

Site Characterization Report

Redwood Road Dump Pilot Phase Development

VCP Site C121

1850 West Indiana Avenue

Salt Lake City, Utah

January 18, 2023; Revised March 9, 2023

Terracon Project No. 61227342 Task 4.2



Prepared for:

Salt Lake City Corporation, Department of Sustainability

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Terracon

Environmental



Facilities



Geotechnical



Materials

January 18, 2023

Revised March 9, 2023



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Attn: Catherine Wyffels
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RE: Site Characterization Report
Redwood Road Dump Pilot Phase Development VCP Site C121
1850 West Indiana Avenue
Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Dear Ms. Wyffels,

Terracon is pleased to provide this revised report regarding the Site Characterization (SC) activities conducted at the above-referenced site. Terracon has performed the work pursuant to our proposal P61227342, dated October 27, 2022 and following the Utah Department of Environmental Quality Voluntary Cleanup Program (VCP) approved Site Characterization Work Plan, dated October 18, 2022.

We appreciate the opportunity to have performed these services for you. Please contact Nancy Saunders at 801-746-5473 if you have questions regarding this information or if we can provide any other services.

Sincerely,
Terracon Consultants, Inc.



Nancy Saunders
Project Manager



Amy Austin
Authorized Project Reviewer



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1.0 INTRODUCTION

1.1 Site Description

Site Name	Redwood Road Dump Pilot Phase Development, VCP Site C121
Site Location/Address	1850 West Indiana Avenue, Salt Lake City, Utah
General Site Description	The Site is an approximately 8-acre parcel of land within an approximately 45-acre parcel owned by Salt Lake City Corporation, that is used for managing the city's green waste. The Site is unimproved with the exception of a 160 ft by 160 ft asphalt pad at the south end of the site. A sewer main line runs south to north through the western portion of the Site. The North Ditch, a stormwater management feature, crosses diagonally through the north end of the site. The Site is bound to the east by Tear-Apart Auto Recycling and by the Alvie Carter Trust property. The Alvie Carter Trust property has been used for auto wrecking and miscellaneous storage and the property owner has allowed significant volumes of debris to encroach onto the Site. The southern boundary is formed by Indiana Avenue; the north and west adjoining properties are the remainder of the 45-acre parent parcel.

Exhibit 1 (Appendix A) presents the Site location on a portion of the USGS 7.5-minute series topographic map. **Exhibit 2 (Appendix A)** is an area map showing the proposed Pilot Phase project area alongside the Redwood Road Dump regulatory Site boundaries **Exhibit 3 (Appendix A)** shows the sampling point locations from this and previous investigations.

The property owner, Salt Lake City Corporation (SLCC), has entered the 8-acre Pilot Phase project site into the Utah Department of Environmental Quality (UDEQ) Division of Environmental Response and Remediation (DERR) Voluntary Cleanup Program (VCP) to address environmental impacts reported during investigations of the larger parent parcel. The property is proposed for redevelopment as a tiny home village to serve the Salt Lake City's unsheltered population.

1.2 Project Background

The previously proposed project area included the entire 45-acre parcel, which is located within the Redwood Road Dump CERCLIS Facility boundaries (Facility ID UTD980961502). The current project boundary for the VCP Site is comprised of 8 acres which are situated east of the area that was landfilled **Exhibit 2 (Appendix A)**.

Terracon has completed several investigations of the VCP Site as well as the larger parent parcel to assess general impacts from historical landfilling activities at the Site. Data obtained from these

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previous investigations—which include soil, groundwater, and soil gas sample data—have been integrated into this Site Characterization Report where applicable. The findings of these investigations are summarized below.

- Limited Site Investigation, report dated July 1, 2021, analytical data provided separately

This investigation was conducted as an initial assessment of subsurface conditions and consisted of excavation of 16 test pits located across the 45-acre parcel with the aim of observing the nature and extent of fill and debris at the Site. When only limited amounts of trash and debris were observed in the test pits, the investigation proceeded to analyzing samples of the native soil (either exposed at the surface or underlying fill material) for contaminants typical of unregulated landfills: volatile organic compounds (VOCs), RCRA metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenols (PCBs), and pesticides. Results of the soil samples were compared to the Environmental Protection Agency's (EPA) Regional Screening Levels (RSLs) from May 2021 for Residential and Commercial properties. The following comparisons were made:

- PAHs were present in many of the native soil samples collected; however, PAH concentrations did not exceed RSLs.
- Arsenic was reported in all 16 samples at concentrations exceeding Residential RSLs and at concentrations exceeding Commercial RSLs in 14 of the samples with concentrations ranging from 3.19 milligrams per kilogram (mg/kg) to 52.9 (mg/kg). Three of the samples exceeded the Site-specific background level of 10.8 mg/kg.
- Lead was reported at a concentration of 954 mg/kg in the sample collected from TP-9 which exceeds the Residential and Commercial RSL. TP-9 is located on the parent parcel and is not within the VCP Site.

