19/2024 14:18 | WG2269760 |
| Pyrene | U | | 0.00298 | 0.00894 | 1 | 04/19/2024 14:18 | WG2269760 |
| 1-Methylnaphthalene | U | | 0.00669 | 0.0298 | 1 | 04/19/2024 14:18 | WG2269760 |
| 2-Methylnaphthalene | U | | 0.00636 | 0.0298 | 1 | 04/19/2024 14:18 | WG2269760 |
| 2-Chloronaphthalene | U | | 0.00695 | 0.0298 | 1 | 04/19/2024 14:18 | WG2269760 |
| *(S) p-Terphenyl-d14* | *65.9* | | | *23.0-120* | | *04/19/2024 14:18* | WG2269760 |

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) mg/kg | Qualifier | MDL (dry) mg/kg | RDL (dry) mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| *(S) Nitrobenzene-d5* | *54.5* | | | *14.0-149* | | *04/19/2024 14:18* | WG2269760 |
| *(S) 2-Fluorobiphenyl* | *48.6* | | | *34.0-125* | | *04/19/2024 14:18* | WG2269760 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 71.7 | | 1 | 04/17/2024 08:28 | WG2268549 |

## Mercury by Method 7471B

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Mercury | 0.0410 | J | 0.0251 | 0.0558 | 1 | 04/17/2024 18:30 | WG2268639 |

## Metals (ICP) by Method 6010D

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Arsenic | 8.99 | | 0.723 | 2.79 | 1 | 04/16/2024 23:31 | WG2268234 |
| Barium | 53.4 | | 0.119 | 0.698 | 1 | 04/16/2024 23:31 | WG2268234 |
| Cadmium | 0.252 | J | 0.0657 | 0.698 | 1 | 04/16/2024 23:31 | WG2268234 |
| Chromium | 10.3 | | 0.186 | 1.40 | 1 | 04/16/2024 23:31 | WG2268234 |
| Copper | 19.3 | | 0.558 | 2.79 | 1 | 04/16/2024 23:31 | WG2268234 |
| Lead | 20.5 | | 0.290 | 0.698 | 1 | 04/16/2024 23:31 | WG2268234 |
| Nickel | 6.91 | | 0.184 | 2.79 | 1 | 04/16/2024 23:31 | WG2268234 |
| Selenium | 2.00 | J | 1.07 | 2.79 | 1 | 04/16/2024 23:31 | WG2268234 |
| Silver | U | | 0.177 | 1.40 | 1 | 04/16/2024 23:31 | WG2268234 |
| Zinc | 91.4 | | 1.16 | 6.98 | 1 | 04/16/2024 23:31 | WG2268234 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 32.1 | | 1.86 | 5.58 | 1 | 04/19/2024 08:00 | WG2269804 |
| Residual Range Organics (RRO) | 122 | | 4.65 | 14.0 | 1 | 04/19/2024 08:00 | WG2269804 |
| *(S) o-Terphenyl* | *28.7* | | | *18.0-148* | | *04/19/2024 08:00* | WG2269804 |

**Sample Narrative:**

L1725561-184 WG2269804: Sample resembles laboratory standard for Hydraulic Oil.

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Anthracene | U | | 0.00321 | 0.00837 | 1 | 04/19/2024 14:38 | WG2269760 |
| Acenaphthene | U | | 0.00292 | 0.00837 | 1 | 04/19/2024 14:38 | WG2269760 |
| Acenaphthylene | U | | 0.00301 | 0.00837 | 1 | 04/19/2024 14:38 | WG2269760 |
| Benzo(a)anthracene | U | | 0.00241 | 0.00837 | 1 | 04/19/2024 14:38 | WG2269760 |
| Benzo(a)pyrene | U | | 0.00250 | 0.00837 | 1 | 04/19/2024 14:38 | WG2269760 |
| Benzo(b)fluoranthene | U | | 0.00213 | 0.00837 | 1 | 04/19/2024 14:38 | WG2269760 |
| Benzo(g,h,i)perylene | U | | 0.00247 | 0.00837 | 1 | 04/19/2024 14:38 | WG2269760 |
| Benzo(k)fluoranthene | U | | 0.00300 | 0.00837 | 1 | 04/19/2024 14:38 | WG2269760 |
| Chrysene | U | | 0.00324 | 0.00837 | 1 | 04/19/2024 14:38 | WG2269760 |
| Dibenz(a,h)anthracene | U | | 0.00240 | 0.00837 | 1 | 04/19/2024 14:38 | WG2269760 |
| Fluoranthene | U | | 0.00317 | 0.00837 | 1 | 04/19/2024 14:38 | WG2269760 |
| Fluorene | U | | 0.00286 | 0.00837 | 1 | 04/19/2024 14:38 | WG2269760 |
| Indeno(1,2,3-cd)pyrene | U | | 0.00253 | 0.00837 | 1 | 04/19/2024 14:38 | WG2269760 |
| Naphthalene | U | | 0.00569 | 0.0279 | 1 | 04/19/2024 14:38 | WG2269760 |
| Phenanthrene | U | | 0.00322 | 0.00837 | 1 | 04/19/2024 14:38 | WG2269760 |
| Pyrene | U | | 0.00279 | 0.00837 | 1 | 04/19/2024 14:38 | WG2269760 |
| 1-Methylnaphthalene | U | | 0.00626 | 0.0279 | 1 | 04/19/2024 14:38 | WG2269760 |
| 2-Methylnaphthalene | U | | 0.00596 | 0.0279 | 1 | 04/19/2024 14:38 | WG2269760 |
| 2-Chloronaphthalene | U | | 0.00650 | 0.0279 | 1 | 04/19/2024 14:38 | WG2269760 |
| *(S) p-Terphenyl-d14* | *57.5* | | | *23.0-120* | | *04/19/2024 14:38* | WG2269760 |

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) mg/kg | Qualifier | MDL (dry) mg/kg | RDL (dry) mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| *(S) Nitrobenzene-d5* | *62.4* | | | *14.0-149* | | *04/19/2024 14:38* | WG2269760 |
| *(S) 2-Fluorobiphenyl* | *50.9* | | | *34.0-125* | | *04/19/2024 14:38* | WG2269760 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 71.7 | | 1 | 04/17/2024 08:28 | WG2268549 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | U | | 1.85 | 5.58 | 1 | 04/19/2024 07:21 | WG2269804 |
| Residual Range Organics (RRO) | U | | 4.64 | 13.9 | 1 | 04/19/2024 07:21 | WG2269804 |
| *(S) o-Terphenyl* | *27.9* | | | *18.0-148* | | *04/19/2024 07:21* | WG2269804 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 65.5 | | 1 | 04/17/2024 08:28 | WG2268549 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | U | | 2.03 | 6.11 | 1 | 04/19/2024 08:13 | WG2269804 |
| Residual Range Organics (RRO) | 12.8 | J | 5.08 | 15.3 | 1 | 04/19/2024 08:13 | WG2269804 |
| *(S) o-Terphenyl* | *40.7* | | | *18.0-148* | | *04/19/2024 08:13* | WG2269804 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 35.1 | | 1 | 04/17/2024 08:28 | WG2268549 |

## Mercury by Method 7471B

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Mercury | 0.773 | | 0.0513 | 0.114 | 1 | 04/17/2024 18:33 | WG2268639 |

## Metals (ICP) by Method 6010D

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Arsenic | 7.31 | | 1.48 | 5.70 | 1 | 04/16/2024 23:35 | WG2268234 |
| Barium | 73.7 | | 0.243 | 1.42 | 1 | 04/16/2024 23:35 | WG2268234 |
| Cadmium | 2.63 | | 0.134 | 1.42 | 1 | 04/16/2024 23:35 | WG2268234 |
| Chromium | 60.3 | | 0.379 | 2.85 | 1 | 04/16/2024 23:35 | WG2268234 |
| Copper | 167 | | 1.14 | 5.70 | 1 | 04/16/2024 23:35 | WG2268234 |
| Lead | 171 | | 0.593 | 1.42 | 1 | 04/16/2024 23:35 | WG2268234 |
| Nickel | 42.1 | | 0.376 | 5.70 | 1 | 04/16/2024 23:35 | WG2268234 |
| Selenium | 5.23 | J | 2.18 | 5.70 | 1 | 04/16/2024 23:35 | WG2268234 |
| Silver | 0.546 | J | 0.362 | 2.85 | 1 | 04/16/2024 23:35 | WG2268234 |
| Zinc | 847 | | 2.37 | 14.2 | 1 | 04/16/2024 23:35 | WG2268234 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPHDX-NO SGT

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Diesel Range Organics (DRO) | 8.15 | J | 3.79 | 11.4 | 1 | 04/19/2024 17:46 | WG2270219 |
| Residual Range Organics (RRO) | 31.9 | | 9.49 | 28.5 | 1 | 04/19/2024 17:46 | WG2270219 |
| *(S) o-Terphenyl* | *54.7* | | | *18.0-148* | | *04/19/2024 17:46* | WG2270219 |

**Sample Narrative:**

L1725561-192 WG2270219: Sample resembles laboratory standard for Hydraulic Oil.

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Anthracene | 0.00655 | J | 0.00655 | 0.0171 | 1 | 04/19/2024 14:57 | WG2269760 |
| Acenaphthene | U | | 0.00596 | 0.0171 | 1 | 04/19/2024 14:57 | WG2269760 |
| Acenaphthylene | U | | 0.00615 | 0.0171 | 1 | 04/19/2024 14:57 | WG2269760 |
| Benzo(a)anthracene | 0.0168 | J | 0.00493 | 0.0171 | 1 | 04/19/2024 14:57 | WG2269760 |
| Benzo(a)pyrene | 0.0117 | J | 0.00510 | 0.0171 | 1 | 04/19/2024 14:57 | WG2269760 |
| Benzo(b)fluoranthene | 0.0153 | J | 0.00436 | 0.0171 | 1 | 04/19/2024 14:57 | WG2269760 |
| Benzo(g,h,i)perylene | 0.00690 | J | 0.00504 | 0.0171 | 1 | 04/19/2024 14:57 | WG2269760 |
| Benzo(k)fluoranthene | 0.00709 | J | 0.00613 | 0.0171 | 1 | 04/19/2024 14:57 | WG2269760 |
| Chrysene | 0.0192 | | 0.00661 | 0.0171 | 1 | 04/19/2024 14:57 | WG2269760 |
| Dibenz(a,h)anthracene | U | | 0.00490 | 0.0171 | 1 | 04/19/2024 14:57 | WG2269760 |
| Fluoranthene | 0.0218 | | 0.00647 | 0.0171 | 1 | 04/19/2024 14:57 | WG2269760 |
| Fluorene | U | | 0.00584 | 0.0171 | 1 | 04/19/2024 14:57 | WG2269760 |
| Indeno(1,2,3-cd)pyrene | 0.00915 | J | 0.00516 | 0.0171 | 1 | 04/19/2024 14:57 | WG2269760 |
| Naphthalene | U | | 0.0116 | 0.0570 | 1 | 04/19/2024 14:57 | WG2269760 |
| Phenanthrene | 0.0183 | | 0.00658 | 0.0171 | 1 | 04/19/2024 14:57 | WG2269760 |
| Pyrene | 0.0148 | J | 0.00570 | 0.0171 | 1 | 04/19/2024 14:57 | WG2269760 |
| 1-Methylnaphthalene | U | | 0.0128 | 0.0570 | 1 | 04/19/2024 14:57 | WG2269760 |
| 2-Methylnaphthalene | U | | 0.0122 | 0.0570 | 1 | 04/19/2024 14:57 | WG2269760 |
| 2-Chloronaphthalene | U | | 0.0133 | 0.0570 | 1 | 04/19/2024 14:57 | WG2269760 |
| *(S) p-Terphenyl-d14* | *69.4* | | | *23.0-120* | | *04/19/2024 14:57* | WG2269760 |

## Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

| Analyte | Result (dry) mg/kg | Qualifier | MDL (dry) mg/kg | RDL (dry) mg/kg | Dilution | Analysis date / time | Batch |
|---|---|---|---|---|---|---|---|
| *(S) Nitrobenzene-d5* | *64.1* | | | *14.0-149* | | *04/19/2024 14:57* | WG2269760 |
| *(S) 2-Fluorobiphenyl* | *43.5* | | | *34.0-125* | | *04/19/2024 14:57* | WG2269760 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 68.6 | | 1 | 04/17/2024 08:28 | WG2268549 |

## Mercury by Method 7471B

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Mercury | 0.0295 | J | 0.0262 | 0.0583 | 1 | 04/17/2024 18:35 | WG2268639 |

## Metals (ICP) by Method 6010D

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Arsenic | 8.30 | | 0.755 | 2.92 | 1 | 04/16/2024 23:38 | WG2268234 |
| Barium | 79.0 | | 0.124 | 0.729 | 1 | 04/16/2024 23:38 | WG2268234 |
| Cadmium | 0.272 | J | 0.0687 | 0.729 | 1 | 04/16/2024 23:38 | WG2268234 |
| Chromium | 49.9 | | 0.194 | 1.46 | 1 | 04/16/2024 23:38 | WG2268234 |
| Copper | 19.6 | | 0.583 | 2.92 | 1 | 04/16/2024 23:38 | WG2268234 |
| Lead | 14.0 | | 0.303 | 0.729 | 1 | 04/16/2024 23:38 | WG2268234 |
| Nickel | 9.47 | | 0.192 | 2.92 | 1 | 04/16/2024 23:38 | WG2268234 |
| Selenium | 2.27 | J | 1.11 | 2.92 | 1 | 04/16/2024 23:38 | WG2268234 |
| Silver | U | | 0.185 | 1.46 | 1 | 04/16/2024 23:38 | WG2268234 |
| Zinc | 98.8 | | 1.21 | 7.29 | 1 | 04/16/2024 23:38 | WG2268234 |

## Semi-Volatile Organic Compounds (GC) by Method NWTPH-HCID

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Gasoline (C7-C12) | U | | 1.94 | 5.83 | 1 | 04/19/2024 15:35 | WG2270226 |
| Mineral Spirits | U | | 1.94 | 5.83 | 1 | 04/19/2024 15:35 | WG2270226 |
| Kerosene | U | | 1.94 | 5.83 | 1 | 04/19/2024 15:35 | WG2270226 |
| Diesel (C12-C24) | 3.12 | J | 1.94 | 5.83 | 1 | 04/19/2024 15:35 | WG2270226 |
| #6 Fuel Oil | U | | 1.94 | 5.83 | 1 | 04/19/2024 15:35 | WG2270226 |
| Hydraulic Fluid | U | | 1.94 | 5.83 | 1 | 04/19/2024 15:35 | WG2270226 |
| Motor Oil (C24-C30) | 12.8 | J | 4.85 | 14.6 | 1 | 04/19/2024 15:35 | WG2270226 |
| *(S) o-Terphenyl* | *35.9* | | | *18.0-148* | | *04/19/2024 15:35* | WG2270226 |

## Method Blank (MB)

(MB) R4058563-1 04/16/24 13:35

| Analyte | MB Result % | MB Qualifier | MB MDL % | MB RDL % |
|---|---|---|---|---|
| Total Solids | 0.00100 | | | |

## L1725561-113 Original Sample (OS) • Duplicate (DUP)

(OS) L1725561-113 04/16/24 13:35 • (DUP) R4058563-3 04/16/24 13:35

| Analyte | Original Result % | DUP Result % | Dilution | DUP RPD % | DUP Qualifier | DUP RPD Limits % |
|---|---|---|---|---|---|---|
| Total Solids | 74.2 | 73.2 | 1 | 1.36 | | 10 |

## Laboratory Control Sample (LCS)

(LCS) R4058563-2 04/16/24 13:35

| Analyte | Spike Amount % | LCS Result % | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Total Solids | 50.0 | 50.0 | 100 | 90.0-110 | |

## Method Blank (MB)

(MB) R4058558-1 04/16/24 13:25

| Analyte | MB Result % | MB Qualifier | MB MDL % | MB RDL % |
|---|---|---|---|---|
| Total Solids | 0.00100 | | | |

## L1725561-130 Original Sample (OS) • Duplicate (DUP)

(OS) L1725561-130 04/16/24 13:25 • (DUP) R4058558-3 04/16/24 13:25

| Analyte | Original Result % | DUP Result % | Dilution | DUP RPD % | DUP Qualifier | DUP RPD Limits % |
|---|---|---|---|---|---|---|
| Total Solids | 79.6 | 76.8 | 1 | 3.54 | | 10 |

## Laboratory Control Sample (LCS)

(LCS) R4058558-2 04/16/24 13:25

| Analyte | Spike Amount % | LCS Result % | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Total Solids | 50.0 | 50.1 | 100 | 90.0-110 | |

## Method Blank (MB)

(MB) R4058557-1 04/16/24 13:14

| Analyte | MB Result % | MB Qualifier | MB MDL % | MB RDL % |
|---|---|---|---|---|
| Total Solids | 0.00100 | | | |

## L1725561-78 Original Sample (OS) • Duplicate (DUP)

(OS) L1725561-78 04/16/24 13:14 • (DUP) R4058557-3 04/16/24 13:14

| Analyte | Original Result % | DUP Result % | Dilution | DUP RPD % | DUP Qualifier | DUP RPD Limits % |
|---|---|---|---|---|---|---|
| Total Solids | 74.3 | 72.6 | 1 | 2.27 | | 10 |

## Laboratory Control Sample (LCS)

(LCS) R4058557-2 04/16/24 13:14

| Analyte | Spike Amount % | LCS Result % | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Total Solids | 50.0 | 50.0 | 100 | 90.0-110 | |

## Method Blank (MB)

(MB) R4058555-1 04/16/24 13:00

| Analyte | MB Result % | MB Qualifier | MB MDL % | MB RDL % |
|---|---|---|---|---|
| Total Solids | 0.00100 | | | |

## L1725607-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1725607-10 04/16/24 13:00 • (DUP) R4058555-3 04/16/24 13:00

| Analyte | Original Result % | DUP Result % | Dilution | DUP RPD % | DUP Qualifier | DUP RPD Limits % |
|---|---|---|---|---|---|---|
| Total Solids | 70.0 | 72.5 | 1 | 3.54 | | 10 |

## Laboratory Control Sample (LCS)

(LCS) R4058555-2 04/16/24 13:00

| Analyte | Spike Amount % | LCS Result % | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Total Solids | 50.0 | 50.0 | 100 | 90.0-110 | |

## Method Blank (MB)

(MB) R4059022-1 04/17/24 09:47

| Analyte | MB Result % | MB Qualifier | MB MDL % | MB RDL % |
|---|---|---|---|---|
| Total Solids | 0.000 | | | |

## L1725561-148 Original Sample (OS) • Duplicate (DUP)

(OS) L1725561-148 04/17/24 09:47 • (DUP) R4059022-3 04/17/24 09:47

| Analyte | Original Result % | DUP Result % | Dilution | DUP RPD % | DUP Qualifier | DUP RPD Limits % |
|---|---|---|---|---|---|---|
| Total Solids | 71.2 | 70.1 | 1 | 1.67 | | 10 |

## Laboratory Control Sample (LCS)

(LCS) R4059022-2 04/17/24 09:47

| Analyte | Spike Amount % | LCS Result % | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Total Solids | 50.0 | 50.0 | 100 | 90.0-110 | |

## Method Blank (MB)

(MB) R4059009-1 04/17/24 08:28

| Analyte | MB Result % | MB Qualifier | MB MDL % | MB RDL % |
|---|---|---|---|---|
| Total Solids | 0.000 | | | |

## L1725561-184 Original Sample (OS) • Duplicate (DUP)

(OS) L1725561-184 04/17/24 08:28 • (DUP) R4059009-3 04/17/24 08:28

| Analyte | Original Result % | DUP Result % | Dilution | DUP RPD % | DUP Qualifier | DUP RPD Limits % |
|---|---|---|---|---|---|---|
| Total Solids | 71.7 | 67.4 | 1 | 6.13 | | 10 |

## Laboratory Control Sample (LCS)

(LCS) R4059009-2 04/17/24 08:28

| Analyte | Spike Amount % | LCS Result % | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Total Solids | 50.0 | 50.0 | 100 | 90.0-110 | |

## Method Blank (MB)

(MB) R4058924-1 04/17/24 16:10

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL mg/kg |
|---|---|---|---|---|
| Mercury | U | | 0.0180 | 0.0400 |

## Laboratory Control Sample (LCS)

(LCS) R4058924-2 04/17/24 16:12

| Analyte | Spike Amount mg/kg | LCS Result mg/kg | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Mercury | 0.500 | 0.492 | 98.3 | 80.0-120 | |

## L1725974-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1725974-01 04/17/24 16:14 • (MS) R4058924-4 04/17/24 16:19 • (MSD) R4058924-5 04/17/24 16:21

| Analyte | Spike Amount (dry) mg/kg | Original Result (dry) mg/kg | MS Result (dry) mg/kg | MSD Result (dry) mg/kg | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.500 | U | 0.515 | 0.561 | 103 | 112 | 1 | 75.0-125 | | | 8.41 | 20 |

# QUALITY CONTROL SUMMARY

L1725561-06,22,40,58,76,148,166,174,184,192,193

## Method Blank (MB)

(MB) R4058949-1 04/17/24 17:19

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL mg/kg |
|---|---|---|---|---|
| Mercury | U | | 0.0180 | 0.0400 |

## Laboratory Control Sample (LCS)

(LCS) R4058949-2 04/17/24 17:22

| Analyte | Spike Amount mg/kg | LCS Result mg/kg | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Mercury | 0.500 | 0.475 | 94.9 | 80.0-120 | |

## L1725561-76 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1725561-76 04/17/24 17:31 • (MS) R4058949-4 04/17/24 17:36 • (MSD) R4058949-5 04/17/24 17:39

| Analyte | Spike Amount (dry) mg/kg | Original Result (dry) mg/kg | MS Result (dry) mg/kg | MSD Result (dry) mg/kg | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.689 | 0.0381 | 0.654 | 0.625 | 89.4 | 85.1 | 1 | 75.0-125 | | | 4.57 | 20 |

## Method Blank (MB)

(MB) R4058534-1 04/16/24 22:45

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL mg/kg |
|---|---|---|---|---|
| Arsenic | U | | 0.518 | 2.00 |
| Barium | U | | 0.0852 | 0.500 |
| Cadmium | U | | 0.0471 | 0.500 |
| Chromium | U | | 0.133 | 1.00 |
| Copper | U | | 0.400 | 2.00 |
| Lead | U | | 0.208 | 0.500 |
| Nickel | U | | 0.132 | 2.00 |
| Selenium | U | | 0.764 | 2.00 |
| Silver | U | | 0.127 | 1.00 |
| Zinc | U | | 0.832 | 5.00 |

## Laboratory Control Sample (LCS)

(LCS) R4058534-2 04/16/24 22:49

| Analyte | Spike Amount mg/kg | LCS Result mg/kg | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Arsenic | 100 | 96.7 | 96.7 | 80.0-120 | |
| Barium | 100 | 106 | 106 | 80.0-120 | |
| Cadmium | 100 | 93.5 | 93.5 | 80.0-120 | |
| Chromium | 100 | 104 | 104 | 80.0-120 | |
| Copper | 100 | 98.8 | 98.8 | 80.0-120 | |
| Lead | 100 | 98.9 | 98.9 | 80.0-120 | |
| Nickel | 100 | 99.9 | 99.9 | 80.0-120 | |
| Selenium | 100 | 94.3 | 94.3 | 80.0-120 | |
| Silver | 20.0 | 18.6 | 92.8 | 80.0-120 | |
| Zinc | 100 | 102 | 102 | 80.0-120 | |

## L1725561-76 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1725561-76 04/16/24 22:52 • (MS) R4058534-5 04/16/24 23:03 • (MSD) R4058534-6 04/16/24 23:07

| Analyte | Spike Amount (dry) mg/kg | Original Result (dry) mg/kg | MS Result (dry) mg/kg | MSD Result (dry) mg/kg | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 138 | 7.81 | 126 | 125 | 85.5 | 85.0 | 1 | 75.0-125 | | | 0.588 | 20 |
| Barium | 138 | 79.4 | 226 | 222 | 107 | 103 | 1 | 75.0-125 | | | 2.19 | 20 |
| Cadmium | 138 | 0.565 | 116 | 117 | 84.1 | 84.3 | 1 | 75.0-125 | | | 0.186 | 20 |
| Chromium | 138 | 225 | 332 | 566 | 77.8 | 247 | 1 | 75.0-125 | | J3 J5 | 52.0 | 20 |
| Copper | 138 | 31.4 | 166 | 181 | 98.0 | 109 | 1 | 75.0-125 | | | 8.47 | 20 |
| Lead | 138 | 27.6 | 146 | 161 | 86.2 | 97.2 | 1 | 75.0-125 | | | 9.82 | 20 |

## L1725561-76 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1725561-76 04/16/24 22:52 • (MS) R4058534-5 04/16/24 23:03 • (MSD) R4058534-6 04/16/24 23:07

| Analyte | Spike Amount (dry) mg/kg | Original Result (dry) mg/kg | MS Result (dry) mg/kg | MSD Result (dry) mg/kg | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nickel | 138 | 9.59 | 143 | 135 | 96.5 | 91.1 | 1 | 75.0-125 | | | 5.34 | 20 |
| Selenium | 138 | 2.68 | 114 | 114 | 80.5 | 80.7 | 1 | 75.0-125 | | | 0.321 | 20 |
| Silver | 27.6 | 0.274 | 24.0 | 24.4 | 86.0 | 87.7 | 1 | 75.0-125 | | | 1.93 | 20 |
| Zinc | 138 | 125 | 269 | 236 | 105 | 81.1 | 1 | 75.0-125 | | | 12.8 | 20 |

## Method Blank (MB)

(MB) R4059023-1 04/17/24 21:05

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL mg/kg |
|---|---|---|---|---|
| Arsenic | U | | 0.518 | 2.00 |
| Barium | U | | 0.0852 | 0.500 |
| Cadmium | U | | 0.0471 | 0.500 |
| Chromium | U | | 0.133 | 1.00 |
| Copper | U | | 0.400 | 2.00 |
| Lead | U | | 0.208 | 0.500 |
| Nickel | U | | 0.132 | 2.00 |
| Selenium | U | | 0.764 | 2.00 |
| Silver | U | | 0.127 | 1.00 |
| Zinc | U | | 0.832 | 5.00 |

## Laboratory Control Sample (LCS)

(LCS) R4059023-2 04/17/24 21:07

| Analyte | Spike Amount mg/kg | LCS Result mg/kg | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Arsenic | 100 | 98.4 | 98.4 | 80.0-120 | |
| Barium | 100 | 103 | 103 | 80.0-120 | |
| Cadmium | 100 | 99.0 | 99.0 | 80.0-120 | |
| Chromium | 100 | 104 | 104 | 80.0-120 | |
| Copper | 100 | 103 | 103 | 80.0-120 | |
| Lead | 100 | 98.1 | 98.1 | 80.0-120 | |
| Nickel | 100 | 99.9 | 99.9 | 80.0-120 | |
| Selenium | 100 | 94.3 | 94.3 | 80.0-120 | |
| Silver | 20.0 | 19.5 | 97.3 | 80.0-120 | |
| Zinc | 100 | 103 | 103 | 80.0-120 | |

## L1725974-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1725974-01 04/17/24 21:09 • (MS) R4059023-5 04/17/24 21:14 • (MSD) R4059023-6 04/17/24 21:16

| Analyte | Spike Amount (dry) mg/kg | Original Result (dry) mg/kg | MS Result (dry) mg/kg | MSD Result (dry) mg/kg | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 100 | U | 96.3 | 87.7 | 96.2 | 87.7 | 1 | 75.0-125 | | | 9.33 | 20 |
| Barium | 100 | 14.3 | 128 | 109 | 113 | 94.2 | 1 | 75.0-125 | | | 16.0 | 20 |
| Cadmium | 100 | 0.0591 | 94.7 | 85.3 | 94.6 | 85.1 | 1 | 75.0-125 | | | 10.5 | 20 |
| Chromium | 100 | 1.12 | 100 | 91.9 | 98.9 | 90.7 | 1 | 75.0-125 | | | 8.51 | 20 |
| Copper | 100 | 8.77 | 174 | 98.2 | 165 | 89.4 | 1 | 75.0-125 | J5 | J3 | 55.8 | 20 |
| Lead | 100 | 0.885 | 97.4 | 86.5 | 96.5 | 85.6 | 1 | 75.0-125 | | | 11.9 | 20 |

## L1725974-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1725974-01 04/17/24 21:09 • (MS) R4059023-5 04/17/24 21:14 • (MSD) R4059023-6 04/17/24 21:16

| Analyte | Spike Amount (dry) mg/kg | Original Result (dry) mg/kg | MS Result (dry) mg/kg | MSD Result (dry) mg/kg | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nickel | 100 | 1.82 | 102 | 89.1 | 100 | 87.2 | 1 | 75.0-125 | | | 13.8 | 20 |
| Selenium | 100 | U | 95.4 | 83.9 | 95.3 | 83.9 | 1 | 75.0-125 | | | 12.8 | 20 |
| Silver | 20.0 | 0.710 | 22.1 | 18.0 | 107 | 86.3 | 1 | 75.0-125 | | J3 | 20.8 | 20 |
| Zinc | 100 | 12.6 | 144 | 102 | 132 | 89.0 | 1 | 75.0-125 | J5 | J3 | 34.7 | 20 |

## L1725974-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1725974-02 04/17/24 21:17 • (MS) R4059023-7 04/17/24 21:19 • (MSD) R4059023-8 04/17/24 21:21

| Analyte | Spike Amount (dry) mg/kg | Original Result (dry) mg/kg | MS Result (dry) mg/kg | MSD Result (dry) mg/kg | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 100 | 2.19 | 104 | 89.8 | 102 | 87.4 | 1 | 75.0-125 | | | 15.1 | 20 |
| Barium | 100 | 38.4 | 135 | 106 | 96.7 | 67.3 | 1 | 75.0-125 | | J3 J6 | 24.4 | 20 |
| Cadmium | 100 | U | 103 | 87.5 | 103 | 87.4 | 1 | 75.0-125 | | | 16.1 | 20 |
| Chromium | 100 | 4.58 | 109 | 91.4 | 104 | 86.7 | 1 | 75.0-125 | | | 17.6 | 20 |
| Copper | 100 | 93.7 | 143 | 130 | 48.8 | 36.5 | 1 | 75.0-125 | J6 | J6 | 9.03 | 20 |
| Lead | 100 | 3.48 | 105 | 89.5 | 101 | 85.9 | 1 | 75.0-125 | | | 15.9 | 20 |
| Nickel | 100 | 6.84 | 115 | 93.5 | 108 | 86.6 | 1 | 75.0-125 | | J3 | 20.7 | 20 |
| Selenium | 100 | 1.46 | 103 | 89.1 | 101 | 87.5 | 1 | 75.0-125 | | | 14.4 | 20 |
| Silver | 20.0 | 4.27 | 23.2 | 19.4 | 94.3 | 75.6 | 1 | 75.0-125 | | | 17.6 | 20 |
| Zinc | 100 | 54.6 | 169 | 157 | 114 | 102 | 1 | 75.0-125 | | | 7.06 | 20 |

## Method Blank (MB)

(MB) R4059656-1 04/18/24 20:13

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL mg/kg |
|---|---|---|---|---|
| Diesel Range Organics (DRO) | U | | 1.33 | 4.00 |
| Residual Range Organics (RRO) | U | | 3.33 | 10.0 |
| *(S) o-Terphenyl* | *48.6* | | | *18.0-148* |

## Laboratory Control Sample (LCS)

(LCS) R4059656-2 04/18/24 20:27

| Analyte | Spike Amount mg/kg | LCS Result mg/kg | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 50.0 | 28.1 | 56.2 | 50.0-150 | |
| *(S) o-Terphenyl* | | | *44.7* | *18.0-148* | |

## L1725386-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1725386-05 04/19/24 10:50 • (MS) R4059772-2 04/19/24 11:18 • (MSD) R4059772-1 04/19/24 11:04

| Analyte | Spike Amount mg/kg | Original Result mg/kg | MS Result mg/kg | MSD Result mg/kg | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 48.3 | 22.4 | 28.0 | 45.2 | 11.6 | 47.2 | 10 | 50.0-150 | J6 | J3 J6 | 47.0 | 20 |
| *(S) o-Terphenyl* | | | | | *49.1* | *60.2* | | *18.0-148* | | | | |

Sample Narrative:

OS: Sample resembles laboratory standard for Motor Oil.

## Method Blank (MB)

(MB) R4059657-1 04/19/24 02:59

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL mg/kg |
|---|---|---|---|---|
| Diesel Range Organics (DRO) | U | | 1.33 | 4.00 |
| Residual Range Organics (RRO) | U | | 3.33 | 10.0 |
| *(S) o-Terphenyl* | *48.9* | | | *18.0-148* |

## Laboratory Control Sample (LCS)

(LCS) R4059657-2 04/19/24 03:12

| Analyte | Spike Amount mg/kg | LCS Result mg/kg | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 50.0 | 32.4 | 64.8 | 50.0-150 | |
| *(S) o-Terphenyl* | | | *51.5* | *18.0-148* | |

## L1726923-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1726923-07 04/19/24 06:28 • (MS) R4059657-3 04/19/24 06:41 • (MSD) R4059657-4 04/19/24 06:54

| Analyte | Spike Amount mg/kg | Original Result mg/kg | MS Result mg/kg | MSD Result mg/kg | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 50.0 | 4.01 | 27.8 | 32.8 | 47.6 | 57.6 | 1 | 50.0-150 | J6 | | 16.5 | 20 |
| *(S) o-Terphenyl* | | | | | *41.7* | *50.9* | | *18.0-148* | | | | |

## Method Blank (MB)

(MB) R4060094-1 04/19/24 16:44

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL mg/kg |
|---|---|---|---|---|
| Diesel Range Organics (DRO) | U | | 1.33 | 4.00 |
| Residual Range Organics (RRO) | U | | 3.33 | 10.0 |
| *(S) o-Terphenyl* | *76.9* | | | *18.0-148* |

## Laboratory Control Sample (LCS)

(LCS) R4060094-2 04/19/24 16:56

| Analyte | Spike Amount mg/kg | LCS Result mg/kg | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 50.0 | 32.5 | 65.0 | 50.0-150 | |
| *(S) o-Terphenyl* | | | *74.5* | *18.0-148* | |

## Method Blank (MB)

(MB) R4060088-1 04/19/24 15:42

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL mg/kg |
|---|---|---|---|---|
| Diesel Range Organics (DRO) | U | | 1.33 | 4.00 |
| Residual Range Organics (RRO) | U | | 3.33 | 10.0 |
| *(S) o-Terphenyl* | *59.0* | | | *18.0-148* |

## Laboratory Control Sample (LCS)

(LCS) R4060088-2 04/19/24 15:57

| Analyte | Spike Amount mg/kg | LCS Result mg/kg | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 50.0 | 40.4 | 80.8 | 50.0-150 | |
| *(S) o-Terphenyl* | | | *82.4* | *18.0-148* | |

## L1725561-77 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1725561-77 04/19/24 17:21 • (MS) R4060088-3 04/19/24 17:35 • (MSD) R4060088-4 04/19/24 17:49

| Analyte | Spike Amount (dry) mg/kg | Original Result (dry) mg/kg | MS Result (dry) mg/kg | MSD Result (dry) mg/kg | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 66.8 | U | 47.3 | 47.4 | 70.8 | 71.0 | 1 | 50.0-150 | | | 0.288 | 20 |
| *(S) o-Terphenyl* | | | | | *67.6* | *69.9* | | *18.0-148* | | | | |

## Method Blank (MB)

(MB) R4060090-1 04/19/24 12:18

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL mg/kg |
|---|---|---|---|---|
| Gasoline (C7-C12) | U | | 1.33 | 4.00 |
| Mineral Spirits | U | | 1.33 | 4.00 |
| Kerosene | U | | 1.33 | 4.00 |
| Diesel (C12-C24) | U | | 1.33 | 4.00 |
| #6 Fuel Oil | U | | 1.33 | 4.00 |
| Hydraulic Fluid | U | | 1.33 | 4.00 |
| Motor Oil (C24-C30) | U | | 3.33 | 10.0 |
| *(S) o-Terphenyl* | *39.5* | | | *18.0-148* |

## Laboratory Control Sample (LCS)

(LCS) R4060090-2 04/19/24 12:30

| Analyte | Spike Amount mg/kg | LCS Result mg/kg | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Diesel (C12-C24) | 50.0 | 34.0 | 68.0 | 50.0-150 | |
| *(S) o-Terphenyl* | | | *57.1* | *18.0-148* | |

## L1725561-193 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1725561-193 04/19/24 15:35 • (MS) R4060090-3 04/19/24 15:48 • (MSD) R4060090-4 04/19/24 16:01

| Analyte | Spike Amount (dry) mg/kg | Original Result (dry) mg/kg | MS Result (dry) mg/kg | MSD Result (dry) mg/kg | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel (C12-C24) | 71.7 | 3.12 | 44.9 | 42.9 | 58.3 | 55.2 | 1 | 50.0-150 | | | 4.65 | 20 |
| *(S) o-Terphenyl* | | | | | *34.6* | *29.5* | | *18.0-148* | | | | |

## Method Blank (MB)

(MB) R4060012-2 04/19/24 10:23

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL mg/kg |
|---|---|---|---|---|
| Anthracene | U | | 0.00230 | 0.00600 |
| Acenaphthene | U | | 0.00209 | 0.00600 |
| Acenaphthylene | U | | 0.00216 | 0.00600 |
| Benzo(a)anthracene | U | | 0.00173 | 0.00600 |
| Benzo(a)pyrene | U | | 0.00179 | 0.00600 |
| Benzo(b)fluoranthene | U | | 0.00153 | 0.00600 |
| Benzo(g,h,i)perylene | U | | 0.00177 | 0.00600 |
| Benzo(k)fluoranthene | U | | 0.00215 | 0.00600 |
| Chrysene | U | | 0.00232 | 0.00600 |
| Dibenz(a,h)anthracene | U | | 0.00172 | 0.00600 |
| Fluoranthene | U | | 0.00227 | 0.00600 |
| Fluorene | U | | 0.00205 | 0.00600 |
| Indeno(1,2,3-cd)pyrene | U | | 0.00181 | 0.00600 |
| Naphthalene | U | | 0.00408 | 0.0200 |
| Phenanthrene | U | | 0.00231 | 0.00600 |
| Pyrene | U | | 0.00200 | 0.00600 |
| 1-Methylnaphthalene | U | | 0.00449 | 0.0200 |
| 2-Methylnaphthalene | U | | 0.00427 | 0.0200 |
| 2-Chloronaphthalene | U | | 0.00466 | 0.0200 |
| *(S) p-Terphenyl-d14* | *66.2* | | | *23.0-120* |
| *(S) Nitrobenzene-d5* | *65.3* | | | *14.0-149* |
| *(S) 2-Fluorobiphenyl* | *59.0* | | | *34.0-125* |

## Laboratory Control Sample (LCS)

(LCS) R4060012-1 04/19/24 10:04

| Analyte | Spike Amount mg/kg | LCS Result mg/kg | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Anthracene | 0.0800 | 0.0655 | 81.9 | 50.0-126 | |
| Acenaphthene | 0.0800 | 0.0588 | 73.5 | 50.0-120 | |
| Acenaphthylene | 0.0800 | 0.0639 | 79.9 | 50.0-120 | |
| Benzo(a)anthracene | 0.0800 | 0.0706 | 88.3 | 45.0-120 | |
| Benzo(a)pyrene | 0.0800 | 0.0566 | 70.8 | 42.0-120 | |
| Benzo(b)fluoranthene | 0.0800 | 0.0540 | 67.5 | 42.0-121 | |
| Benzo(g,h,i)perylene | 0.0800 | 0.0520 | 65.0 | 45.0-125 | |
| Benzo(k)fluoranthene | 0.0800 | 0.0505 | 63.1 | 49.0-125 | |
| Chrysene | 0.0800 | 0.0673 | 84.1 | 49.0-122 | |
| Dibenz(a,h)anthracene | 0.0800 | 0.0597 | 74.6 | 47.0-125 | |
| Fluoranthene | 0.0800 | 0.0693 | 86.6 | 49.0-129 | |