During excavation of the test pits, measurements were made with direct-reading instruments to evaluate the potential for accumulation of landfill gases such as methane, hydrogen sulfide, and other VOCs. The results of screening with the direct-reading instruments indicated gases are not being generated in significant amounts; however, quantitative soil gas data was not collected at the time.

- Supplemental Limited Site Investigation, report dated August 26, 2021

Following the completion of the initial site assessment as described above, an investigation of soil gas was conducted. Included in the scope of the investigation was sampling of the North Ditch, which is a drainage ditch running through the northeast portion of the parent parcel that exhibited staining in some sections.

Five soil gas implants were positioned throughout the parent parcel, one of which was located within the VCP Site (SG-01). Three samples were collected of surface soils along the North Ditch.

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These samples were collected on the parent parcel, not within the VCP Site. Results of the Supplemental LSI are summarized as follows:

- Results of the soil gas samples were compared to the EPA's Vapor Intrusion Screening Levels (VISLs) for both Residential and Commercial properties. Several VOC compounds were detected in the five samples. Benzene exceeded the Residential VISL in the sample from SG-3 and chloroform exceeded the Residential VISL in the sample from SG-4. No sample exceeded a commercial VISL. The sample from SG-1, collected from within the VCP Site, did not report concentrations of VOCs in excess of screening levels. EPA has not established a VISL for methane; however, the Lower Explosive Limit (LEL) is used to evaluate the physical hazard posed by methane, due to its explosive characteristic. The LEL for methane is 5 percent which is equivalent to 50,000 parts per million by volume (ppmv). The soil gas sample from SG-3, collected west of the VCP Site, reported a methane concentration of 23,000 ppmv which is approximately one half of the LEL.
- The soil samples from the North Ditch (which were not located within the VCP Site, reported lead and benzo(a)pyrene at concentrations above the Residential RSL in samples ND-03 and ND-02, respectively. Arsenic was reported above the Residential and Commercial RSL in each of the samples, as well as the Site-specific background level of 10.8 mg/kg.
- Limited Site Investigation Report, Proposed TOSA Village Pilot Phase, report dated March 2, 2022.

This investigation was conducted within the approximate 8-acre boundary that has been established as the VCP Site. The objective of the study was to obtain more site-specific soil, groundwater, and soil gas data within the area that could later be submitted with an application to enter the VCP, if warranted. The scope of work consisted of the excavation of 12 test pits for soil sampling and an additional four pits for observation only, installation and sampling of four soil gas probes, installation and sampling of three groundwater monitoring wells, and the survey and measurement of water levels in the wells to establish the direction of groundwater flow. The results of the investigation are summarized below:

- Observations made during the test pit excavations, along with observations from previous investigations, were used to delineate approximate areas where fill had been placed in the proposed development area. Soil samples were collected from 12 of the test pits from native materials, either exposed at the surface, or underlying the fill material, and submitted for laboratory analysis of VOCs, RCRA metals, PAHs, PCBs, and pesticides. Low concentrations of benzene, xylenes, and several semi volatile organic compounds were reported in samples across the VCP Site; however, in all cases, these constituents were present below regulatory screening levels. Pesticides and PCBs were not reported above laboratory detection limits. Arsenic was reported above residential and commercial

RSLs in all samples. It exceeded the Site-specific background concentration in one sample.

- The results of the groundwater investigation showed the direction of flow to the southeast, based on January 26, 2022 data. Sample analyses showed the only VOC reported above laboratory reporting limits was methyl-tert-butyl ether (MTBE), a gasoline constituent, from sample TOSA-MW02. The reported concentration was well below the MCL. Pesticides, PAHs, and PCBs were not reported above laboratory reporting limits. Arsenic was reported in two groundwater samples (TOSA-MW02 and TOSA-MW03) at concentrations above the MCL. As with the occurrence of arsenic in soils in the Salt Lake Valley, it is relatively common to detect dissolved arsenic in groundwater. It was not viewed as indicative of impacts originating from the historical landfilling activities.
- Perfluoroalkyl substances (PFAS) analytical data indicate the presence of the compound perfluorooctanesulfonic acid (PFOA) in the groundwater at TOSA-MW02 at 194 nanograms per liter (ng/L). At the time of sampling, this exceeded the EPA's health advisory level of 70 ng/L. The EPA has since established Tap Water RSLs for drinking water for several PFAS compounds including PFOA. TOSA-MW02 is closest to the main landfill and may reflect that PFAS compounds have entered the subsurface from the landfill materials.
- Four soil gas samples were collected from locations spread across the VCP Site, with an emphasis on the southern portion where it is anticipated that larger commercial buildings will be located. Chloroform exceeded its VISL in two of the samples, SG-8 and SG-9. Chloroform is commonly reported when chlorinated water combines with organic subsurface materials, such as when culinary water or sewer water is introduced from a piping leak. Although it likely does not indicate a release of chemicals has occurred, the EPA has established thresholds for exposure to chloroform and the soil gas results suggest these thresholds may be exceeded.

In summary, the previous investigations of the larger parent parcel and the current VCP Site indicate there have been minimal impacts from landfilling and other industrial uses of the site and nearby properties. Soil impacts have not been observed, with the exception of minor amounts of debris in the upper 5 feet in soils in some locations and one occurrence of elevated lead. Groundwater impacts appear limited to dissolved arsenic. In addition, a sample from one groundwater monitoring well at the Site reported PFOA in excess of 70 nanograms per liter (ng/L). At the time these samples were collected, EPA had not established an enforceable standard; 70 ng/L was the recommended health advisory level. The source of these impacts is likely the landfill on the parent parcel which appears to be upgradient of the VCP Site.

Chloroform may pose a potential for vapor intrusion into future buildings based on soil gas analytical results. Additionally, methane appears to be present at elevated levels farther west of the Site, on the parent parcel. The source of the methane was not specifically identified, but likely includes both landfill materials and natural sources.

1.2.1 Objective of Site Characterization

The property owner, Salt Lake City Corporation, has entered into a VCP agreement to address potential impacts at the Site that might impact future residents of the proposed residential tiny home village. As part of the VCP process, DERR requested additional site characterization prior to development of a Remedial Action Plan (RAP) to address environmental impacts identified at the Site. Terracon developed and submitted a Site Characterization Work Plan (SCWP) to DERR, dated October 17, 2022, to address the request for additional information. This Site Characterization Report presents the results of the most recent investigation activities as well as previously acquired data collected within the VCP Site.

1.3 Screening Levels

The objective of this Site Characterization is to evaluate groundwater and soils for the presence of contaminants commonly associated with landfill and industrial properties at concentrations above regulatory screening levels. Samples collected during this investigation are compared to EPA RSLs, MCLs, Tap Water screening levels, and VISLs. Arsenic concentrations in soil are compared to a background concentration of 10.8 mg/kg established in a 1995 investigation conducted on the Redwood Road Dump site and presented in the Site Inspection Prioritization report, dated 9/28/1995.

1.4 Standard of Care

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time period. Please note that Terracon does not warrant the work of laboratories, regulatory agencies, or other third parties supplying information used in the preparation of the report. These LSI services were performed in accordance with the scope of work agreed with you, our client, as reflected in our proposal, and were not restricted by ASTM E1903-19.

1.5 Additional Scope Limitations

Findings, conclusions, and recommendations resulting from these services are based upon information derived from the onsite activities and other services performed under this scope of work. Such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, non-detectable, or not present during these services, and we cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this LSI. Subsurface conditions may vary from those encountered at specific borings or wells or during other surveys, tests, assessments, investigations, or exploratory services; the data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services.

1.6 Reliance

This LSI report has been prepared for the exclusive use and reliance of Salt Lake City Corporation. Use or reliance by any other party is prohibited without the written authorization of Salt Lake City Corporation and Terracon. Reliance on the LSI report by the client and all authorized parties will be subject to the terms, conditions, and limitations stated in the proposal, the Site Characterization report, and Terracon's Agreement. The limitation of liability defined in the Agreement is the aggregate limit of Terracon's liability to the client and all relying parties.