## Laboratory Control Sample (LCS)

(LCS) R4060012-1 04/19/24 10:04

| Analyte | Spike Amount mg/kg | LCS Result mg/kg | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Fluorene | 0.0800 | 0.0643 | 80.4 | 49.0-120 | |
| Indeno(1,2,3-cd)pyrene | 0.0800 | 0.0637 | 79.6 | 46.0-125 | |
| Naphthalene | 0.0800 | 0.0598 | 74.8 | 50.0-120 | |
| Phenanthrene | 0.0800 | 0.0661 | 82.6 | 47.0-120 | |
| Pyrene | 0.0800 | 0.0608 | 76.0 | 43.0-123 | |
| 1-Methylnaphthalene | 0.0800 | 0.0613 | 76.6 | 51.0-121 | |
| 2-Methylnaphthalene | 0.0800 | 0.0601 | 75.1 | 50.0-120 | |
| 2-Chloronaphthalene | 0.0800 | 0.0621 | 77.6 | 50.0-120 | |
| *(S) p-Terphenyl-d14* | | | *71.2* | *23.0-120* | |
| *(S) Nitrobenzene-d5* | | | *64.3* | *14.0-149* | |
| *(S) 2-Fluorobiphenyl* | | | *55.5* | *34.0-125* | |

## L1725358-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1725358-02 04/19/24 11:41 • (MS) R4060012-3 04/19/24 12:01 • (MSD) R4060012-4 04/19/24 12:21

| Analyte | Spike Amount mg/kg | Original Result mg/kg | MS Result mg/kg | MSD Result mg/kg | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Anthracene | 0.0772 | U | 0.0523 | 0.0521 | 67.7 | 67.1 | 1 | 10.0-145 | | | 0.383 | 30 |
| Acenaphthene | 0.0772 | U | 0.0455 | 0.0472 | 58.9 | 60.8 | 1 | 14.0-127 | | | 3.67 | 27 |
| Acenaphthylene | 0.0772 | U | 0.0499 | 0.0515 | 64.6 | 66.4 | 1 | 21.0-124 | | | 3.16 | 25 |
| Benzo(a)anthracene | 0.0772 | 0.00177 | 0.0580 | 0.0561 | 72.8 | 70.0 | 1 | 10.0-139 | | | 3.33 | 30 |
| Benzo(a)pyrene | 0.0772 | 0.00212 | 0.0504 | 0.0487 | 62.5 | 60.0 | 1 | 10.0-141 | | | 3.43 | 31 |
| Benzo(b)fluoranthene | 0.0772 | 0.00301 | 0.0466 | 0.0444 | 56.5 | 53.3 | 1 | 10.0-140 | | | 4.84 | 36 |
| Benzo(g,h,i)perylene | 0.0772 | U | 0.0471 | 0.0438 | 61.0 | 56.4 | 1 | 10.0-140 | | | 7.26 | 33 |
| Benzo(k)fluoranthene | 0.0772 | U | 0.0434 | 0.0420 | 56.2 | 54.1 | 1 | 10.0-137 | | | 3.28 | 31 |
| Chrysene | 0.0772 | U | 0.0567 | 0.0561 | 73.4 | 72.3 | 1 | 10.0-145 | | | 1.06 | 30 |
| Dibenz(a,h)anthracene | 0.0772 | U | 0.0488 | 0.0479 | 63.2 | 61.7 | 1 | 10.0-132 | | | 1.86 | 31 |
| Fluoranthene | 0.0772 | 0.00280 | 0.0599 | 0.0579 | 74.0 | 71.0 | 1 | 10.0-153 | | | 3.40 | 33 |
| Fluorene | 0.0772 | U | 0.0495 | 0.0503 | 64.1 | 64.8 | 1 | 11.0-130 | | | 1.60 | 29 |
| Indeno(1,2,3-cd)pyrene | 0.0772 | 0.00206 | 0.0564 | 0.0526 | 70.4 | 65.1 | 1 | 10.0-137 | | | 6.97 | 32 |
| Naphthalene | 0.0772 | U | 0.0433 | 0.0466 | 56.1 | 60.1 | 1 | 10.0-135 | | | 7.34 | 27 |
| Phenanthrene | 0.0772 | U | 0.0544 | 0.0542 | 70.5 | 69.8 | 1 | 10.0-144 | | | 0.368 | 31 |
| Pyrene | 0.0772 | 0.00220 | 0.0515 | 0.0502 | 63.9 | 61.9 | 1 | 10.0-148 | | | 2.56 | 35 |
| 1-Methylnaphthalene | 0.0772 | U | 0.0449 | 0.0478 | 57.5 | 60.9 | 1 | 10.0-142 | | | 6.26 | 28 |
| 2-Methylnaphthalene | 0.0772 | U | 0.0451 | 0.0482 | 58.2 | 61.9 | 1 | 10.0-137 | | | 6.65 | 28 |
| 2-Chloronaphthalene | 0.0772 | U | 0.0470 | 0.0495 | 60.8 | 63.7 | 1 | 29.0-120 | | | 5.18 | 24 |
| *(S) p-Terphenyl-d14* | | | | | *57.1* | *52.0* | | *23.0-120* | | | | |
| *(S) Nitrobenzene-d5* | | | | | *50.2* | *64.5* | | *14.0-149* | | | | |
| *(S) 2-Fluorobiphenyl* | | | | | *44.3* | *53.4* | | *34.0-125* | | | | |

## Method Blank (MB)

(MB) R4060406-2 04/19/24 19:11

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL mg/kg |
|---|---|---|---|---|
| Anthracene | U | | 0.00230 | 0.00600 |
| Acenaphthene | U | | 0.00209 | 0.00600 |
| Acenaphthylene | U | | 0.00216 | 0.00600 |
| Benzo(a)anthracene | U | | 0.00173 | 0.00600 |
| Benzo(a)pyrene | U | | 0.00179 | 0.00600 |
| Benzo(b)fluoranthene | U | | 0.00153 | 0.00600 |
| Benzo(g,h,i)perylene | U | | 0.00177 | 0.00600 |
| Benzo(k)fluoranthene | U | | 0.00215 | 0.00600 |
| Chrysene | U | | 0.00232 | 0.00600 |
| Dibenz(a,h)anthracene | U | | 0.00172 | 0.00600 |
| Fluoranthene | U | | 0.00227 | 0.00600 |
| Fluorene | U | | 0.00205 | 0.00600 |
| Indeno(1,2,3-cd)pyrene | U | | 0.00181 | 0.00600 |
| Naphthalene | U | | 0.00408 | 0.0200 |
| Phenanthrene | U | | 0.00231 | 0.00600 |
| Pyrene | U | | 0.00200 | 0.00600 |
| 1-Methylnaphthalene | U | | 0.00449 | 0.0200 |
| 2-Methylnaphthalene | U | | 0.00427 | 0.0200 |
| 2-Chloronaphthalene | U | | 0.00466 | 0.0200 |
| *(S) p-Terphenyl-d14* | *63.2* | | | *23.0-120* |
| *(S) Nitrobenzene-d5* | *67.0* | | | *14.0-149* |
| *(S) 2-Fluorobiphenyl* | *59.0* | | | *34.0-125* |

## Laboratory Control Sample (LCS)

(LCS) R4060406-1 04/19/24 18:53

| Analyte | Spike Amount mg/kg | LCS Result mg/kg | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Anthracene | 0.0800 | 0.0719 | 89.9 | 50.0-126 | |
| Acenaphthene | 0.0800 | 0.0627 | 78.4 | 50.0-120 | |
| Acenaphthylene | 0.0800 | 0.0721 | 90.1 | 50.0-120 | |
| Benzo(a)anthracene | 0.0800 | 0.0715 | 89.4 | 45.0-120 | |
| Benzo(a)pyrene | 0.0800 | 0.0570 | 71.3 | 42.0-120 | |
| Benzo(b)fluoranthene | 0.0800 | 0.0619 | 77.4 | 42.0-121 | |
| Benzo(g,h,i)perylene | 0.0800 | 0.0600 | 75.0 | 45.0-125 | |
| Benzo(k)fluoranthene | 0.0800 | 0.0568 | 71.0 | 49.0-125 | |
| Chrysene | 0.0800 | 0.0663 | 82.9 | 49.0-122 | |
| Dibenz(a,h)anthracene | 0.0800 | 0.0665 | 83.1 | 47.0-125 | |
| Fluoranthene | 0.0800 | 0.0752 | 94.0 | 49.0-129 | |

## Laboratory Control Sample (LCS)

(LCS) R4060406-1 04/19/24 18:53

| Analyte | Spike Amount mg/kg | LCS Result mg/kg | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Fluorene | 0.0800 | 0.0748 | 93.5 | 49.0-120 | |
| Indeno(1,2,3-cd)pyrene | 0.0800 | 0.0680 | 85.0 | 46.0-125 | |
| Naphthalene | 0.0800 | 0.0693 | 86.6 | 50.0-120 | |
| Phenanthrene | 0.0800 | 0.0701 | 87.6 | 47.0-120 | |
| Pyrene | 0.0800 | 0.0618 | 77.3 | 43.0-123 | |
| 1-Methylnaphthalene | 0.0800 | 0.0688 | 86.0 | 51.0-121 | |
| 2-Methylnaphthalene | 0.0800 | 0.0670 | 83.8 | 50.0-120 | |
| 2-Chloronaphthalene | 0.0800 | 0.0624 | 78.0 | 50.0-120 | |
| *(S) p-Terphenyl-d14* | | | *85.4* | *23.0-120* | |
| *(S) Nitrobenzene-d5* | | | *78.5* | *14.0-149* | |
| *(S) 2-Fluorobiphenyl* | | | *69.1* | *34.0-125* | |

## L1725558-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1725558-06 04/19/24 21:16 • (MS) R4060406-3 04/19/24 21:33 • (MSD) R4060406-4 04/19/24 21:51

| Analyte | Spike Amount (dry) mg/kg | Original Result (dry) mg/kg | MS Result (dry) mg/kg | MSD Result (dry) mg/kg | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Anthracene | 0.0975 | U | 0.0731 | 0.0661 | 75.0 | 67.8 | 1 | 10.0-145 | | | 10.1 | 30 |
| Acenaphthene | 0.0975 | U | 0.0647 | 0.0593 | 66.4 | 60.8 | 1 | 14.0-127 | | | 8.78 | 27 |
| Acenaphthylene | 0.0975 | U | 0.0739 | 0.0666 | 75.8 | 68.3 | 1 | 21.0-124 | | | 10.4 | 25 |
| Benzo(a)anthracene | 0.0975 | U | 0.0728 | 0.0671 | 74.6 | 68.8 | 1 | 10.0-139 | | | 8.14 | 30 |
| Benzo(a)pyrene | 0.0975 | U | 0.0629 | 0.0572 | 64.5 | 58.6 | 1 | 10.0-141 | | | 9.48 | 31 |
| Benzo(b)fluoranthene | 0.0975 | U | 0.0661 | 0.0562 | 67.8 | 57.6 | 1 | 10.0-140 | | | 16.2 | 36 |
| Benzo(g,h,i)perylene | 0.0975 | U | 0.0612 | 0.0504 | 62.8 | 51.6 | 1 | 10.0-140 | | | 19.5 | 33 |
| Benzo(k)fluoranthene | 0.0975 | U | 0.0611 | 0.0537 | 62.7 | 55.1 | 1 | 10.0-137 | | | 12.9 | 31 |
| Chrysene | 0.0975 | U | 0.0687 | 0.0638 | 70.4 | 65.5 | 1 | 10.0-145 | | | 7.28 | 30 |
| Dibenz(a,h)anthracene | 0.0975 | U | 0.0697 | 0.0561 | 71.4 | 57.5 | 1 | 10.0-132 | | | 21.7 | 31 |
| Fluoranthene | 0.0975 | U | 0.0815 | 0.0673 | 83.6 | 69.0 | 1 | 10.0-153 | | | 19.1 | 33 |
| Fluorene | 0.0975 | U | 0.0751 | 0.0694 | 77.0 | 71.2 | 1 | 11.0-130 | | | 7.88 | 29 |
| Indeno(1,2,3-cd)pyrene | 0.0975 | U | 0.0699 | 0.0556 | 71.7 | 57.0 | 1 | 10.0-137 | | | 22.9 | 32 |
| Naphthalene | 0.0975 | U | 0.0711 | 0.0653 | 73.0 | 67.0 | 1 | 10.0-135 | | | 8.52 | 27 |
| Phenanthrene | 0.0975 | U | 0.0732 | 0.0682 | 75.1 | 69.9 | 1 | 10.0-144 | | | 7.17 | 31 |
| Pyrene | 0.0975 | U | 0.0631 | 0.0577 | 64.7 | 59.1 | 1 | 10.0-148 | | | 9.02 | 35 |
| 1-Methylnaphthalene | 0.0975 | U | 0.0707 | 0.0561 | 72.5 | 57.5 | 1 | 10.0-142 | | | 23.0 | 28 |
| 2-Methylnaphthalene | 0.0975 | U | 0.0627 | 0.0543 | 64.3 | 55.7 | 1 | 10.0-137 | | | 14.4 | 28 |
| 2-Chloronaphthalene | 0.0975 | U | 0.0653 | 0.0554 | 67.0 | 56.9 | 1 | 29.0-120 | | | 16.4 | 24 |
| *(S) p-Terphenyl-d14* | | | | | *66.7* | *59.3* | | *23.0-120* | | | | |
| *(S) Nitrobenzene-d5* | | | | | *73.7* | *60.0* | | *14.0-149* | | | | |
| *(S) 2-Fluorobiphenyl* | | | | | *62.2* | *45.1* | | *34.0-125* | | | | |

## Method Blank (MB)

(MB) R4060407-2 04/19/24 19:46

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL mg/kg |
|---|---|---|---|---|
| Anthracene | U | | 0.00230 | 0.00600 |
| Acenaphthene | U | | 0.00209 | 0.00600 |
| Acenaphthylene | U | | 0.00216 | 0.00600 |
| Benzo(a)anthracene | U | | 0.00173 | 0.00600 |
| Benzo(a)pyrene | U | | 0.00179 | 0.00600 |
| Benzo(b)fluoranthene | U | | 0.00153 | 0.00600 |
| Benzo(g,h,i)perylene | U | | 0.00177 | 0.00600 |
| Benzo(k)fluoranthene | U | | 0.00215 | 0.00600 |
| Chrysene | U | | 0.00232 | 0.00600 |
| Dibenz(a,h)anthracene | U | | 0.00172 | 0.00600 |
| Fluoranthene | U | | 0.00227 | 0.00600 |
| Fluorene | U | | 0.00205 | 0.00600 |
| Indeno(1,2,3-cd)pyrene | U | | 0.00181 | 0.00600 |
| Naphthalene | U | | 0.00408 | 0.0200 |
| Phenanthrene | U | | 0.00231 | 0.00600 |
| Pyrene | U | | 0.00200 | 0.00600 |
| 1-Methylnaphthalene | U | | 0.00449 | 0.0200 |
| 2-Methylnaphthalene | U | | 0.00427 | 0.0200 |
| 2-Chloronaphthalene | U | | 0.00466 | 0.0200 |
| *(S) p-Terphenyl-d14* | *72.3* | | | *23.0-120* |
| *(S) Nitrobenzene-d5* | *57.2* | | | *14.0-149* |
| *(S) 2-Fluorobiphenyl* | *58.0* | | | *34.0-125* |

## Laboratory Control Sample (LCS)

(LCS) R4060407-1 04/19/24 19:29

| Analyte | Spike Amount mg/kg | LCS Result mg/kg | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Anthracene | 0.0800 | 0.0718 | 89.8 | 50.0-126 | |
| Acenaphthene | 0.0800 | 0.0623 | 77.9 | 50.0-120 | |
| Acenaphthylene | 0.0800 | 0.0710 | 88.8 | 50.0-120 | |
| Benzo(a)anthracene | 0.0800 | 0.0715 | 89.4 | 45.0-120 | |
| Benzo(a)pyrene | 0.0800 | 0.0586 | 73.3 | 42.0-120 | |
| Benzo(b)fluoranthene | 0.0800 | 0.0612 | 76.5 | 42.0-121 | |
| Benzo(g,h,i)perylene | 0.0800 | 0.0590 | 73.8 | 45.0-125 | |
| Benzo(k)fluoranthene | 0.0800 | 0.0573 | 71.6 | 49.0-125 | |
| Chrysene | 0.0800 | 0.0672 | 84.0 | 49.0-122 | |
| Dibenz(a,h)anthracene | 0.0800 | 0.0655 | 81.9 | 47.0-125 | |
| Fluoranthene | 0.0800 | 0.0723 | 90.4 | 49.0-129 | |

## Laboratory Control Sample (LCS)

(LCS) R4060407-1 04/19/24 19:29

| Analyte | Spike Amount mg/kg | LCS Result mg/kg | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Fluorene | 0.0800 | 0.0703 | 87.9 | 49.0-120 | |
| Indeno(1,2,3-cd)pyrene | 0.0800 | 0.0663 | 82.9 | 46.0-125 | |
| Naphthalene | 0.0800 | 0.0687 | 85.9 | 50.0-120 | |
| Phenanthrene | 0.0800 | 0.0715 | 89.4 | 47.0-120 | |
| Pyrene | 0.0800 | 0.0619 | 77.4 | 43.0-123 | |
| 1-Methylnaphthalene | 0.0800 | 0.0677 | 84.6 | 51.0-121 | |
| 2-Methylnaphthalene | 0.0800 | 0.0675 | 84.4 | 50.0-120 | |
| 2-Chloronaphthalene | 0.0800 | 0.0625 | 78.1 | 50.0-120 | |
| *(S) p-Terphenyl-d14* | | | *82.0* | *23.0-120* | |
| *(S) Nitrobenzene-d5* | | | *84.4* | *14.0-149* | |
| *(S) 2-Fluorobiphenyl* | | | *67.1* | *34.0-125* | |

## L1725607-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1725607-09 04/20/24 05:22 • (MS) R4060373-1 04/20/24 05:40 • (MSD) R4060373-2 04/20/24 05:57

| Analyte | Spike Amount (dry) mg/kg | Original Result (dry) mg/kg | MS Result (dry) mg/kg | MSD Result (dry) mg/kg | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Anthracene | 0.0900 | 0.0367 | 0.107 | 0.106 | 78.5 | 76.8 | 1 | 10.0-145 | | | 1.48 | 30 |
| Acenaphthene | 0.0900 | 0.00840 | 0.0721 | 0.0803 | 70.8 | 79.9 | 1 | 14.0-127 | | | 10.7 | 27 |
| Acenaphthylene | 0.0900 | 0.00864 | 0.0770 | 0.0706 | 76.0 | 68.8 | 1 | 21.0-124 | | | 8.74 | 25 |
| Benzo(a)anthracene | 0.0900 | 0.0920 | 0.159 | 0.273 | 74.9 | 201 | 1 | 10.0-139 | | J3 J5 | 52.4 | 30 |
| Benzo(a)pyrene | 0.0900 | 0.0580 | 0.114 | 0.131 | 62.4 | 81.3 | 1 | 10.0-141 | | | 13.8 | 31 |
| Benzo(b)fluoranthene | 0.0900 | 0.100 | 0.153 | 0.252 | 58.3 | 169 | 1 | 10.0-140 | | J3 J5 | 49.2 | 36 |
| Benzo(g,h,i)perylene | 0.0900 | 0.0710 | 0.118 | 0.131 | 51.8 | 66.8 | 1 | 10.0-140 | | | 10.9 | 33 |
| Benzo(k)fluoranthene | 0.0900 | 0.0189 | 0.0740 | 0.0690 | 61.2 | 55.7 | 1 | 10.0-137 | | | 6.96 | 31 |
| Chrysene | 0.0900 | 0.138 | 0.194 | 0.485 | 62.8 | 386 | 1 | 10.0-145 | | J3 J5 | 85.5 | 30 |
| Dibenz(a,h)anthracene | 0.0900 | 0.0259 | 0.0762 | 0.108 | 55.9 | 91.1 | 1 | 10.0-132 | | J3 | 34.4 | 31 |
| Fluoranthene | 0.0900 | 0.104 | 0.182 | 0.274 | 86.2 | 188 | 1 | 10.0-153 | | J3 J5 | 40.2 | 33 |
| Fluorene | 0.0900 | 0.0112 | 0.0802 | 0.108 | 76.6 | 108 | 1 | 11.0-130 | | J3 | 29.8 | 29 |
| Indeno(1,2,3-cd)pyrene | 0.0900 | 0.0420 | 0.0948 | 0.0890 | 58.7 | 52.3 | 1 | 10.0-137 | | | 6.28 | 32 |
| Naphthalene | 0.0900 | 0.0729 | 0.142 | 0.167 | 77.3 | 105 | 1 | 10.0-135 | | | 16.1 | 27 |
| Phenanthrene | 0.0900 | 0.219 | 0.288 | 1.05 | 76.6 | 922 | 1 | 10.0-144 | | J3 J5 | 114 | 31 |
| Pyrene | 0.0900 | 0.0972 | 0.166 | 0.262 | 76.6 | 183 | 1 | 10.0-148 | | J3 J5 | 44.9 | 35 |
| 1-Methylnaphthalene | 0.0900 | 0.0924 | 0.158 | 0.418 | 73.2 | 362 | 1 | 10.0-142 | | J3 J5 | 90.2 | 28 |
| 2-Methylnaphthalene | 0.0900 | 0.146 | 0.225 | 0.379 | 87.9 | 259 | 1 | 10.0-137 | | J3 J5 | 50.9 | 28 |
| 2-Chloronaphthalene | 0.0900 | U | 0.0635 | 0.0557 | 70.6 | 61.9 | 1 | 29.0-120 | | | 13.1 | 24 |
| *(S) p-Terphenyl-d14* | | | | | *69.6* | *67.5* | | *23.0-120* | | | | |
| *(S) Nitrobenzene-d5* | | | | | *71.7* | *78.0* | | *14.0-149* | | | | |
| *(S) 2-Fluorobiphenyl* | | | | | *67.5* | *55.2* | | *34.0-125* | | | | |

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

## Abbreviations and Definitions

| | |
|---|---|
| (dry) | Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils]. |
| MDL | Method Detection Limit. |
| MDL (dry) | Method Detection Limit. |
| RDL | Reported Detection Limit. |
| RDL (dry) | Reported Detection Limit. |
| Rec. | Recovery. |
| RPD | Relative Percent Difference. |
| SDG | Sample Delivery Group. |
| (S) | Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media. |
| U | Not detected at the Reporting Limit (or MDL where applicable). |
| Analyte | The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported. |
| Dilution | If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor. |
| Limits | These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges. |
| Original Sample | The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG. |
| Qualifier | This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable. |
| Result | The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte. |
| Uncertainty (Radiochemistry) | Confidence level of 2 sigma. |
| Case Narrative (Cn) | A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report. |
| Quality Control Summary (Qc) | This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material. |
| Sample Chain of Custody (Sc) | This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis. |
| Sample Results (Sr) | This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported. |
| Sample Summary (Ss) | This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis. |

| Qualifier | Description |
|---|---|
| J | The identification of the analyte is acceptable; the reported value is an estimate. |
| J2 | Surrogate recovery limits have been exceeded; values are outside lower control limits. |
| J3 | The associated batch QC was outside the established quality control range for precision. |
| J5 | The sample matrix interfered with the ability to make any accurate determination; spike value is high. |
| J6 | The sample matrix interfered with the ability to make any accurate determination; spike value is low. |
| J7 | Surrogate recovery cannot be used for control limit evaluation due to dilution. |

# ACCREDITATIONS & LOCATIONS

## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

| | | | |
|---|---|---|---|
| Alabama | 40660 | Nebraska | NE-OS-15-05 |
| Alaska | 17-026 | Nevada | TN000032021-1 |
| Arizona | AZ0612 | New Hampshire | 2975 |
| Arkansas | 88-0469 | New Jersey–NELAP | TN002 |
| California | 2932 | New Mexico [1] | TN00003 |
| Colorado | TN00003 | New York | 11742 |
| Connecticut | PH-0197 | North Carolina | Env375 |
| Florida | E87487 | North Carolina [1] | DW21704 |
| Georgia | NELAP | North Carolina [3] | 41 |
| Georgia [1] | 923 | North Dakota | R-140 |
| Idaho | TN00003 | Ohio–VAP | CL0069 |
| Illinois | 200008 | Oklahoma | 9915 |
| Indiana | C-TN-01 | Oregon | TN200002 |
| Iowa | 364 | Pennsylvania | 68-02979 |
| Kansas | E-10277 | Rhode Island | LAO000356 |
| Kentucky [1 6] | KY90010 | South Carolina | 84004002 |
| Kentucky [2] | 16 | South Dakota | n/a |
| Louisiana | AI30792 | Tennessee [1 4] | 2006 |
| Louisiana | LA018 | Texas | T104704245-20-18 |
| Maine | TN00003 | Texas [5] | LAB0152 |
| Maryland | 324 | Utah | TN000032021-11 |
| Massachusetts | M-TN003 | Vermont | VT2006 |
| Michigan | 9958 | Virginia | 110033 |
| Minnesota | 047-999-395 | Washington | C847 |
| Mississippi | TN00003 | West Virginia | 233 |
| Missouri | 340 | Wisconsin | 998093910 |
| Montana | CERT0086 | Wyoming | A2LA |
| A2LA – ISO 17025 | 1461.01 | AIHA-LAP,LLC EMLAP | 100789 |
| A2LA – ISO 17025 [5] | 1461.02 | DOD | 1461.01 |
| Canada | 1461.01 | USDA | P330-15-00234 |
| EPA–Crypto | TN00003 | | |

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

# [redacted] Companies, LLC - Portland, OR

15618 SW 72nd Ave
Tigard, OR 97224

Billing Information:
Accounts Payable
15618 SW 72nd Ave
Tigard, OR 97224

Report to: Andrew Bisbee

Email To: Andrew.Bisbee@apexcos.com

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: 503-924-4704

Client Project # 32-23010077

Lab Project # ASHCREPOR-BISBEE

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-23010077

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 1 of 20

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1725061
Table # M150
Acctnum: ASHCREPOR
Template: T249306
Prelogin: P1063626
PM: 110 - Brian Ford
PB: MV 3/19/24
Shipped Via: FedEX Ground

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-3-SS-1 | Grab | SS | 0-0.5 | 4/10/24 | 1345 | 1 | | | | | ARCHIVE | -01 |
| DU-3-SS-2 | Grab | SS | | 4/10/24 | 1350 | 1 | | | | | | -02 |
| DU-3-SS-3 | Grab | SS | | 4/10/24 | 1355 | 1 | | | | | | -03 |
| DU-3-SS-4 | Grab | SS | | 4/10/24 | 1400 | 1 | | | | | | -04 |
| DU-3-SS-5 | Grab | SS | | 4/10/24 | 1405 | 1 | | | | | | -05 |
| DU-3-SS-COMP-1 | comp | SS | | 4/10/24 | 1410 | 2 | X | X | X | X | | -06 |
| DU-4A-1-1 | Grab | SS | 0-1 | 4/8/24 | 1115 | 1 | | | | | ARCHIVE | -07 |
| DU-4A-1-2 | Grab | SS | 1-2 | 4/8/24 | 1120 | 1 | | | | | | -08 |
| DU-4A-1-3 | Grab | SS | 2-3 | 4/8/24 | 1128 | 1 | | | | | | -09 |
| DU-4A-2-1 | Grab | SS | 0-1 | 4/8/24 | 1130 | 1 | | | | | | -10 |

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: *Client: list metals needed=

metals = RCRA 8 + copper, zinc, and nickel by EPA Method 6010.
7 day TAT for all analyses. per request of Andrew Bisbee-njf 04/15/24

Samples ret ___ UPS ___ ___ Temp _____ w _____ Other _____

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) |
|---|---|---|---|
| | 4-12-24 | 12:00 | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) |
| | | | |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) |
| | | | jamcen |

Trip Blank Received: Yes (No) HCL / MeoH TBR

Temp: °C Bottles Received: 125

Date: 4-13-24 Time: 0900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / (OK)

**Apex Companies, LLC - Portland, OR**
15618 SW 72nd Ave
Tigard, OR 97224

Billing Information:
Accounts Payable
15618 SW 72nd Ave
Tigard, OR 97224
Pres Chk

Report to: Andrew Bisbee
Email To: Andrew.Bisbee@apexcos.com

Project Description: KING SALVAGE
City/State Collected: TOLEDO, OR
Please Circle: PT MT CT ET

Phone: 503-924-4704
Client Project # 32-23010077
Lab Project # ASHCREPOR-BISBEE

Collected by (print): ANDREW BISBEE
Site/Facility ID #
P.O. # 32-23010077

Collected by (signature):
Immediately Packed on Ice N ___ Y X

*Rush?* (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day
Date Results Needed
Quote #

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-4A-2-2 | Grab | SS | 1-2 | 4/8/24 | 1135 | 1 | | | | | ARCHIVE | -11 |
| DU-4A-2-3 | Grab | SS | 2-3 | 4/8/24 | 1138 | 1 | | | | | | -12 |
| DU-4A-3-1 | Grab | SS | 0-1 | 4/8/24 | 1140 | 1 | | | | | | -13 |
| DU-4A-3-2 | Grab | SS | 1-2 | 4/8/24 | 1145 | 1 | | | | | | -14 |
| DU-4A-3-3 | Grab | SS | 2-3 | 4/8/24 | 1148 | 1 | | | | | | -15 |
| DU-4A-4-1 | Grab | SS | 0-1 | 4/8/24 | 1150 | 1 | | | | | | -16 |
| DU-4A-4-2 | Grab | SS | 1-2 | 4/8/24 | 1155 | 1 | | | | | | -17 |
| DU-4A-4-3 | Grab | SS | 2-3 | 4/8/24 | 1158 | 1 | | | | | | -18 |
| DU-4A-5-1 | Grab | SS | 0-1 | 4/8/24 | 1215 | 1 | | | | | | -19 |
| DU-4A-5-2 | Grab | SS | 1-2 | 4/8/24 | 1220 | 1 | | | | | | -20 |

Analysis / Container / Preservative

Pace
PEOPLE ADVANCING SCIENCE
MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1725561
Table #
Acctnum: ASHCREPOR
Template: T249306
Prelogin: P1063626
PM: 110 - Brian Ford
PB: MV 3/19/24
Shipped Via: FedEX Ground

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: *Client: list metals needed=

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____
Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR | |
|---|---|---|---|---|---|
| | 4-12-24 | 12:00 | | | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: | If preservation required by Login: Date/Time |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 | Hold: Condition: NCF / (OK) |

Company Name/Address:
**Apex Companies, LLC - Portland, OR**

15618 SW 72nd Ave
Tigard, OR 97224

Billing Information:
Accounts Payable
15618 SW 72nd Ave
Tigard, OR 97224

Report to: **Andrew Bisbee**

Email To: **Andrew.Bisbee@apexcos.com**

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: **503-924-4704**

Client Project # 32-23010077

Lab Project # ASHCREPOR-BISBEE

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-23010077

Collected by (signature):

Immediately Packed on Ice N ___ Y X

*Rush?* (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Chain of Custody Page 3 of 20

Pace
PEOPLE ADVANCING SCIENCE

**MT JULIET, TN**
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1755061

Table #

Acctnum: ASHCREPOR
Template: T249306
Prelogin: P1063626
PM: 110 - Brian Ford
PB: MV 3/19/24
Shipped Via: FedEX Ground

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-4A-5-3 | Grab | SS | 2-3 | 4/8/24 | 1223 | 1 | | | | | ARCHIVE | -21 |
| DU-4A-COMP-1 | Comp | SS | 0-1 | 4/8/24 | 1230 | 2 | X | X | X | X | | -22 |
| DU-4A-COMP-2 | Comp | SS | 1-2 | 4/8/24 | 1235 | 2 | | | X | | RUN DX, HOLD FOR FOLLOW-UP | -23 |
| DU-4A-COMP-3 | Comp | SS | 2-3 | 4/8/24 | 1245 | 2 | | | X | | ↓ | -24 |
| DU-4B-1-1 | Grab | SS | 0-1 | 4/10/24 | 1035 | 1 | | | | | ARCHIVE | -25 |
| DU-4B-1-2 | Grab | SS | 1-2 | 4/10/24 | 1040 | 1 | | | | | | -26 |
| DU-4B-1-3 | Grab | SS | 2-3 | 4/10/24 | 1045 | 1 | | | | | | -27 |
| DU-4B-2-1 | Grab | SS | 0-1 | 4/10/24 | 1055 | 1 | | | | | | -28 |
| DU-4B-2-2 | Grab | SS | 1-2 | 4/10/24 | 1100 | 1 | | | | | | -29 |
| DU-4B-2-3 | Grab | SS | 2-3 | 4/10/24 | 1105 | 1 | | | | | ↓ | -30 |

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: *Client: list metals needed=

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR | |
|---|---|---|---|---|---|
| | 4-12-24 | 12:00 | | | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: | If preservation required by Login: Date/Time |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 | Hold: Condition: NCF / OK |

Apex Companies, LLC - Portland, OR

15618 SW 72nd Ave
Tigard, OR 97224

Billing Information:
Accounts Payable
15618 SW 72nd Ave
Tigard, OR 97224

Pres Chk

Report to: Andrew Bisbee

Email To: Andrew.Bisbee@apexcos.com

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: 503-924-4704

Client Project # 32-23010077

Lab Project # ASHCREPOR-BISBEE

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-23010077

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-4B-3-1 | Grab | SS | 0-1 | 4/10/24 | 1140 | 1 | | | | | ARCHIVE | -31 |
| DU-4B-3-2 | Grab | SS | 1-2 | 4/10/24 | 1145 | 1 | | | | | | -32 |
| DU-4B-3-3 | Grab | SS | 2-3 | 4/10/24 | 1150 | 1 | | | | | | -33 |
| DU-4B-4-1 | Grab | SS | 0-1 | 4/10/24 | 1205 | 1 | | | | | | -34 |
| DU-4B-4-2 | Grab | SS | 1-2 | 4/10/24 | 1210 | 1 | | | | | | -35 |
| DU-4B-4-3 | Grab | SS | 2-3 | 4/10/24 | 1215 | 1 | | | | | | -36 |
| DU-4B-5-1 | Grab | SS | 0-1 | 4/10/24 | 1220 | 1 | | | | | | -37 |
| DU-4B-5-2 | Grab | SS | 1-2 | 4/10/24 | 1225 | 1 | | | | | | -38 |
| DU-4B-5-3 | Grab | SS | 2-3 | 4/10/24 | 1230 | 1 | | | | | | -39 |
| DU-4B-COMP-1 | Comp | SS | 0-1 | 4/10/24 | 1233 | 2 | X | X | X | X | | -40 |

Analysis / Container / Preservative

Chain of Custody Page 4 of 20

Pace
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SDG # L1765061

Table #

Acctnum: ASHCREPOR

Template: T249306

Prelogin: P1063626

PM: 110 - Brian Ford

PB: MV 3/19/24

Shipped Via: FedEX Ground

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:*Client: list metals needed=

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR | |
|---|---|---|---|---|---|
| | 4-12-24 | 12:00 | | | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: | If preservation required by Login: Date/Time |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 | Hold: Condition: NCF / OK |

**Apex Companies, LLC - Portland, OR**

15618 SW 72nd Ave
Tigard, OR 97224

Billing Information:
Accounts Payable
15618 SW 72nd Ave
Tigard, OR 97224

Report to: Andrew Bisbee

Email To: Andrew.Bisbee@apexcos.com

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: 503-924-4704

Client Project # 32-23010077

Lab Project # ASHCREPOR-BISBEE

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-23010077

Collected by (signature):

Immediately Packed on Ice N ___ Y X

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___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
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___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 5 of 20

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Table #

Acctnum: ASHCREPOR
Template: T249306
Prelogin: P1063626
PM: 110 - Brian Ford
PB: MV 3/19/24
Shipped Via: FedEX Ground

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-4B-COMP-2 | COMP | SS | 1-2 | 4/10/24 | 1235 | 2 | | | X | | RUN DX, HOLD FOR F/U | -41 |
| DU-4B-COMP-3 | COMP | SS | 2-3 | 4/10/24 | 1240 | 2 | | | X | | ↓ | -42 |
| DU-4C-1-1 | Grab | SS | 0-1 | 4/8/24 | 1350 | 1 | | | | | ARCHIVE | -43 |
| DU-4C-1-2 | Grab | SS | 1-2 | 4/8/24 | 1355 | 1 | | | | | | -44 |
| DU-4C-1-3 | Grab | SS | 2-3 | 4/8/24 | 1358 | 1 | | | | | | -45 |
| DU-4C-2-1 | Grab | SS | 0-1 | 4/8/24 | 1340 | 1 | | | | | | -46 |
| DU-4C-2-2 | Grab | SS | 1-2 | 4/8/24 | 1345 | 1 | | | | | | -47 |
| DU-4C-2-3 | Grab | SS | 2-3 | 4/8/24 | 1348 | 1 | | | | | | -48 |
| DU-4C-3-1 | Grab | SS | 0-1 | 4/8/24 | 1420 | 1 | | | | | | -49 |
| DU-4C-3-2 | Grab | SS | 1-2 | 4/8/24 | 1425 | 1 | | | | | ↓ | -50 |

* Matrix:
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GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: *Client: list metals needed=

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP X Y N
COC Signed/Accurate: X Y N
Bottles arrive intact: X Y N
Correct bottles used: X Y N
Sufficient volume sent: X Y N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: X Y N

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR | If preservation required by Login: Date/Time |
|---|---|---|---|---|---|
| | 4-12-24 | 12:00 | | | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: | |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 | Hold: Condition: NCF / OK |

Company Name/Address:
**Apex Companies, LLC - Portland, OR**
15618 SW 72nd Ave
Tigard, OR 97224

Billing Information:
Accounts Payable
15618 SW 72nd Ave
Tigard, OR 97224

Pres Chk

Report to: **Andrew Bisbee**

Email To: **Andrew.Bisbee@apexcos.com**

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: **503-924-4704**

Client Project # 32-23010077

Lab Project # **ASHCREPOR-BISBEE**

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-23010077

Collected by (signature):

Immediately Packed on Ice N ___ Y X

***Rush?*** (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 6 of 20

Pace
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SDG # L1755161

Table #

Acctnum: **ASHCREPOR**
Template: **T249306**
Prelogin: **P1063626**
PM: **110 - Brian Ford**
PB: MV 3/19/24

Shipped Via: **FedEX Ground**

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-4C-3-3 | Grab | SS | 2-3 | 4/8/24 | 1428 | 1 | | | | | ARCHIVE | -51 |
| DU-4C-4-1 | Grab | SS | 0-1 | 4/8/24 | 1445 | 1 | | | | | ↓ | -52 |
| DU-4C-4-2 | Grab | SS | 1-2 | 4/8/24 | 1450 | 1 | | | X | X | | -53 |
| DU-4C-4-3 | Grab | SS | 2-3 | 4/8/24 | 1453 | 1 | | | | | ARCHIVE | -54 |
| DU-4C-5-1 | Grab | SS | 0-1 | 4/8/24 | 1430 | 1 | | | | | | -55 |
| DU-4C-5-2 | Grab | SS | 1-2 | 4/8/24 | 1435 | 1 | | | | | | -56 |
| DU-4C-5-3 | Grab | SS | 2-3 | 4/8/24 | 1438 | 1 | | | | | ↓ | -57 |
| DU-4C-COMP-1 | COMP | SS | 0-1 | 4/8/24 | 1500 | 2 | X | X | X | X | | -58 |
| DU-4C-COMP-2 | COMP | SS | 1-2 | 4/8/24 | 1505 | 2 | | | X | | RUN DX, HOLD FOR FOLLOW UP | -59 |
| DU-4C-COM-3 | COMP | SS | 2-3 | 4/8/24 | 1515 | 2 | | | X | | ↓ | -60 |

* Matrix:
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**GW** - Groundwater **B** - Bioassay
**WW** - WasteWater
**DW** - Drinking Water
**OT** - Other_____

**Remarks:*Client: list metals needed=**

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP X N
COC Signed/Accurate: X N
Bottles arrive intact: X N
Correct bottles used: X N
Sufficient volume sent: X N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: X __N