2.0 SCOPE OF WORK

The VCP-approved scope of work for this Site Characterization consisted of the following:

- Excavate seven test pits in areas where fill has been observed for the purpose of collecting samples of the fill material as well as underlying native materials
- Excavate three test pits on the east side of the Site where the east-adjointing Alvie Carter Trust (ACT) auto salvage and dumping operations encroached onto the Site for the purpose of collecting samples of fill material and underlying native materials (including an apparent burn pit discovered within the Site boundary)
- Install two monitoring wells and collect groundwater samples from the two new wells and the three existing onsite wells
- Survey all five monitoring wells to measure the site-specific direction of groundwater flow
- Collect 2 surface soil / sediment samples from the North Ditch.

All work conducted followed the steps detailed in the Site Characterization Work Plan (*Terracon, October 18, 2022*) and associated Quality Assurance Project Plan (QAPP) with the following exceptions.

- The QAPP stated laboratory analysis of samples would be conducted by Chemtech-Ford Laboratories, Sandy, Utah. Pace Laboratories, a national laboratory certified in Utah, performed the analyses instead. Pace Laboratories followed the Quality Assurance/Quality Control (QA/QC) measures outlined in the QAPP.
- The location of monitoring well TOSA MW04 was moved several feet to the east to avoid the 30-foot buffer zone alongside the main sewer line running through the western portion of the Site. The revised location is shown on **Exhibit 3 (Appendix A)**.
- The location of test pit TP-37 was moved slightly to assess impacts from the staging of waste materials generated during the cleanup of homeless camps. The revised location is shown on **Exhibit 3 (Appendix A)**

3.0 METHODOLOGY

Prior to sampling, the public utility location service (Blue Stakes) was notified at least 48 hours prior to digging or drilling as required by law. Field activities were conducted from November 3, 2022 through November 10, 2022 and consisted of the following activities:

- Excavation of test pits for collecting samples of fill material (TP-33 through TP-39). Samples of underlying native materials were collected and held by the analytical laboratory and only analyzed if impacts were reported in the fill samples
- Excavation of three test pits in the ACT area for fill and native soil samples (TP-40 through TP-42)
- Installation and development of two monitoring wells (TOSA-MW04 and TOSA-MW05)
- Sampling of five monitoring wells (TOSA-MW01 through TOSA-MW05)

Sample locations are shown on **Exhibit 3** in **Appendix A**. Details of each activity are presented in the following sections.

3.1 Test Pits for Soil Logging and Sampling

Terracon's field activities were conducted on November 10, 2022 by Mr. Steven Maliszkeski, Terracon Project Manager and Utah-certified Asbestos Inspector (ASB-7498). The work consisted of excavating seven test pits in areas where fill has previously been encountered and three test pits in the Alvie Carter Trust area. Subcontracted excavation services were performed by Direct Push Services.

One soil sample was collected from each test pit designated to investigate fill material (TP-33 through TP-39). Samples for VOC analysis consisted of grab samples from the 6-inch interval displaying the greatest impacts, such as positive PID readings and/or staining. If evidence of impacts was not observed, the grab samples were collected from a 6-inch interval in the approximate center of the vertical profile. Samples for non-volatile analytes (metals, SVOCs, PCBs, dioxins/furans) were composited from the material encountered at the surface to the total depth of the test pit using a hand trowel. TP-37, positioned just north of the asphalt pad used for green waste staging, was also used to investigate potential impacts from Salt Lake City's occasional staging of household waste from clearing homeless camps and a surface soil sample was collected.

A second sample from each test pit was collected from the underlying native material. This sample was placed on hold at the laboratory until the results of the primary fill sample were reported. The intention was to submit the sample for analysis if the corresponding fill sample reported impacts above a screening level. One fill sample, TP-36 FILL, reported PAH compounds in excess of a screening level. The underlying native soil sample was thus submitted for analysis of PAHs.

Two samples were collected from each of the three test pits located in the ACT area: one from the fill material and one from the underlying native material, following the procedures described above.

Soils from the test pits were logged to document general lithology, color, and the presence or absence of fill and debris and field screened using a photoionization detector (PID) to qualitatively evaluate the presence of volatile organic compounds (VOCs). Copies of the test pit logs are presented in **Appendix C**.