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR | |
|---|---|---|---|---|---|
| | 4-12-24 | 12:00 | | | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: | If preservation required by Login: Date/Time |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 | Hold: Condition: NCF / OK |

Company Name/Address:
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Pres Chk

Report to: **Andrew Bisbee**

Email To: **Andrew.Bisbee@apexcos.com**

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: **503-924-4704**

Client Project # 32-23010077

Lab Project # **ASHCREPOR-BISBEE**

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-23010077

Collected by (signature):

Immediately Packed on Ice N ___ Y X

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___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 7 of 20

Pace
PEOPLE ADVANCING SCIENCE

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SDG # L1755Gd

Table #

Acctnum: **ASHCREPOR**
Template: **T249306**
Prelogin: **P1063626**
PM: **110 - Brian Ford**
PB: MV 3/19/24

Shipped Via: **FedEX Ground**

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-4D-1-1 | Grab | SS | 0-1 | 4/9/24 | 1555 | 1 | | | | | ARCHIVE | -61 |
| DU-4D-1-2 | Grab | SS | 1-2 | 4/9/24 | 1600 | 1 | | | | | | -62 |
| DU-4D-1-3 | Grab | SS | 2-3 | 4/9/24 | 1603 | 1 | | | | | | -63 |
| DU-4D-2-1 | Grab | SS | 0-1 | 4/8/24 | 1315 | 1 | | | | | | -64 |
| DU-4D-2-2 | Grab | SS | 1-2 | 4/8/24 | 1320 | 1 | | | | | | -65 |
| DU-4D-2-3 | Grab | SS | 2-3 | 4/8/24 | 1323 | 1 | | | | | | -66 |
| DU-4D-3-1 | Grab | SS | 0-1 | 4/9/24 | 1615 | 1 | | | | | | -67 |
| DU-4D-3-2 | Grab | SS | 1-2 | 4/9/24 | 1620 | 1 | | | | | | -68 |
| DU-4D-3-3 | Grab | SS | 2-3 | 4/9/24 | 1623 | 1 | | | | | | -69 |
| DU-4D-4-1 | Grab | SS | 0-1 | 4/9/24 | 1605 | 1 | | | | | | -70 |

* Matrix:
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**GW** - Groundwater **B** - Bioassay
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**OT** - Other_____

**Remarks:*Client: list metals needed=**

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP X Y __N
COC Signed/Accurate: X Y __N
Bottles arrive intact: X Y __N
Correct bottles used: X Y __N
Sufficient volume sent: X Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR | If preservation required by Login: Date/Time |
|---|---|---|---|---|---|
| | 4-12-24 | 12:00 | | | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: | |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 | Hold: Condition: NCF / OK |

Company Name/Address:
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Please Circle: PT MT CT ET

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| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-4D-4-2 | Grab | SS | 1-2 | 4/9/24 | 1610 | 1 | | | | | ARCHIVE | -71 |
| DU-4D-4-3 | Grab | SS | 2-3 | 4/9/24 | 1613 | 1 | | | | | | -72 |
| DU-4D-5-1 | Grab | SS | 0-1 | 4/9/24 | 1625 | 1 | | | | | | -73 |
| DU-4D-5-2 | Grab | SS | 1-2 | 4/9/24 | 1630 | 1 | | | | | | -74 |
| DU-4D-5-3 | Grab | SS | 2-3 | 4/9/24 | 1633 | 1 | | | | | ↓ | -75 |
| DU-4D-COMP-1 | COMP | SS | 0-1 | 4/9/24 | 1635 | 2 | X | X | X | X | | -76 |
| DU-4D-COMP-2 | COMP | SS | 1-2 | 4/9/24 | 1640 | 2 | | | X | | RUN DX, HOLD FOR FOLLOW-UP | -77 |
| DU-4D-COMP-3 | COMP | SS | 2-3 | 4/9/24 | 1645 | 2 | | | X | | ↓ | -78 |
| DU-4E-1-1 | Grab | SS | 0-1 | 4/8/24 | 1540 | 1 | | | | | ARCHIVE | -79 |
| DU-4E-1-2 | Grab | SS | 1-2 | 4/8/24 | 1545 | 1 | | | | | ↓ | -80 |

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Remarks:*Client: list metals needed=

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Flow _____ Other _____

Samples returned via:
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Tracking #

Relinquished by : (Signature) | Date: 4-12-24 | Time: 12:00 | Received by: (Signature)

Relinquished by : (Signature) | Date: | Time: | Received by: (Signature)

Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) Jamesm | Date: 4-13-24 | Time: 0900

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: °C Bottles Received:

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Sample Receipt Checklist

| | | |
|---|---|---|
| COC Seal Present/Intact: | NP | Y N |
| COC Signed/Accurate: | | Y N |
| Bottles arrive intact: | | Y N |
| Correct bottles used: | | Y N |
| Sufficient volume sent: | | Y N |
| If Applicable | | |
| VOA Zero Headspace: | | Y N |
| Preservation Correct/Checked: | | Y N |
| RAD Screen <0.5 mR/hr: | | Y N |

Chain of Custody Page 8 of 20

Pace
PEOPLE ADVANCING SCIENCE

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SDG # L1756601

Table #

Acctnum: ASHCREPOR
Template: T249306
Prelogin: P1063626
PM: 110 - Brian Ford
PB: MV 3/19/24
Shipped Via: FedEX Ground

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Phone: **503-924-4704**

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Lab Project # **ASHCREPOR-BISBEE**

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-23010077

Collected by (signature):

Immediately Packed on Ice N ___ Y X

**Rush?** (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres |
|---|---|---|---|---|---|---|---|---|---|---|
| DU-4E-1-3 | Grab | SS | 2-3 | 4/8/24 | 1548 | 1 | | | | |
| DU-4E-2-1 | Grab | SS | 0-1 | 4/8/24 | 1530 | 1 | | | | |
| DU-4E-2-2 | Grab | SS | 1-2 | 4/8/24 | 1535 | 1 | | | | |
| DU-4E-2-3 | Grab | SS | 2-3 | 4/8/24 | 1538 | 1 | | | | |
| DU-4E-3-1 | Grab | SS | 0-1 | 4/8/24 | 1555 | 1 | | | | |
| DU-4E-3-2 | Grab | SS | 1-2 | 4/8/24 | 1600 | 1 | | | | |
| DU-4E-3-3 | Grab | SS | 2-3 | 4/8/24 | 1603 | 1 | | | | |
| DU-4E-4-1 | Grab | SS | 0-1 | 4/8/24 | 1605 | 1 | | | | |
| DU-4E-4-2 | Grab | SS | 1-2 | 4/8/24 | 1610 | 1 | | | X | X |
| DU-4E-4-3 | Grab | SS | 2-3 | 4/8/24 | 1613 | 1 | | | | |

Analysis / Container / Preservative

Chain of Custody Page 7 of 20

Pace
PEOPLE ADVANCING SCIENCE

**MT JULIET, TN**

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1725561

Table #

Acctnum: **ASHCREPOR**
Template: **T249306**
Prelogin: **P1063626**
PM: **110 - Brian Ford**
PB: MV 3/19/24
Shipped Via: **FedEX Ground**

| Remarks | Sample # (lab only) |
|---|---|
| ARCHIVE | -81 |
| | -82 |
| | -83 |
| | -84 |
| | -85 |
| | -86 |
| | -87 |
| | -88 |
| | -89 |
| ARCHIVE | -90 |

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

**Remarks:*Client: list metals needed=**

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist

| | | |
|---|---|---|
| COC Seal Present/Intact: | NP | X N |
| COC Signed/Accurate: | | X N |
| Bottles arrive intact: | | X N |
| Correct bottles used: | | X N |
| Sufficient volume sent: | | X N |
| If Applicable | | |
| VOA Zero Headspace: | | Y N |
| Preservation Correct/Checked: | | Y N |
| RAD Screen <0.5 mR/hr: | | Y N |

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR | |
|---|---|---|---|---|---|
| | 4-12-24 | 12:00 | | | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: | If preservation required by Login: Date/Time |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 | Hold: Condition: NCF / OK |

**Apex Companies, LLC - Portland, OR**

15618 SW 72nd Ave
Tigard, OR 97224

Billing Information:
Accounts Payable
15618 SW 72nd Ave
Tigard, OR 97224

Report to: Andrew Bisbee

Email To: Andrew.Bisbee@apexcos.com

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: 503-924-4704

Client Project # 32-23010077

Lab Project # ASHCREPOR-BISBEE

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-23010077

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day STANDARD

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 10 of 20

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
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SDG # L1765061

Table #

Acctnum: ASHCREPOR
Template: T249306
Prelogin: P1063626
PM: 110 - Brian Ford
PB: MV 3/19/24

Shipped Via: FedEX Ground

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-4E-5-1 | Grab | SS | 0-1 | 4/8/24 | 1615 | 1 | | | | | ARCHIVE | -91 |
| DU-4E-5-2 | Grab | SS | 1-2 | 4/8/24 | 1620 | 1 | | | | | ↓ | -92 |
| DU-4E-5-3 | Grab | SS | 2-3 | 4/8/24 | 1623 | 1 | | | | | ↓ | -93 |
| DU-4E-COMP-1 | COMP | SS | 0-1 | 4/8/24 | 1625 | 2 | X | X | X | X | ↓ | -94 |
| DU-4E-COMP-2 | COMP | SS | 1-2 | 4/8/24 | 1630 | 2 | | | X | | RUN DX, HOLD FOR 95 FOLLOW-UP | |
| DU-4E-COMP-3 | COMP | SS | 2-3 | 4/8/24 | 1635 | 2 | | | X | | ↓ | -96 |
| DU-4F-1-1 | Grab | SS | 0-1 | 4/9/24 | 820 | 1 | | | | | ARCHIVE | -97 |
| DU-4F-1-2 | Grab | SS | 1-2 | 4/9/24 | 825 | 1 | | | | | ↓ | -98 |
| DU-4F-1-3 | Grab | SS | 2-3 | 4/9/24 | 828 | 1 | | | | | ↓ | -99 |
| DU-4F-2-1 | Grab | SS | 0-1 | 4/9/24 | 830 | 1 | | | | | ↓ | -100 |

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: *Client: list metals needed=

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP X Y __N
COC Signed/Accurate: X Y __N
Bottles arrive intact: X Y __N
Correct bottles used: X Y __N
Sufficient volume sent: X Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: X Y __N

| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR | |
|---|---|---|---|---|---|
| | 4-12-24 | 12:00 | | | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: | If preservation required by Login: Date/Time |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 | Hold: Condition: NCF / OK |

**Apex Companies, LLC - Portland, OR**

15618 SW 72nd Ave
Tigard, OR 97224

Billing Information:
Accounts Payable
15618 SW 72nd Ave
Tigard, OR 97224

Pres Chk

Report to: Andrew Bisbee

Email To: Andrew.Bisbee@apexcos.com

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: 503-924-4704

Client Project # 32-23010077

Lab Project # ASHCREPOR-BISBEE

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-23010077

Collected by (signature):

Immediately Packed on Ice N ___ Y X

*Rush?* (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day STANDARD

Quote #

Date Results Needed

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-4F-2-2 | Grab | SS | 1-2 | 4/9/24 | 835 | 1 | | | X | X | | -101 |
| DU-4F-2-3 | Grab | SS | 2-3 | 4/9/24 | 838 | 1 | | | | | ARCHIVE | -102 |
| DU-4F-3-1 | Grab | SS | 0-1 | 4/9/24 | 845 | 1 | | | | | | -103 |
| DU-4F-3-2 | Grab | SS | 1-2 | 4/9/24 | 850 | 1 | | | | | | -104 |
| DU-4F-3-3 | Grab | SS | 2-3 | 4/9/24 | 853 | 1 | | | | | | -105 |
| DU-4F-4-1 | Grab | SS | 0-1 | 4/9/24 | 900 | 1 | | | | | | -106 |
| DU-4F-4-2 | Grab | SS | 1-2 | 4/9/24 | 905 | 1 | | | | | | -107 |
| DU-4F-4-3 | Grab | SS | 2-3 | 4/9/24 | 908 | 1 | | | | | | -108 |
| DU-4F-5-1 | Grab | SS | 0-1 | 4/9/24 | 920 | 1 | | | | | | -109 |
| DU-4F-5-2 | Grab | SS | 1-2 | 4/9/24 | 925 | 1 | | | X | X | | -110 |

Analysis / Container / Preservative

Chain of Custody Page 1 of 20

Pace
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SDG # L1755061

Table #

Acctnum: ASHCREPOR
Template: T249306
Prelogin: P1063626
PM: 110 - Brian Ford
PB: MV 3/19/24

Shipped Via: FedEX Ground

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: *Client: list metals needed=

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP X N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: Y __N

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR | |
|---|---|---|---|---|---|
| | 4-12-24 | 12:00 | | | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: | If preservation required by Login: Date/Time |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 | Hold: Condition: NCF / OK |

**Apex Companies, LLC - Portland, OR**

15618 SW 72nd Ave
Tigard, OR 97224

Billing information:
Accounts Payable
15618 SW 72nd Ave
Tigard, OR 97224

Report to: Andrew Bisbee

Email To: Andrew.Bisbee@apexcos.com

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: 503-924-4704

Client Project # 32-2301007?

Lab Project # ASHCREPOR-BISBEE

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-2301007?

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day STANDARD

Quote #

Date Results Needed

Analysis / Container / Preservative

Pres Chk

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-4F-5-3 | Grab | SS | 2-3 | 4/9/24 | 908 | 1 | | | | | ARCHIVE | -111 |
| DU 4F - COMP-1 | COMP | SS | 0-1 | 4/9/24 | 930 | 2 | X | X | X | X | | -112 |
| DU-4F-COMP-2 | COMP | SS | 1-2 | 4/9/24 | 935 | 2 | | | X | | RUN Dx, HOLD FOR FOLLOW UP | -113 |
| DU-4F-COMP-3 | COMP | SS | 2-3 | 4/9/24 | 940 | 2 | | | X | | | -114 |
| DU-4G-1-1 | Grab | SS | 0-1 | 4/9/24 | 1010 | 1 | | | | | ARCHIVE | -115 |
| DU-4G-1-2 | Grab | SS | 1-2 | 4/9/24 | 1015 | 1 | | | | | | -116 |
| DU-4G-1-3 | Grab | SS | 2-3 | 4/9/24 | 1018 | 1 | | | | | | -117 |
| DU-4G-2-1 | Grab | SS | 0-1 | 4/9/24 | 1000 | 1 | | | | | | -118 |
| DU-4G-2-2 | Grab | SS | 1-2 | 4/9/24 | 1005 | 1 | | | | | | -119 |
| DU-4G-2-3 | Grab | SS | 2-3 | 4/9/24 | 1008 | 1 | | | | | | -120 |

Chain of Custody Page 12 of 20

Pace
PEOPLE ADVANCING SCIENCE

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SDG # L1765561

Table #

Acctnum: ASHCREPOR
Template: T249306
Prelogin: P1063626
PM: 110 - Brian Ford
PB: MV 3/19/24

Shipped Via: FedEX Ground

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:*Client: list metals needed=

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP X Y __N
COC Signed/Accurate: X Y __N
Bottles arrive intact: X Y __N
Correct bottles used: X Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR | |
|---|---|---|---|---|---|
| | 4-12-24 | 12:00 | | | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: | If preservation required by Login: Date/Time |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 | Hold: Condition: NCF / OK |

**Apex Companies, LLC - Portland, OR**

15618 SW 72nd Ave
Tigard, OR 97224

Billing Information:
Accounts Payable
15618 SW 72nd Ave
Tigard, OR 97224

Report to: Andrew Bisbee

Email To: Andrew.Bisbee@apexcos.com

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: 503-924-4704

Client Project # 32-230100T7

Lab Project # ASHCREPOR-BISBEE

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-230100T7

Collected by (signature):

Immediately Packed on Ice N ___ Y X

*Rush?* (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day STANDARD

Quote #

Date Results Needed

Analysis / Container / Preservative

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-46-3-1 | Grab | SS | 0-1 | 4/9/24 | 1040 | 1 | | | | | ARCHIVE | -121 |
| DU-46-3-2 | Grab | SS | 1-2 | 4/9/24 | 1045 | 1 | | | | | | -122 |
| DU-46-3-3 | Grab | SS | 2-3 | 4/9/24 | 1048 | 1 | | | | | | -123 |
| DU-46-4-1 | Grab | SS | 0-1 | 4/9/24 | 1150 | 1 | | | | | | -124 |
| DU-46-4-2 | Grab | SS | 1-2 | 4/9/24 | 1155 | 1 | | | | | | -125 |
| DU-46-4-3 | Grab | SS | 2-3 | 4/9/24 | 1158 | 1 | | | | | | -126 |
| DU-46-5-1 | Grab | SS | 0-1 | 4/9/24 | 1100 | 1 | | | | | | -127 |
| DU-46-5-2 | Grab | SS | 1-2 | 4/9/24 | 1105 | 1 | | | | | | -128 |
| DU-46-5-3 | Grab | SS | 2-3 | 4/9/24 | 1108 | 1 | | | | | | -129 |
| DU-46-COMP-1 | COMP | SS | 0-1 | 4/9/24 | 1200 | 2 | X | X | X | X | | -130 |

Pace
PEOPLE ADVANCING SCIENCE

**MT JULIET, TN**

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SDG # L1725561

Table #

Acctnum: ASHCREPOR

Template: T249306

Prelogin: P1063626

PM: 110 - Brian Ford

PB: MV 3/19/24

Shipped Via: FedEX Ground

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:*Client: list metals needed=

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist

| | | |
|---|---|---|
| COC Seal Present/Intact: | NP | Y N |
| COC Signed/Accurate: | | Y N |
| Bottles arrive intact: | | Y N |
| Correct bottles used: | | Y N |
| Sufficient volume sent: | | Y N |
| If Applicable | | |
| VOA Zero Headspace: | | Y N |
| Preservation Correct/Checked: | | Y N |
| RAD Screen <0.5 mR/hr: | | Y N |

| | | | | | |
|---|---|---|---|---|---|
| Relinquished by : (Signature) | Date: 4-12-24 | Time: 12:00 | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: | If preservation required by Login: Date/Time |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 | Hold: Condition: NCF / OK |

**Apex Companies, LLC - Portland, OR**

15618 SW 72nd Ave
Tigard, OR 97224

Billing Information:
Accounts Payable
15618 SW 72nd Ave
Tigard, OR 97224

Report to: **Andrew Bisbee**

Email To: **Andrew.Bisbee@apexcos.com**

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: **503-924-4704**

Client Project # 32-2301077

Lab Project # ASHCREPOR-BISBEE

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-2301077

Collected by (signature):

Immediately Packed on Ice N ___ Y X

***Rush?*** (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day STANDARD

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 14 of 20

Pace
PEOPLE ADVANCING SCIENCE

**MT JULIET, TN**
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SDG # L1765061

Table #

Acctnum: ASHCREPOR
Template: T249306
Prelogin: P1063626
PM: 110 - Brian Ford
PB: MV 3/19/24
Shipped Via: FedEX Ground

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-4G-COMP-2 | COMP | SS | 1-2 | 4/9/24 | 1205 | 2 | | | X | | RUN Dx, HOLD FOR FOLLOW-UP | -131 |
| DU-4G-COMP-3 | COMP | SS | 2-3 | 4/9/24 | 1210 | 2 | | | X | | ↓ | -132 |
| DU-4H-1-1 | Grab | SS | 0-1 | 4/9/24 | 1300 | 1 | | | | | ARCHIVE | -133 |
| DU-4H-1-2 | Grab | SS | 1-2 | 4/9/24 | 1305 | 1 | | | | | | -134 |
| DU-4H-1-3 | Grab | SS | 2-3 | 4/9/24 | 1308 | 1 | | | | | | -135 |
| DU-4H-2-1 | Grab | SS | 0-1 | 4/9/24 | 1240 | 1 | | | | | | -136 |
| DU-4H-2-2 | Grab | SS | 1-2 | 4/9/24 | 1245 | 1 | | | | | | -137 |
| DU-4H-2-3 | Grab | SS | 2-3 | 4/9/24 | 1248 | 1 | | | | | | -138 |
| DU-4H-3-1 | Grab | SS | 0-1 | 4/9/24 | 1250 | 1 | | | | | | -139 |
| DU-4H-3-2 | Grab | SS | 1-2 | 4/9/24 | 1255 | 1 | | | | | ↓ | -140 |

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

**Remarks:*Client: list metals needed=**

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: __Y __N

| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR | |
|---|---|---|---|---|---|
| | 4-12-24 | 12:00 | | | |
| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: | If preservation required by Login: Date/Time |
| Relinquished by: (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 | Hold: Condition: NCF / OK |

Company Name/Address:
**Apex Companies, LLC - Portland, OR**

15618 SW 72nd Ave
Tigard, OR 97224

Billing Information:
Accounts Payable
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Tigard, OR 97224

Pres Chk

Report to: **Andrew Bisbee**

Email To: **Andrew.Bisbee@apexcos.com**

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: **503-924-4704**

Client Project # 32-23010077

Lab Project # ASHCREPOR-BISBEE

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-23010077

Collected by (signature):

Immediately Packed on Ice N ___ Y X

**Rush?** (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day STANDARD

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 5 of 20

Pace
PEOPLE ADVANCING SCIENCE

**MT JULIET, TN**
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1755601

Table #

Acctnum: ASHCREPOR
Template: T249306
Prelogin: P1063626
PM: 110 - Brian Ford
PB: MV 3/19/24
Shipped Via: FedEX Ground

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-4H-3-3 | Grab | SS | 2-3 | 4/9/24 | 1258 | 1 | | | | | ARCHIVE | -141 |
| DU-4H-4-1 | Grab | SS | 0-1 | 4/9/24 | 1325 | 1 | | | | | | -142 |
| DU-4H-4-2 | Grab | SS | 1-2 | 4/9/24 | 1330 | 1 | | | | | | -143 |
| DU-4H-4-3 | Grab | SS | 2-3 | 4/9/24 | 1333 | 1 | | | | | | -144 |
| DU-4H-5-1 | Grab | SS | 0-1 | 4/9/24 | 1340 | 1 | | | | | | -145 |
| DU-4H-5-2 | Grab | SS | 1-2 | 4/9/24 | 1345 | 1 | | | | | | -146 |
| DU-4H-5-3 | Grab | SS | 2-3 | 4/9/24 | 1348 | 1 | | | | | | -147 |
| DU-4H-COMP-1 | COMP | SS | 0-1 | 4/9/24 | 1350 | 2 | X | X | X | X | | -148 |
| DU-4H-COMP-2 | COMP | SS | 1-2 | 4/9/24 | 1355 | 2 | | | X | | RUN Dx, HOLD FOR FOLLOW-UP | -149 |
| DU-4H-COMP-3 | COMP | SS | 2-3 | 4/9/24 | 1400 | 2 | | | X | | | -150 |

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: *Client: list metals needed=

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP X Y __N
COC Signed/Accurate: X Y __N
Bottles arrive intact: X Y __N
Correct bottles used: X Y __N
Sufficient volume sent: X Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: X Y __N

| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR | |
|---|---|---|---|---|---|
| | 4-12-24 | 12:00 | | | |
| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: | If preservation required by Login: Date/Time |
| Relinquished by: (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 | Hold: Condition: NCF / OK |

Apex Companies, LLC - Portland, OR

15618 SW 72nd Ave
Tigard, OR 97224

Billing Information:
Accounts Payable
15618 SW 72nd Ave
Tigard, OR 97224

Pres Chk

Report to: Andrew Bisbee

Email To: Andrew.Bisbee@apexcos.com

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: 503-924-4704

Client Project # 32-23010077

Lab Project # ASHCREPOR-BISBEE

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-23010077

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day STANDARD

Quote #

Date Results Needed

Analysis / Container / Preservative

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-4I-1-1 | Grab | SS | 0-1 | 4/9/24 | 1430 | 1 | | | | | ARCHIVE | -151 |
| DU-4I-1-2 | Grab | SS | 1-2 | 4/9/24 | 1435 | 1 | | | | | | -152 |
| DU-4I-1-3 | Grab | SS | 2-3 | 4/9/24 | 1438 | 1 | | | | | | -153 |
| DU-4I-2-1 | Grab | SS | 0-1 | 4/9/24 | 1440 | 1 | | | | | | -154 |
| DU-4I-2-2 | Grab | SS | 1-2 | 4/9/24 | 1445 | 1 | | | | | | -155 |
| DU-4I-2-3 | Grab | SS | 2-3 | 4/9/24 | 1448 | 1 | | | | | | -156 |
| DU-4I-3-1 | Grab | SS | 0-1 | 4/9/24 | 1500 | 1 | | | | | | -157 |
| DU-4I-3-2 | Grab | SS | 1-2 | 4/9/24 | 1505 | 1 | | | | | | -158 |
| DU-4I-3-3 | Grab | SS | 2-3 | 4/9/24 | 1508 | 1 | | | | | | -159 |
| DU-4I-4-1 | Grab | SS | 0-1 | 4/9/24 | 1420 | 1 | | | | | | -160 |

Chain of Custody Page 10 of 20

Pace
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MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
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SDG # L1725561

Table #

Acctnum: ASHCREPOR
Template: T249306
Prelogin: P1063626
PM: 110 - Brian Ford
PB: MV 3/19/24

Shipped Via: FedEX Ground

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ____

Remarks: *Client: list metals needed=

pH ____ Temp ____

Flow ____ Other ____

Samples returned via:
__ UPS __ FedEx __ Courier ____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: __Y __N

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR | If preservation required by Login: Date/Time |
|---|---|---|---|---|---|
| | 4-12-24 | 12:00 | | | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: | |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 | Hold: Condition: NCF / OK |

Chain of Custody Page 17 of 20

**Apex Companies, LLC - Portland, OR**
15618 SW 72nd Ave
Tigard, OR 97224

Billing Information:
Accounts Payable
15618 SW 72nd Ave
Tigard, OR 97224

Pres Chk

Report to: **Andrew Bisbee**

Email To: **Andrew.Bisbee@apexcos.com**

Project Description: KING SAUSAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: **503-924-4704**

Client Project # 32-23010077

Lab Project # ASHCREPOR-BISBEE

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-23010077

Collected by (signature):

Immediately Packed on Ice N ___ Y X

***Rush?*** (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day STANDARD

Quote #

Date Results Needed

Analysis / Container / Preservative

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-4I-4-2 | Grab | SS | 1-2 | 4/9/24 | 1425 | 1 | | | | | ARCHIVE | -161 |
| DU-4I-4-3 | Grab | SS | 2-3 | 4/9/24 | 1428 | 1 | | | | | | -162 |
| DU-4I-5-1 | Grab | SS | 0-1 | 4/9/24 | 1510 | 1 | | | | | | -163 |
| DU-4I-5-2 | Grab | SS | 1-2 | 4/9/24 | 1515 | 1 | | | | | | -164 |
| DU-4I-5-3 | Grab | SS | 2-3 | 4/9/24 | 1518 | 1 | | | | | | -165 |
| DU-4I-COMP-1 | COMP | SS | 0-1 | 4/9/24 | 1520 | 2 | X | X | X | X | | -166 |
| DU-4I-COMP-2 | COMP | SS | 1-2 | 4/9/24 | 1525 | 2 | | | X | | RUN DX, HOLD FOR FOLLOW-UP | -167 |
| DU-4I-COMP-3 | COMP | SS | 2-3 | 4/9/24 | 1535 | 2 | | | X | | | -168 |
| DU-5-SS-1 | Grab | SS | 0-0.5 | 4/10/24 | 1415 | 1 | | | | | ARCHIVE | -169 |
| DU-5-SS-2 | Grab | SS | 0-0.5 | 4/10/24 | 1420 | 1 | | | | | | -170 |

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other

Remarks: *Client: list metals needed=

pH ___ Temp ___
Flow ___ Other ___

Samples returned via:
__ UPS __ FedEx __ Courier ___

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP X Y N
COC Signed/Accurate: X Y N
Bottles arrive intact: X Y N
Correct bottles used: X Y N
Sufficient volume sent: X Y N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: X Y N

| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR |
|---|---|---|---|---|
| | 4-12-24 | 12:00 | | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 |

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Pace
PEOPLE ADVANCING SCIENCE

**MT JULIET, TN**
12065 Lebanon Rd Mount Juliet, TN 37122
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SDG # L1725561

Table #

Acctnum: ASHCREPOR
Template: T249306
Prelogin: P1063626
PM: 110 - Brian Ford
PB: mv 3/19/24
Shipped Via: FedEX Ground

**Apex Companies, LLC - Portland, OR**

15618 SW 72nd Ave
Tigard, OR 97224

Accounts Payable
15618 SW 72nd Ave
Tigard, OR 97224

Report to: **Andrew Bisbee**

Email To: **Andrew.Bisbee@apexcos.com**

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: **503-924-4704**

Client Project # 32-23010077

Lab Project # ASHCREPOR-BISBEE

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-23010077

Collected by (signature):

Immediately Packed on Ice N ___ Y X

***Rush?*** (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day STANDARD

Date Results Needed

Quote #

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-5-SS-3 | Grab | SS | 0-0.5 | 4/10/24 | 1425 | 1 | | | | | ARCHIVE | -171 |
| DU-5-SS-4 | Grab | SS | 0-0.5 | 4/10/24 | 1430 | 1 | | | | | ↓ | -172 |
| DU-5-SS-5 | Grab | SS | 0-0.5 | 4/10/24 | 1435 | 1 | | | | | | -173 |
| DU-5-SS-COMP-1 | COMP | SS | 0-0.5 | 4/10/24 | 1440 | 2 | X | X | X | X | | -174 |
| DU-6-1-1 | Grab | SS | 0-1 | 4/10/24 | 900 | 1 | | | | | ARCHIVE | -175 |
| DU-6-1-2 | Grab | SS | 1-2 | 4/10/24 | 905 | 1 | | | | | ↓ | -176 |
| DU-6-1-5 | Grab | SS | 2-5 | 4/10/24 | 908 | 1 | | | | | | -177 |
| DU-6-2-1 | Grab | SS | 0-1 | 4/10/24 | 920 | 1 | | | | | | -178 |
| DU-6-2-2 | Grab | SS | 1-2 | 4/10/24 | 925 | 1 | | | | | | -179 |
| DU-6-2-5 | Grab | SS | 2-5 | 4/10/24 | 928 | 1 | | | | | ↓ | -180 |

Chain of Custody Page 18 of 20

Pace
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SDG # L1755561

Table #

Acctnum: ASHCREPOR
Template: T249306
Prelogin: P1063626
PM: 110 - Brian Ford
PB: MV 3/19/24
Shipped Via: FedEX Ground

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

**Remarks:*Client: list metals needed=**

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR | |
|---|---|---|---|---|---|
| | 4-12-24 | 12:00 | | | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: | If preservation required by Login: Date/Time |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 | Hold: Condition: NCF / OK |

Apex Companies, LLC - Portland, OR

15618 SW 72nd Ave
Tigard, OR 97224

Billing Information:
Accounts Payable
15618 SW 72nd Ave
Tigard, OR 97224

Pres
Chk

Report to: Andrew Bisbee

Email To: Andrew.Bisbee@apexcos.com

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: 503-924-4704

Client Project # 32-23010077

Lab Project # ASHCREPOR-BISBEE

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-23010077

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed: STANDARD

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-6-3-1 | Grab | SS | 0-1 | 4/10/24 | 935 | 1 | | | | | ARCHIVE | -181 |
| DU-6-3-2 | Grab | SS | 1-2 | 4/10/24 | 940 | 1 | | | | | | -182 |
| DU-6-3-5 | Grab | SS | 2-5 | 4/10/24 | 943 | 1 | | | | | | -183 |
| DU-6-COMP-1 | COMP | SS | 0-1 | 4/10/24 | 950 | 2 | X | X | X | X | | -184 |
| DU-6-COMP-2 | COMP | SS | 1-2 | 4/10/24 | 1000 | 2 | | | X | | RUN DX, HOLD FOR FOLLOW-UP | |
| DU-6-COMP-5 | COMP | SS | 2-5 | 4/10/24 | 1010 | 2 | | | X | | | -185 |
| DU-6-SS-1 | Grab | SS | 0-0.5 | 4/10/24 | 1305 | 1 | | | | | ARCHIVE | -187 |
| DU-6-SS-2 | Grab | SS | 0-0.5 | 4/10/24 | 1310 | 1 | | | | | | -188 |
| DU-6-SS-3 | Grab | SS | 0-0.5 | 4/10/24 | 1315 | 1 | | | | | | -189 |
| DU-6-SS-4 | Grab | SS | 0-0.5 | 4/10/24 | 1320 | 1 | | | | | | -190 |

Analysis / Container / Preservative

Chain of Custody Page 19 of 20

Pace
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MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
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SDG # L1755261

Table #

Acctnum: ASHCREPOR

Template: T249306

Prelogin: P1063626

PM: 110 - Brian Ford

PB: MV 3/19/24

Shipped Via: FedEX Ground

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other

Remarks: *Client: list metals needed=

pH ____ Temp ____

Flow ____ Other ____

Samples returned via:
__ UPS __ FedEx __ Courier ____

Tracking #

Sample Receipt Checklist

| | | |
|---|---|---|
| COC Seal Present/Intact: | NP | Y N |
| COC Signed/Accurate: | | Y N |
| Bottles arrive intact: | | Y N |
| Correct bottles used: | | Y N |
| Sufficient volume sent: | | Y N |
| If Applicable | | |
| VOA Zero Headspace: | | Y N |
| Preservation Correct/Checked: | | Y N |
| RAD Screen <0.5 mR/hr: | | Y N |

| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR | If preservation required by Login: Date/Time |
|---|---|---|---|---|---|
| | 4-12-24 | 12:00 | | | |
| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: | |
| Relinquished by: (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 | Hold: Condition: NCF / OK |

**Apex Companies, LLC - Portland, OR**

15618 SW 72nd Ave
Tigard, OR 97224

Billing Information:
Accounts Payable
15618 SW 72nd Ave
Tigard, OR 97224

Pres / Chk

Report to: **Andrew Bisbee**

Email To: **Andrew.Bisbee@apexcos.com**

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: **503-924-4704**

Client Project # 32-23010077

Lab Project # ASHCREPOR-BISBEE

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-23010077

Collected by (signature):

Immediately Packed on Ice N ___ Y X

***Rush?*** (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day STANDARD

Quote #

Date Results Needed

Analysis / Container / Preservative

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | HOLD | | | | | | | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ~~DW-4C-3-3~~ DX | Grab | SS | | 4/8/24 | 1428 | 1 | | | | | | | | | | | | | |
| ~~DW-4C-5-1~~ DX | | SS | | | | | | | | | | | | | | | | | |
| ~~DW-4C-5-2~~ DX | | SS | | | | | | | | | | | | | | | | | |
| ~~DW-4C-5-3~~ DX | | SS | | | | | | | | | | | | | | | | | |
| DU-6-SS-5 | Grab | SS | 0-0.5 | 4/10/24 | 1325 | 1 | | | | | | | | | | | | ARCHIVE-191 | |
| DU-6-SS-COMP-1 | COMP | SS | 0-0.5 | 4/10/24 | 1330 | 2 | X | X | X | X | | | | | | | | -192 | |
| IDW | COMP | SS | 0-5 | 4/10/24 | 1400 | 2 | X | | | | X | | | | | | | -193 RUN METALS/HOLD HOLD FOR FOLLOW-UP | |
| | | SS | | | | | | | | | | | | | | | | | |
| | | SS | | | | | | | | | | | | | | | | | |
| | | SS | | | | | | | | | | | | | | | | | |

* Matrix:
**SS** - Soil **AIR** - Air **F** - Filter
**GW** - Groundwater **B** - Bioassay
**WW** - WasteWater
**DW** - Drinking Water
**OT** - Other_____

**Remarks:*Client: list metals needed=**

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR |
|---|---|---|---|---|
| | 4-12-24 | 12:00 | | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 |

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Sample Receipt Checklist

| | | |
|---|---|---|
| COC Seal Present/Intact: | NP | Y N |
| COC Signed/Accurate: | | Y N |
| Bottles arrive intact: | | Y N |
| Correct bottles used: | | Y N |
| Sufficient volume sent: | | Y N |
| If Applicable | | |
| VOA Zero Headspace: | | Y N |
| Preservation Correct/Checked: | | Y N |
| RAD Screen <0.5 mR/hr: | | Y N |

Chain of Custody Page 20 of 20

Pace
PEOPLE ADVANCING SCIENCE

**MT JULIET, TN**
12065 Lebanon Rd Mount Juliet, TN 37122
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SDG # L1725561

Table #

Acctnum: ASHCREPOR
Template: T249306
Prelogin: P1063626
PM: 110 - Brian Ford
PB: MV 3/19/24
Shipped Via: FedEx Ground

LI725561

| Tracking Numbers | DPA7 Temperature |
|---|---|
| 7320 9668 3780 | 0.4 + 0.1 = 0.5 |
| 7320 9668 3840 | 5.5 + 0.1 = 5.6 |
| 7320 9668 3872 | 5.5 + 0.1 = 5.6 |
| 7320 9668 3861 | 0.2 + 0.1 = 0.3 |
| 7320 9668 3839 | 2.6 + 0.1 = 2.7 |
| 7320 9668 3806 | 0.1 + 0.1 = 0.2 |
| 7320 9668 3850 | 1.2 + 0.1 = 1.3 |
| 7320 9668 3770 | 3.2 + 0.1 = 3.3 |
| 7320 9668 3791 | 0.3 + 0.1 = 0.4 |
| 7320 9668 3828 | 1.3 + 0.1 = 1.4 |
| 7320 9668 3817 | 5.5 + 0.1 = 5.6 |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

Name _____ Date _____

# ANALYTICAL REPORT

April 29, 2024



## Oregon Dept. of Env. Quality - ODEQ

| | |
|---|---|
| Sample Delivery Group: | L1725562 |
| Samples Received: | 04/13/2024 |
| Project Number: | 32-23010077 |
| Description: | King Salvage |
| Report To: | Andrew Bisbee |

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

# TABLE OF CONTENTS

## DU-3-SS-COMP-1 L1725562-01 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/10/24 13:45 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Subcontracted Analyses | WG2267310 | 1 | 04/26/24 00:00 | 04/26/24 00:00 | - | Minneapolis, MN 55414 |

## DU-4A-COMP-1 L1725562-02 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/08/24 12:30 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Subcontracted Analyses | WG2267310 | 1 | 04/26/24 00:00 | 04/26/24 00:00 | - | Minneapolis, MN 55414 |

## DU-4B-COMP-1 L1725562-03 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/10/24 12:33 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Subcontracted Analyses | WG2267310 | 1 | 04/26/24 00:00 | 04/26/24 00:00 | - | Minneapolis, MN 55414 |

## DU-4C-COMP-1 L1725562-04 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/08/24 15:00 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Subcontracted Analyses | WG2267310 | 1 | 04/26/24 00:00 | 04/26/24 00:00 | - | Minneapolis, MN 55414 |

## DU-4D-COMP-1 L1725562-05 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/09/24 16:35 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Subcontracted Analyses | WG2267310 | 1 | 04/26/24 00:00 | 04/26/24 00:00 | - | Minneapolis, MN 55414 |

## DU-4E-COMP-1 L1725562-06 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/08/24 16:25 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Subcontracted Analyses | WG2267310 | 1 | 04/26/24 00:00 | 04/26/24 00:00 | - | Minneapolis, MN 55414 |

## DU-4F-COMP-1 L1725562-07 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/09/24 09:30 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Subcontracted Analyses | WG2267310 | 1 | 04/26/24 00:00 | 04/26/24 00:00 | - | Minneapolis, MN 55414 |

## DU-4G-COMP-1 L1725562-08 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/09/24 12:00 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Subcontracted Analyses | WG2267310 | 1 | 04/26/24 00:00 | 04/26/24 00:00 | - | Minneapolis, MN 55414 |

## DU-4H-COMP-1 L1725562-09 Solid

Collected by: Andrew Bisbee
Collected date/time: 04/09/24 13:50
Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Subcontracted Analyses | WG2267310 | 1 | 04/26/24 00:00 | 04/26/24 00:00 | - | Minneapolis, MN 55414 |

## DU-4I-COMP-1 L1725562-10 Solid

Collected by: Andrew Bisbee
Collected date/time: 04/09/24 15:20
Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Subcontracted Analyses | WG2267310 | 1 | 04/26/24 00:00 | 04/26/24 00:00 | - | Minneapolis, MN 55414 |

## DU-5-SS-COMP-1 L1725562-11 Solid

Collected by: Andrew Bisbee
Collected date/time: 04/10/24 14:40
Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Subcontracted Analyses | WG2267310 | 1 | 04/26/24 00:00 | 04/26/24 00:00 | - | Minneapolis, MN 55414 |

## DU-6-COMP-1 L1725562-12 Solid

Collected by: Andrew Bisbee
Collected date/time: 04/10/24 09:50
Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Subcontracted Analyses | WG2267310 | 1 | 04/26/24 00:00 | 04/26/24 00:00 | - | Minneapolis, MN 55414 |

## DU-6-SS-COMP-1 L1725562-13 Solid

Collected by: Andrew Bisbee
Collected date/time: 04/10/24 13:30
Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Subcontracted Analyses | WG2267310 | 1 | 04/26/24 00:00 | 04/26/24 00:00 | - | Minneapolis, MN 55414 |

# CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

## Project Narrative

L1725562 -01, -02, -03, -04, -05, -06, -07, -08, -09, -10, -11, -12, -13 contains subout data that is included after the chain of custody.

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

## Abbreviations and Definitions

| | |
|---|---|
| SDG | Sample Delivery Group. |
| Uncertainty (Radiochemistry) | Confidence level of 2 sigma. |
| Case Narrative (Cn) | A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report. |
| Quality Control Summary (Qc) | This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material. |
| Sample Chain of Custody (Sc) | This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis. |
| Sample Results (Sr) | This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported. |
| Sample Summary (Ss) | This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis. |

## Qualifier Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

# ACCREDITATIONS & LOCATIONS

## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

| | | | |
|---|---|---|---|
| Alabama | 40660 | Nebraska | NE-OS-15-05 |
| Alaska | 17-026 | Nevada | TN000032021-1 |
| Arizona | AZ0612 | New Hampshire | 2975 |
| Arkansas | 88-0469 | New Jersey–NELAP | TN002 |
| California | 2932 | New Mexico [1] | TN00003 |
| Colorado | TN00003 | New York | 11742 |
| Connecticut | PH-0197 | North Carolina | Env375 |
| Florida | E87487 | North Carolina [1] | DW21704 |
| Georgia | NELAP | North Carolina [3] | 41 |
| Georgia [1] | 923 | North Dakota | R-140 |
| Idaho | TN00003 | Ohio–VAP | CL0069 |
| Illinois | 200008 | Oklahoma | 9915 |
| Indiana | C-TN-01 | Oregon | TN200002 |
| Iowa | 364 | Pennsylvania | 68-02979 |
| Kansas | E-10277 | Rhode Island | LAO000356 |
| Kentucky [1 6] | KY90010 | South Carolina | 84004002 |
| Kentucky [2] | 16 | South Dakota | n/a |
| Louisiana | AI30792 | Tennessee [1 4] | 2006 |
| Louisiana | LA018 | Texas | T104704245-20-18 |
| Maine | TN00003 | Texas [5] | LAB0152 |
| Maryland | 324 | Utah | TN000032021-11 |
| Massachusetts | M-TN003 | Vermont | VT2006 |
| Michigan | 9958 | Virginia | 110033 |
| Minnesota | 047-999-395 | Washington | C847 |
| Mississippi | TN00003 | West Virginia | 233 |
| Missouri | 340 | Wisconsin | 998093910 |
| Montana | CERT0086 | Wyoming | A2LA |
| A2LA – ISO 17025 | 1461.01 | AIHA-LAP,LLC EMLAP | 100789 |
| A2LA – ISO 17025 [5] | 1461.02 | DOD | 1461.01 |
| Canada | 1461.01 | USDA | P330-15-00234 |
| EPA–Crypto | TN00003 | | |

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Companies, LLC - Portland, OR

15618 SW 72nd Ave
Tigard, OR 97224

Accounts Payable
15618 SW 72nd Ave
Tigard, OR 97224

Report to: Andrew Bisbee

Email To: Andrew.Bisbee@apexcos.com

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: 503-924-4704

Client Project # 32-23010077

Lab Project # ASHCREPOR-BISBEE

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-23010077

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres |
|---|---|---|---|---|---|---|---|---|---|---|
| DU-3-SS-1 | Grab | SS | 0-0.5 | 4/10/24 | 1345 | 1 | | | | |
| DU-3-SS-2 | Grab | SS | " | 4/10/24 | 1350 | 1 | | | | |
| DU-3-SS-3 | Grab | SS | " | 4/10/24 | 1355 | 1 | | | | |
| DU-3-SS-4 | Grab | SS | " | 4/10/24 | 1400 | 1 | | | | |
| DU-3-SS-5 | Grab | SS | " | 4/10/24 | 1405 | 1 | | | | |
| DU-3-SS-COMP-1 | comp | SS | ↓ | 4/10/24 | 1410 | 2 | X | X | X | X |
| DU-4A-1-1 | Grab | SS | 0-1 | 4/8/24 | 1115 | 1 | | | | |
| DU-4A-1-2 | Grab | SS | 1-2 | 4/8/24 | 1120 | 1 | | | | |
| DU-4A-1-3 | Grab | SS | 2-3 | 4/8/24 | 1128 | 1 | | | | |
| DU-4A-2-1 | Grab | SS | 0-1 | 4/8/24 | 1130 | 1 | | | | |

Chain of Custody Page 1 of 2

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SDG # L1725562

Table # M150

Acctnum: ASHCREPOR

Template: T249306

Prelogin: P1063626

PM: 110 - Brian Ford

PB: MV 3/19/24

Shipped Via: FedEX Ground

| Remarks | Sample # (lab only) |
|---|---|
| ARCHIVE ↓ | |
| | -01 |
| ARCHIVE ↓ | |

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: *Client: list metals needed=

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP X Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: X Y __N
RAD Screen <0.5 mR/hr: __Y __N

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) |
|---|---|---|---|
| | 4-12-24 | 12:00 | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) |

Trip Blank Received: Yes (No) HCL / MeoH TBR

Temp: °C Bottles Received: 125

Date: 4-13-24 Time: 0900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

**Apex Companies, LLC - Portland, OR**
15618 SW 72nd Ave
Tigard, OR 97224

**Accounts Payable**
15618 SW 72nd Ave
Tigard, OR 97224

Report to: **Andrew Bisbee**

Email To: **Andrew.Bisbee@apexcos.com**

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: **503-924-4704**

Client Project # 32-23010077

Lab Project # **ASHCREPOR-BISBEE**

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-23010077

Collected by (signature):

Immediately Packed on Ice N___ Y X

***Rush?*** (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres |
|---|---|---|---|---|---|---|---|---|---|---|
| DU-4A-2-2 | Grab | SS | 1-2 | 4/8/24 | 1135 | 1 | | | | |
| DU-4A-2-3 | Grab | SS | 2-3 | 4/8/24 | 1138 | 1 | | | | |
| DU-4A-3-1 | Grab | SS | 0-1 | 4/8/24 | 1140 | 1 | | | | |
| DU-4A-3-2 | Grab | SS | 1-2 | 4/8/24 | 1145 | 1 | | | | |
| DU-4A-3-3 | Grab | SS | 2-3 | 4/8/24 | 1148 | 1 | | | | |
| DU-4A-4-1 | Grab | SS | 0-1 | 4/8/24 | 1150 | 1 | | | | |
| DU-4A-4-2 | Grab | SS | 1-2 | 4/8/24 | 1155 | 1 | | | | |
| DU-4A-4-3 | Grab | SS | 2-3 | 4/8/24 | 1158 | 1 | | | | |
| DU-4A-5-1 | Grab | SS | 0-1 | 4/8/24 | 1215 | 1 | | | | |
| DU-4A-5-2 | Grab | SS | 1-2 | 4/8/24 | 1220 | 1 | | | | |

Analysis / Container / Preservative

Pres
Chk

Chain of Custody Page 2 of 2C

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SDG # L1755262

Table #

Acctnum: **ASHCREPOR**
Template: **T249306**
Prelogin: **P1063626**
PM: **110 - Brian Ford**
PB: MV 3/19/24

Shipped Via: **FedEX Ground**

| Remarks | Sample # (lab only) |
|---|---|
| ARCHIVE | |

* Matrix:
**SS** - Soil **AIR** - Air **F** - Filter
**GW** - Groundwater **B** - Bioassay
**WW** - WasteWater
**DW** - Drinking Water
**OT** - Other_____

**Remarks:*Client: list metals needed=**

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) |
|---|---|---|---|
| | 4-12-24 | 12:00 | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) |

Trip Blank Received: Yes / No
HCL / MeOH
TBR

Temp: °C Bottles Received:

Date: 4-13-24 Time: 0900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Chain of Custody Page 3 of 20

**Apex Companies, LLC - Portland, OR**
15618 SW 72nd Ave
Tigard, OR 97224

Accounts Payable
15618 SW 72nd Ave
Tigard, OR 97224

Report to: Andrew Bisbee
Email To: Andrew.Bisbee@apexcos.com

Project Description: KING SALVAGE
City/State Collected: TOLEDO, OR
Please Circle: PT MT CT ET

Phone: 503-924-4704
Client Project # 32-23010077
Lab Project # ASHCREPOR-BISBEE

Collected by (print): ANDREW BISBEE
Site/Facility ID #
P.O. # 32-23010077

Collected by (signature):
Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day
Date Results Needed
Quote #

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres |
|---|---|---|---|---|---|---|---|---|---|---|
| DU-4A-5-3 | Grab | SS | 2-3 | 4/8/24 | 1223 | 1 | | | | |
| DU-4A-COMP-1 | Comp | SS | 0-1 | 4/8/24 | 1230 | 2 | X | X | X | X |
| DU-4A-COMP-2 | Comp | SS | 1-2 | 4/8/24 | 1235 | 2 | | | X | |
| DU-4A-COMP-3 | Comp | SS | 2-3 | 4/8/24 | 1245 | 2 | | | X | |
| DU-4B-1-1 | Grab | SS | 0-1 | 4/10/24 | 1035 | 1 | | | | |
| DU-4B-1-2 | Grab | SS | 1-2 | 4/10/24 | 1040 | 1 | | | | |
| DU-4B-1-3 | Grab | SS | 2-3 | 4/10/24 | 1045 | 1 | | | | |
| DU-4B-2-1 | Grab | SS | 0-1 | 4/10/24 | 1055 | 1 | | | | |
| DU-4B-2-2 | Grab | SS | 1-2 | 4/10/24 | 1100 | 1 | | | | |
| DU-4B-2-3 | Grab | SS | 2-3 | 4/10/24 | 1105 | 1 | | | | |

Analysis / Container / Preservative

Pres
Chk

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SDG # L1755162
Table #
Acctnum: ASHCREPOR
Template: T249306
Prelogin: P1063626
PM: 110 - Brian Ford
PB: MV 3/19/24
Shipped Via: FedEx Ground

Remarks | Sample # (lab only)

ARCHIVE
-02
RUN DX, HOLD FOR FOLLOW-UP
ARCHIVE

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: *Client: list metals needed=

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____
Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) |
|---|---|---|---|
| | 4-12-24 | 12:00 | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) |

Trip Blank Received: Yes / No HCL / MeoH TBR
Temp: °C Bottles Received:
Date: 4-13-24 Time: 0900

If preservation required by Login: Date/Time
Hold:
Condition: NCF / OK

Apex Companies, LLC - Portland, OR

15618 SW 72nd Ave
Tigard, OR 97224

Accounts Payable
15618 SW 72nd Ave
Tigard, OR 97224

Report to: Andrew Bisbee

Email To: Andrew.Bisbee@apexcos.com

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: 503-924-4704

Client Project # 32-23010077

Lab Project # ASHCREPOR-BISBEE

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-23010077

Collected by (signature):

Quote #

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres |
|---|---|---|---|---|---|---|---|---|---|---|
| DU-4B-3-1 | Grab | SS | 0-1 | 4/10/24 | 1140 | 1 | | | | |
| DU-4B-3-2 | Grab | SS | 1-2 | 4/10/24 | 1145 | 1 | | | | |
| DU-4B-3-3 | Grab | SS | 2-3 | 4/10/24 | 1150 | 1 | | | | |
| DU-4B-4-1 | Grab | SS | 0-1 | 4/10/24 | 1205 | 1 | | | | |
| DU-4B-4-2 | Grab | SS | 1-2 | 4/10/24 | 1210 | 1 | | | | |
| DU-4B-4-3 | Grab | SS | 2-3 | 4/10/24 | 1215 | 1 | | | | |
| DU-4B-5-1 | Grab | SS | 0-1 | 4/10/24 | 1220 | 1 | | | | |
| DU-4B-5-2 | Grab | SS | 1-2 | 4/10/24 | 1225 | 1 | | | | |
| DU-4B-5-3 | Grab | SS | 2-3 | 4/10/24 | 1230 | 1 | | | | |
| DU-4B-COMP-1 | Comp | SS | 0-1 | 4/10/24 | 1233 | 2 | X | X | X | X |

Analysis / Container / Preservative

Pres Chk

Chain of Custody Page 4 of 4

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MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
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SDG # L1725162

Table #

Acctnum: ASHCREPOR
Template: T249306
Prelogin: P1063626
PM: 110 - Brian Ford
PB: MV 3/19/24
Shipped Via: FedEX Ground

| Remarks | Sample # (lab only) |
|---|---|
| ARCHIVE | |
| | -03 |

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: *Client: list metals needed=

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR | If preservation required by Login: Date/Time |
|---|---|---|---|---|---|
| | 4-12-24 | 12:00 | | | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: | |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 | Hold: Condition: NCF / OK |

Chain of Custody Page 5 of 40

**Apex Companies, LLC - Portland, OR**
15618 SW 72nd Ave
Tigard, OR 97224

Accounts Payable
15618 SW 72nd Ave
Tigard, OR 97224

Pres Chk

Report to: Andrew Bisbee

Email To: Andrew.Bisbee@apexcos.com

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: 503-924-4704

Client Project # 32-2301007?

Lab Project # ASHCREPOR-BISBEE

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-2301007?

Collected by (signature):

Immediately Packed on Ice N ___ Y X

*Rush?* (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres |
|---|---|---|---|---|---|---|---|---|---|---|
| DU-4B-COMP-2 | COMP | SS | 1-2 | 4/10/24 | 1235 | 2 | | | X | |
| DU-4B-COMP-3 | COMP | SS | 2-3 | 4/10/24 | 1240 | 2 | | | X | |
| DU-4C-1-1 | Grab | SS | 0-1 | 4/8/24 | 1350 | 1 | | | | |
| DU-4C-1-2 | Grab | SS | 1-2 | 4/8/24 | 1355 | 1 | | | | |
| DU-4C-1-3 | Grab | SS | 2-3 | 4/8/24 | 1358 | 1 | | | | |
| DU-4C-2-1 | Grab | SS | 0-1 | 4/8/24 | 1340 | 1 | | | | |
| DU-4C-2-2 | Grab | SS | 1-2 | 4/8/24 | 1345 | 1 | | | | |
| DU-4C-2-3 | Grab | SS | 2-3 | 4/8/24 | 1348 | 1 | | | | |
| DU-4C-3-1 | Grab | SS | 0-1 | 4/8/24 | 1420 | 1 | | | | |
| DU-4C-3-2 | Grab | SS | 1-2 | 4/8/24 | 1425 | 1 | | | | |

RUN DX, HOLD FOR FOLLOW-UP
↓
ARCHIVE
↓

Pace
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SDG # L1755662

Table #

Acctnum: ASHCREPOR
Template: T249306
Prelogin: P1063626
PM: 110 - Brian Ford
PB: MV 3/19/24
Shipped Via: FedEX Ground

Remarks | Sample # (lab only)

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: *Client: list metals needed=

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR | If preservation required by Login: Date/Time |
|---|---|---|---|---|---|
| | 4-12-24 | 12:00 | | | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: | |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 | Hold: Condition: NCF / OK |

Chain of Custody Page 6 of 20

**Apex Companies, LLC - Portland, OR**
15618 SW 72nd Ave
Tigard, OR 97224

**Accounts Payable**
15618 SW 72nd Ave
Tigard, OR 97224

Pres Chk

Report to: **Andrew Bisbee**

Email To: **Andrew.Bisbee@apexcos.com**

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: **503-924-4704**

Client Project # 32-23010077

Lab Project # **ASHCREPOR-BISBEE**

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-23010077

Collected by (signature):

Immediately Packed on Ice N___ Y X

***Rush?*** (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-4C-3-3 | Grab | SS | 2-3 | 4/8/24 | 1428 | 1 | | | | | | |
| DU-4C-4-1 | Grab | SS | 0-1 | 4/8/24 | 1445 | 1 | | | | | ARCHIVE | |
| DU-4C-4-2 | Grab | SS | 1-2 | 4/8/24 | 1450 | 1 | | | X | X | ↓ | |
| DU-4C-4-3 | Grab | SS | 2-3 | 4/8/24 | 1453 | 1 | | | | | | |
| DU-4C-5-1 | Grab | SS | 0-1 | 4/8/24 | 1430 | 1 | | | | | ARCHIVE | |
| DU-4C-5-2 | Grab | SS | 1-2 | 4/8/24 | 1435 | 1 | | | | | ↓ | |
| DU-4C-5-3 | Grab | SS | 2-3 | 4/8/24 | 1438 | 1 | | | | | | |
| DU-4C-COMP-1 | COMP | SS | 0-1 | 4/8/24 | 1500 | 2 | X | X | X | X | ↓ | -04 |
| DU-4C-COMP-2 | COMP | SS | 1-2 | 4/8/24 | 1505 | 2 | | | X | | | |
| DU-4C-COM-3 | COMP | SS | 2-3 | 4/8/24 | 1515 | 2 | | | X | | RUN DX, HOLD FOR FOLLOW-UP | |

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

**Remarks:*Client: list metals needed=**

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) |
|---|---|---|---|
| | 4-12-24 | 12:00 | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) |

Trip Blank Received: Yes / No HCL / MeoH TBR

Temp: °C Bottles Received:

Date: 4-13-24 Time: 0900

If preservation required by Login: Date/Time

Hold: Condition: NCF / OK

Sample Receipt Checklist

| | | |
|---|---|---|
| COC Seal Present/Intact: | NP | Y N |
| COC Signed/Accurate: | | Y N |
| Bottles arrive intact: | | Y N |
| Correct bottles used: | | Y N |
| Sufficient volume sent: | | Y N |
| If Applicable | | |
| VOA Zero Headspace: | | Y N |
| Preservation Correct/Checked: | | Y N |
| RAD Screen <0.5 mR/hr: | | Y N |

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**MT JULIET, TN**
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SDG # L1755162

Table #

Acctnum: **ASHCREPOR**
Template: **T249306**
Prelogin: **P1063626**
PM: **110 - Brian Ford**
PB: MV 3/19/24
Shipped Via: **FedEX Ground**

**Apex Companies, LLC - Portland, OR**

15618 SW 72nd Ave
Tigard, OR 97224

Accounts Payable
~~15618 SW 72nd Ave~~
Tigard, OR 97224

Report to: **Andrew Bisbee**

Email To: **Andrew.Bisbee@apexcos.com**

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: **503-924-4704**

Client Project # 32-23010077

Lab Project # **ASHCREPOR-BISBEE**

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-23010077

Collected by (signature):

Quote #

Immediately Packed on Ice N___ Y X

***Rush?*** (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres |
|---|---|---|---|---|---|---|---|---|---|---|
| DU-4D-1-1 | Grab | SS | 0-1 | 4/9/24 | 1555 | 1 | | | | |
| DU-4D-1-2 | Grab | SS | 1-2 | 4/9/24 | 1600 | 1 | | | | |
| DU-4D-1-3 | Grab | SS | 2-3 | 4/9/24 | 1603 | 1 | | | | |
| DU-4D-2-1 | Grab | SS | 0-1 | 4/8/24 | 1315 | 1 | | | | |
| DU-4D-2-2 | Grab | SS | 1-2 | 4/8/24 | 1320 | 1 | | | | |
| DU-4D-2-3 | Grab | SS | 2-3 | 4/8/24 | 1323 | 1 | | | | |
| DU-4D-3-1 | Grab | SS | 0-1 | 4/9/24 | 1615 | 1 | | | | |
| DU-4D-3-2 | Grab | SS | 1-2 | 4/9/24 | 1620 | 1 | | | | |
| DU-4D-3-3 | Grab | SS | 2-3 | 4/9/24 | 1623 | 1 | | | | |
| DU-4D-4-1 | Grab | SS | 0-1 | 4/9/24 | 1605 | 1 | | | | |

Analysis / Container / Preservative

Pres Chk

Chain of Custody Page 7 of 20

Pace
PEOPLE ADVANCING SCIENCE

**MT JULIET, TN**

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SDG # L1755162

Table #

Acctnum: **ASHCREPOR**

Template: **T249306**

Prelogin: **P1063626**

PM: **110 - Brian Ford**

PB: MV 3/19/24

Shipped Via: **FedEX Ground**

| Remarks | Sample # (lab only) |
|---|---|
| ARCHIVE | |

* Matrix:
**SS** - Soil **AIR** - Air **F** - Filter
**GW** - Groundwater **B** - Bioassay
**WW** - WasteWater
**DW** - Drinking Water
**OT** - Other_____

**Remarks:*Client: list metals needed=**

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR | If preservation required by Login: Date/Time |
|---|---|---|---|---|---|
| | 4-12-24 | 12:00 | | | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: | |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 | Hold: Condition: NCF / OK |

| Apex Companies, LLC - Portland, OR | Accounts Payable | Pres / Chk |
|---|---|---|
| 15618 SW 72nd Ave<br>Tigard, OR 97224 | 15618 SW 72nd Ave<br>Tigard, OR 97224 | |
| Report to: Andrew Bisbee | Email To: Andrew.Bisbee@apexcos.com | |
| Project Description: KING SALVAGE | City/State Collected: TOLEDO, OR | Please Circle: PT MT CT ET |
| Phone: 503-924-4704 | Client Project # 32-2301077 | Lab Project # ASHCREPOR-BISBEE |
| Collected by (print): ANDREW BISBEE | Site/Facility ID # | P.O. # 32-2301077 |
| Collected by (signature): | Rush? (Lab MUST Be Notified) ___ Same Day X Five Day ___ Next Day ___ 5 Day (Rad Only) ___ Two Day ___ 10 Day (Rad Only) ___ Three Day | Quote # |
| Immediately Packed on Ice N___ Y X | Date Results Needed | |

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres |
|---|---|---|---|---|---|---|---|---|---|---|
| DU-4D-4-2 | Grab | SS | 1-2 | 4/9/24 | 1610 | 1 | | | | |
| DU-4D-4-3 | Grab | SS | 2-3 | 4/9/24 | 1613 | 1 | | | | |
| DU-4D-5-1 | Grab | SS | 0-1 | 4/9/24 | 1625 | 1 | | | | |
| DU-4D-5-2 | Grab | SS | 1-2 | 4/9/24 | 1630 | 1 | | | | |
| DU-4D-5-3 | Grab | SS | 2-3 | 4/9/24 | 1633 | 1 | | | | |
| DU-4D-COMP-1 | COMP | SS | 0-1 | 4/9/24 | 1635 | 2 | X | X | X | X |
| DU-4D-COMP-2 | COMP | SS | 1-2 | 4/9/24 | 1640 | 2 | | | X | |
| DU-4D-COMP-3 | COMP | SS | 2-3 | 4/9/24 | 1645 | 2 | | | X | |
| DU-4E-1-1 | Grab | SS | 0-1 | 4/8/24 | 1540 | 1 | | | | |
| DU-4E-1-2 | Grab | SS | 1-2 | 4/8/24 | 1545 | 1 | | | | |

Analysis / Container / Preservative

Chain of Custody Page 8 of 20

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
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SDG # L1755562
Table #
Acctnum: ASHCREPOR
Template: T249306
Prelogin: P1063626
PM: 110 - Brian Ford
PB: MV 3/19/24
Shipped Via: FedEX Ground

| Remarks | Sample # (lab only) |
|---|---|
| ARCHIVE | |
| | -05 |
| RUN DX, HOLD FOR FOLLOW-UP | |
| ARCHIVE | |

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: *Client: list metals needed=

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist

| | | |
|---|---|---|
| COC Seal Present/Intact: | NP | Y N |
| COC Signed/Accurate: | | Y N |
| Bottles arrive intact: | | Y N |
| Correct bottles used: | | Y N |
| Sufficient volume sent: | | Y N |
| If Applicable | | |
| VOA Zero Headspace: | | Y N |
| Preservation Correct/Checked: | | Y N |
| RAD Screen <0.5 mR/hr: | | Y N |

| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) |
|---|---|---|---|
| | 4-12-24 | 12:00 | |
| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) |
| Relinquished by: (Signature) | Date: | Time: | Received for lab by: (Signature) |

Trip Blank Received: Yes / No HCL / MeoH TBR
Temp: °C Bottles Received:
Date: 4-13-24 Time: 0900

If preservation required by Login: Date/Time

Hold: Condition: NCF / OK

**Apex Companies, LLC - Portland, OR**

15618 SW 72nd Ave
Tigard, OR 97224

**Accounts Payable**
15618 SW 72nd Ave
Tigard, OR 97224

Pres
Chk

Report to: **Andrew Bisbee**

Email To: **Andrew.Bisbee@apexcos.com**

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: **503-924-4704**

Client Project # 32-23010077

Lab Project # **ASHCREPOR-BISBEE**

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-23010077

Collected by (signature):

Immediately Packed on Ice N ___ Y X

***Rush?*** (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-4E-1-3 | Grab | SS | 2-3 | 4/8/24 | 1548 | 1 | | | | | ARCHIVE | |
| DU-4E-2-1 | Grab | SS | 0-1 | 4/8/24 | 1530 | 1 | | | | | | |
| DU-4E-2-2 | Grab | SS | 1-2 | 4/8/24 | 1535 | 1 | | | | | | |
| DU-4E-2-3 | Grab | SS | 2-3 | 4/8/24 | 1538 | 1 | | | | | | |
| DU-4E-3-1 | Grab | SS | 0-1 | 4/8/24 | 1555 | 1 | | | | | | |
| DU-4E-3-2 | Grab | SS | 1-2 | 4/8/24 | 1600 | 1 | | | | | | |
| DU-4E-3-3 | Grab | SS | 2-3 | 4/8/24 | 1603 | 1 | | | | | | |
| DU-4E-4-1 | Grab | SS | 0-1 | 4/8/24 | 1605 | 1 | | | | | | |
| DU-4E-4-2 | Grab | SS | 1-2 | 4/8/24 | 1610 | 1 | | | X | X | | |
| DU-4E-4-3 | Grab | SS | 2-3 | 4/8/24 | 1613 | 1 | | | | | ARCHIVE | |

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

**Remarks:*Client: list metals needed=**

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) |
|---|---|---|---|
| | 4-12-24 | 12:00 | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) |

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: °C Bottles Received:

Date: 4-13-24 Time: 0900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Sample Receipt Checklist

| | |
|---|---|
| COC Seal Present/Intact: | __NP __Y __N |
| COC Signed/Accurate: | __Y __N |
| Bottles arrive intact: | __Y __N |
| Correct bottles used: | __Y __N |
| Sufficient volume sent: | __Y __N |
| If Applicable | |
| VOA Zero Headspace: | __Y __N |
| Preservation Correct/Checked: | __Y __N |
| RAD Screen <0.5 mR/hr: | __Y __N |

Chain of Custody Page 9 of 20

Pace
PEOPLE ADVANCING SCIENCE

**MT JULIET, TN**
12065 Lebanon Rd Mount Juliet, TN 37122

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SDG # L1755162

Table #

Acctnum: **ASHCREPOR**
Template: **T249306**
Prelogin: **P1063626**
PM: 110 - Brian Ford
PB: mv 3/19/24

Shipped Via: **FedEX Ground**

**Apex Companies, LLC - Portland, OR**

15618 SW 72nd Ave
Tigard, OR 97224

**Accounts Payable**
15618 SW 72nd Ave
Tigard, OR 97224

Report to: **Andrew Bisbee**

Email To: **Andrew.Bisbee@apexcos.com**

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: **503-924-4704**

Client Project # 32-23010077

Lab Project # **ASHCREPOR-BISBEE**

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-23010077

Collected by (signature):

Immediately Packed on Ice N ___ Y X

*Rush?* (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day STANDARD

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 10 of 20

Pace
PEOPLE ADVANCING SCIENCE

**MT JULIET, TN**
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1755562

Table #

Acctnum: **ASHCREPOR**
Template: **T249306**
Prelogin: **P1063626**
PM: **110 - Brian Ford**
PB: MV 3/19/24

Shipped Via: **FedEX Ground**

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-4E-5-1 | Grab | SS | 0-1 | 4/8/24 | 1615 | 1 | | | | | ARCHIVE | |
| DU-4E-5-2 | Grab | SS | 1-2 | 4/8/24 | 1620 | 1 | | | | | ↓ | |
| DU-4E-5-3 | Grab | SS | 2-3 | 4/8/24 | 1623 | 1 | | | | | | |
| DU-4E-COMP-1 | COMP | SS | 0-1 | 4/8/24 | 1625 | 2 | X | X | X | X | | -06 |
| DU-4E-COMP-2 | COMP | SS | 1-2 | 4/8/24 | 1630 | 2 | | | X | | RUN Dx, HOLD FOR FOLLOW-UP | |
| DU-4E-COMP-3 | COMP | SS | 2-3 | 4/8/24 | 1635 | 2 | | | X | | ↓ | |
| DU-4F-1-1 | Grab | SS | 0-1 | 4/9/24 | 820 | 1 | | | | | ARCHIVE | |
| DU-4F-1-2 | Grab | SS | 1-2 | 4/9/24 | 825 | 1 | | | | | ↓ | |
| DU-4F-1-3 | Grab | SS | 2-3 | 4/9/24 | 828 | 1 | | | | | | |
| DU-4F-2-1 | Grab | SS | 0-1 | 4/9/24 | 830 | 1 | | | | | | |

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

**Remarks:*Client: list metals needed=**

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR | If preservation required by Login: Date/Time |
|---|---|---|---|---|---|
| | 4-12-24 | 12:00 | | | |
| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: | |
| Relinquished by: (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 | Hold: Condition: NCF / OK |

**Apex Companies, LLC - Portland, OR**

15618 SW 72nd Ave
Tigard, OR 97224

Accounts Payable
15618 SW 72nd Ave
Tigard, OR 97224

Report to: Andrew Bisbee

Email To: Andrew.Bisbee@apexcos.com

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: 503-924-4704

Client Project # 32-23010077

Lab Project # ASHCREPOR-BISBEE

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-23010077

Collected by (signature):

Immediately Packed on Ice N ___ Y X

*Rush?* (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day STANDARD

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 1 of 2

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1755162

Table #

Acctnum: ASHCREPOR
Template: T249306
Prelogin: P1063626
PM: 110 - Brian Ford
PB: MV 3/19/24
Shipped Via: FedEx Ground

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-4F-2-2 | Grab | SS | 1-2 | 4/9/24 | 835 | 1 | | | X | X | | |
| DU-4F-2-3 | Grab | SS | 2-3 | 4/9/24 | 838 | 1 | | | | | | |
| DU-4F-3-1 | Grab | SS | 0-1 | 4/9/24 | 845 | 1 | | | | | ARCHIVE | |
| DU-4F-3-2 | Grab | SS | 1-2 | 4/9/24 | 850 | 1 | | | | | | |
| DU-4F-3-3 | Grab | SS | 2-3 | 4/9/24 | 853 | 1 | | | | | | |
| DU-4F-4-1 | Grab | SS | 0-1 | 4/9/24 | 900 | 1 | | | | | | |
| DU-4F-4-2 | Grab | SS | 1-2 | 4/9/24 | 905 | 1 | | | | | | |
| DU-4F-4-3 | Grab | SS | 2-3 | 4/9/24 | 908 | 1 | | | | | | |
| DU-4F-5-1 | Grab | SS | 0-1 | 4/9/24 | 920 | 1 | | | | | | |
| DU-4F-5-2 | Grab | SS | 1-2 | 4/9/24 | 925 | 1 | | | X | X | | |

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: *Client: list metals needed=

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist

| | | |
|---|---|---|
| COC Seal Present/Intact: | NP | Y N |
| COC Signed/Accurate: | | Y N |
| Bottles arrive intact: | | Y N |
| Correct bottles used: | | Y N |
| Sufficient volume sent: | | Y N |
| If Applicable | | |
| VOA Zero Headspace: | | Y N |
| Preservation Correct/Checked: | | Y N |
| RAD Screen <0.5 mR/hr: | | Y N |

| | Date: | Time: | | |
|---|---|---|---|---|
| Relinquished by: (Signature) | 4-12-24 | 12:00 | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR |
| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: |
| Relinquished by: (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 |

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Chain of Custody Page 12 of 40

**Apex Companies, LLC - Portland, OR**
15618 SW 72nd Ave
Tigard, OR 97224

Accounts Payable
15618 SW 72nd Ave
Tigard, OR 97224

Report to: **Andrew Bisbee**
Email To: **Andrew.Bisbee@apexcos.com**

Project Description: KING SALVAGE
City/State Collected: TOLEDO, OR
Please Circle: PT MT CT ET

Phone: **503-924-4704**
Client Project # 32-2301007?
Lab Project # **ASHCREPOR-BISBEE**

Collected by (print): ANDREW BISBEE
Site/Facility ID #
P.O. # 32-2301007?

Collected by (signature):
Immediately Packed on Ice N ___ Y X

***Rush?*** (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day STANDARD

Quote #
Date Results Needed

Analysis / Container / Preservative

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Pres Chk | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-4F-5-3 | Grab | SS | 2-3 | 4/9/24 | 908 | 1 | | | | | | | |
| DU-4F-COMP-1 | COMP | SS | 0-1 | 4/9/24 | ~~0922~~ 930 | 2 | X | X | X | X | | ARCHIVE | |
| DU-4F-COMP-2 | COMP | SS | 1-2 | 4/9/24 | 935 | 2 | | | X | | | | -07 |
| DU-4F-COMP-3 | COMP | SS | 2-3 | 4/9/24 | 940 | 2 | | | X | | | RUN DX, HOLD FOR FOLLOW UP ↓ | |
| DU-4G-1-1 | Grab | SS | 0-1 | 4/9/24 | 1010 | 1 | | | | | | ARCHIVE | |
| DU-4G-1-2 | Grab | SS | 1-2 | 4/9/24 | 1015 | 1 | | | | | | | |
| DU-4G-1-3 | Grab | SS | 2-3 | 4/9/24 | 1018 | 1 | | | | | | | |
| DU-4G-2-1 | Grab | SS | 0-1 | 4/9/24 | 1000 | 1 | | | | | | | |
| DU-4G-2-2 | Grab | SS | 1-2 | 4/9/24 | 1005 | 1 | | | | | | | |
| DU-4G-2-3 | Grab | SS | 2-3 | 4/9/24 | 1008 | 1 | | | | | | | |

* Matrix:
**SS** - Soil **AIR** - Air **F** - Filter
**GW** - Groundwater **B** - Bioassay
**WW** - WasteWater
**DW** - Drinking Water
**OT** - Other_____

**Remarks:*Client: list metals needed=**

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____
Tracking #

| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) |
|---|---|---|---|
| | 4-12-24 | 12:00 | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) |

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: °C Bottles Received:

Date: 4-13-24 Time: 0900

If preservation required by Login: Date/Time

Hold: Condition: NCF / OK

**Sample Receipt Checklist**
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Pace
PEOPLE ADVANCING SCIENCE

**MT JULIET, TN**
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SDG # L1725562
Table #
Acctnum: **ASHCREPOR**
Template: **T249306**
Prelogin: **P1063626**
PM: **110 - Brian Ford**
PB: MV 3/19/24
Shipped Via: **FedEX Ground**

Chain of Custody Page 13 of 20

**Apex Companies, LLC - Portland, OR**
15618 SW 72nd Ave
Tigard, OR 97224

**Accounts Payable**
15618 SW 72nd Ave
Tigard, OR 97224

Report to: **Andrew Bisbee**
Email To: **Andrew.Bisbee@apexcos.com**

Project Description: KING SALVAGE
City/State Collected: TOLEDO, OR
Please Circle: PT MT CT ET

Phone: **503-924-4704**
Client Project # 32-230100T7
Lab Project # **ASHCREPOR-BISBEE**

Collected by (print): ANDREW BISBEE
Site/Facility ID #
P.O. # 32-230100T7

Collected by (signature):
Immediately Packed on Ice N___ Y X

*Rush?* (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day STANDARD
Date Results Needed
Quote #

Pace
PEOPLE ADVANCING SCIENCE

**MT JULIET, TN**
12065 Lebanon Rd Mount Juliet, TN 37122
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SDG # L1725162
Table #
Acctnum: **ASHCREPOR**
Template: **T249306**
Prelogin: **P1063626**
PM: **110 - Brian Ford**
PB: MV 3/19/24
Shipped Via: **FedEX Ground**

Analysis / Container / Preservative

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Pres Chk | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-46-3-1 | Grab | SS | 0-1 | 4/9/24 | 1040 | 1 | | | | | | ARCHIVE | |
| DU-46-3-2 | Grab | SS | 1-2 | 4/9/24 | 1045 | 1 | | | | | | | |
| DU-46-3-3 | Grab | SS | 2-3 | 4/9/24 | 1048 | 1 | | | | | | | |
| DU-46-4-1 | Grab | SS | 0-1 | 4/9/24 | 1150 | 1 | | | | | | | |
| DU-46-4-2 | Grab | SS | 1-2 | 4/9/24 | 1155 | 1 | | | | | | | |
| DU-46-4-3 | Grab | SS | 2-3 | 4/9/24 | 1158 | 1 | | | | | | | |
| DU-46-5-1 | Grab | SS | 0-1 | 4/9/24 | 1100 | 1 | | | | | | | |
| DU-46-5-2 | Grab | SS | 1-2 | 4/9/24 | 1105 | 1 | | | | | | | |
| DU-46-5-3 | Grab | SS | 2-3 | 4/9/24 | 1108 | 1 | | | | | | | |
| DU-46-COMP-1 | COMP | SS | 0-1 | 4/9/24 | 1200 | 2 | X | X | X | X | | | -08 |

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other

Remarks: *Client: list metals needed=
pH ____ Temp ____
Flow ____ Other ____

Samples returned via: __ UPS __ FedEx __ Courier ____
Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR | If preservation required by Login: Date/Time |
|---|---|---|---|---|---|
| | 4-12-24 | 12:00 | | | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: | |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 | Hold: / Condition: NCF / OK |

Chain of Custody Page 17 of 20

**Apex Companies, LLC - Portland, OR**
15618 SW 72nd Ave
Tigard, OR 97224

**Accounts Payable**
15618 SW 72nd Ave
Tigard, OR 97224

Report to: **Andrew Bisbee**
Email To: **Andrew.Bisbee@apexcos.com**

Project Description: KING SALVAGE
City/State Collected: TOLEDO, OR
Please Circle: PT MT CT ET

Phone: **503-924-4704**
Client Project # 32-2301077
Lab Project # **ASHCREPOR-BISBEE**

Collected by (print): ANDREW BISBEE
Site/Facility ID #
P.O. # 32-2301077

Collected by (signature):
Immediately Packed on Ice N ___ Y X

***Rush?*** (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day STANDARD

Quote #
Date Results Needed

**Pace**
PEOPLE ADVANCING SCIENCE

**MT JULIET, TN**
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1725562
Table #
Acctnum: **ASHCREPOR**
Template: **T249306**
Prelogin: **P1063626**
PM: **110 - Brian Ford**
PB: MV 3/19/24
Shipped Via: **FedEX Ground**