Soil samples were collected from the excavated material using a clean gloved hand. Non-disposable sampling equipment was cleaned using an Alconox® wash and potable water before beginning the project and before collecting each soil sample. The samples were placed in laboratory-prepared containers, labeled, and placed on ice in a cooler. The sample coolers and completed chain-of-custody forms were relinquished to Pace Analytical National Center for Testing & Innovation (Pace), a Utah-certified laboratory, for analysis on a standard turnaround time.

3.2 Monitoring Well Installation, Development, and Sampling

Two new monitoring wells, TOSA-MW04 and TOSA-MW05, were installed on November 3, 2022. The soil borings for the monitoring wells were advanced with direct push (“Geoprobe”) drilling equipment outfitted with 3.75-inch rods to allow for the construction of 2-inch-diameter monitoring wells. The mechanized drilling services were performed by a Utah-licensed well driller, Direct Push Services. Terracon environmental personnel selected the boring locations, visually observed the drilling activities, and logged the soil borings.

During advancement of the soil borings, soils were continuously cored in 5-foot intervals and observed to document subsurface soil types, color, relative moisture content, and sensory evidence of environmental impacts. The soil cores were also field screened using sensory methods and a photoionization detector (PID) to qualitatively evaluate the presence of volatile organic compounds (VOCs).

3.2.1 Well Installation

The two soil borings were converted to groundwater monitoring wells. The monitoring wells were installed according to the following general procedures:

- Borings were advanced to a total depth of 15 feet below ground surface (bgs)
- Installation of 10 feet of 2-inch diameter, 0.010-inch machine slotted polyvinyl chloride (PVC) well screen with a threaded bottom cap, positioned with the top of the well screen approximately 2 feet above the water level surface
- Installation of 2-inch diameter, threaded, flush-joint PVC riser pipe to approximately 2 feet above the surface

- Addition of pre-sieved 20/40 grade silica sand for annular sand pack around the screened interval from the bottom of the boring to 1 foot above the top of the screen
- Placement of 2 feet of hydrated bentonite pellets above the sand pack
- Addition of cement/bentonite slurry to the surface
- Placement of outer steel protective casing set in a concrete pad

Copies of the boring logs with monitoring well construction details are presented in **Appendix C**.

3.2.2 Well Development and Survey

A minimum of 24 hours after the wells were constructed, they were developed by bailing with new disposable bailers to remove fine grained sediments from the sand pack and well screen in order to allow the infiltration of formation water. Approximately five casing volumes of water were removed from each well.

The top of the PVC casing in the two new wells and three existing monitoring wells was surveyed by a licensed surveyor, PSOMAS Engineering. Depth-to-groundwater was measured in each of the monitoring wells on the same day (November 10, 2022) and the site-specific groundwater gradient was calculated using the well casing elevations and depth-to-groundwater measurements

3.2.3 Groundwater Sampling

The five monitoring wells were sampled on November 7, 2022, using low-flow sampling methods. The wells were evacuated with a low-flow peristaltic pump. New high-density polyethylene (HDPE) tubing was used for each well, the inlet of which was placed within the top foot of the water column. Water quality parameters (pH, temperature, conductivity, dissolved oxygen, and turbidity) were measured during purging to gauge stabilization. The parameters pH, temperature, conductivity, and dissolved oxygen were measured in line with a YSI Professional Plus flow-through cell. Turbidity was measured with a Hach 2100q portable turbidity meter. Both instruments were calibrated prior to use according to manufacturer's specifications. Using depth to water and total depth of well measurements, the casing volume of water for each well was calculated. The peristaltic pump was set to pump water at a rate of 200 milliliters per minute (mL/min) or less. The wells were purged until one of the following criteria were met:

- Groundwater quality parameters of pH, temperature, conductivity, and dissolved oxygen readings had stabilized to within 10% over three consecutive readings and turbidity had stabilized to within 10% over three readings or had decreased to less than 5 NTUs.
- Three casing volumes were removed.

Water quality parameters stabilized in four of the wells (TOSA-MW02 through TOSA-MW05); however, the discharge from well TOSA-MW01 became turbid midway through purging, and stabilization could not be achieved. In this case, three casing volumes were removed.