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Pres Chk | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-4G-COMP-2 | COMP | SS | 1-2 | 4/9/24 | 1205 | 2 | | | X | | | RUN Dx, HOLD FOR FOLLOW-UP | |
| DU-4G-COMP-3 | COMP | SS | 2-3 | 4/9/24 | 1210 | 2 | | | X | | | ↓ | |
| DU-4H-1-1 | Grab | SS | 0-1 | 4/9/24 | 1300 | 1 | | | | | | ARCHIVE | |
| DU-4H-1-2 | Grab | SS | 1-2 | 4/9/24 | 1305 | 1 | | | | | | ↓ | |
| DU-4H-1-3 | Grab | SS | 2-3 | 4/9/24 | 1308 | 1 | | | | | | | |
| DU-4H-2-1 | Grab | SS | 0-1 | 4/9/24 | 1240 | 1 | | | | | | | |
| DU-4H-2-2 | Grab | SS | 1-2 | 4/9/24 | 1245 | 1 | | | | | | | |
| DU-4H-2-3 | Grab | SS | 2-3 | 4/9/24 | 1248 | 1 | | | | | | | |
| DU-4H-3-1 | Grab | SS | 0-1 | 4/9/24 | 1250 | 1 | | | | | | | |
| DU-4H-3-2 | Grab | SS | 1-2 | 4/9/24 | 1255 | 1 | | | | | | | |

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

**Remarks:*Client: list metals needed=**

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____
Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR | |
|---|---|---|---|---|---|
| | 4-12-24 | 12:00 | | | |
| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: | If preservation required by Login: Date/Time |
| Relinquished by: (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 | Hold: / Condition: NCF / OK |

**Apex Companies, LLC - Portland, OR**

15618 SW 72nd Ave
Tigard, OR 97224

**Accounts Payable**
15618 SW 72nd Ave
Tigard, OR 97224

Pres Chk

Report to: **Andrew Bisbee**

Email To: **Andrew.Bisbee@apexcos.com**

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: **503-924-4704**

Client Project # 32-23010077

Lab Project # **ASHCREPOR-BISBEE**

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-23010077

Collected by (signature):

Immediately Packed on Ice N___ Y X

***Rush?*** (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day STANDARD

Quote #

Date Results Needed

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-4H-3-3 | Grab | SS | 2-3 | 4/9/24 | 1258 | 1 | | | | | | |
| DU-4H-4-1 | Grab | SS | 0-1 | 4/9/24 | 1325 | 1 | | | | | ARCHIVE | |
| DU-4H-4-2 | Grab | SS | 1-2 | 4/9/24 | 1330 | 1 | | | | | | |
| DU-4H-4-3 | Grab | SS | 2-3 | 4/9/24 | 1333 | 1 | | | | | | |
| DU-4H-5-1 | Grab | SS | 0-1 | 4/9/24 | 1340 | 1 | | | | | | |
| DU-4H-5-2 | Grab | SS | 1-2 | 4/9/24 | 1345 | 1 | | | | | | |
| DU-4H-5-3 | Grab | SS | 2-3 | 4/9/24 | 1348 | 1 | | | | | | |
| DU-4H-COMP-1 | COMP | SS | 0-1 | 4/9/24 | 1350 | 2 | X | X | X | X | | -09 |
| DU-4H-COMP-2 | COMP | SS | 1-2 | 4/9/24 | 1355 | 2 | | | X | | RUN Dx, HOLD FOR FOLLOW-UP | |
| DU-4H-COMP-3 | COMP | SS | 2-3 | 4/9/24 | 1400 | 2 | | | X | | | |

* Matrix:
**SS** - Soil **AIR** - Air **F** - Filter
**GW** - Groundwater **B** - Bioassay
**WW** - WasteWater
**DW** - Drinking Water
**OT** - Other_____

**Remarks:*Client: list metals needed=**

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) |
|---|---|---|---|
| | 4-12-24 | 12:00 | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) |

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: °C Bottles Received:

Date: 4-13-24 Time: 0900

If preservation required by Login: Date/Time

Hold: Condition: NCF / OK

Sample Receipt Checklist

| | | |
|---|---|---|
| COC Seal Present/Intact: | NP | Y N |
| COC Signed/Accurate: | | Y N |
| Bottles arrive intact: | | Y N |
| Correct bottles used: | | Y N |
| Sufficient volume sent: | | Y N |
| If Applicable | | |
| VOA Zero Headspace: | | Y N |
| Preservation Correct/Checked: | | Y N |
| RAD Screen <0.5 mR/hr: | | Y N |

Chain of Custody Page 5 of 20

Pace
PEOPLE ADVANCING SCIENCE

**MT JULIET, TN**
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # LM25202

Table #

Acctnum: **ASHCREPOR**
Template: **T249306**
Prelogin: **P1063626**
PM: **110 - Brian Ford**
PB: MV 3/19/24
Shipped Via: **FedEx Ground**

Apex Companies, LLC - Portland, OR
15618 SW 72nd Ave
Tigard, OR 97224

Accounts Payable
15618 SW 72nd Ave
Tigard, OR 97224

Pres Chk

Report to: Andrew Bisbee
Email To: Andrew.Bisbee@apexcos.com

Project Description: KING SALVAGE
City/State Collected: TOLEDO, OR
Please Circle: PT MT CT ET

Phone: 503-924-4704
Client Project # 32-23010077
Lab Project # ASHCREPOR-BISBEE

Collected by (print): ANDREW BISBEE
Site/Facility ID #
P.O. # 32-23010077

Collected by (signature):
Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day STANDARD

Quote #
Date Results Needed

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres |
|---|---|---|---|---|---|---|---|---|---|---|
| DU-4I-1-1 | Grab | SS | 0-1 | 4/9/24 | 1430 | 1 | | | | |
| DU-4I-1-2 | Grab | SS | 1-2 | 4/9/24 | 1435 | 1 | | | | |
| DU-4I-1-3 | Grab | SS | 2-3 | 4/9/24 | 1438 | 1 | | | | |
| DU-4I-2-1 | Grab | SS | 0-1 | 4/9/24 | 1440 | 1 | | | | |
| DU-4I-2-2 | Grab | SS | 1-2 | 4/9/24 | 1445 | 1 | | | | |
| DU-4I-2-3 | Grab | SS | 2-3 | 4/9/24 | 1448 | 1 | | | | |
| DU-4I-3-1 | Grab | SS | 0-1 | 4/9/24 | 1500 | 1 | | | | |
| DU-4I-3-2 | Grab | SS | 1-2 | 4/9/24 | 1505 | 1 | | | | |
| DU-4I-3-3 | Grab | SS | 2-3 | 4/9/24 | 1508 | 1 | | | | |
| DU-4I-4-1 | Grab | SS | 0-1 | 4/9/24 | 1420 | 1 | | | | |

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ___

Remarks:*Client: list metals needed=

pH ___ Temp ___
Flow ___ Other ___

Samples returned via:
__ UPS __ FedEx __ Courier ___
Tracking #

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) |
|---|---|---|---|
| | 4-12-24 | 12:00 | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) |

Trip Blank Received: Yes / No HCL / MeoH TBR
Temp: °C Bottles Received:
Date: 4-13-24 Time: 0900

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

If preservation required by Login: Date/Time
Hold:
Condition: NCF / OK

Chain of Custody Page 10 of 20

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SDG # L1725562
Table #
Acctnum: ASHCREPOR
Template: T249306
Prelogin: P1063626
PM: 110 - Brian Ford
PB: MV 3/19/24
Shipped Via: FedEX Ground

| Remarks | Sample # (lab only) |
|---|---|
| ARCHIVE | |

Apex Companies, LLC - Portland, OR

15618 SW 72nd Ave
Tigard, OR 97224

Accounts Payable
15618 SW 72nd Ave
Tigard, OR 97224

Report to: Andrew Bisbee

Email To: Andrew.Bisbee@apexcos.com

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: 503-924-4704

Client Project # 32-23010077

Lab Project # ASHCREPOR-BISBEE

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-23010077

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day STANDARD

Quote #

Date Results Needed

Analysis / Container / Preservative

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-4I-4-2 | Grab | SS | 1-2 | 4/9/24 | 1425 | 1 | | | | | ARCHIVE | |
| DU-4I-4-3 | Grab | SS | 2-3 | 4/9/24 | 1428 | 1 | | | | | | |
| DU-4I-5-1 | Grab | SS | 0-1 | 4/9/24 | 1510 | 1 | | | | | | |
| DU-4I-5-2 | Grab | SS | 1-2 | 4/9/24 | 1515 | 1 | | | | | | |
| DU-4I-5-3 | Grab | SS | 2-3 | 4/9/24 | 1518 | 1 | | | | | | |
| DU-4I-COMP-1 | COMP | SS | 0-1 | 4/9/24 | 1520 | 2 | X | X | X | X | | -10 |
| DU-4I-COMP-2 | COMP | SS | 1-2 | 4/9/24 | 1525 | 2 | | | X | | RUN DX, HOLD FOR FOLLOW-UP | |
| DU-4I-COMP-3 | COMP | SS | 2-3 | 4/9/24 | 1535 | 2 | | | X | | | |
| DU-5-SS-1 | Grab | SS | 0-0.5 | 4/10/24 | 1415 | 1 | | | | | ARCHIVE | |
| DU-5-SS-2 | Grab | SS | 0-0.5 | 4/10/24 | 1420 | 1 | | | | | | |

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other

Remarks: *Client: list metals needed=

pH ____ Temp ____

Flow ____ Other ____

Samples returned via: __ UPS __ FedEx __ Courier ____

Tracking #

| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) |
|---|---|---|---|
| | 4-12-24 | 12:00 | |
| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) |
| Relinquished by: (Signature) | Date: | Time: | Received for lab by: (Signature) |

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: °C Bottles Received:

Date: 4-13-24 Time: 0900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Sample Receipt Checklist

| | | |
|---|---|---|
| COC Seal Present/Intact: | NP | Y N |
| COC Signed/Accurate: | | Y N |
| Bottles arrive intact: | | Y N |
| Correct bottles used: | | Y N |
| Sufficient volume sent: | | Y N |
| If Applicable | | |
| VOA Zero Headspace: | | Y N |
| Preservation Correct/Checked: | | Y N |
| RAD Screen <0.5 mR/hr: | | Y N |

Chain of Custody Page 17 of 20

Pace
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SDG # L1725562

Table #

Acctnum: ASHCREPOR
Template: T249306
Prelogin: P1063626
PM: 110 - Brian Ford
PB: mv 3/19/24

Shipped Via: FedEX Ground

Chain of Custody Page 15 of 20

**Pace** PEOPLE ADVANCING SCIENCE

**MT JULIET, TN**
12065 Lebanon Rd Mount Juliet, TN 37122
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| | |
|---|---|
| SDG # | L1725062 |
| Table # | |
| Acctnum: | ASHCREPOR |
| Template: | T249306 |
| Prelogin: | P1063626 |
| PM: | 110 - Brian Ford |
| PB: | mv 3/19/24 |
| Shipped Via: | FedEX Ground |

Remarks | Sample # (lab only)

**Accounts Payable**
15618 SW 72nd Ave
Tigard, OR 97224

Pres Chk

**Report to:** Andrew Bisbee
**Email To:** Andrew.Bisbee@apexcos.com

**Project Description:** KING SALVAGE
**City/State Collected:** TOLEDO, OR
Please Circle: PT MT CT ET

**Phone:** 503-924-4704
**Client Project #:** 32-23010077
**Lab Project #:** ASHCREPOR-BISBEE

**Collected by (print):** ANDREW BISBEE
**Site/Facility ID #:**
**P.O. #:** 32-23010077

**Collected by (signature):**
Immediately Packed on Ice N ___ Y X

**Rush?** (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day
**Date Results Needed:** STANDARD
**Quote #:**

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-5-SS-3 | Grab | SS | 0-0.5 | 4/10/24 | 1425 | 1 | | | | | ARCHIVE | |
| DU-5-SS-4 | Grab | SS | 0-0.5 | 4/10/24 | 1430 | 1 | | | | | ↓ | |
| DU-5-SS-5 | Grab | SS | 0-0.5 | 4/10/24 | 1435 | 1 | | | | | | |
| DU-5-SS-COMP-1 | COMP | SS | 0-0.5 | 4/10/24 | 1440 | 2 | X | X | X | X | | -01 |
| DU-6-1-1 | Grab | SS | 0-1 | 4/10/24 | 900 | 1 | | | | | ARCHIVE | |
| DU-6-1-2 | Grab | SS | 1-2 | 4/10/24 | 905 | 1 | | | | | ↓ | |
| DU-6-1-5 | Grab | SS | 2-5 | 4/10/24 | 908 | 1 | | | | | | |
| DU-6-2-1 | Grab | SS | 0-1 | 4/10/24 | 920 | 1 | | | | | | |
| DU-6-2-2 | Grab | SS | 1-2 | 4/10/24 | 925 | 1 | | | | | | |
| DU-6-2-5 | Grab | SS | 2-5 | 4/10/24 | 928 | 1 | | | | | | |

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

**Remarks:** *Client: list metals needed=

pH _____ Temp _____
Flow _____ Other _____

Samples returned via: __ UPS __ FedEx __ Courier _____
Tracking #

| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR |
|---|---|---|---|---|
| | 4-12-24 | 12:00 | | |
| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: |
| Relinquished by: (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 |

If preservation required by Login: Date/Time

Hold: | Condition: NCF / OK

Sample Receipt Checklist

| | |
|---|---|
| COC Seal Present/Intact: | __NP __Y __N |
| COC Signed/Accurate: | __Y __N |
| Bottles arrive intact: | __Y __N |
| Correct bottles used: | __Y __N |
| Sufficient volume sent: | __Y __N |
| If Applicable | |
| VOA Zero Headspace: | __Y __N |
| Preservation Correct/Checked: | __Y __N |
| RAD Screen <0.5 mR/hr: | __Y __N |

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Tigard, OR 97224

Accounts Payable
15618 SW 72nd Ave
Tigard, OR 97224

Pres Chk

Chain of Custody Page 1 of 2

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
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Report to: Andrew Bisbee

Email To: Andrew.Bisbee@apexcos.com

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: 503-924-4704

Client Project # 32-23010077

Lab Project # ASHCREPOR-BISBEE

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-23010077

Collected by (signature):

Quote #

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed: STANDARD

SDG # L1725562

Table #

Acctnum: ASHCREPOR

Template: T249306

Prelogin: P1063626

PM: 110 - Brian Ford

PB: MV 3/19/24

Shipped Via: FedEx Ground

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-6-3-1 | Grab | SS | 0-1 | 4/10/24 | 935 | 1 | | | | | ARCHIVE | |
| DU-6-3-2 | Grab | SS | 1-2 | 4/10/24 | 940 | 1 | | | | | ↓ | |
| DU-6-3-5 | Grab | SS | 2-5 | 4/10/24 | 943 | 1 | | | | | | |
| DU-6-COMP-1 | COMP | SS | 0-1 | 4/10/24 | 950 | 2 | X | X | X | X | | -12 |
| DU-6-COMP-2 | COMP | SS | 1-2 | 4/10/24 | 1000 | 2 | | | X | | RUN DX, HOLD FOR FOLLOW-UP | |
| DU-6-COMP-5 | COMP | SS | 2-5 | 4/10/24 | 1010 | 2 | | | X | | ↓ | |
| DU-6-SS-1 | Grab | SS | 0-0.5 | 4/10/24 | 1305 | 1 | | | | | ARCHIVE | |
| DU-6-SS-2 | Grab | SS | 0-0.5 | 4/10/24 | 1310 | 1 | | | | | ↓ | |
| DU-6-SS-3 | Grab | SS | 0-0.5 | 4/10/24 | 1315 | 1 | | | | | | |
| DU-6-SS-4 | Grab | SS | 0-0.5 | 4/10/24 | 1320 | 1 | | | | | | |

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other

Remarks: *Client: list metals needed=

pH ___ Temp ___

Flow ___ Other ___

Samples returned via: __ UPS __ FedEx __ Courier ___

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR | |
|---|---|---|---|---|---|
| | 4-12-24 | 12:00 | | | |
| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: | If preservation required by Login: Date/Time |
| Relinquished by: (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 | Hold: / Condition: NCF / OK |

Chain of Custody Page 1 of 1

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SDG # L1755162
Table #
Acctnum: ASHCREPOR
Template: T249306
Prelogin: P1063626
PM: 110 - Brian Ford
PB: MV 3/19/24
Shipped Via: FedEX Ground

| Company / Address | Accounts Payable | Pres Chk |
|---|---|---|
| Apex Companies, LLC - Portland, OR<br>15618 SW 72nd Ave<br>Tigard, OR 97224 | Accounts Payable<br>15618 SW 72nd Ave<br>Tigard, OR 97224 | |
| Report to: Andrew Bisbee | Email To: Andrew.Bisbee@apexcos.com | |
| Project Description: KING SALVAGE | City/State Collected: TOLEDO, OR | Please Circle: PT MT CT ET |
| Phone: 503-924-4704 | Client Project # 32-23010077 | Lab Project # ASHCREPOR-BISBEE |
| Collected by (print): ANDREW BISBEE | Site/Facility ID # | P.O. # 32-23010077 |
| Collected by (signature): Immediately Packed on Ice N ___ Y X | Rush? (Lab MUST Be Notified) ___ Same Day X Five Day ___ Next Day ___ 5 Day (Rad Only) ___ 10 Day (Rad Only) ___ Three Day STANDARD | Quote # Date Results Needed |

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres | HOLD | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ~~DU-4C-3-3 DK~~ | Grab | SS | | 4/8/24 | 1428 | 1 | | | | | | | |
| ~~DU-4C-5-1 DK~~ | | SS | | | | | | | | | | | |
| ~~DU-4C-5-2 DK~~ | | SS | | | | | | | | | | | |
| ~~DU-4C-5-3 DK~~ | | SS | | | | | | | | | | | |
| DU-6-SS-5 | Grab | SS | 0-0.5 | 4/10/24 | 1325 | 1 | | | | | | | |
| DU-6-SS-COMP-1 | COMP | SS | 0-0.5 | 4/10/24 | 1330 | 2 | X | X | X | X | | ARCHIVE | -13 |
| IDW | COMP | SS | 0-5 | 4/10/24 | 1400 | 2 | X | | | | X | RUN METALS/HOLD ~~HOLD FOR FOLLOW-UP~~ | |
| | | SS | | | | | | | | | | | |
| | | SS | | | | | | | | | | | |
| | | SS | | | | | | | | | | | |

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: *Client: list metals needed=

pH _____ Temp _____
Flow _____ Other _____

Samples returned via: __ UPS __ FedEx __ Courier _____
Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR |
|---|---|---|---|---|
| | 4-12-24 | 12:00 | | |
| Relinquished by : (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: |
| Relinquished by : (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0900 |

If preservation required by Login: Date/Time

Hold: Condition: NCF / OK

U7255G7

| Tracking Numbers | DPAT Temperature |
|---|---|
| 7320 9668 3780 | 0.4 + 0.1 = 0.5 |
| 7320 9668 3840 | 5.5 + 0.1 = 5.6 |
| 7320 9668 3872 | 5.5 + 0.1 = 5.6 |
| 7320 9668 3861 | 0.2 + 0.1 = 0.3 |
| 7320 9668 3839 | 2.6 + 0.1 = 2.7 |
| 7320 9668 3806 | 0.1 + 0.1 = 0.2 |
| 7320 9668 3850 | 1.2 + 0.1 = 1.3 |
| 7320 9668 3770 | 3.2 + 0.1 = 3.3 |
| 7320 9668 3791 | 0.3 + 0.1 = 0.4 |
| 7320 9668 3828 | 1.3 + 0.1 = 1.4 |
| 7320 9668 3817 | 5.5 + 0.1 = 5.6 |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

Name

Date

Pace Analytical™
www.pacelabs.com

**Pace Analytical Services, LLC.**
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

## Report Prepared for:

Client Services
Pace Analytical National
12065 Lebanon Rd
Mt. Juliet TN 37122

# REPORT OF LABORATORY ANALYSIS FOR PCDD/PCDF

**Report Prepared Date:**
April 26, 2024

## Report Information:

**Pace Project #: 10689535**
**Sample Receipt Date: 04/16/2024**
**Client Project #: L1725562 WG2267310**
**Client Sub PO #: L1725562**
**State Cert #: MN200001**

### Invoicing & Reporting Options:

The report provided has been invoiced as a Level 2 PCDD/PCDF Report. If an upgrade of this report package is requested, an additional charge may be applied.

Please review the attached invoice for accuracy and forward any questions to Kirsten Hogberg, your Pace Project Manager.

### This report has been reviewed by:

April 29, 2024

Kirsten Hogberg, Project Manager
(612) 607-6407
(612) 607-6444 (fax)
kirsten.hogberg@pacelabs.com

## Report of Laboratory Analysis

**Pace Analytical Services, LLC.**
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

## DISCUSSION

This report presents the results from the analyses performed on thirteen samples submitted by a representative of Pace Analytical National. The samples were analyzed for the presence or absence of polychlorodibenzo-p-dioxins (PCDDs) and polychlorodibenzofurans (PCDFs) using a modified version of USEPA Method 8290. The estimated detection limits (EDLs) were based on signal-to-noise measurements. Estimated maximum possible concentration (EMPC) values were treated as positives in the toxic equivalence calculations.

Second column confirmation analyses of 2,3,7,8-TCDF values obtained from the primary (DB5-MS) column are performed only when specifically requested for a project and only when the values are above the concentration of the lowest calibration standard. Typical resolution for this isomer using the DB5-MS column ranges from 25-30%.

The recoveries of the isotopically-labeled PCDD/PCDF internal standards in the sample extracts ranged from 23-105%. Except for twenty-six low values, which were flagged "R" on the results tables, the labeled internal standard recoveries obtained for this project were within the 40-135% target range specified in Method 8290. Since the quantification of the native congeners was based on isotope dilution, the data were automatically corrected for variation in recovery and accurate values were obtained.

Values were flagged "I" where incorrect isotope ratios were obtained or "P" where polychlorinated diphenyl ethers were present. Concentrations below the calibration range were flagged "J" and should be regarded as estimates. Concentrations above the calibration range were flagged "E" and should also be regarded as estimates.

A laboratory method blank was prepared and analyzed with each sample batch as part of our routine quality control procedures. The results show Blank-112389 to contain a trace level of 1,2,3,4,7,8-HxCDD. This level was below the calibration range of the method. Sample levels similar to the corresponding blank levels were flagged "B" on the results tables and may be, at least partially, attributed to the background.

Laboratory and matrix spike samples were also prepared using clean reference matrix or sample matrix that had been fortified with native standard materials. The results show that the spiked native compounds were generally recovered at 85-129% with relative percent differences (RPDs) of 0.3-109.6%. Two background-subtracted recovery values obtained for the matrix spike duplicate were outside the target range, flagged "R" on the results table, and may indicate analytical biases for the affected congeners in the associated field sample determinations. Also, two RPD values obtained in the matrix spike sample analyses were above the 20% target upper limit and may indicate elevated variability for the affected congeners. Matrix spikes were prepared with the 04/17/2024 extraction batch using sample material from a separate project; results from these analyses will be provided upon request.

The responses obtained for selected labeled congeners in calibration standard analyses L240423B_16 and L240424B_16 were outside the target ranges. As specified in our procedures for this method, the averages of the daily response factors for these compounds were used in the calculations for the samples from these runshifts. The affected values were flagged "Y" on the results tables.

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

# Minnesota Laboratory Certifications

| Authority | Certificate # | Authority | Certificate # |
|---|---|---|---|
| | | Missouri | 10100 |
| A2LA | 2926.01 | Montana | CERT0092 |
| Alabama | 40770 | Nebraska | NE-OS-18-06 |
| Alaska-DW | MN00064 | Nevada | MN00064 |
| Alaska-UST | 17-009 | New Hampshire | 2081 |
| Arizona | AZ0014 | New Jersey | MN002 |
| Arkansas - WW | 88-0680 | New York | 11647 |
| Arkansas-DW | MN00064 | North Carolina- | 27700 |
| California | 2929 | North Carolina- | 530 |
| Colorado | MN00064 | North Dakota | R-036 |
| Connecticut | PH-0256 | Ohio-DW | 41244 |
| Florida | E87605 | Ohio-VAP (170 | CL101 |
| Georgia | 959 | Ohio-VAP (180 | CL110 |
| Hawaii | MN00064 | Oklahoma | 9507 |
| Idaho | MN00064 | Oregon-Primary | MN300001 |
| Illinois | 200011 | Oregon-Second | MN200001 |
| Indiana | C-MN-01 | Pennsylvania | 68-00563 |
| Iowa | 368 | Puerto Rico | MN00064 |
| Kansas | E-10167 | South Carolina | 74003 |
| Kentucky-DW | 90062 | Tennessee | TN02818 |
| Kentucky-WW | 90062 | Texas | T104704192 |
| Louisiana-DEQ | AI-84596 | Utah | MN00064 |
| Louisiana-DW | MN00064 | Vermont | VT-027053137 |
| Maine | MN00064 | Virginia | 460163 |
| Maryland | 322 | Washington | C486 |
| Michigan | 9909 | West Virginia-D | 382 |
| Minnesota | 027-053-137 | West Virginia-D | 9952C |
| Minnesota-Ag | via MN 027-053 | Wisconsin | 999407970 |
| Minnesota-Petr | 1240 | Wyoming-UST | via A2LA 2926. |
| Mississippi | MN00064 | | |

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444
www.pacelabs.com

# Appendix A

Sample Management

## REPORT OF LABORATORY ANALYSIS

# Sub-Contract Chain of Custody

**Batch Date/Time:** 04/15/24 12:59
**Sub-Contract Lab:** PACEMN
**Address:** 1700 Elm Street Suite 200 SE
**City/State:** Minneapolis, MN 55414
**Contact:** Kirsten.Hogberg@pacelabs.com
**Owner Lab:** PACEMTJL
**Address:** 12065 Lebanon Rd.
**City/State:** Mt. Juliet, TN 37122
**Phone:** (615) 773-9756
**Fax:** (615) 758-5859

**WO:** WG2267310
**Email:** MTJLSubOutTeam@pacelabs.com
**Results Due Date:** 05/07/24
**ESC Purchase Order #:** L1725562
**Send Reports to:** James C Huckaba

Pace Analytical®

12065 Lebanon Rd.
Mt. Juliet, TN 37122
Phone:(615) 773-9756
Fax:(615) 758-5859

| Sample ID Container ID | Matrix | State | Collect Date | Description | Sample Number Lab Use Only | Sample Comments Lab Use Only |
|---|---|---|---|---|---|---|
| DU-3-SS-COMP-1 S46989458 | SS | OR | 04/10/24 13:45 | SUBSV8290 | 1. L1725562-01 | 001 |
| DU-4A-COMP-1 47289415 | SS | OR | 04/08/24 12:30 | SUBSV8290 | 2. L1725562-02 | 002 |
| DU-4B-COMP-1 47289416 | SS | OR | 04/10/24 12:33 | SUBSV8290 | 3. L1725562-03 | 003 |
| DU-4C-COMP-1 47289417 | SS | OR | 04/08/24 15:00 | SUBSV8290 | 4. L1725562-04 | 004 |
| DU-4D-COMP-1 47289418 | SS | OR | 04/09/24 16:35 | SUBSV8290 | 5. L1725562-05 | 005 |
| DU-4E-COMP-1 47289419 | SS | OR | 04/08/24 16:25 | SUBSV8290 | 6. L1725562-06 | 006 |
| DU-4F-COMP-1 47289420 | SS | OR | 04/09/24 09:30 | SUBSV8290 | 7. L1725562-07 | 007 |
| DU-4G-COMP-1 47289421 | SS | OR | 04/09/24 12:00 | SUBSV8290 | 8. L1725562-08 | 008 |
| DU-4H-COMP-1 47289422 | SS | OR | 04/09/24 13:50 | SUBSV8290 | 9. L1725562-09 | 009 |
| DU-4I-COMP-1 47289423 | SS | OR | 04/09/24 15:20 | SUBSV8290 | 10. L1725562-10 | 010 |
| DU-5-SS-COMP-1 47289424 | SS | OR | 04/10/24 14:40 | SUBSV8290 | 11. L1725562-11 | 011 |
| DU-6-COMP-1 47289425 | SS | OR | 04/10/24 09:50 | SUBSV8290 | 12. L1725562-12 | 012 |
| DU-6-SS-COMP-1 47289426 | SS | OR | 04/10/24 13:30 | SUBSV8290 | 13. L1725562-13 | 013 |

*= Container used for multiple Samples and/or Analyses

Relinquished by: _____ Date 4-15-24
Recieved by: _____ Date 4/16/24 8:40
Relinquished by: _____ Date _____
Recieved by: _____ Date _____

WO# : 10689535

10689535

| | |
|---|---|
| Pace ANALYTICAL SERVICES | **DC#_Title: ENV-FRM-MIN4-0154 v02_USDA Regulated Soil Checklist** |
| | **Effective Date: 08/19/2022** |

# USDA Regulated Soil Checklist

**To be Completed by Sample Receiving:**

**WO:** 10689535 **Date:** 4/16/24 **Initials:** JMW

Sample Origin (check one): ☑ DOMESTIC ☐ QUARANTINED ☐ FOREIGN

*NOTE: Soil samples from Hawaii, Guam, Puerto Rico, and the US Virgin Islands are Foreign originated.*

If **DOMESTIC**, circle state of origin: AL AR AZ CA FL GA LA MS NC NM NY OK (OR) SC TN TX VA

*Includes: IFA, SOD, Golden Nematode, Karnal Bunt, and Witchweed* List County: Lincoln County

**(USDA Permit/Compliance Agreement authorizes movement of samples from these domestic regulated zones)**

If **QUARANTINED**, circle state of origin: CA ID NY TX

*Includes: Fruit Fly and Pale Cyst Nematode* List County: _____

**(Movement is not authorized for Pale Cyst Nematode (ID)—remaining quarantines require additional paperwork)**

If **FOREIGN**, list country of origin: _____

**(Movement from some Canadian Provinces is not allowed. Refer to ENV-FRM-MIN4-0137 *Regulated Soil Flow Chart*)**

| REQUIREMENT | ACTION | COMPLETED | | |
|---|---|---|---|---|
| PPQ-530 Paperwork must be included for any samples from counties with a Fruit Fly Quarantine in CA, NY, and TX.<br>Reference ENV-SOP-MIN4-0095. | Scan PPQ-530 to the corresponding Project folder on the X:drive.<br>If PPQ-530 is not present, contact the laboratory's designated USDA permit holder. **Do NOT continue processing samples.** | YES | NO | (N/A) |
| Samples from ID may not be moved from the quarantined region.<br>Reference ENV-SOP-MIN4-0095. | If samples originated in a quarantined zone, contact the laboratory's designated USDA permit holder. **Do NOT continue processing samples.** | YES | NO | (N/A) |

| REQUIREMENT | ACTION | COMPLETED | | |
|---|---|---|---|---|
| "Special Handling" stickers are to be placed on all samples. | Did "special handling" stickers get placed on all sample containers? | YES | NO | (N/A) |
| Samples must be segregated and stored in designated bins, shelves, and coolers. | Were samples placed in a designated cooler, containers, and shelves? | YES | NO | (N/A) |
| Samples must be double contained to prevent accidental release. | Were there any signs of breakage or leakage (check for broken glass and/or loose soil in the cooler)?<br>*NOTE: If NO, ice and melt water can be disposed of by normal process (ex: down the drain).* | YES | (NO) | N/A |
| | If **YES**, were ice and melt water separated from the cooler and disposed of properly? | YES | NO | (N/A) |
| | **Any broken glass and/or loose soil are to be bagged and placed in a USDA Regulated satellite container or active drum (see Waste Coordinator).**<br>**Ice and melt water should be baked at a temperature range of 121-154°F for 2 hours and then cooled before going down the drain.** | | | |
| Equipment and supplies that have come into contact samples must be decontaminated. | Was the cooler(s) and/or countertop(s) decontaminated using either a fresh 10% bleach solution or 70% ethanol? (Gloves and other lab supplies will be bagged and placed in the USDA Regulated satellite container or active drum). | YES | (NO) | |

**COMMENTS:**

| Pace ANALYTICAL SERVICES | DC#_Title: ENV-FRM-MIN4-0154 v02_USDA Regulated Soil Checklist |
|---|---|
| | Effective Date: 08/19/2022 |

**To be Completed by Project Management (PM and/or PC):**

Sample analysis will be conducted (circle all that apply): (MN) Subcontract Lab

If **subcontract**, list lab(s): _____

| REQUIREMENT | ACTION | COMPLETED | | |
|---|---|---|---|---|
| Permission to ship untreated soil must be on file prior to shipping to any subcontract lab, including IR Pace Labs. | Go to: *S:\CLIENTSVR\10_Client Services Department Documents\Regulated Soils Permits\Permission to Ship*<br>If permission to ship letter is not there, contact the laboratory's designated USDA permit holder. | YES | NO | N/A |
| Shipment must include a valid copy of the receiving lab's permit as well as permission to ship letter. | Is a copy of all needed paperwork included with the COC?<br>**Do NOT ship samples until all necessary paperwork is compiled.** | YES | NO | N/A |

**COMMENTS:**

**PM Signature:** Kirsten Hogberg **Date:** 4/16/2024

## ENV-FRM-MIN4-0150 v15_Sample Condition Upon Receipt

CLIENT NAME: Pace MTJL PROJECT #:

**WO#: 10689535**

PM: KNH Due Date: 05/07/24

CLIENT: ESC_TN

COURIER: ☐ Client ☐ Commercial ☑ FedEx ☐ Pace ☐ SpeeDee ☐ UPS ☐ USPS

TRACKING NUMBER: 773594597090O ☐ See Exceptions form ENV-FRM-MIN4-0142

Custody Seal on Cooler/Box Present: ☑ YES ☐ NO Seals Intact: ☑ YES ☐ NO Biological Tissue Frozen: ☐ YES ☐ NO ☑ N/A

Packing Material: ☑ Bubble Bags ☐ Bubble Wrap ☐ None ☐ Other Temp Blank: ☑ YES ☐ NO Type of Ice: ☐ Blue ☐ Dry ☑ Wet ☐ Melted ☐ None

Thermometer: ☐ T1 (0461) ☐ T2 (0436) ☑ T3 (0459) ☐ T4 (0402) ☐ T5 (0178) ☐ T6 (0235) ☐ T7 (0042) ☐ T8 (0775) ☐ T9 (0727) ☐ 01339252 (1710)

| | |
|---|---|
| Did Samples Originate in West Virginia: ☐ YES ☑ NO | Were All Container Temps taken: ☐ YES ☐ NO ☑ N/A |
| Correction Factor: -0.1 Cooler Temp Read w/Temp Blank: 1.6 °C Cooler Temp Corrected w/Temp Blank: 1.5 °C | Average Corrected Temp (no Temp Blank Only): ____ °C |
| *NOTE: Temp should be above freezing to 6°C.* | ☐ See Exceptions Form ENV-FRM-MIN4-0142 ☐ 1 Container |
| USDA Regulated Soil: ☐ N/A – Water Sample/Other (describe): ____ | Initials & Date of Person Examining Contents: JMW 4/16/24 |
| Did Samples originate from one of the following states (check maps) – AL, AR, AZ, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA: ☑ YES ☐ NO | Did samples originate from a foreign source (international, including Hawaii and Puerto Rico): ☐ YES ☑ NO |
| **NOTE: If YES to either question, fill out a Regulated Soil Checklist (ENV-FRM-MIN4-0154) and include with SCUR/COC paperwork.** | |

| LOCATION (check one): ☐ DULUTH ☑ MINNEAPOLIS ☐ VIRGINIA | YES | NO | N/A | COMMENT(S) |
|---|---|---|---|---|
| Chain of Custody Present and Filled Out? | ☑ | ☐ | | 1. |
| Chain of Custody Relinquished? | ☑ | ☐ | | 2. |
| Sampler Name and/or Signature on COC? | ☐ | ☐ | ☑ | 3. |
| Samples Arrived within Hold Time? | ☑ | ☐ | | 4. If Fecal: ☐ <8 hrs ☐ >8 hr, <24 hr ☐ No |
| **Short Hold Time Analysis (<72 hr)?** | ☐ | ☑ | | 5. ☐ BOD / cBOD ☐ Fecal coliform ☐ Hex Chrom ☐ HPC ☐ Nitrate ☐ Nitrite ☐ Ortho Phos ☐ Total coliform/*E. coli* ☐ Other: ____ |
| **Rush Turn Around Time Requested?** | ☐ | ☑ | | 6. |
| Sufficient Sample Volume? | ☑ | ☐ | | 7. |
| Correct Containers Used? – Pace Containers Used? | ☑ ☑ | ☐ ☐ | ☐ | 8. |
| Containers Intact? | ☑ | ☐ | | 9. |
| Field Filtered Volume Received for Dissolved Tests? | ☐ | ☐ | ☑ | 10. Is sediment visible in the dissolved container: ☐ YES ☐ NO |
| Is sufficient information available to reconcile the samples to the COC? **NOTE:** If ID/Date/Time don't match fill out section 11. Matrix: ☐ Oil ☑ Soil ☐ Water ☐ Other | ☑ | ☐ | | **11. If NO, write ID/Date/Time of container below:** ☐ See Exceptions form ENV-FRM-MIN4-0142 |
| All containers needing acid/base preservation have been checked? | ☐ | ☐ | ☑ | 12. Sample #: |
| All containers needing preservation are found to be in compliance with EPA recommendation? ($HNO_3$, $H_2SO_4$, < 2 pH, NaOH > 9 Sulfide, NaOH > 10 Cyanide) | ☐ | ☐ | ☑ | ☐ $HNO_3$ ☐ $H_2SO_4$ ☐ NaOH ☐ Zinc Acetate |
| Exceptions: VOA, Coliform, TOC/DOC, Oil & Grease, DRO/8015 (water) and Dioxins/PFAS | ☐ | ☐ | ☑ | Positive for Residual Chlorine: ☐ YES ☐ NO |
| **NOTE:** If adding preservative to a container, it must be added to associated field and equipment blanks—verify with PM first. | | | | pH Paper Lot # (Residual Chlorine / 0-6 Roll / 0-6 Strip / 0-14 Strip) ☐ See Exceptions form ENV-FRM-MIN4-0142 |
| Headspace in Methyl Mercury Container? | ☐ | ☐ | ☑ | 13. |
| Extra labels present on soil VOA or WIDRO containers? | ☐ | ☐ | ☑ | 14. |
| Headspace in VOA Vials (greater than 6mm)? | ☐ | ☐ | ☑ | ☐ See Exceptions form ENV-FRM-MIN4-0142 |
| Trip Blanks Present? | ☐ | ☐ | ☑ | 15. |
| Trip Blank Custody Seals Present? | ☐ | ☐ | ☐ | Pace Trip Blank Lot # (if purchased): ____ |

**CLIENT NOTIFICATION / RESOLUTION** **FIELD DATA REQUIRED:** ☐ YES ☐ NO

Person Contacted: ____ Date & Time: ____

Comments / Resolution: ____

Project Manager Review: Kirsten Hogberg Date: 4/16/2024

*NOTE: When there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e., out of hald, incorrect preservative, out of temp, incorrect containers).*

Labeled By: JMW Line: 2

# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.



| Section A<br>Required Client Information: | | Section B<br>Required Project Information: | | Section C<br>Invoice Information: | |
|---|---|---|---|---|---|
| Company: | Pace Analytical | Report To: | Pace Analytical Subout Team | Attention: | Andrew Bisbee |
| Address: | 12065 Lebanon Rd. | Copy To: | | Company Name: | |
| Mt. Juliet, TN 37122 | | | | Address: | |
| Email: | MTJLSuboutTeam@pacelabs.com | Purchase Order #: | L1725562 | Pace Quote: | |
| Phone: (615) 773-9756 | Fax: (615) 758-5859 | Project Name: | King Salvage | Pace Project Manager: | Kirsten Hogberg |
| Requested Due Date: | 7-May | Project #: | 32-23010077 | Pace Profile #: | 38076 |

| Regulatory Agency |
|---|
| |
| State / Location |
| OR |

| MATRIX | CODE |
|---|---|
| Drinking Water | DW |
| Water | WT |
| Waste Water | WW |
| Product | P |
| Soil/Solid | SL |
| Oil | OL |
| Wipe | WP |
| Air | AR |
| Other | OT |
| Tissue | TS |

| ITEM # | SAMPLE ID<br>One Character per box.<br>(A-Z, 0-9 / , -)<br>Sample Ids must be unique | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED START DATE | COLLECTED START TIME | COLLECTED END DATE | COLLECTED END TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | H2SO4 | HNO3 | HCl | NaOH | Na2S2O3 | Methanol | Other | Requested Analysis Filtered (Y/N): Y/N | Analyses Test | SUBSV8290 | Residual Chlorine (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DU-3-SS-COMP-1 | SL | | | | 10-Apr | 13:45 | | 1 | 1 | | | | | | | | | | X | |
| 2 | DU-4A-COMP-1 | SL | | | | 08-Apr | 12:30 | | 1 | 1 | | | | | | | | | | X | |
| 3 | DU-4B-COMP-1 | SL | | | | 10-Apr | 12:33 | | 1 | 1 | | | | | | | | | | X | |
| 4 | DU-4C-COMP-1 | SL | | | | 08-Apr | 15:00 | | 1 | 1 | | | | | | | | | | X | |
| 5 | DU-4D-COMP-1 | SL | | | | 09-Apr | 16:35 | | 1 | 1 | | | | | | | | | | X | |
| 6 | DU-4E-COMP-1 | SL | | | | 08-Apr | 16:25 | | 1 | 1 | | | | | | | | | | X | |
| 7 | DU-4F-COMP-1 | SL | | | | 09-Apr | 9:30 | | 1 | 1 | | | | | | | | | | X | |
| 8 | DU-4G-COMP-1 | SL | | | | 09-Apr | 12:00 | | 1 | 1 | | | | | | | | | | X | |
| 9 | DU-4H-COMP-1 | SL | | | | 09-Apr | 13:50 | | 1 | 1 | | | | | | | | | | X | |
| 10 | DU-4I-COMP-1 | SL | | | | 09-Apr | 15:20 | | 1 | 1 | | | | | | | | | | X | |
| 11 | DU-5-SS-COMP-1 | SL | | | | 10-Apr | 14:40 | | 1 | 1 | | | | | | | | | | X | |
| 12 | DU-6-COMP-1 | SL | | | | 10-Apr | 9:50 | | 1 | 1 | | | | | | | | | | X | |

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS |
|---|---|---|---|---|---|---|---|
| | James C Huckaba | 15-Apr | 13:01 | | | | |
| Pace Analytical Batch: WG2267310 | | | | | | | |
| **Pace Analytical SDGs: L1725562** | | | | | | | |
| **Location: Minneapolis, MN 55414** | | | | | | | |

| SAMPLER NAME AND SIGNATURE | | | | |
|---|---|---|---|---|
| PRINT Name of SAMPLER: | | | | |
| SIGNATURE of SAMPLER: | DATE Signed: | TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) / Samples Intact (Y/N) |

# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.



| **Section A** Required Client Information: | | **Section B** Required Project Information: | | **Section C** Invoice Information: | |
|---|---|---|---|---|---|
| Company: | Pace Analytical | Report To: | Pace Analytical Subout Team | Attention: | Andrew Bisbee |
| Address: | 12065 Lebanon Rd. | Copy To: | | Company Name: | |
| Mt. Juliet, TN 37122 | | | | Address: | |
| Email: | MTJLSuboutTeam@pacelabs.com | Purchase Order #: | L1725562 | Pace Quote: | |
| Phone: (615) 773-9756 | Fax: (615) 758-5859 | Project Name: | King Salvage | Pace Project Manager: | Kirsten Hogberg |
| Requested Due Date: | 7-May | Project #: | 32-23010077 | Pace Profile #: | 38076 |

| Regulatory Agency |
|---|
| |
| **State / Location** |
| **OR** |

**SAMPLE ID**
**One Character per box.**
**(A-Z, 0-9 / , -)**
**Sample Ids must be unique**

| MATRIX | CODE |
|---|---|
| Drinking Water | DW |
| Water | WT |
| Waste Water | WW |
| Product | P |
| Soil/Solid | SL |
| Oil | OL |
| Wipe | WP |
| Air | AR |
| Other | OT |
| Tissue | TS |

| ITEM # | SAMPLE ID | MATRIX CODE (see valid codes to left) | SAMPLE TYPE (G=GRAB C=COMP) | COLLECTED START DATE | COLLECTED START TIME | COLLECTED END DATE | COLLECTED END TIME | SAMPLE TEMP AT COLLECTION | # OF CONTAINERS | Preservatives: Unpreserved | H2SO4 | HNO3 | HCl | NaOH | Na2S2O3 | Methanol | Other | Analyses Test Y/N | Analyses Test: SUBSV8290 | Residual Chlorine (Y/N) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | DU-6-SS-COMP-1 | SL | | | | 10-Apr | 13:30 | | 1 | 1 | | | | | | | | | X | |
| 2 | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | |

Requested Analysis Filtered (Y/N)

| ADDITIONAL COMMENTS | RELINQUISHED BY / AFFILIATION | DATE | TIME | ACCEPTED BY / AFFILIATION | DATE | TIME | SAMPLE CONDITIONS |
|---|---|---|---|---|---|---|---|
| | James C Huckaba | 15-Apr | 13:01 | | | | |
| Pace Analytical Batch: WG2267310 | | | | | | | |
| **Pace Analytical SDGs: L1725562** | | | | | | | |
| **Location: Minneapolis, MN 55414** | | | | | | | |

| SAMPLER NAME AND SIGNATURE | | | | |
|---|---|---|---|---|
| **PRINT Name of SAMPLER:** | | | | |
| **SIGNATURE of SAMPLER:** | **DATE Signed:** | TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) / Samples Intact (Y/N) |

**Pace Analytical Services, LLC**
1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444
www.pacelabs.com

# Reporting Flags

A = Reporting Limit based on signal to noise (EDL)

B = Less than 10x higher than method blank level

C = Result obtained from confirmation analysis

D = Result obtained from analysis of diluted sample

E = Exceeds calibration range

H2 = Extracted outside of holding time

I = Isotope ratio out of specification

J = Estimated value

L = Suppressive interference, analyte may be biased low

Nn = Value obtained from additional analysis

P = PCDE Interference

R = Recovery outside target range

S = Peak saturated

U = Analyte not detected

V = Result verified by confirmation analysis

X = %D Exceeds limits

Y = Calculated using average of daily RFs

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444
www.pacelabs.com

# Appendix B

Sample Analysis Summary

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

# Method 8290 Sample Analysis Results

Client - Pace Analytical National

| | | | |
|---|---|---|---|
| Client's Sample ID | DU-3-SS-COMP-1 | | |
| Lab Sample ID | 10689535001 | | |
| Filename | L240422A_11 | | |
| Injected By | AH5 | | |
| Total Amount Extracted | 19.0 g | Matrix | SOLID |
| % Moisture | 37.2 | Dilution | NA |
| Dry Weight Extracted | 11.9 g | Collected | 04/10/2024 13:45 |
| ICAL ID | L240401 | Received | 04/16/2024 08:40 |
| CCal Filename(s) | L240422A_05 & L240422A_21 | Extracted | 04/17/2024 14:30 |
| Method Blank ID | BLANK-112389 | Analyzed | 04/22/2024 18:54 |

| Native Isomers | Conc ng/Kg | EMPC ng/Kg | EDL ng/Kg | | Internal Standards | ng's Added | Percent Recovery |
|---|---|---|---|---|---|---|---|
| 2,3,7,8-TCDF | ND | ----- | 0.10 | | 2,3,7,8-TCDF-13C | 2.00 | 81 |
| Total TCDF | 0.47 | ----- | 0.10 | J | 2,3,7,8-TCDD-13C | 2.00 | 74 |
| | | | | | 1,2,3,7,8-PeCDF-13C | 2.00 | 89 |
| 2,3,7,8-TCDD | ----- | 0.11 | 0.069 | JI | 2,3,4,7,8-PeCDF-13C | 2.00 | 90 |
| Total TCDD | 0.23 | ----- | 0.069 | J | 1,2,3,7,8-PeCDD-13C | 2.00 | 98 |
| | | | | | 1,2,3,4,7,8-HxCDF-13C | 2.00 | 81 |
| 1,2,3,7,8-PeCDF | ND | ----- | 0.053 | | 1,2,3,6,7,8-HxCDF-13C | 2.00 | 79 |
| 2,3,4,7,8-PeCDF | ND | ----- | 0.049 | | 2,3,4,6,7,8-HxCDF-13C | 2.00 | 78 |
| Total PeCDF | ND | ----- | 0.049 | | 1,2,3,7,8,9-HxCDF-13C | 2.00 | 70 |
| | | | | | 1,2,3,4,7,8-HxCDD-13C | 2.00 | 76 |
| 1,2,3,7,8-PeCDD | ND | ----- | 0.11 | | 1,2,3,6,7,8-HxCDD-13C | 2.00 | 83 |
| Total PeCDD | 0.13 | ----- | 0.11 | J | 1,2,3,4,6,7,8-HpCDF-13C | 2.00 | 71 |
| | | | | | 1,2,3,4,7,8,9-HpCDF-13C | 2.00 | 68 |
| 1,2,3,4,7,8-HxCDF | ND | ----- | 0.047 | | 1,2,3,4,6,7,8-HpCDD-13C | 2.00 | 75 |
| 1,2,3,6,7,8-HxCDF | ND | ----- | 0.044 | | OCDD-13C | 4.00 | 66 |
| 2,3,4,6,7,8-HxCDF | ND | ----- | 0.046 | | | | |
| 1,2,3,7,8,9-HxCDF | 0.11 | ----- | 0.066 | J | 1,2,3,4-TCDD-13C | 2.00 | NA |
| Total HxCDF | 0.11 | ----- | 0.044 | J | 1,2,3,7,8,9-HxCDD-13C | 2.00 | NA |
| 1,2,3,4,7,8-HxCDD | 0.15 | ----- | 0.076 | BJ | 2,3,7,8-TCDD-37Cl4 | 0.20 | 79 |
| 1,2,3,6,7,8-HxCDD | 0.077 | ----- | 0.071 | J | | | |
| 1,2,3,7,8,9-HxCDD | ----- | 0.16 | 0.071 | JI | | | |
| Total HxCDD | 0.80 | ----- | 0.071 | BJ | | | |
| 1,2,3,4,6,7,8-HpCDF | ND | ----- | 0.064 | | Total 2,3,7,8-TCDD | | |
| 1,2,3,4,7,8,9-HpCDF | ND | ----- | 0.090 | | Equivalence: 0.17 ng/Kg | | |
| Total HpCDF | 0.16 | ----- | 0.064 | J | (Lower-bound - Using 2005 WHO Factors) | | |
| 1,2,3,4,6,7,8-HpCDD | 0.66 | ----- | 0.11 | J | | | |
| Total HpCDD | 0.66 | ----- | 0.11 | J | | | |
| OCDF | ----- | 0.15 | 0.081 | JI | | | |
| OCDD | 2.6 | ----- | 0.057 | J | | | |

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
EDL = Estimated Detection Limit

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
J = Estimated value
B = Less than 10x higher than method blank level
I = Isotope ratio out of specification

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

# Method 8290 Sample Analysis Results

Client - Pace Analytical National

| | | | |
|---|---|---|---|
| Client's Sample ID | DU-4A-COMP-1 | | |
| Lab Sample ID | 10689535002 | | |
| Filename | L240422A_12 | | |
| Injected By | AH5 | | |
| Total Amount Extracted | 14.8 g | Matrix | SOLID |
| % Moisture | 33.1 | Dilution | NA |
| Dry Weight Extracted | 9.88 g | Collected | 04/08/2024 12:30 |
| ICAL ID | L240401 | Received | 04/16/2024 08:40 |
| CCal Filename(s) | L240422A_05 & L240422A_21 | Extracted | 04/17/2024 14:30 |
| Method Blank ID | BLANK-112389 | Analyzed | 04/22/2024 19:39 |

| Native Isomers | Conc ng/Kg | EMPC ng/Kg | EDL ng/Kg | | Internal Standards | ng's Added | Percent Recovery |
|---|---|---|---|---|---|---|---|
| 2,3,7,8-TCDF | 0.18 | ----- | 0.14 | J | 2,3,7,8-TCDF-13C | 2.00 | 73 |
| Total TCDF | 3.4 | ----- | 0.14 | | 2,3,7,8-TCDD-13C | 2.00 | 66 |
| | | | | | 1,2,3,7,8-PeCDF-13C | 2.00 | 61 |
| 2,3,7,8-TCDD | ND | ----- | 0.084 | | 2,3,4,7,8-PeCDF-13C | 2.00 | 61 |
| Total TCDD | 0.71 | ----- | 0.084 | J | 1,2,3,7,8-PeCDD-13C | 2.00 | 65 |
| | | | | | 1,2,3,4,7,8-HxCDF-13C | 2.00 | 65 |
| 1,2,3,7,8-PeCDF | 0.24 | ----- | 0.20 | J | 1,2,3,6,7,8-HxCDF-13C | 2.00 | 63 |
| 2,3,4,7,8-PeCDF | 0.33 | ----- | 0.20 | J | 2,3,4,6,7,8-HxCDF-13C | 2.00 | 62 |
| Total PeCDF | 4.8 | ----- | 0.20 | J | 1,2,3,7,8,9-HxCDF-13C | 2.00 | 59 |
| | | | | | 1,2,3,4,7,8-HxCDD-13C | 2.00 | 63 |
| 1,2,3,7,8-PeCDD | ND | ----- | 0.22 | | 1,2,3,6,7,8-HxCDD-13C | 2.00 | 64 |
| Total PeCDD | 0.55 | ----- | 0.22 | J | 1,2,3,4,6,7,8-HpCDF-13C | 2.00 | 58 |
| | | | | | 1,2,3,4,7,8,9-HpCDF-13C | 2.00 | 56 |
| 1,2,3,4,7,8-HxCDF | 0.50 | ----- | 0.33 | J | 1,2,3,4,6,7,8-HpCDD-13C | 2.00 | 62 |
| 1,2,3,6,7,8-HxCDF | 0.37 | ----- | 0.33 | J | OCDD-13C | 4.00 | 53 |
| 2,3,4,6,7,8-HxCDF | ----- | 0.45 | 0.31 | JI | | | |
| 1,2,3,7,8,9-HxCDF | ND | ----- | 0.42 | | 1,2,3,4-TCDD-13C | 2.00 | NA |
| Total HxCDF | 3.6 | ----- | 0.31 | J | 1,2,3,7,8,9-HxCDD-13C | 2.00 | NA |
| 1,2,3,4,7,8-HxCDD | 0.32 | ----- | 0.23 | BJ | 2,3,7,8-TCDD-37Cl4 | 0.20 | 69 |
| 1,2,3,6,7,8-HxCDD | 0.59 | ----- | 0.20 | J | | | |
| 1,2,3,7,8,9-HxCDD | ----- | 0.34 | 0.21 | JI | | | |
| Total HxCDD | 3.1 | ----- | 0.20 | J | | | |
| 1,2,3,4,6,7,8-HpCDF | 2.7 | ----- | 0.31 | J | Total 2,3,7,8-TCDD | | |
| 1,2,3,4,7,8,9-HpCDF | ND | ----- | 0.41 | | Equivalence: 0.51 ng/Kg | | |
| Total HpCDF | 2.7 | ----- | 0.31 | J | (Lower-bound - Using 2005 WHO Factors) | | |
| 1,2,3,4,6,7,8-HpCDD | 8.5 | ----- | 0.13 | | | | |
| Total HpCDD | 16 | ----- | 0.13 | | | | |
| OCDF | ----- | 2.4 | 0.56 | JI | | | |
| OCDD | 68 | ----- | 0.30 | | | | |

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
EDL = Estimated Detection Limit

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
J = Estimated value
B = Less than 10x higher than method blank level
I = Isotope ratio out of specification

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

# Method 8290 Sample Analysis Results

Client - Pace Analytical National

| | | | |
|---|---|---|---|
| Client's Sample ID | DU-4B-COMP-1 | | |
| Lab Sample ID | 10689535003 | | |
| Filename | L240422A_13 | | |
| Injected By | AH5 | | |
| Total Amount Extracted | 13.4 g | Matrix | SOLID |
| % Moisture | 29.5 | Dilution | NA |
| Dry Weight Extracted | 9.44 g | Collected | 04/10/2024 12:33 |
| ICAL ID | L240401 | Received | 04/16/2024 08:40 |
| CCal Filename(s) | L240422A_05 & L240422A_21 | Extracted | 04/17/2024 14:30 |
| Method Blank ID | BLANK-112389 | Analyzed | 04/22/2024 20:25 |

| Native Isomers | Conc ng/Kg | EMPC ng/Kg | EDL ng/Kg | | Internal Standards | ng's Added | Percent Recovery |
|---|---|---|---|---|---|---|---|
| 2,3,7,8-TCDF | ND | ----- | 0.098 | | 2,3,7,8-TCDF-13C | 2.00 | 92 |
| Total TCDF | 1.1 | ----- | 0.098 | | 2,3,7,8-TCDD-13C | 2.00 | 82 |
| | | | | | 1,2,3,7,8-PeCDF-13C | 2.00 | 91 |
| 2,3,7,8-TCDD | ND | ----- | 0.13 | | 2,3,4,7,8-PeCDF-13C | 2.00 | 94 |
| Total TCDD | 0.29 | ----- | 0.13 | J | 1,2,3,7,8-PeCDD-13C | 2.00 | 102 |
| | | | | | 1,2,3,4,7,8-HxCDF-13C | 2.00 | 83 |
| 1,2,3,7,8-PeCDF | ND | ----- | 0.044 | | 1,2,3,6,7,8-HxCDF-13C | 2.00 | 83 |
| 2,3,4,7,8-PeCDF | ----- | 0.089 | 0.042 | JI | 2,3,4,6,7,8-HxCDF-13C | 2.00 | 81 |
| Total PeCDF | 0.20 | ----- | 0.042 | J | 1,2,3,7,8,9-HxCDF-13C | 2.00 | 78 |
| | | | | | 1,2,3,4,7,8-HxCDD-13C | 2.00 | 82 |
| 1,2,3,7,8-PeCDD | ND | ----- | 0.075 | | 1,2,3,6,7,8-HxCDD-13C | 2.00 | 88 |
| Total PeCDD | 0.34 | ----- | 0.075 | J | 1,2,3,4,6,7,8-HpCDF-13C | 2.00 | 80 |
| | | | | | 1,2,3,4,7,8,9-HpCDF-13C | 2.00 | 78 |
| 1,2,3,4,7,8-HxCDF | 0.18 | ----- | 0.048 | J | 1,2,3,4,6,7,8-HpCDD-13C | 2.00 | 86 |
| 1,2,3,6,7,8-HxCDF | 0.13 | ----- | 0.049 | J | OCDD-13C | 4.00 | 78 |
| 2,3,4,6,7,8-HxCDF | ----- | 0.14 | 0.046 | JI | | | |
| 1,2,3,7,8,9-HxCDF | ND | ----- | 0.057 | | 1,2,3,4-TCDD-13C | 2.00 | NA |
| Total HxCDF | 1.7 | ----- | 0.046 | J | 1,2,3,7,8,9-HxCDD-13C | 2.00 | NA |
| 1,2,3,4,7,8-HxCDD | 0.25 | ----- | 0.11 | BJ | 2,3,7,8-TCDD-37Cl4 | 0.20 | 83 |
| 1,2,3,6,7,8-HxCDD | ----- | 0.18 | 0.088 | JI | | | |
| 1,2,3,7,8,9-HxCDD | ----- | 0.13 | 0.094 | JI | | | |
| Total HxCDD | 0.54 | ----- | 0.088 | BJ | | | |
| 1,2,3,4,6,7,8-HpCDF | 1.1 | ----- | 0.11 | J | Total 2,3,7,8-TCDD | | |
| 1,2,3,4,7,8,9-HpCDF | ND | ----- | 0.14 | | Equivalence: 0.20 ng/Kg | | |
| Total HpCDF | 1.1 | ----- | 0.11 | J | (Lower-bound - Using 2005 WHO Factors) | | |
| 1,2,3,4,6,7,8-HpCDD | 5.0 | ----- | 0.060 | J | | | |
| Total HpCDD | 8.8 | ----- | 0.060 | | | | |
| OCDF | 5.3 | ----- | 0.11 | J | | | |
| OCDD | 49 | ----- | 0.12 | | | | |

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
EDL = Estimated Detection Limit

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
J = Estimated value
B = Less than 10x higher than method blank level
I = Isotope ratio out of specification

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
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# Method 8290 Sample Analysis Results

Client - Pace Analytical National

| | | | |
|---|---|---|---|
| Client's Sample ID | DU-4C-COMP-1 | | |
| Lab Sample ID | 10689535004 | | |
| Filename | L240422A_14 | | |
| Injected By | AH5 | | |
| Total Amount Extracted | 13.9 g | Matrix | SOLID |
| % Moisture | 29.4 | Dilution | NA |
| Dry Weight Extracted | 9.81 g | Collected | 04/08/2024 15:00 |
| ICAL ID | L240401 | Received | 04/16/2024 08:40 |
| CCal Filename(s) | L240422A_05 & L240422A_21 | Extracted | 04/17/2024 14:30 |
| Method Blank ID | BLANK-112389 | Analyzed | 04/22/2024 21:10 |

| Native Isomers | Conc ng/Kg | EMPC ng/Kg | EDL ng/Kg | | Internal Standards | ng's Added | Percent Recovery |
|---|---|---|---|---|---|---|---|
| 2,3,7,8-TCDF | 6.2 | ----- | 0.14 | | 2,3,7,8-TCDF-13C | 2.00 | 86 |
| Total TCDF | 19 | ----- | 0.14 | | 2,3,7,8-TCDD-13C | 2.00 | 78 |
| | | | | | 1,2,3,7,8-PeCDF-13C | 2.00 | 89 |
| 2,3,7,8-TCDD | 0.37 | ----- | 0.10 | J | 2,3,4,7,8-PeCDF-13C | 2.00 | 90 |
| Total TCDD | 8.5 | ----- | 0.10 | | 1,2,3,7,8-PeCDD-13C | 2.00 | 98 |
| | | | | | 1,2,3,4,7,8-HxCDF-13C | 2.00 | 77 |
| 1,2,3,7,8-PeCDF | 8.7 | ----- | 0.068 | | 1,2,3,6,7,8-HxCDF-13C | 2.00 | 77 |
| 2,3,4,7,8-PeCDF | 9.8 | ----- | 0.069 | | 2,3,4,6,7,8-HxCDF-13C | 2.00 | 73 |
| Total PeCDF | 140 | ----- | 0.068 | | 1,2,3,7,8,9-HxCDF-13C | 2.00 | 72 |
| | | | | | 1,2,3,4,7,8-HxCDD-13C | 2.00 | 75 |
| 1,2,3,7,8-PeCDD | 6.6 | ----- | 0.064 | | 1,2,3,6,7,8-HxCDD-13C | 2.00 | 80 |
| Total PeCDD | 38 | ----- | 0.064 | | 1,2,3,4,6,7,8-HpCDF-13C | 2.00 | 68 |
| | | | | | 1,2,3,4,7,8,9-HpCDF-13C | 2.00 | 70 |
| 1,2,3,4,7,8-HxCDF | 13 | ----- | 0.16 | | 1,2,3,4,6,7,8-HpCDD-13C | 2.00 | 77 |
| 1,2,3,6,7,8-HxCDF | 6.3 | ----- | 0.16 | | OCDD-13C | 4.00 | 78 |
| 2,3,4,6,7,8-HxCDF | 11 | ----- | 0.16 | | | | |
| 1,2,3,7,8,9-HxCDF | 6.0 | ----- | 0.20 | | 1,2,3,4-TCDD-13C | 2.00 | NA |
| Total HxCDF | 410 | ----- | 0.16 | | 1,2,3,7,8,9-HxCDD-13C | 2.00 | NA |
| 1,2,3,4,7,8-HxCDD | 20 | ----- | 0.061 | | 2,3,7,8-TCDD-37Cl4 | 0.20 | 74 |
| 1,2,3,6,7,8-HxCDD | 120 | ----- | 0.052 | | | | |
| 1,2,3,7,8,9-HxCDD | 35 | ----- | 0.055 | | | | |
| Total HxCDD | 480 | ----- | 0.052 | | | | |
| 1,2,3,4,6,7,8-HpCDF | 150 | ----- | 0.28 | | Total 2,3,7,8-TCDD | | |
| 1,2,3,4,7,8,9-HpCDF | ----- | 4.4 | 0.36 | JI | Equivalence: 61 ng/Kg | | |
| Total HpCDF | 370 | ----- | 0.28 | | (Lower-bound - Using 2005 WHO Factors) | | |
| 1,2,3,4,6,7,8-HpCDD | 2300 | ----- | 0.023 | | | | |
| Total HpCDD | 3900 | ----- | 0.023 | | | | |
| OCDF | 65 | ----- | 0.045 | | | | |
| OCDD | 14000 | ----- | 0.25 | E | | | |

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
EDL = Estimated Detection Limit

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
J = Estimated value
E = Exceeds calibration range
I = Isotope ratio out of specification

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

# Method 8290 Sample Analysis Results

Client - Pace Analytical National

| | | | |
|---|---|---|---|
| Client's Sample ID | DU-4D-COMP-1 | | |
| Lab Sample ID | 10689535005 | | |
| Filename | L240422A_15 | | |
| Injected By | AH5 | | |
| Total Amount Extracted | 15.9 g | Matrix | SOLID |
| % Moisture | 26.5 | Dilution | NA |
| Dry Weight Extracted | 11.7 g | Collected | 04/09/2024 16:35 |
| ICAL ID | L240401 | Received | 04/16/2024 08:40 |
| CCal Filename(s) | L240422A_05 & L240422A_21 | Extracted | 04/17/2024 14:30 |
| Method Blank ID | BLANK-112389 | Analyzed | 04/22/2024 21:56 |

| Native Isomers | Conc ng/Kg | EMPC ng/Kg | EDL ng/Kg | | Internal Standards | ng's Added | Percent Recovery |
|---|---|---|---|---|---|---|---|
| 2,3,7,8-TCDF | 0.51 | ----- | 0.16 | J | 2,3,7,8-TCDF-13C | 2.00 | 93 |
| Total TCDF | 8.8 | ----- | 0.16 | | 2,3,7,8-TCDD-13C | 2.00 | 85 |
| | | | | | 1,2,3,7,8-PeCDF-13C | 2.00 | 95 |
| 2,3,7,8-TCDD | ND | ----- | 0.082 | | 2,3,4,7,8-PeCDF-13C | 2.00 | 98 |
| Total TCDD | 0.15 | ----- | 0.082 | J | 1,2,3,7,8-PeCDD-13C | 2.00 | 105 |
| | | | | | 1,2,3,4,7,8-HxCDF-13C | 2.00 | 86 |
| 1,2,3,7,8-PeCDF | ----- | 0.28 | 0.070 | JI | 1,2,3,6,7,8-HxCDF-13C | 2.00 | 82 |
| 2,3,4,7,8-PeCDF | ----- | 0.48 | 0.064 | JI | 2,3,4,6,7,8-HxCDF-13C | 2.00 | 84 |
| Total PeCDF | 28 | ----- | 0.064 | | 1,2,3,7,8,9-HxCDF-13C | 2.00 | 77 |
| | | | | | 1,2,3,4,7,8-HxCDD-13C | 2.00 | 83 |
| 1,2,3,7,8-PeCDD | ----- | 0.14 | 0.079 | JI | 1,2,3,6,7,8-HxCDD-13C | 2.00 | 89 |
| Total PeCDD | 1.7 | ----- | 0.079 | J | 1,2,3,4,6,7,8-HpCDF-13C | 2.00 | 79 |
| | | | | | 1,2,3,4,7,8,9-HpCDF-13C | 2.00 | 75 |
| 1,2,3,4,7,8-HxCDF | 0.67 | ----- | 0.14 | J | 1,2,3,4,6,7,8-HpCDD-13C | 2.00 | 83 |
| 1,2,3,6,7,8-HxCDF | 0.63 | ----- | 0.14 | J | OCDD-13C | 4.00 | 75 |
| 2,3,4,6,7,8-HxCDF | 1.1 | ----- | 0.14 | J | | | |
| 1,2,3,7,8,9-HxCDF | 0.26 | ----- | 0.18 | J | 1,2,3,4-TCDD-13C | 2.00 | NA |
| Total HxCDF | 25 | ----- | 0.14 | | 1,2,3,7,8,9-HxCDD-13C | 2.00 | NA |
| 1,2,3,4,7,8-HxCDD | ----- | 0.36 | 0.099 | JI | 2,3,7,8-TCDD-37Cl4 | 0.20 | 76 |
| 1,2,3,6,7,8-HxCDD | 1.3 | ----- | 0.085 | J | | | |
| 1,2,3,7,8,9-HxCDD | ----- | 0.62 | 0.089 | JI | | | |
| Total HxCDD | 7.1 | ----- | 0.085 | | | | |
| 1,2,3,4,6,7,8-HpCDF | 20 | ----- | 0.30 | | Total 2,3,7,8-TCDD | | |
| 1,2,3,4,7,8,9-HpCDF | ----- | 0.87 | 0.40 | JI | Equivalence: 1.9 ng/Kg | | |
| Total HpCDF | 81 | ----- | 0.30 | | (Lower-bound - Using 2005 WHO Factors) | | |
| 1,2,3,4,6,7,8-HpCDD | 50 | ----- | 0.11 | | | | |
| Total HpCDD | 82 | ----- | 0.11 | | | | |
| OCDF | 82 | ----- | 0.18 | | | | |
| OCDD | 940 | ----- | 0.18 | | | | |

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
EDL = Estimated Detection Limit

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
J = Estimated value
I = Isotope ratio out of specification

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

# Method 8290 Sample Analysis Results

Client - Pace Analytical National

| | | | |
|---|---|---|---|
| Client's Sample ID | DU-4E-COMP-1 | | |
| Lab Sample ID | 10689535006 | | |
| Filename | L240422A_16 | | |
| Injected By | AH5 | | |
| Total Amount Extracted | 14.6 g | Matrix | SOLID |
| % Moisture | 26.5 | Dilution | NA |
| Dry Weight Extracted | 10.8 g | Collected | 04/08/2024 16:25 |
| ICAL ID | L240401 | Received | 04/16/2024 08:40 |
| CCal Filename(s) | L240422A_05 & L240422A_21 | Extracted | 04/17/2024 14:30 |
| Method Blank ID | BLANK-112389 | Analyzed | 04/22/2024 22:41 |

| Native Isomers | Conc ng/Kg | EMPC ng/Kg | EDL ng/Kg | | Internal Standards | ng's Added | Percent Recovery |
|---|---|---|---|---|---|---|---|
| 2,3,7,8-TCDF | 1.3 | ----- | 0.12 | | 2,3,7,8-TCDF-13C | 2.00 | 94 |
| Total TCDF | 43 | ----- | 0.12 | | 2,3,7,8-TCDD-13C | 2.00 | 86 |
| | | | | | 1,2,3,7,8-PeCDF-13C | 2.00 | 88 |
| 2,3,7,8-TCDD | ----- | 0.25 | 0.15 | JI | 2,3,4,7,8-PeCDF-13C | 2.00 | 90 |
| Total TCDD | 5.6 | ----- | 0.15 | | 1,2,3,7,8-PeCDD-13C | 2.00 | 98 |
| | | | | | 1,2,3,4,7,8-HxCDF-13C | 2.00 | 84 |
| 1,2,3,7,8-PeCDF | 1.4 | ----- | 0.11 | J | 1,2,3,6,7,8-HxCDF-13C | 2.00 | 82 |
| 2,3,4,7,8-PeCDF | 3.5 | ----- | 0.10 | J | 2,3,4,6,7,8-HxCDF-13C | 2.00 | 81 |
| Total PeCDF | 34 | ----- | 0.10 | | 1,2,3,7,8,9-HxCDF-13C | 2.00 | 80 |
| | | | | | 1,2,3,4,7,8-HxCDD-13C | 2.00 | 83 |
| 1,2,3,7,8-PeCDD | 0.64 | ----- | 0.083 | J | 1,2,3,6,7,8-HxCDD-13C | 2.00 | 88 |
| Total PeCDD | 10.0 | ----- | 0.083 | | 1,2,3,4,6,7,8-HpCDF-13C | 2.00 | 74 |
| | | | | | 1,2,3,4,7,8,9-HpCDF-13C | 2.00 | 75 |
| 1,2,3,4,7,8-HxCDF | 1.8 | ----- | 0.28 | J | 1,2,3,4,6,7,8-HpCDD-13C | 2.00 | 84 |
| 1,2,3,6,7,8-HxCDF | 2.4 | ----- | 0.30 | J | OCDD-13C | 4.00 | 67 |
| 2,3,4,6,7,8-HxCDF | 3.3 | ----- | 0.27 | J | | | |
| 1,2,3,7,8,9-HxCDF | 0.87 | ----- | 0.36 | J | 1,2,3,4-TCDD-13C | 2.00 | NA |
| Total HxCDF | 32 | ----- | 0.27 | | 1,2,3,7,8,9-HxCDD-13C | 2.00 | NA |
| 1,2,3,4,7,8-HxCDD | 1.0 | ----- | 0.15 | BJ | 2,3,7,8-TCDD-37Cl4 | 0.20 | 85 |
| 1,2,3,6,7,8-HxCDD | 2.6 | ----- | 0.12 | J | | | |
| 1,2,3,7,8,9-HxCDD | 1.7 | ----- | 0.13 | J | | | |
| Total HxCDD | 21 | ----- | 0.12 | | | | |
| 1,2,3,4,6,7,8-HpCDF | 16 | ----- | 0.35 | | Total 2,3,7,8-TCDD | | |
| 1,2,3,4,7,8,9-HpCDF | 1.2 | ----- | 0.45 | J | Equivalence: 4.3 ng/Kg | | |
| Total HpCDF | 19 | ----- | 0.35 | | (Lower-bound - Using 2005 WHO Factors) | | |
| 1,2,3,4,6,7,8-HpCDD | 50 | ----- | 0.19 | | | | |
| Total HpCDD | 97 | ----- | 0.19 | | | | |
| OCDF | 13 | ----- | 0.49 | | | | |
| OCDD | 530 | ----- | 0.65 | | | | |

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
EDL = Estimated Detection Limit

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
J = Estimated value
B = Less than 10x higher than method blank level
I = Isotope ratio out of specification

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

# Method 8290 Sample Analysis Results

Client - Pace Analytical National

| | | | |
|---|---|---|---|
| Client's Sample ID | DU-4F-COMP-1 | | |
| Lab Sample ID | 10689535007 | | |
| Filename | L240423A_10 | | |
| Injected By | AH5 | | |
| Total Amount Extracted | 13.7 g | Matrix | SOLID |
| % Moisture | 26.1 | Dilution | NA |
| Dry Weight Extracted | 10.1 g | Collected | 04/09/2024 09:30 |
| ICAL ID | L240401 | Received | 04/16/2024 08:40 |
| CCal Filename(s) | L240422A_21 & L240423A_16 | Extracted | 04/17/2024 14:30 |
| Method Blank ID | BLANK-112389 | Analyzed | 04/23/2024 10:04 |

| Native Isomers | Conc ng/Kg | EMPC ng/Kg | EDL ng/Kg | | Internal Standards | ng's Added | Percent Recovery | |
|---|---|---|---|---|---|---|---|---|
| 2,3,7,8-TCDF | 17 | ----- | 0.86 | | 2,3,7,8-TCDF-13C | 2.00 | 72 | |
| Total TCDF | 770 | ----- | 0.86 | | 2,3,7,8-TCDD-13C | 2.00 | 60 | |
| | | | | | 1,2,3,7,8-PeCDF-13C | 2.00 | 60 | |
| 2,3,7,8-TCDD | 3.7 | ----- | 0.81 | | 2,3,4,7,8-PeCDF-13C | 2.00 | 60 | |
| Total TCDD | 210 | ----- | 0.81 | | 1,2,3,7,8-PeCDD-13C | 2.00 | 65 | |
| | | | | | 1,2,3,4,7,8-HxCDF-13C | 2.00 | 68 | |
| 1,2,3,7,8-PeCDF | 29 | ----- | 0.66 | | 1,2,3,6,7,8-HxCDF-13C | 2.00 | 66 | |
| 2,3,4,7,8-PeCDF | 53 | ----- | 0.62 | | 2,3,4,6,7,8-HxCDF-13C | 2.00 | 64 | |
| Total PeCDF | 680 | ----- | 0.62 | | 1,2,3,7,8,9-HxCDF-13C | 2.00 | 61 | |
| | | | | | 1,2,3,4,7,8-HxCDD-13C | 2.00 | 62 | |
| 1,2,3,7,8-PeCDD | 14 | ----- | 0.25 | | 1,2,3,6,7,8-HxCDD-13C | 2.00 | 65 | |
| Total PeCDD | 280 | ----- | 0.25 | | 1,2,3,4,6,7,8-HpCDF-13C | 2.00 | 42 | |
| | | | | | 1,2,3,4,7,8,9-HpCDF-13C | 2.00 | 35 | R |
| 1,2,3,4,7,8-HxCDF | ----- | 68 | 0.67 | P | 1,2,3,4,6,7,8-HpCDD-13C | 2.00 | 38 | R |
| 1,2,3,6,7,8-HxCDF | 49 | ----- | 0.68 | | OCDD-13C | 4.00 | 23 | R |
| 2,3,4,6,7,8-HxCDF | 53 | ----- | 0.64 | | | | | |
| 1,2,3,7,8,9-HxCDF | 18 | ----- | 0.86 | | 1,2,3,4-TCDD-13C | 2.00 | NA | |
| Total HxCDF | 560 | ----- | 0.64 | | 1,2,3,7,8,9-HxCDD-13C | 2.00 | NA | |
| | | | | | | | | |
| 1,2,3,4,7,8-HxCDD | 15 | ----- | 0.39 | | 2,3,7,8-TCDD-37Cl4 | 0.20 | 60 | |
| 1,2,3,6,7,8-HxCDD | 37 | ----- | 0.34 | | | | | |
| 1,2,3,7,8,9-HxCDD | 23 | ----- | 0.35 | | | | | |
| Total HxCDD | 420 | ----- | 0.34 | | | | | |
| | | | | | | | | |
| 1,2,3,4,6,7,8-HpCDF | 360 | ----- | 1.3 | | Total 2,3,7,8-TCDD | | | |
| 1,2,3,4,7,8,9-HpCDF | ----- | 21 | 2.1 | I | Equivalence: 72 ng/Kg | | | |
| Total HpCDF | 360 | ----- | 1.3 | | (Lower-bound - Using 2005 WHO Factors) | | | |
| | | | | | | | | |
| 1,2,3,4,6,7,8-HpCDD | 500 | ----- | 0.84 | | | | | |
| Total HpCDD | 1100 | ----- | 0.84 | | | | | |
| | | | | | | | | |
| OCDF | 220 | ----- | 1.6 | | | | | |
| OCDD | 4000 | ----- | 1.2 | | | | | |

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
EDL = Estimated Detection Limit

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
R = Recovery outside target range
P = PCDE Interference
I = Isotope ratio out of specification

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
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# Method 8290 Sample Analysis Results

Client - Pace Analytical National

| | | | |
|---|---|---|---|
| Client's Sample ID | DU-4G-COMP-1 | | |
| Lab Sample ID | 10689535008 | | |
| Filename | L240422A_17 | | |
| Injected By | AH5 | | |
| Total Amount Extracted | 14.6 g | Matrix | SOLID |
| % Moisture | 23.8 | Dilution | NA |
| Dry Weight Extracted | 11.2 g | Collected | 04/09/2024 12:00 |
| ICAL ID | L240401 | Received | 04/16/2024 08:40 |
| CCal Filename(s) | L240422A_05 & L240422A_21 | Extracted | 04/17/2024 14:30 |
| Method Blank ID | BLANK-112389 | Analyzed | 04/22/2024 23:27 |

| Native Isomers | Conc ng/Kg | EMPC ng/Kg | EDL ng/Kg | | Internal Standards | ng's Added | Percent Recovery |
|---|---|---|---|---|---|---|---|
| 2,3,7,8-TCDF | 1.4 | ----- | 0.27 | | 2,3,7,8-TCDF-13C | 2.00 | 78 |
| Total TCDF | 17 | ----- | 0.27 | | 2,3,7,8-TCDD-13C | 2.00 | 68 |
| | | | | | 1,2,3,7,8-PeCDF-13C | 2.00 | 77 |
| 2,3,7,8-TCDD | ND | ----- | 0.23 | | 2,3,4,7,8-PeCDF-13C | 2.00 | 79 |
| Total TCDD | 0.71 | ----- | 0.23 | J | 1,2,3,7,8-PeCDD-13C | 2.00 | 86 |
| | | | | | 1,2,3,4,7,8-HxCDF-13C | 2.00 | 72 |
| 1,2,3,7,8-PeCDF | 1.9 | ----- | 0.067 | J | 1,2,3,6,7,8-HxCDF-13C | 2.00 | 71 |
| 2,3,4,7,8-PeCDF | 2.1 | ----- | 0.066 | J | 2,3,4,6,7,8-HxCDF-13C | 2.00 | 70 |
| Total PeCDF | 20 | ----- | 0.066 | | 1,2,3,7,8,9-HxCDF-13C | 2.00 | 68 |
| | | | | | 1,2,3,4,7,8-HxCDD-13C | 2.00 | 72 |
| 1,2,3,7,8-PeCDD | 0.58 | ----- | 0.094 | J | 1,2,3,6,7,8-HxCDD-13C | 2.00 | 75 |
| Total PeCDD | 1.5 | ----- | 0.094 | J | 1,2,3,4,6,7,8-HpCDF-13C | 2.00 | 63 |
| | | | | | 1,2,3,4,7,8,9-HpCDF-13C | 2.00 | 62 |
| 1,2,3,4,7,8-HxCDF | 3.5 | ----- | 0.21 | J | 1,2,3,4,6,7,8-HpCDD-13C | 2.00 | 70 |
| 1,2,3,6,7,8-HxCDF | 3.5 | ----- | 0.20 | J | OCDD-13C | 4.00 | 59 |
| 2,3,4,6,7,8-HxCDF | 2.3 | ----- | 0.20 | J | | | |
| 1,2,3,7,8,9-HxCDF | 1.6 | ----- | 0.25 | J | 1,2,3,4-TCDD-13C | 2.00 | NA |
| Total HxCDF | 38 | ----- | 0.20 | | 1,2,3,7,8,9-HxCDD-13C | 2.00 | NA |
| 1,2,3,4,7,8-HxCDD | 1.0 | ----- | 0.16 | BJ | 2,3,7,8-TCDD-37Cl4 | 0.20 | 69 |
| 1,2,3,6,7,8-HxCDD | 9.8 | ----- | 0.14 | | | | |
| 1,2,3,7,8,9-HxCDD | 3.0 | ----- | 0.15 | J | | | |
| Total HxCDD | 54 | ----- | 0.14 | | | | |
| 1,2,3,4,6,7,8-HpCDF | 23 | ----- | 0.30 | | Total 2,3,7,8-TCDD | | |
| 1,2,3,4,7,8,9-HpCDF | 5.3 | ----- | 0.38 | | Equivalence: 7.4 ng/Kg | | |
| Total HpCDF | 51 | ----- | 0.30 | | (Lower-bound - Using 2005 WHO Factors) | | |
| 1,2,3,4,6,7,8-HpCDD | 280 | ----- | 0.22 | | | | |
| Total HpCDD | 500 | ----- | 0.22 | | | | |
| OCDF | 49 | ----- | 0.33 | | | | |
| OCDD | 1400 | ----- | 0.39 | | | | |

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
EDL = Estimated Detection Limit

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
J = Estimated value
B = Less than 10x higher than method blank level

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
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# Method 8290 Sample Analysis Results

Client - Pace Analytical National

| | | | |
|---|---|---|---|
| Client's Sample ID | DU-4H-COMP-1 | | |
| Lab Sample ID | 10689535009 | | |
| Filename | L240423B_09 | | |
| Injected By | SMT | | |
| Total Amount Extracted | 12.6 g | Matrix | SOLID |
| % Moisture | 30.9 | Dilution | NA |
| Dry Weight Extracted | 8.70 g | Collected | 04/09/2024 13:50 |
| ICAL ID | L240401 | Received | 04/16/2024 08:40 |
| CCal Filename(s) | L240423A_16 & L240423B_16 | Extracted | 04/18/2024 14:30 |
| Method Blank ID | BLANK-112406 | Analyzed | 04/23/2024 21:32 |

| Native Isomers | Conc ng/Kg | EMPC ng/Kg | EDL ng/Kg | | Internal Standards | ng's Added | Percent Recovery | |
|---|---|---|---|---|---|---|---|---|
| 2,3,7,8-TCDF | ND | ----- | 0.37 | | 2,3,7,8-TCDF-13C | 2.00 | 75 | |
| Total TCDF | 3.9 | ----- | 0.37 | | 2,3,7,8-TCDD-13C | 2.00 | 66 | |
| | | | | | 1,2,3,7,8-PeCDF-13C | 2.00 | 88 | |
| 2,3,7,8-TCDD | ND | ----- | 0.23 | | 2,3,4,7,8-PeCDF-13C | 2.00 | 79 | |
| Total TCDD | ND | ----- | 0.23 | | 1,2,3,7,8-PeCDD-13C | 2.00 | 86 | |
| | | | | | 1,2,3,4,7,8-HxCDF-13C | 2.00 | 77 | |
| 1,2,3,7,8-PeCDF | ND | ----- | 0.10 | | 1,2,3,6,7,8-HxCDF-13C | 2.00 | 73 | |
| 2,3,4,7,8-PeCDF | ----- | 0.57 | 0.10 | JI | 2,3,4,6,7,8-HxCDF-13C | 2.00 | 74 | |
| Total PeCDF | 4.8 | ----- | 0.10 | J | 1,2,3,7,8,9-HxCDF-13C | 2.00 | 62 | |
| | | | | | 1,2,3,4,7,8-HxCDD-13C | 2.00 | 63 | |
| 1,2,3,7,8-PeCDD | ND | ----- | 0.30 | | 1,2,3,6,7,8-HxCDD-13C | 2.00 | 75 | |
| Total PeCDD | 0.74 | ----- | 0.30 | J | 1,2,3,4,6,7,8-HpCDF-13C | 2.00 | 54 | |
| | | | | | 1,2,3,4,7,8,9-HpCDF-13C | 2.00 | 67 | Y |
| 1,2,3,4,7,8-HxCDF | ----- | 0.49 | 0.25 | JI | 1,2,3,4,6,7,8-HpCDD-13C | 2.00 | 53 | |
| 1,2,3,6,7,8-HxCDF | ----- | 0.32 | 0.28 | JI | OCDD-13C | 4.00 | 47 | Y |
| 2,3,4,6,7,8-HxCDF | 0.74 | ----- | 0.27 | J | | | | |
| 1,2,3,7,8,9-HxCDF | ND | ----- | 0.43 | | 1,2,3,4-TCDD-13C | 2.00 | NA | |
| Total HxCDF | 4.2 | ----- | 0.25 | J | 1,2,3,7,8,9-HxCDD-13C | 2.00 | NA | |
| 1,2,3,4,7,8-HxCDD | 0.48 | ----- | 0.23 | J | 2,3,7,8-TCDD-37Cl4 | 0.20 | 71 | |
| 1,2,3,6,7,8-HxCDD | 0.52 | ----- | 0.21 | J | | | | |
| 1,2,3,7,8,9-HxCDD | ----- | 0.44 | 0.22 | JI | | | | |
| Total HxCDD | 5.6 | ----- | 0.21 | J | | | | |
| 1,2,3,4,6,7,8-HpCDF | 3.4 | ----- | 0.40 | J | Total 2,3,7,8-TCDD | | | |
| 1,2,3,4,7,8,9-HpCDF | ND | ----- | 0.58 | | Equivalence: 0.63 ng/Kg | | | |
| Total HpCDF | 3.4 | ----- | 0.40 | J | (Lower-bound - Using 2005 WHO Factors) | | | |
| 1,2,3,4,6,7,8-HpCDD | 9.6 | ----- | 0.20 | | | | | |
| Total HpCDD | 19 | ----- | 0.20 | | | | | |
| OCDF | ----- | 3.1 | 0.87 | JI | | | | |
| OCDD | 75 | ----- | 0.19 | | | | | |

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
EDL = Estimated Detection Limit

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
J = Estimated value
I = Isotope ratio out of specification
Y = Calculated using average of daily RFs

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
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# Method 8290 Sample Analysis Results

Client - Pace Analytical National

| | | | |
|---|---|---|---|
| Client's Sample ID | DU-4I-COMP-1 | | |
| Lab Sample ID | 10689535010 | | |
| Filename | L240423B_10 | | |
| Injected By | SMT | | |
| Total Amount Extracted | 12.7 g | Matrix | SOLID |
| % Moisture | 27.4 | Dilution | NA |
| Dry Weight Extracted | 9.21 g | Collected | 04/09/2024 15:20 |
| ICAL ID | L240401 | Received | 04/16/2024 08:40 |
| CCal Filename(s) | L240423A_16 & L240423B_16 | Extracted | 04/18/2024 14:30 |
| Method Blank ID | BLANK-112406 | Analyzed | 04/23/2024 22:17 |

| Native Isomers | Conc ng/Kg | EMPC ng/Kg | EDL ng/Kg | | Internal Standards | ng's Added | Percent Recovery | |
|---|---|---|---|---|---|---|---|---|
| 2,3,7,8-TCDF | 2.2 | ----- | 0.16 | | 2,3,7,8-TCDF-13C | 2.00 | 68 | |
| Total TCDF | 60 | ----- | 0.16 | | 2,3,7,8-TCDD-13C | 2.00 | 59 | |
| | | | | | 1,2,3,7,8-PeCDF-13C | 2.00 | 66 | |
| 2,3,7,8-TCDD | ND | ----- | 0.39 | | 2,3,4,7,8-PeCDF-13C | 2.00 | 67 | |
| Total TCDD | 7.8 | ----- | 0.39 | | 1,2,3,7,8-PeCDD-13C | 2.00 | 71 | |
| | | | | | 1,2,3,4,7,8-HxCDF-13C | 2.00 | 63 | |
| 1,2,3,7,8-PeCDF | 2.6 | ----- | 0.27 | J | 1,2,3,6,7,8-HxCDF-13C | 2.00 | 64 | |
| 2,3,4,7,8-PeCDF | 6.3 | ----- | 0.24 | | 2,3,4,6,7,8-HxCDF-13C | 2.00 | 59 | |
| Total PeCDF | 66 | ----- | 0.24 | | 1,2,3,7,8,9-HxCDF-13C | 2.00 | 51 | |
| | | | | | 1,2,3,4,7,8-HxCDD-13C | 2.00 | 60 | |
| 1,2,3,7,8-PeCDD | 1.00 | ----- | 0.16 | J | 1,2,3,6,7,8-HxCDD-13C | 2.00 | 64 | |
| Total PeCDD | 18 | ----- | 0.16 | | 1,2,3,4,6,7,8-HpCDF-13C | 2.00 | 42 | |
| | | | | | 1,2,3,4,7,8,9-HpCDF-13C | 2.00 | 46 | Y |
| 1,2,3,4,7,8-HxCDF | ----- | 13 | 0.45 | P | 1,2,3,4,6,7,8-HpCDD-13C | 2.00 | 40 | |
| 1,2,3,6,7,8-HxCDF | 6.1 | ----- | 0.47 | | OCDD-13C | 4.00 | 29 | RY |
| 2,3,4,6,7,8-HxCDF | 6.8 | ----- | 0.46 | | | | | |
| 1,2,3,7,8,9-HxCDF | 4.0 | ----- | 0.67 | J | 1,2,3,4-TCDD-13C | 2.00 | NA | |
| Total HxCDF | 72 | ----- | 0.45 | | 1,2,3,7,8,9-HxCDD-13C | 2.00 | NA | |
| | | | | | | | | |
| 1,2,3,4,7,8-HxCDD | 1.7 | ----- | 0.22 | J | 2,3,7,8-TCDD-37Cl4 | 0.20 | 70 | |
| 1,2,3,6,7,8-HxCDD | 4.7 | ----- | 0.20 | J | | | | |
| 1,2,3,7,8,9-HxCDD | 3.2 | ----- | 0.21 | J | | | | |
| Total HxCDD | 49 | ----- | 0.20 | | | | | |
| | | | | | | | | |
| 1,2,3,4,6,7,8-HpCDF | 32 | ----- | 0.71 | | Total 2,3,7,8-TCDD | | | |
| 1,2,3,4,7,8,9-HpCDF | 8.7 | ----- | 1.2 | | Equivalence: 8.6 ng/Kg | | | |
| Total HpCDF | 72 | ----- | 0.71 | | (Lower-bound - Using 2005 WHO Factors) | | | |
| | | | | | | | | |
| 1,2,3,4,6,7,8-HpCDD | 84 | ----- | 0.48 | | | | | |
| Total HpCDD | 180 | ----- | 0.48 | | | | | |
| | | | | | | | | |
| OCDF | 52 | ----- | 0.91 | | | | | |
| OCDD | 690 | ----- | 0.85 | | | | | |

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
EDL = Estimated Detection Limit

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
J = Estimated value
R = Recovery outside target range
P = PCDE Interference
Y = Calculated using average of daily RFs

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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# Method 8290 Sample Analysis Results

Client - Pace Analytical National

| | | | |
|---|---|---|---|
| Client's Sample ID | DU-5-SS-COMP-1 | | |
| Lab Sample ID | 10689535011 | | |
| Filename | L240423B_11 | | |
| Injected By | SMT | | |
| Total Amount Extracted | 15.9 g | Matrix | SOLID |
| % Moisture | 36.6 | Dilution | NA |
| Dry Weight Extracted | 10.1 g | Collected | 04/10/2024 14:40 |
| ICAL ID | L240401 | Received | 04/16/2024 08:40 |
| CCal Filename(s) | L240423A_16 & L240423B_16 | Extracted | 04/18/2024 14:30 |
| Method Blank ID | BLANK-112406 | Analyzed | 04/23/2024 23:03 |

| Native Isomers | Conc ng/Kg | EMPC ng/Kg | EDL ng/Kg | | Internal Standards | ng's Added | Percent Recovery | |
|---|---|---|---|---|---|---|---|---|
| 2,3,7,8-TCDF | ND | ----- | 0.32 | | 2,3,7,8-TCDF-13C | 2.00 | 46 | |
| Total TCDF | ND | ----- | 0.32 | | 2,3,7,8-TCDD-13C | 2.00 | 37 | R |
| | | | | | 1,2,3,7,8-PeCDF-13C | 2.00 | 57 | |
| 2,3,7,8-TCDD | ND | ----- | 0.45 | | 2,3,4,7,8-PeCDF-13C | 2.00 | 51 | |
| Total TCDD | ND | ----- | 0.45 | | 1,2,3,7,8-PeCDD-13C | 2.00 | 55 | |
| | | | | | 1,2,3,4,7,8-HxCDF-13C | 2.00 | 62 | |
| 1,2,3,7,8-PeCDF | ND | ----- | 0.32 | | 1,2,3,6,7,8-HxCDF-13C | 2.00 | 54 | |
| 2,3,4,7,8-PeCDF | ND | ----- | 0.32 | | 2,3,4,6,7,8-HxCDF-13C | 2.00 | 53 | |
| Total PeCDF | ND | ----- | 0.32 | | 1,2,3,7,8,9-HxCDF-13C | 2.00 | 39 | R |
| | | | | | 1,2,3,4,7,8-HxCDD-13C | 2.00 | 48 | |
| 1,2,3,7,8-PeCDD | ND | ----- | 0.13 | | 1,2,3,6,7,8-HxCDD-13C | 2.00 | 53 | |
| Total PeCDD | ND | ----- | 0.13 | | 1,2,3,4,6,7,8-HpCDF-13C | 2.00 | 38 | R |
| | | | | | 1,2,3,4,7,8,9-HpCDF-13C | 2.00 | 42 | Y |
| 1,2,3,4,7,8-HxCDF | ND | ----- | 0.16 | | 1,2,3,4,6,7,8-HpCDD-13C | 2.00 | 35 | R |
| 1,2,3,6,7,8-HxCDF | ND | ----- | 0.19 | | OCDD-13C | 4.00 | 26 | RY |
| 2,3,4,6,7,8-HxCDF | ND | ----- | 0.18 | | | | | |
| 1,2,3,7,8,9-HxCDF | ND | ----- | 0.35 | | 1,2,3,4-TCDD-13C | 2.00 | NA | |
| Total HxCDF | ND | ----- | 0.16 | | 1,2,3,7,8,9-HxCDD-13C | 2.00 | NA | |
| | | | | | | | | |
| 1,2,3,4,7,8-HxCDD | ND | ----- | 0.24 | | 2,3,7,8-TCDD-37Cl4 | 0.20 | 63 | |
| 1,2,3,6,7,8-HxCDD | ND | ----- | 0.21 | | | | | |
| 1,2,3,7,8,9-HxCDD | ND | ----- | 0.22 | | | | | |
| Total HxCDD | ND | ----- | 0.21 | | | | | |
| | | | | | | | | |
| 1,2,3,4,6,7,8-HpCDF | ----- | 0.47 | 0.39 | JI | Total 2,3,7,8-TCDD | | | |
| 1,2,3,4,7,8,9-HpCDF | ND | ----- | 0.67 | | Equivalence: 0.020 ng/Kg | | | |
| Total HpCDF | ND | ----- | 0.39 | | (Lower-bound - Using 2005 WHO Factors) | | | |
| | | | | | | | | |
| 1,2,3,4,6,7,8-HpCDD | ----- | 1.2 | 0.51 | JI | | | | |
| Total HpCDD | ND | ----- | 0.51 | | | | | |
| | | | | | | | | |
| OCDF | ND | ----- | 1.1 | | | | | |
| OCDD | ----- | 9.5 | 0.85 | JI | | | | |

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
EDL = Estimated Detection Limit

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
J = Estimated value
R = Recovery outside target range
I = Isotope ratio out of specification
Y = Calculated using average of daily RFs

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

# Method 8290 Sample Analysis Results

Client - Pace Analytical National

| | | | |
|---|---|---|---|
| Client's Sample ID | DU-6-COMP-1 | | |
| Lab Sample ID | 10689535012 | | |
| Filename | L240423B_12 | | |
| Injected By | SMT | | |
| Total Amount Extracted | 15.2 g | Matrix | SOLID |
| % Moisture | 30.2 | Dilution | NA |
| Dry Weight Extracted | 10.6 g | Collected | 04/10/2024 09:50 |
| ICAL ID | L240401 | Received | 04/16/2024 08:40 |
| CCal Filename(s) | L240423A_16 & L240423B_16 | Extracted | 04/18/2024 14:30 |
| Method Blank ID | BLANK-112406 | Analyzed | 04/23/2024 23:48 |

| Native Isomers | Conc ng/Kg | EMPC ng/Kg | EDL ng/Kg | | Internal Standards | ng's Added | Percent Recovery | |
|---|---|---|---|---|---|---|---|---|
| 2,3,7,8-TCDF | ND | ----- | 0.16 | | 2,3,7,8-TCDF-13C | 2.00 | 80 | |
| Total TCDF | 0.44 | ----- | 0.16 | J | 2,3,7,8-TCDD-13C | 2.00 | 69 | |
| | | | | | 1,2,3,7,8-PeCDF-13C | 2.00 | 84 | |
| 2,3,7,8-TCDD | ND | ----- | 0.29 | | 2,3,4,7,8-PeCDF-13C | 2.00 | 79 | |
| Total TCDD | ND | ----- | 0.29 | | 1,2,3,7,8-PeCDD-13C | 2.00 | 81 | |
| | | | | | 1,2,3,4,7,8-HxCDF-13C | 2.00 | 81 | |
| 1,2,3,7,8-PeCDF | ND | ----- | 0.10 | | 1,2,3,6,7,8-HxCDF-13C | 2.00 | 79 | |
| 2,3,4,7,8-PeCDF | ND | ----- | 0.098 | | 2,3,4,6,7,8-HxCDF-13C | 2.00 | 79 | |
| Total PeCDF | ND | ----- | 0.098 | | 1,2,3,7,8,9-HxCDF-13C | 2.00 | 64 | |
| | | | | | 1,2,3,4,7,8-HxCDD-13C | 2.00 | 67 | |
| 1,2,3,7,8-PeCDD | ND | ----- | 0.16 | | 1,2,3,6,7,8-HxCDD-13C | 2.00 | 80 | |
| Total PeCDD | 0.30 | ----- | 0.16 | J | 1,2,3,4,6,7,8-HpCDF-13C | 2.00 | 50 | |
| | | | | | 1,2,3,4,7,8,9-HpCDF-13C | 2.00 | 58 | Y |
| 1,2,3,4,7,8-HxCDF | 0.32 | ----- | 0.21 | J | 1,2,3,4,6,7,8-HpCDD-13C | 2.00 | 47 | |
| 1,2,3,6,7,8-HxCDF | ND | ----- | 0.23 | | OCDD-13C | 4.00 | 35 | RY |
| 2,3,4,6,7,8-HxCDF | 0.23 | ----- | 0.22 | J | | | | |
| 1,2,3,7,8,9-HxCDF | ND | ----- | 0.35 | | 1,2,3,4-TCDD-13C | 2.00 | NA | |
| Total HxCDF | 0.55 | ----- | 0.21 | J | 1,2,3,7,8,9-HxCDD-13C | 2.00 | NA | |
| 1,2,3,4,7,8-HxCDD | 0.28 | ----- | 0.21 | J | 2,3,7,8-TCDD-37Cl4 | 0.20 | 77 | |
| 1,2,3,6,7,8-HxCDD | ----- | 0.26 | 0.19 | JI | | | | |
| 1,2,3,7,8,9-HxCDD | ----- | 0.21 | 0.19 | JI | | | | |
| Total HxCDD | 1.2 | ----- | 0.19 | J | | | | |
| 1,2,3,4,6,7,8-HpCDF | 2.7 | ----- | 0.45 | J | Total 2,3,7,8-TCDD | | | |
| 1,2,3,4,7,8,9-HpCDF | ND | ----- | 0.72 | | Equivalence: 0.43 ng/Kg | | | |
| Total HpCDF | 2.7 | ----- | 0.45 | J | (Lower-bound - Using 2005 WHO Factors) | | | |
| 1,2,3,4,6,7,8-HpCDD | 21 | ----- | 0.18 | | | | | |
| Total HpCDD | 32 | ----- | 0.18 | | | | | |
| OCDF | 9.3 | ----- | 1.1 | J | | | | |
| OCDD | 230 | ----- | 0.44 | | | | | |

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
EDL = Estimated Detection Limit

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
J = Estimated value
R = Recovery outside target range
I = Isotope ratio out of specification
Y = Calculated using average of daily RFs

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
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# Method 8290 Sample Analysis Results

Client - Pace Analytical National

| | | | |
|---|---|---|---|
| Client's Sample ID | DU-6-SS-COMP-1 | | |
| Lab Sample ID | 10689535013 | | |
| Filename | L240423B_13 | | |
| Injected By | SMT | | |
| Total Amount Extracted | 16.8 g | Matrix | SOLID |
| % Moisture | 55.2 | Dilution | NA |
| Dry Weight Extracted | 7.54 g | Collected | 04/10/2024 13:30 |
| ICAL ID | L240401 | Received | 04/16/2024 08:40 |
| CCal Filename(s) | L240423A_16 & L240423B_16 | Extracted | 04/18/2024 14:30 |
| Method Blank ID | BLANK-112406 | Analyzed | 04/24/2024 00:34 |

| Native Isomers | Conc ng/Kg | EMPC ng/Kg | EDL ng/Kg | | Internal Standards | ng's Added | Percent Recovery | |
|---|---|---|---|---|---|---|---|---|
| 2,3,7,8-TCDF | ND | ----- | 0.41 | | 2,3,7,8-TCDF-13C | 2.00 | 64 | |
| Total TCDF | 23 | ----- | 0.41 | | 2,3,7,8-TCDD-13C | 2.00 | 56 | |
| | | | | | 1,2,3,7,8-PeCDF-13C | 2.00 | 62 | |
| 2,3,7,8-TCDD | ND | ----- | 0.37 | | 2,3,4,7,8-PeCDF-13C | 2.00 | 58 | |
| Total TCDD | 3.6 | ----- | 0.37 | | 1,2,3,7,8-PeCDD-13C | 2.00 | 62 | |
| | | | | | 1,2,3,4,7,8-HxCDF-13C | 2.00 | 72 | |
| 1,2,3,7,8-PeCDF | 0.78 | ----- | 0.16 | J | 1,2,3,6,7,8-HxCDF-13C | 2.00 | 71 | |
| 2,3,4,7,8-PeCDF | ----- | 1.8 | 0.16 | JI | 2,3,4,6,7,8-HxCDF-13C | 2.00 | 66 | |
| Total PeCDF | 13 | ----- | 0.16 | | 1,2,3,7,8,9-HxCDF-13C | 2.00 | 53 | |
| | | | | | 1,2,3,4,7,8-HxCDD-13C | 2.00 | 62 | |
| 1,2,3,7,8-PeCDD | 0.59 | ----- | 0.26 | J | 1,2,3,6,7,8-HxCDD-13C | 2.00 | 66 | |
| Total PeCDD | 5.2 | ----- | 0.26 | J | 1,2,3,4,6,7,8-HpCDF-13C | 2.00 | 46 | |
| | | | | | 1,2,3,4,7,8,9-HpCDF-13C | 2.00 | 53 | Y |
| 1,2,3,4,7,8-HxCDF | 2.1 | ----- | 0.18 | J | 1,2,3,4,6,7,8-HpCDD-13C | 2.00 | 43 | |
| 1,2,3,6,7,8-HxCDF | 1.7 | ----- | 0.18 | J | OCDD-13C | 4.00 | 36 | RY |
| 2,3,4,6,7,8-HxCDF | 1.7 | ----- | 0.19 | J | | | | |
| 1,2,3,7,8,9-HxCDF | ND | ----- | 0.31 | | 1,2,3,4-TCDD-13C | 2.00 | NA | |
| Total HxCDF | 19 | ----- | 0.18 | | 1,2,3,7,8,9-HxCDD-13C | 2.00 | NA | |
| 1,2,3,4,7,8-HxCDD | ----- | 0.76 | 0.26 | JI | 2,3,7,8-TCDD-37Cl4 | 0.20 | 74 | |
| 1,2,3,6,7,8-HxCDD | ----- | 1.5 | 0.24 | JI | | | | |
| 1,2,3,7,8,9-HxCDD | 1.6 | ----- | 0.24 | J | | | | |
| Total HxCDD | 11 | ----- | 0.24 | | | | | |
| 1,2,3,4,6,7,8-HpCDF | 12 | ----- | 0.46 | | Total 2,3,7,8-TCDD | | | |
| 1,2,3,4,7,8,9-HpCDF | ND | ----- | 0.76 | | Equivalence: 2.8 ng/Kg | | | |
| Total HpCDF | 12 | ----- | 0.46 | | (Lower-bound - Using 2005 WHO Factors) | | | |
| 1,2,3,4,6,7,8-HpCDD | 41 | ----- | 0.38 | | | | | |
| Total HpCDD | 79 | ----- | 0.38 | | | | | |
| OCDF | 17 | ----- | 0.68 | | | | | |
| OCDD | 690 | ----- | 0.78 | | | | | |

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
EDL = Estimated Detection Limit

ND = Not Detected
NA = Not Applicable
NC = Not Calculated

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
J = Estimated value
R = Recovery outside target range
I = Isotope ratio out of specification
Y = Calculated using average of daily RFs

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
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# Method 8290 Blank Analysis Results

| | | | |
|---|---|---|---|
| Lab Sample Name | DFBLKDL | | |
| Lab Sample ID | BLANK-112389 | Matrix | Solid |
| Filename | L240422A_10 | Dilution | NA |
| Total Amount Extracted | 10.5 g | Extracted | 04/17/2024 14:30 |
| ICAL ID | L240401 | Analyzed | 04/22/2024 18:08 |
| CCal Filename(s) | L240422A_05 & L240422A_21 | Injected By | AH5 |

| Native Isomers | Conc ng/Kg | EMPC ng/Kg | EDL ng/Kg | | Internal Standards | ng's Added | Percent Recovery |
|---|---|---|---|---|---|---|---|
| 2,3,7,8-TCDF | ND | ----- | 0.11 | | 2,3,7,8-TCDF-13C | 2.00 | 74 |
| Total TCDF | ND | ----- | 0.11 | | 2,3,7,8-TCDD-13C | 2.00 | 61 |
| | | | | | 1,2,3,7,8-PeCDF-13C | 2.00 | 77 |
| 2,3,7,8-TCDD | ND | ----- | 0.18 | | 2,3,4,7,8-PeCDF-13C | 2.00 | 78 |
| Total TCDD | ND | ----- | 0.18 | | 1,2,3,7,8-PeCDD-13C | 2.00 | 84 |
| | | | | | 1,2,3,4,7,8-HxCDF-13C | 2.00 | 69 |
| 1,2,3,7,8-PeCDF | ND | ----- | 0.090 | | 1,2,3,6,7,8-HxCDF-13C | 2.00 | 67 |
| 2,3,4,7,8-PeCDF | ND | ----- | 0.087 | | 2,3,4,6,7,8-HxCDF-13C | 2.00 | 68 |
| Total PeCDF | ND | ----- | 0.087 | | 1,2,3,7,8,9-HxCDF-13C | 2.00 | 62 |
| | | | | | 1,2,3,4,7,8-HxCDD-13C | 2.00 | 66 |
| 1,2,3,7,8-PeCDD | ND | ----- | 0.093 | | 1,2,3,6,7,8-HxCDD-13C | 2.00 | 71 |
| Total PeCDD | ND | ----- | 0.093 | | 1,2,3,4,6,7,8-HpCDF-13C | 2.00 | 62 |
| | | | | | 1,2,3,4,7,8,9-HpCDF-13C | 2.00 | 59 |
| 1,2,3,4,7,8-HxCDF | ND | ----- | 0.12 | | 1,2,3,4,6,7,8-HpCDD-13C | 2.00 | 66 |
| 1,2,3,6,7,8-HxCDF | ND | ----- | 0.12 | | OCDD-13C | 4.00 | 57 |
| 2,3,4,6,7,8-HxCDF | ND | ----- | 0.12 | | | | |
| 1,2,3,7,8,9-HxCDF | ND | ----- | 0.16 | | 1,2,3,4-TCDD-13C | 2.00 | NA |
| Total HxCDF | ND | ----- | 0.12 | | 1,2,3,7,8,9-HxCDD-13C | 2.00 | NA |
| 1,2,3,4,7,8-HxCDD | 0.26 | ----- | 0.098 | J | 2,3,7,8-TCDD-37Cl4 | 0.20 | 61 |
| 1,2,3,6,7,8-HxCDD | ND | ----- | 0.088 | | | | |
| 1,2,3,7,8,9-HxCDD | ND | ----- | 0.090 | | | | |
| Total HxCDD | 0.26 | ----- | 0.088 | J | | | |
| 1,2,3,4,6,7,8-HpCDF | ND | ----- | 0.12 | | Total 2,3,7,8-TCDD | | |
| 1,2,3,4,7,8,9-HpCDF | ND | ----- | 0.17 | | Equivalence: 0.028 ng/Kg | | |
| Total HpCDF | ND | ----- | 0.12 | | (Lower-bound - Using 2005 WHO Factors) | | |
| 1,2,3,4,6,7,8-HpCDD | ----- | 0.18 | 0.13 | JI | | | |
| Total HpCDD | ND | ----- | 0.13 | | | | |
| OCDF | ND | ----- | 0.13 | | | | |
| OCDD | ----- | 0.51 | 0.19 | JI | | | |

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
EDL = Estimated Detection Limit

Results reported on a total weight basis and are valid to no more than 2 significant figures.
J = Estimated value
I = Isotope ratio out of specification

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
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## Method 8290 Blank Analysis Results

| | | | |
|---|---|---|---|
| Lab Sample Name | DFBLKDR | | |
| Lab Sample ID | BLANK-112406 | Matrix | Solid/Wipe |
| Filename | L240423B_03 | Dilution | NA |
| Total Amount Extracted | 10.4 g | Extracted | 04/18/2024 14:30 |
| ICAL ID | L240401 | Analyzed | 04/23/2024 16:59 |
| CCal Filename(s) | L240423A_16 & L240423B_16 | Injected By | SMT |

| Native Isomers | Conc ng/Kg | EMPC ng/Kg | EDL ng/Kg | Internal Standards | ng's Added | Percent Recovery |
|---|---|---|---|---|---|---|
| 2,3,7,8-TCDF | ND | ----- | 0.11 | 2,3,7,8-TCDF-13C | 2.00 | 75 |
| Total TCDF | ND | ----- | 0.11 | 2,3,7,8-TCDD-13C | 2.00 | 68 |
| | | | | 1,2,3,7,8-PeCDF-13C | 2.00 | 84 |
| 2,3,7,8-TCDD | ND | ----- | 0.19 | 2,3,4,7,8-PeCDF-13C | 2.00 | 80 |
| Total TCDD | ND | ----- | 0.19 | 1,2,3,7,8-PeCDD-13C | 2.00 | 85 |
| | | | | 1,2,3,4,7,8-HxCDF-13C | 2.00 | 78 |
| 1,2,3,7,8-PeCDF | ND | ----- | 0.063 | 1,2,3,6,7,8-HxCDF-13C | 2.00 | 74 |
| 2,3,4,7,8-PeCDF | ND | ----- | 0.070 | 2,3,4,6,7,8-HxCDF-13C | 2.00 | 77 |
| Total PeCDF | ND | ----- | 0.063 | 1,2,3,7,8,9-HxCDF-13C | 2.00 | 67 |
| | | | | 1,2,3,4,7,8-HxCDD-13C | 2.00 | 68 |
| 1,2,3,7,8-PeCDD | ND | ----- | 0.047 | 1,2,3,6,7,8-HxCDD-13C | 2.00 | 77 |
| Total PeCDD | ND | ----- | 0.047 | 1,2,3,4,6,7,8-HpCDF-13C | 2.00 | 59 |
| | | | | 1,2,3,4,7,8,9-HpCDF-13C | 2.00 | 74 Y |
| 1,2,3,4,7,8-HxCDF | ND | ----- | 0.033 | 1,2,3,4,6,7,8-HpCDD-13C | 2.00 | 59 |
| 1,2,3,6,7,8-HxCDF | ND | ----- | 0.035 | OCDD-13C | 4.00 | 54 Y |
| 2,3,4,6,7,8-HxCDF | ND | ----- | 0.031 | | | |
| 1,2,3,7,8,9-HxCDF | ND | ----- | 0.046 | 1,2,3,4-TCDD-13C | 2.00 | NA |
| Total HxCDF | ND | ----- | 0.031 | 1,2,3,7,8,9-HxCDD-13C | 2.00 | NA |
| 1,2,3,4,7,8-HxCDD | ND | ----- | 0.083 | 2,3,7,8-TCDD-37Cl4 | 0.20 | 69 |
| 1,2,3,6,7,8-HxCDD | ND | ----- | 0.059 | | | |
| 1,2,3,7,8,9-HxCDD | ND | ----- | 0.061 | | | |
| Total HxCDD | ND | ----- | 0.059 | | | |
| 1,2,3,4,6,7,8-HpCDF | ND | ----- | 0.082 | Total 2,3,7,8-TCDD | | |
| 1,2,3,4,7,8,9-HpCDF | ND | ----- | 0.12 | Equivalence: 0.00016 ng/Kg | | |
| Total HpCDF | ND | ----- | 0.082 | (Lower-bound - Using 2005 WHO Factors) | | |
| 1,2,3,4,6,7,8-HpCDD | ND | ----- | 0.11 | | | |
| Total HpCDD | ND | ----- | 0.11 | | | |
| OCDF | ND | ----- | 0.13 | | | |
| OCDD | ----- | 0.55 | 0.25 JI | | | |

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
EDL = Estimated Detection Limit

Results reported on a total weight basis and are valid to no more than 2 significant figures.
J = Estimated value
I = Isotope ratio out of specification
Y = Calculated using average of daily RFs

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
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Tel: 612-607-1700
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# Method 8290 Laboratory Control Spike Results

| | | | |
|---|---|---|---|
| Lab Sample ID | LCS-112390 | | |
| Filename | L240422A_06 | Matrix | Solid |
| Total Amount Extracted | 10.4 g | Dilution | NA |
| ICAL ID | L240401 | Extracted | 04/17/2024 14:30 |
| CCal Filename(s) | L240422A_05 & L240422A_21 | Analyzed | 04/22/2024 15:07 |
| Method Blank ID | BLANK-112389 | Injected By | AH5 |

| Native Isomers | Qs (ng) | Qm (ng) | % Rec. | Internal Standards | ng's Added | Percent Recovery |
|---|---|---|---|---|---|---|
| 2,3,7,8-TCDF | 0.20 | 0.19 | 96 | 2,3,7,8-TCDF-13C | 2.0 | 79 |
| Total TCDF | | | | 2,3,7,8-TCDD-13C | 2.0 | 63 |
| | | | | 1,2,3,7,8-PeCDF-13C | 2.0 | 83 |
| 2,3,7,8-TCDD | 0.20 | 0.21 | 107 | 2,3,4,7,8-PeCDF-13C | 2.0 | 85 |
| Total TCDD | | | | 1,2,3,7,8-PeCDD-13C | 2.0 | 90 |
| | | | | 1,2,3,4,7,8-HxCDF-13C | 2.0 | 73 |
| 1,2,3,7,8-PeCDF | 1.0 | 0.96 | 96 | 1,2,3,6,7,8-HxCDF-13C | 2.0 | 71 |
| 2,3,4,7,8-PeCDF | 1.0 | 0.93 | 93 | 2,3,4,6,7,8-HxCDF-13C | 2.0 | 73 |
| Total PeCDF | | | | 1,2,3,7,8,9-HxCDF-13C | 2.0 | 70 |
| | | | | 1,2,3,4,7,8-HxCDD-13C | 2.0 | 70 |
| 1,2,3,7,8-PeCDD | 1.0 | 0.93 | 93 | 1,2,3,6,7,8-HxCDD-13C | 2.0 | 76 |
| Total PeCDD | | | | 1,2,3,4,6,7,8-HpCDF-13C | 2.0 | 67 |
| | | | | 1,2,3,4,7,8,9-HpCDF-13C | 2.0 | 68 |
| 1,2,3,4,7,8-HxCDF | 1.0 | 0.99 | 99 | 1,2,3,4,6,7,8-HpCDD-13C | 2.0 | 73 |
| 1,2,3,6,7,8-HxCDF | 1.0 | 0.98 | 98 | OCDD-13C | 4.0 | 63 |
| 2,3,4,6,7,8-HxCDF | 1.0 | 1.0 | 101 | | | |
| 1,2,3,7,8,9-HxCDF | 1.0 | 0.98 | 98 | 1,2,3,4-TCDD-13C | 2.0 | NA |
| Total HxCDF | | | | 1,2,3,7,8,9-HxCDD-13C | 2.0 | NA |
| 1,2,3,4,7,8-HxCDD | 1.0 | 1.1 | 106 | 2,3,7,8-TCDD-37Cl4 | 0.20 | 65 |
| 1,2,3,6,7,8-HxCDD | 1.0 | 0.98 | 98 | | | |
| 1,2,3,7,8,9-HxCDD | 1.0 | 1.0 | 101 | | | |
| Total HxCDD | | | | | | |
| 1,2,3,4,6,7,8-HpCDF | 1.0 | 1.0 | 105 | | | |
| 1,2,3,4,7,8,9-HpCDF | 1.0 | 1.00 | 100 | | | |
| Total HpCDF | | | | | | |
| 1,2,3,4,6,7,8-HpCDD | 1.0 | 0.95 | 95 | | | |
| Total HpCDD | | | | | | |
| OCDF | 2.0 | 2.1 | 105 | | | |
| OCDD | 2.0 | 2.2 | 111 | | | |

Qs = Quantity Spiked
Qm = Quantity Measured
Rec. = Recovery (Expressed as Percent)
R = Recovery outside of target range

Y = RF averaging used in calculations
Nn = Value obtained from additional analysis
NA = Not Applicable
* = See Discussion

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
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# Method 8290 Laboratory Control Spike Results

| | | | |
|---|---|---|---|
| Lab Sample ID | LCS-112407 | | |
| Filename | L240423A_15 | Matrix | Solid/Wipe |
| Total Amount Extracted | 10.3 g | Dilution | NA |
| ICAL ID | L240401 | Extracted | 04/18/2024 14:30 |
| CCal Filename(s) | L240422A_21 & L240423A_16 | Analyzed | 04/23/2024 13:51 |
| Method Blank ID | BLANK-112406 | Injected By | JF |

| Native Isomers | Qs (ng) | Qm (ng) | % Rec. | Internal Standards | ng's Added | Percent Recovery |
|---|---|---|---|---|---|---|
| 2,3,7,8-TCDF | 0.20 | 0.21 | 105 | 2,3,7,8-TCDF-13C | 2.0 | 82 |
| Total TCDF | | | | 2,3,7,8-TCDD-13C | 2.0 | 71 |
| | | | | 1,2,3,7,8-PeCDF-13C | 2.0 | 95 |
| 2,3,7,8-TCDD | 0.20 | 0.23 | 116 | 2,3,4,7,8-PeCDF-13C | 2.0 | 84 |
| Total TCDD | | | | 1,2,3,7,8-PeCDD-13C | 2.0 | 91 |
| | | | | 1,2,3,4,7,8-HxCDF-13C | 2.0 | 90 |
| 1,2,3,7,8-PeCDF | 1.0 | 1.00 | 100 | 1,2,3,6,7,8-HxCDF-13C | 2.0 | 80 |
| 2,3,4,7,8-PeCDF | 1.0 | 0.99 | 99 | 2,3,4,6,7,8-HxCDF-13C | 2.0 | 78 |
| Total PeCDF | | | | 1,2,3,7,8,9-HxCDF-13C | 2.0 | 68 |
| | | | | 1,2,3,4,7,8-HxCDD-13C | 2.0 | 70 |
| 1,2,3,7,8-PeCDD | 1.0 | 1.00 | 100 | 1,2,3,6,7,8-HxCDD-13C | 2.0 | 79 |
| Total PeCDD | | | | 1,2,3,4,6,7,8-HpCDF-13C | 2.0 | 66 |
| | | | | 1,2,3,4,7,8,9-HpCDF-13C | 2.0 | 58 |
| 1,2,3,4,7,8-HxCDF | 1.0 | 1.0 | 105 | 1,2,3,4,6,7,8-HpCDD-13C | 2.0 | 60 |
| 1,2,3,6,7,8-HxCDF | 1.0 | 1.0 | 105 | OCDD-13C | 4.0 | 43 |
| 2,3,4,6,7,8-HxCDF | 1.0 | 1.1 | 106 | | | |
| 1,2,3,7,8,9-HxCDF | 1.0 | 1.1 | 106 | 1,2,3,4-TCDD-13C | 2.0 | NA |
| Total HxCDF | | | | 1,2,3,7,8,9-HxCDD-13C | 2.0 | NA |
| 1,2,3,4,7,8-HxCDD | 1.0 | 1.1 | 114 | 2,3,7,8-TCDD-37Cl4 | 0.20 | 79 |
| 1,2,3,6,7,8-HxCDD | 1.0 | 1.0 | 104 | | | |
| 1,2,3,7,8,9-HxCDD | 1.0 | 1.1 | 111 | | | |
| Total HxCDD | | | | | | |
| 1,2,3,4,6,7,8-HpCDF | 1.0 | 1.1 | 110 | | | |
| 1,2,3,4,7,8,9-HpCDF | 1.0 | 1.0 | 101 | | | |
| Total HpCDF | | | | | | |
| 1,2,3,4,6,7,8-HpCDD | 1.0 | 1.00 | 100 | | | |
| Total HpCDD | | | | | | |
| OCDF | 2.0 | 1.8 | 90 | | | |
| OCDD | 2.0 | 2.3 | 113 | | | |

Qs = Quantity Spiked
Qm = Quantity Measured
Rec. = Recovery (Expressed as Percent)
R = Recovery outside of target range

Y = RF averaging used in calculations
Nn = Value obtained from additional analysis
NA = Not Applicable
* = See Discussion

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

# Method 8290 Spiked Sample Report

Client - Pace Analytical National

| | | | |
|---|---|---|---|
| Client's Sample ID | DU-4H-COMP-1-MS | | |
| Lab Sample ID | 10689535009-MS | | |
| Filename | L240424B_03 | Matrix | SOLID |
| Total Amount Extracted | 12.1 g | Dilution | NA |
| ICAL ID | L240401 | Extracted | 04/18/2024 14:30 |
| CCal Filename(s) | L240424A_24 & L240424B_16 | Analyzed | 04/25/2024 00:19 |
| Method Blank ID | BLANK-112406 | Injected By | SMT |

| Native Isomers | Qs (ng) | Qm (ng) | % Rec. | Internal Standards | ng's Added | Percent Recovery |
|---|---|---|---|---|---|---|
| 2,3,7,8-TCDF | 0.20 | 0.20 | 102 | 2,3,7,8-TCDF-13C | 2.00 | 81 |
| | | | | 2,3,7,8-TCDD-13C | 2.00 | 67 |
| | | | | 1,2,3,7,8-PeCDF-13C | 2.00 | 68 Y |
| 2,3,7,8-TCDD | 0.20 | 0.23 | 114 | 2,3,4,7,8-PeCDF-13C | 2.00 | 82 |
| | | | | 1,2,3,7,8-PeCDD-13C | 2.00 | 85 |
| | | | | 1,2,3,4,7,8-HxCDF-13C | 2.00 | 54 |
| 1,2,3,7,8-PeCDF | 1.00 | 1.05 | 105 | 1,2,3,6,7,8-HxCDF-13C | 2.00 | 61 |
| 2,3,4,7,8-PeCDF | 1.00 | 1.05 | 105 | 2,3,4,6,7,8-HxCDF-13C | 2.00 | 69 |
| | | | | 1,2,3,7,8,9-HxCDF-13C | 2.00 | 67 |
| | | | | 1,2,3,4,7,8-HxCDD-13C | 2.00 | 57 |
| 1,2,3,7,8-PeCDD | 1.00 | 0.97 | 97 | 1,2,3,6,7,8-HxCDD-13C | 2.00 | 63 |
| | | | | 1,2,3,4,6,7,8-HpCDF-13C | 2.00 | 51 |
| | | | | 1,2,3,4,7,8,9-HpCDF-13C | 2.00 | 56 |
| 1,2,3,4,7,8-HxCDF | 1.00 | 1.08 | 108 | 1,2,3,4,6,7,8-HpCDD-13C | 2.00 | 57 |
| 1,2,3,6,7,8-HxCDF | 1.00 | 1.10 | 110 | OCDD-13C | 4.00 | 45 |
| 2,3,4,6,7,8-HxCDF | 1.00 | 1.07 | 106 | | | |
| 1,2,3,7,8,9-HxCDF | 1.00 | 1.01 | 101 | 1,2,3,4-TCDD-13C | 2.00 | NA |
| | | | | 1,2,3,7,8,9-HxCDD-13C | 2.00 | NA |
| 1,2,3,4,7,8-HxCDD | 1.00 | 1.13 | 113 | 2,3,7,8-TCDD-37Cl4 | 0.20 | 77 |
| 1,2,3,6,7,8-HxCDD | 1.00 | 1.07 | 107 | | | |
| 1,2,3,7,8,9-HxCDD | 1.00 | 1.29 | 129 | | | |
| 1,2,3,4,6,7,8-HpCDF | 1.00 | 1.15 | 112 | | | |
| 1,2,3,4,7,8,9-HpCDF | 1.00 | 1.06 | 106 | | | |
| 1,2,3,4,6,7,8-HpCDD | 1.00 | 1.06 | 98 | | | |
| OCDF | 2.00 | 2.25 | 112 | | | |
| OCDD | 2.00 | 2.72 | 104 | | | |

Qs = Quantity Spiked  Qm = Quantity Measured  Rec. = Recovery (Expressed as Percent)

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
J = Estimated value
Y = Calculated using average of daily RFs

## REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

# Method 8290 Spiked Sample Report

Client - Pace Analytical National

| | | | |
|---|---|---|---|
| Client's Sample ID | DU-4H-COMP-1-MSD | | |
| Lab Sample ID | 10689535009-MSD | | |
| Filename | L240424B_04 | Matrix | SOLID |
| Total Amount Extracted | 12.2 g | Dilution | NA |
| ICAL ID | L240401 | Extracted | 04/18/2024 14:30 |
| CCal Filename(s) | L240424A_24 & L240424B_16 | Analyzed | 04/25/2024 01:05 |
| Method Blank ID | BLANK-112406 | Injected By | SMT |

| **Native Isomers** | **Qs** (ng) | **Qm** (ng) | % Rec. | **Internal Standards** | **ng's Added** | **Percent Recovery** |
|---|---|---|---|---|---|---|
| 2,3,7,8-TCDF | 0.20 | 0.17 | 85 | 2,3,7,8-TCDF-13C | 2.00 | 5 R |
| | | | | 2,3,7,8-TCDD-13C | 2.00 | 13 R |
| | | | | 1,2,3,7,8-PeCDF-13C | 2.00 | 4 RY |
| 2,3,7,8-TCDD | 0.20 | 0.23 | 117 | 2,3,4,7,8-PeCDF-13C | 2.00 | 9 R |
| | | | | 1,2,3,7,8-PeCDD-13C | 2.00 | 7 R |
| | | | | 1,2,3,4,7,8-HxCDF-13C | 2.00 | 16 R |
| 1,2,3,7,8-PeCDF | 1.00 | 1.09 | 109 | 1,2,3,6,7,8-HxCDF-13C | 2.00 | 14 R |
| 2,3,4,7,8-PeCDF | 1.00 | 1.02 | 102 | 2,3,4,6,7,8-HxCDF-13C | 2.00 | 6 R |
| | | | | 1,2,3,7,8,9-HxCDF-13C | 2.00 | 7 R |
| | | | | 1,2,3,4,7,8-HxCDD-13C | 2.00 | 13 R |
| 1,2,3,7,8-PeCDD | 1.00 | 0.97 | 97 | 1,2,3,6,7,8-HxCDD-13C | 2.00 | 13 R |
| | | | | 1,2,3,4,6,7,8-HpCDF-13C | 2.00 | 12 R |
| | | | | 1,2,3,4,7,8,9-HpCDF-13C | 2.00 | 8 R |
| 1,2,3,4,7,8-HxCDF | 1.00 | 1.11 | 111 | 1,2,3,4,6,7,8-HpCDD-13C | 2.00 | 9 R |
| 1,2,3,6,7,8-HxCDF | 1.00 | 1.09 | 109 | OCDD-13C | 4.00 | 7 R |
| 2,3,4,6,7,8-HxCDF | 1.00 | 1.08 | 108 | | | |
| 1,2,3,7,8,9-HxCDF | 1.00 | 1.16 | 116 | 1,2,3,4-TCDD-13C | 2.00 | NA |
| | | | | 1,2,3,7,8,9-HxCDD-13C | 2.00 | NA |
| 1,2,3,4,7,8-HxCDD | 1.00 | 1.14 | 114 | 2,3,7,8-TCDD-37Cl4 | 0.20 | 16 |
| 1,2,3,6,7,8-HxCDD | 1.00 | 1.10 | 109 | | | |
| 1,2,3,7,8,9-HxCDD | 1.00 | 0.38 | 38 R | | | |
| 1,2,3,4,6,7,8-HpCDF | 1.00 | 1.10 | 107 | | | |
| 1,2,3,4,7,8,9-HpCDF | 1.00 | 1.05 | 105 | | | |
| 1,2,3,4,6,7,8-HpCDD | 1.00 | 1.13 | 105 | | | |
| OCDF | 2.00 | 2.80 | 140 R | | | |
| OCDD | 2.00 | 3.08 | 122 | | | |

Qs = Quantity Spiked  Qm = Quantity Measured  Rec. = Recovery (Expressed as Percent)

Results reported on a dry weight basis and are valid to no more than 2 significant figures.
R = Recovery outside target range
Y = Calculated using average of daily RFs

## REPORT OF LABORATORY ANALYSIS

**Pace Analytical Services, LLC**
1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

# Method 8290 Spike Sample Results

Client - Pace Analytical National

| | | | |
|---|---|---|---|
| Client Sample ID | DU-4H-COMP-1 | | |
| Lab Sample ID | 10689535009 | Sample Filename | L240423B_09 |
| MS ID | 10689535009-MS | MS Filename | L240424B_03 |
| MSD ID | 10689535009-MSD | MSD Filename | L240424B_04 |

| | Quantity | Unspiked Sample Contribution | | Quantity Measured | | | Subtracted Recovery | |
|---|---|---|---|---|---|---|---|---|
| | Spiked | to MS | to MSD | MS | MSD | | MS | MSD |
| Analyte | (ng) | (ng) | (ng) | (ng) | (ng) | RPD | (%) | (%) |
| 2,3,7,8-TCDF | 0.20 | ND | ND | 0.20 | 0.17 | 18.1 | 102 | 85 |
| 2,3,7,8-TCDD | 0.20 | ND | ND | 0.23 | 0.23 | 3.3 | 114 | 117 |
| 1,2,3,7,8-PeCDF | 1.00 | ND | ND | 1.05 | 1.09 | 3.7 | 105 | 109 |
| 2,3,4,7,8-PeCDF | 1.00 | 0.00557 | 0.00560 | 1.05 | 1.02 | 2.3 | 105 | 102 |
| 1,2,3,7,8-PeCDD | 1.00 | ND | ND | 0.97 | 0.97 | 0.3 | 97 | 97 |
| 1,2,3,4,7,8-HxCDF | 1.00 | 0.00444 | 0.00446 | 1.08 | 1.11 | 2.3 | 108 | 111 |
| 1,2,3,6,7,8-HxCDF | 1.00 | 0.00294 | 0.00296 | 1.10 | 1.09 | 1.0 | 110 | 109 |
| 2,3,4,6,7,8-HxCDF | 1.00 | 0.00622 | 0.00626 | 1.07 | 1.08 | 1.6 | 106 | 108 |
| 1,2,3,7,8,9-HxCDF | 1.00 | ND | ND | 1.01 | 1.16 | 14.3 | 101 | 116 |
| 1,2,3,4,7,8-HxCDD | 1.00 | 0.00404 | 0.00407 | 1.13 | 1.14 | 0.9 | 113 | 114 |
| 1,2,3,6,7,8-HxCDD | 1.00 | 0.00439 | 0.00441 | 1.07 | 1.10 | 2.4 | 107 | 109 |
| 1,2,3,7,8,9-HxCDD | 1.00 | 0.00456 | 0.00459 | 1.29 | 0.38 | 109.6 | 129 | 38 |
| 1,2,3,4,6,7,8-HpCDF | 1.00 | 0.0289 | 0.0290 | 1.15 | 1.10 | 4.2 | 112 | 107 |
| 1,2,3,4,7,8,9-HpCDF | 1.00 | ND | ND | 1.06 | 1.05 | 0.7 | 106 | 105 |
| 1,2,3,4,6,7,8-HpCDD | 1.00 | 0.0803 | 0.0808 | 1.06 | 1.13 | 6.6 | 98 | 105 |
| OCDF | 2.00 | 0.0319 | 0.0321 | 2.25 | 2.80 | 22.1 | 112 | 140 |
| OCDD | 2.00 | 0.627 | 0.631 | 2.72 | 3.08 | 12.5 | 104 | 122 |

Quantity Spiked - the amount of analyte spiked into the spiked samples
Unspiked Sample Contribution - calculated based on the amount found in the sample and the extracted amounts of the spiked and unspiked samples
Quantity Measured - the total amount of analyte measured in the spiked samples
RPD - the Relative Percent Difference of the spiked sample Quantity Measured values
Subtracted Recovery - calculated after subtracting the unspiked sample contribution

# ANALYTICAL REPORT

May 09, 2024



## Oregon Dept. of Env. Quality - ODEQ

| | |
|---|---|
| Sample Delivery Group: | L1731061 |
| Samples Received: | 04/13/2024 |
| Project Number: | 32-23010077 |
| Description: | King Salvage |
| Report To: | Andrew Bisbee |

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

# TABLE OF CONTENTS

## DU-4F-5-2 L1731061-01 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/09/24 09:25 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2267999 | 1 | 04/16/24 13:26 | 04/16/24 13:35 | JAV | Mt. Juliet, TN |
| Mercury by Method 7471B | WG2279355 | 1 | 05/02/24 21:12 | 05/02/24 23:57 | LAS | Mt. Juliet, TN |
| Metals (ICP) by Method 6010D | WG2282270 | 1 | 05/08/24 08:25 | 05/08/24 17:52 | JTM | Mt. Juliet, TN |
| Metals (ICP) by Method 6010D | WG2282270 | 5 | 05/08/24 08:25 | 05/09/24 10:23 | JTM | Mt. Juliet, TN |

## DU-4F-COMP-2 L1731061-02 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/09/24 09:35 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2267999 | 1 | 04/16/24 13:26 | 04/16/24 13:35 | JAV | Mt. Juliet, TN |
| Mercury by Method 7471B | WG2279355 | 1 | 05/02/24 21:12 | 05/02/24 23:59 | LAS | Mt. Juliet, TN |
| Metals (ICP) by Method 6010D | WG2282270 | 1 | 05/08/24 08:25 | 05/08/24 17:53 | JTM | Mt. Juliet, TN |

## DU-4F-COMP-3 L1731061-03 Solid

Collected by: Andrew Bisbee | Collected date/time: 04/09/24 09:40 | Received date/time: 04/13/24 09:00

| Method | Batch | Dilution | Preparation date/time | Analysis date/time | Analyst | Location |
|---|---|---|---|---|---|---|
| Total Solids by Method 2540 G-2011 | WG2268002 | 1 | 04/16/24 13:17 | 04/16/24 13:25 | JAV | Mt. Juliet, TN |
| Mercury by Method 7471B | WG2279355 | 1 | 05/02/24 21:12 | 05/03/24 00:02 | LAS | Mt. Juliet, TN |
| Metals (ICP) by Method 6010D | WG2282270 | 1 | 05/08/24 08:25 | 05/08/24 17:32 | JTM | Mt. Juliet, TN |

# CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 78.0 | | 1 | 04/16/2024 13:35 | WG2267999 |

## Mercury by Method 7471B

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Mercury | 0.145 | | 0.0231 | 0.0513 | 1 | 05/02/2024 23:57 | WG2279355 |

## Metals (ICP) by Method 6010D

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Arsenic | 11.0 | | 0.664 | 2.56 | 1 | 05/08/2024 17:52 | WG2282270 |
| Barium | 421 | | 0.109 | 0.641 | 1 | 05/08/2024 17:52 | WG2282270 |
| Cadmium | 9.02 | | 0.0604 | 0.641 | 1 | 05/08/2024 17:52 | WG2282270 |
| Chromium | 95.9 | | 0.171 | 1.28 | 1 | 05/08/2024 17:52 | WG2282270 |
| Copper | 337 | | 0.513 | 2.56 | 1 | 05/08/2024 17:52 | WG2282270 |
| Lead | 1460 | | 0.267 | 0.641 | 1 | 05/08/2024 17:52 | WG2282270 |
| Nickel | 61.0 | | 0.169 | 2.56 | 1 | 05/08/2024 17:52 | WG2282270 |
| Selenium | 4.04 | | 0.980 | 2.56 | 1 | 05/08/2024 17:52 | WG2282270 |
| Silver | U | | 0.163 | 1.28 | 1 | 05/08/2024 17:52 | WG2282270 |
| Zinc | 3970 | | 5.33 | 32.1 | 5 | 05/09/2024 10:23 | WG2282270 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 74.2 | | 1 | 04/16/2024 13:35 | WG2267999 |

## Mercury by Method 7471B

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Mercury | 0.0302 | J | 0.0243 | 0.0539 | 1 | 05/02/2024 23:59 | WG2279355 |

## Metals (ICP) by Method 6010D

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Arsenic | 5.30 | | 0.698 | 2.70 | 1 | 05/08/2024 17:53 | WG2282270 |
| Barium | 78.9 | | 0.115 | 0.674 | 1 | 05/08/2024 17:53 | WG2282270 |
| Cadmium | U | | 0.0635 | 0.674 | 1 | 05/08/2024 17:53 | WG2282270 |
| Chromium | 20.4 | | 0.179 | 1.35 | 1 | 05/08/2024 17:53 | WG2282270 |
| Copper | 12.5 | | 0.539 | 2.70 | 1 | 05/08/2024 17:53 | WG2282270 |
| Lead | 9.78 | | 0.280 | 0.674 | 1 | 05/08/2024 17:53 | WG2282270 |
| Nickel | 8.01 | | 0.178 | 2.70 | 1 | 05/08/2024 17:53 | WG2282270 |
| Selenium | 1.55 | J | 1.03 | 2.70 | 1 | 05/08/2024 17:53 | WG2282270 |
| Silver | U | | 0.171 | 1.35 | 1 | 05/08/2024 17:53 | WG2282270 |
| Zinc | 72.8 | | 1.12 | 6.74 | 1 | 05/08/2024 17:53 | WG2282270 |

## Total Solids by Method 2540 G-2011

| Analyte | Result | Qualifier | Dilution | Analysis | Batch |
|---|---|---|---|---|---|
| | % | | | date / time | |
| Total Solids | 72.0 | | 1 | 04/16/2024 13:25 | WG2268002 |

## Mercury by Method 7471B

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Mercury | 0.0610 | | 0.0250 | 0.0556 | 1 | 05/03/2024 00:02 | WG2279355 |

## Metals (ICP) by Method 6010D

| Analyte | Result (dry) | Qualifier | MDL (dry) | RDL (dry) | Dilution | Analysis | Batch |
|---|---|---|---|---|---|---|---|
| | mg/kg | | mg/kg | mg/kg | | date / time | |
| Arsenic | 4.71 | | 0.720 | 2.78 | 1 | 05/08/2024 17:32 | WG2282270 |
| Barium | 123 | O1 | 0.118 | 0.695 | 1 | 05/08/2024 17:32 | WG2282270 |
| Cadmium | 1.38 | | 0.0654 | 0.695 | 1 | 05/08/2024 17:32 | WG2282270 |
| Chromium | 25.3 | O1 | 0.185 | 1.39 | 1 | 05/08/2024 17:32 | WG2282270 |
| Copper | 38.8 | O1 | 0.556 | 2.78 | 1 | 05/08/2024 17:32 | WG2282270 |
| Lead | 91.5 | J6 O1 | 0.289 | 0.695 | 1 | 05/08/2024 17:32 | WG2282270 |
| Nickel | 15.1 | O1 | 0.183 | 2.78 | 1 | 05/08/2024 17:32 | WG2282270 |
| Selenium | 1.94 | J | 1.06 | 2.78 | 1 | 05/08/2024 17:32 | WG2282270 |
| Silver | U | | 0.176 | 1.39 | 1 | 05/08/2024 17:32 | WG2282270 |
| Zinc | 408 | J3 J5 J6 O1 | 1.16 | 6.95 | 1 | 05/08/2024 17:32 | WG2282270 |

## Method Blank (MB)

(MB) R4058563-1 04/16/24 13:35

| Analyte | MB Result % | MB Qualifier | MB MDL % | MB RDL % |
|---|---|---|---|---|
| Total Solids | 0.00100 | | | |

## L1725561-113 Original Sample (OS) • Duplicate (DUP)

(OS) L1725561-113 04/16/24 13:35 • (DUP) R4058563-3 04/16/24 13:35

| Analyte | Original Result % | DUP Result % | Dilution | DUP RPD % | DUP Qualifier | DUP RPD Limits % |
|---|---|---|---|---|---|---|
| Total Solids | 74.2 | 73.2 | 1 | 1.36 | | 10 |

## Laboratory Control Sample (LCS)

(LCS) R4058563-2 04/16/24 13:35

| Analyte | Spike Amount % | LCS Result % | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Total Solids | 50.0 | 50.0 | 100 | 90.0-110 | |

## Method Blank (MB)

(MB) R4058558-1 04/16/24 13:25

| Analyte | MB Result % | MB Qualifier | MB MDL % | MB RDL % |
|---|---|---|---|---|
| Total Solids | 0.00100 | | | |

## L1725561-130 Original Sample (OS) • Duplicate (DUP)

(OS) L1725561-130 04/16/24 13:25 • (DUP) R4058558-3 04/16/24 13:25

| Analyte | Original Result % | DUP Result % | Dilution | DUP RPD % | DUP Qualifier | DUP RPD Limits % |
|---|---|---|---|---|---|---|
| Total Solids | 79.6 | 76.8 | 1 | 3.54 | | 10 |

## Laboratory Control Sample (LCS)

(LCS) R4058558-2 04/16/24 13:25

| Analyte | Spike Amount % | LCS Result % | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Total Solids | 50.0 | 50.1 | 100 | 90.0-110 | |

# QUALITY CONTROL SUMMARY

L1731061-01,02,03

## Method Blank (MB)

(MB) R4065278-1 05/02/24 23:37

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL mg/kg |
|---|---|---|---|---|
| Mercury | U | | 0.0180 | 0.0400 |

## Laboratory Control Sample (LCS)

(LCS) R4065278-2 05/02/24 23:39

| Analyte | Spike Amount mg/kg | LCS Result mg/kg | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Mercury | 0.500 | 0.509 | 102 | 80.0-120 | |

## L1731922-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1731922-07 05/02/24 23:42 • (MS) R4065278-4 05/02/24 23:47 • (MSD) R4065278-5 05/02/24 23:49

| Analyte | Spike Amount mg/kg | Original Result mg/kg | MS Result mg/kg | MSD Result mg/kg | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.500 | U | 0.424 | 0.436 | 84.7 | 87.1 | 1 | 75.0-125 | | | 2.75 | 20 |

## Method Blank (MB)

(MB) R4067513-1 05/08/24 17:28

| Analyte | MB Result mg/kg | MB Qualifier | MB MDL mg/kg | MB RDL mg/kg |
|---|---|---|---|---|
| Arsenic | U | | 0.518 | 2.00 |
| Barium | U | | 0.0852 | 0.500 |
| Cadmium | U | | 0.0471 | 0.500 |
| Chromium | U | | 0.133 | 1.00 |
| Copper | U | | 0.400 | 2.00 |
| Lead | U | | 0.208 | 0.500 |
| Nickel | 0.267 | J | 0.132 | 2.00 |
| Selenium | U | | 0.764 | 2.00 |
| Silver | U | | 0.127 | 1.00 |
| Zinc | U | | 0.832 | 5.00 |

## Laboratory Control Sample (LCS)

(LCS) R4067513-2 05/08/24 17:30

| Analyte | Spike Amount mg/kg | LCS Result mg/kg | LCS Rec. % | Rec. Limits % | LCS Qualifier |
|---|---|---|---|---|---|
| Arsenic | 100 | 89.7 | 89.7 | 80.0-120 | |
| Barium | 100 | 95.4 | 95.4 | 80.0-120 | |
| Cadmium | 100 | 88.6 | 88.6 | 80.0-120 | |
| Chromium | 100 | 94.1 | 94.1 | 80.0-120 | |
| Copper | 100 | 99.5 | 99.5 | 80.0-120 | |
| Lead | 100 | 89.8 | 89.8 | 80.0-120 | |
| Nickel | 100 | 92.2 | 92.2 | 80.0-120 | |
| Selenium | 100 | 84.8 | 84.8 | 80.0-120 | |
| Silver | 20.0 | 17.8 | 89.1 | 80.0-120 | |
| Zinc | 100 | 91.4 | 91.4 | 80.0-120 | |

## L1731061-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1731061-03 05/08/24 17:32 • (MS) R4067513-5 05/08/24 17:37 • (MSD) R4067513-6 05/08/24 17:38

| Analyte | Spike Amount (dry) mg/kg | Original Result (dry) mg/kg | MS Result (dry) mg/kg | MSD Result (dry) mg/kg | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 139 | 4.71 | 135 | 122 | 94.0 | 84.4 | 1 | 75.0-125 | | | 10.3 | 20 |
| Barium | 139 | 123 | 264 | 239 | 101 | 83.7 | 1 | 75.0-125 | | | 9.59 | 20 |
| Cadmium | 139 | 1.38 | 131 | 118 | 93.6 | 83.8 | 1 | 75.0-125 | | | 10.9 | 20 |
| Chromium | 139 | 25.3 | 164 | 154 | 99.6 | 92.6 | 1 | 75.0-125 | | | 6.10 | 20 |
| Copper | 139 | 38.8 | 196 | 194 | 113 | 111 | 1 | 75.0-125 | | | 1.06 | 20 |
| Lead | 139 | 91.5 | 195 | 227 | 74.8 | 97.4 | 1 | 75.0-125 | J6 | | 14.8 | 20 |

## L1731061-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1731061-03 05/08/24 17:32 • (MS) R4067513-5 05/08/24 17:37 • (MSD) R4067513-6 05/08/24 17:38

| Analyte | Spike Amount (dry) mg/kg | Original Result (dry) mg/kg | MS Result (dry) mg/kg | MSD Result (dry) mg/kg | MS Rec. % | MSD Rec. % | Dilution | Rec. Limits % | MS Qualifier | MSD Qualifier | RPD % | RPD Limits % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nickel | 139 | 15.1 | 141 | 128 | 90.6 | 81.2 | 1 | 75.0-125 | | | 9.67 | 20 |
| Selenium | 139 | 1.94 | 136 | 120 | 96.2 | 85.0 | 1 | 75.0-125 | | | 12.1 | 20 |
| Silver | 27.8 | U | 25.8 | 23.5 | 93.0 | 84.6 | 1 | 75.0-125 | | | 9.49 | 20 |
| Zinc | 139 | 408 | 699 | 461 | 210 | 38.2 | 1 | 75.0-125 | J5 | J3 J6 | 41.1 | 20 |

# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

## Abbreviations and Definitions

| | |
|---|---|
| (dry) | Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils]. |
| MDL | Method Detection Limit. |
| MDL (dry) | Method Detection Limit. |
| RDL | Reported Detection Limit. |
| RDL (dry) | Reported Detection Limit. |
| Rec. | Recovery. |
| RPD | Relative Percent Difference. |
| SDG | Sample Delivery Group. |
| U | Not detected at the Reporting Limit (or MDL where applicable). |
| Analyte | The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported. |
| Dilution | If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor. |
| Limits | These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges. |
| Original Sample | The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG. |
| Qualifier | This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable. |
| Result | The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte. |
| Uncertainty (Radiochemistry) | Confidence level of 2 sigma. |
| Case Narrative (Cn) | A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report. |
| Quality Control Summary (Qc) | This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material. |
| Sample Chain of Custody (Sc) | This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis. |
| Sample Results (Sr) | This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported. |
| Sample Summary (Ss) | This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis. |

| Qualifier | Description |
|---|---|
| J | The identification of the analyte is acceptable; the reported value is an estimate. |
| J3 | The associated batch QC was outside the established quality control range for precision. |
| J5 | The sample matrix interfered with the ability to make any accurate determination; spike value is high. |
| J6 | The sample matrix interfered with the ability to make any accurate determination; spike value is low. |
| O1 | The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference. |

# ACCREDITATIONS & LOCATIONS

## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

| | | | |
|---|---|---|---|
| Alabama | 40660 | Nebraska | NE-OS-15-05 |
| Alaska | 17-026 | Nevada | TN000032021-1 |
| Arizona | AZ0612 | New Hampshire | 2975 |
| Arkansas | 88-0469 | New Jersey–NELAP | TN002 |
| California | 2932 | New Mexico [1] | TN00003 |
| Colorado | TN00003 | New York | 11742 |
| Connecticut | PH-0197 | North Carolina | Env375 |
| Florida | E87487 | North Carolina [1] | DW21704 |
| Georgia | NELAP | North Carolina [3] | 41 |
| Georgia [1] | 923 | North Dakota | R-140 |
| Idaho | TN00003 | Ohio–VAP | CL0069 |
| Illinois | 200008 | Oklahoma | 9915 |
| Indiana | C-TN-01 | Oregon | TN200002 |
| Iowa | 364 | Pennsylvania | 68-02979 |
| Kansas | E-10277 | Rhode Island | LAO000356 |
| Kentucky [1 6] | KY90010 | South Carolina | 84004002 |
| Kentucky [2] | 16 | South Dakota | n/a |
| Louisiana | AI30792 | Tennessee [1 4] | 2006 |
| Louisiana | LA018 | Texas | T104704245-20-18 |
| Maine | TN00003 | Texas [5] | LAB0152 |
| Maryland | 324 | Utah | TN000032021-11 |
| Massachusetts | M-TN003 | Vermont | VT2006 |
| Michigan | 9958 | Virginia | 110033 |
| Minnesota | 047-999-395 | Washington | C847 |
| Mississippi | TN00003 | West Virginia | 233 |
| Missouri | 340 | Wisconsin | 998093910 |
| Montana | CERT0086 | Wyoming | A2LA |
| A2LA – ISO 17025 | 1461.01 | AIHA-LAP,LLC EMLAP | 100789 |
| A2LA – ISO 17025 [5] | 1461.02 | DOD | 1461.01 |
| Canada | 1461.01 | USDA | P330-15-00234 |
| EPA–Crypto | TN00003 | | |

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Chain of Custody Page 1 of 20

**Apex Companies, LLC - Portland, OR**

15618 SW 72nd Ave
Tigard, OR 97224

Billing Information:
Accounts Payable
15618 SW 72nd Ave
Tigard, OR 97224

Pres Chk

Email To: Andrew.Bisbee@apexcos.com

Report to: Andrew Bisbee

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Project Description: KING SALVAGE

Phone: 503-924-4704

Client Project # 32-23010077

Lab Project # ASHCREPOR-BISBEE

Site/Facility ID #

P.O. # 32-23010077

Collected by (print): ANDREW BISBEE

Quote #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

**Rush?** (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day STANDARD

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8oz Clr-NoPres | Dioxins/Furans 8290 4oz Clr-NoPres | NWTPHDX no SGT 8oz Clr-NoPres | PAHs 8270SIM 8oz Clr-NoPres | Remarks | Sample # (lab only) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DU-4F-2-2 | Grab | SS | 1-2 | 4/9/24 | 835 | 1 | | | X | X | | ~~-101~~ |
| DU-4F-2-3 | Grab | SS | 2-3 | 4/9/24 | 838 | 1 | | | | | ARCHIVE | ~~-102~~ |
| DU-4F-3-1 | Grab | SS | 0-1 | 4/9/24 | 845 | 1 | | | | | | ~~-103~~ |
| DU-4F-3-2 | Grab | SS | 1-2 | 4/9/24 | 850 | 1 | | | | | | ~~-104~~ |
| DU-4F-3-3 | Grab | SS | 2-3 | 4/9/24 | 853 | 1 | | | | | | ~~-105~~ |
| DU-4F-4-1 | Grab | SS | 0-1 | 4/9/24 | 900 | 1 | | | | | | ~~-106~~ |
| DU-4F-4-2 | Grab | SS | 1-2 | 4/9/24 | 905 | 1 | | | | | | ~~-107~~ |
| DU-4F-4-3 | Grab | SS | 2-3 | 4/9/24 | 908 | 1 | | | | | | ~~-108~~ |
| DU-4F-5-1 | Grab | SS | 0-1 | 4/9/24 | 920 | 1 | | | | | | ~~-109~~ |
| DU-4F-5-2 | Grab | SS | 1-2 | 4/9/24 | 925 | 1 | | | X | X | | ~~-110~~ -01 |

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ___

Remarks: *Client: list metals needed=

pH ___ Temp ___
Flow ___ Other ___

Samples returned via:
__ UPS __ FedEx __ Courier ___

Tracking #

| | Date: | Time: | |
|---|---|---|---|
| Relinquished by: (Signature) | 4-12-24 | 12:00 | Received by: (Signature) |
| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) |
| Relinquished by: (Signature) | Date: | Time: | Received for lab by: (Signature) |

Trip Blank Received: Yes / No HCL / MeoH TBR

Temp: °C Bottles Received:

Date: 4-13-24 Time: 0900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Sample Receipt Checklist

| | | |
|---|---|---|
| COC Seal Present/Intact: | NP: | Y / N |
| COC Signed/Accurate: | | Y / N |
| Bottles arrive intact: | | Y / N |
| Correct bottles used: | | Y / N |
| Sufficient volume sent: | | Y / N |
| If Applicable | | |
| VOA Zero Headspace: | | Y / N |
| Preservation Correct/Checked: | | Y / N |
| RAD Screen <0.5 mR/hr: | | Y / N |

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1731061

Table # 1731061

Acctnum: ASHCREPOR

Template: T249306

Prelogin: P1063626

PM: 110 - Brian Ford

PB: MV 3/19/24

Shipped Via: FedEX Ground

MV 4/30/24

Apex Companies, LLC - Portland, OR

15618 SW 72nd Ave
Tigard, OR 97224

Billing Information:
Accounts Payable
15618 SW 72nd Ave
Tigard, OR 97224

Pres Chk

Report to: Andrew Bisbee

Email To: Andrew.Bisbee@apexcos.com

Project Description: KING SALVAGE

City/State Collected: TOLEDO, OR

Please Circle: PT MT CT ET

Phone: 503-924-4704

Client Project # 32-2301007?

Lab Project # ASHCREPOR-BISBEE

Collected by (print): ANDREW BISBEE

Site/Facility ID #

P.O. # 32-2301007?

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day X Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day STANDARD

Quote #

Date Results Needed

| Sample ID | Comp/Grab | Matrix * | Depth | Date | Time | No. of Cntrs | *Metals 8ozClr-NoPres | Dioxins/Furans 8290 4ozClr-NoPres | NWTPHDX no SGT 8ozClr-NoPres | PAHs 8270SIM 8ozClr-NoPres |
|---|---|---|---|---|---|---|---|---|---|---|
| DU-4F-5-3 | Grab | SS | 2-3 | 4/9/24 | 908 | 1 | | | | |
| DU 4F-COMP-1 | COMP | SS | 0-1 | 4/9/24 | ~~0920~~ | 2 | X | X | X | X |
| DU-4F-COMP-2 | COMP | SS | 1-2 | 4/9/24 | 935 | 2 | | | X | |
| DU-4F-COMP-3 | COMP | SS | 2-3 | 4/9/24 | 940 | 2 | | | X | |
| DU-4G-1-1 | Grab | SS | 0-1 | 4/9/24 | 1010 | 1 | | | | |
| DU-4G-1-2 | Grab | SS | 1-2 | 4/9/24 | 1015 | 1 | | | | |
| DU-4G-1-3 | Grab | SS | 2-3 | 4/9/24 | 1018 | 1 | | | | |
| DU-4G-2-1 | Grab | SS | 0-1 | 4/9/24 | 1000 | 1 | | | | |
| DU-4G-2-2 | Grab | SS | 1-2 | 4/9/24 | 1005 | 1 | | | | |
| DU-4G-2-3 | Grab | SS | 2-3 | 4/9/24 | 1008 | 1 | | | | |

Analysis / Container / Preservative

Chain of Custody Page 12 of 20

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MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # ~~L1755201~~

Table # L1731061

Acctnum: ASHCREPOR

Template: T249306

Prelogin: P1063626

PM: 110 - Brian Ford

PB: MV 3/19/24

Shipped Via: FedEx Ground

| Remarks | Sample # (lab only) |
|---|---|
| ARCHIVE | -111 |
| | -112 |
| RUN Dx, HOLD FOR FOLLOW UP | -113 -02 -03 |
| | -114 |
| ARCHIVE | -115 |
| | -116 |
| | -117 |
| | -118 |
| | -119 |
| | -120 |

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: *Client: list metals needed=

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__UPS __FedEx __Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP X N
COC Signed/Accurate: X N
Bottles arrive intact: X N
Correct bottles used: X N
Sufficient volume sent: X N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: X N
RAD Screen <0.5 mR/hr: X N

| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) | Trip Blank Received: Yes / No HCL / MeoH TBR |
|---|---|---|---|---|
| | 4-12-24 | 12:00 | | |
| Relinquished by: (Signature) | Date: | Time: | Received by: (Signature) | Temp: °C Bottles Received: |
| Relinquished by: (Signature) | Date: | Time: | Received for lab by: (Signature) | Date: 4-13-24 Time: 0400 |

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

## L1725561 OREGONDEQ re-log

R5

Please re-log the following for MRCRA8,CUICP,NIICP,ZNICP,TS as R5 due 05/07.

DU-4F-COMP-2
DU-4F-COMP-3
DU-4F-5-2

**Time estimate:** oh **Time spent:** oh

**Members**

BF Brian Ford