The scope of work included collecting groundwater samples for analysis of perfluoroalkyl substances (PFAS). These analytes require special sampling and handling methods. Terracon employed the “Clean Hands/Dirty Hands” protocol developed by the US EPA for sampling low level metals and can be used for other contaminants that are analyzed in the parts per trillion range. In this procedure, one field person is designated as the “clean hands” sampler and is assigned with only handling and filling the sample containers. A second field person is designated as the “dirty hands” sampler and performs all other tasks, such as opening the well covers, measuring depth to water, and installing the tubing in the well. To verify the field methods were protective of sample integrity, a field blank and an equipment blank were collected. The results of the blank analytical results are discussed in **Section 5, Quality Assurance / Quality Control**.

Once the sample containers for PFAS were filled and placed in their own cooler, the remainder of the sample containers were filled according to Terracon’s Standard Operating Procedures. For all wells sampled, using the well purging pump already in place, the sample containers were filled out of the pump discharge line maintaining the low-flow setting. Samples for analysis of metals were filtered through an in-line, disposable, 0.45-micron pore filter.

The use of non-disposable sampling equipment was limited to the water level probe. It was decontaminated using an Alconox® detergent wash followed by a potable water rinse then followed by a certified PFAS-free water rinse, prior to commencement of the project and between measurement collection in each well.

3.3 Surface Soil Sampling: North Ditch

Soil samples were collected from the North Ditch on November 10, 2022 by Nancy Saunders, Terracon Project Manager. A total of two soil samples were collected within the North Ditch at locations where it crosses the Site (ND-4 and ND-5). The shallow soil samples were collected from the sediments/surficial soils from 0 to 4 inches below the surface using a hand trowel.

The samples were placed in laboratory-prepared containers, labeled, and placed on ice in a cooler.

3.4 Analytical Program

The analytical program is presented in **Table 1 (Appendix B)**. Samples were analyzed by Pace Analytical Laboratories, a Utah-certified laboratory, following the procedures specified in the Quality Assurance Project Plan (QAPP), dated October 17, 2022.

4.0 RESULTS

4.1 Subsurface Conditions

Observations made during excavation of test pits and installing monitoring wells were recorded on borehole logs and are summarized below. Copies of the logs are presented in **Appendix C**.

4.1.1 Previously Observed Fill Areas

Apparent fill material was encountered in test pits TP-33 through TP-39, where fill has previously been documented. In general, the fill ranged in thickness from 1.5 feet in test pit TP-39 to approximately 4.5 feet in test pits TP-36 and TP-38. The exception to this was test pit TP-37, next to the asphalt pad, where 6.5 feet of fill was encountered. The majority of the test pits encountered fill with bits of wood; however, debris including concrete fragments, plastic sheeting, fabric, and metal straps was present in the test pits TP-36 and TP-37. Below the fill material, native soil consisted of silts and clays with fine grained sand. No positive detections for VOCs were measured with the PID.

4.1.2 ACT Area

Test pits TP-40 through TP-42, excavated in the ACT area, encountered fill ranging in thickness from 1 to 3.5 feet. The fill material consisted of silt mixed with plastic fragments, bricks, bits of lumber, concrete and rebar, and metal piping. Some of the debris was apparently burnt. Native materials beneath the fill consisted of silts and clays. No positive detections for VOCs were measured with the PID. Suspect asbestos-containing building materials (ACBM) were not observed in the fill material debris.

4.1.3 Groundwater Survey Results

Groundwater elevations were calculated based on the top-of-casing well elevations and depth-to-groundwater measurements collected on November 10, 2022. **Table 2 (Appendix B)** is a summary of the survey and depth-to-groundwater measurement data. The site-specific groundwater gradient measured during this investigation was to the northwest, as shown on **Exhibit 4 (Appendix A)**.

4.2 Soil Analytical Results

Results of fill material and selected native soil samples are presented in **Tables 3 through 6 (Appendix B)** and are summarized below. The analytical results were compared to the EPA Regional Screening Levels (RSLs) for soil under both Residential and Industrial scenarios, as published in November 2022. The RSLs use a Target Cancer Risk of 1×10^{-6} (one-in-a-million) and a Hazard Quotient of 1.

Dioxins/furans are a group of compounds (congeners) that share similar chemical structures and characteristics. The toxicity of dioxins/furans is normally evaluated based on the sum of the toxicity of a selected group of the congeners. The calculated toxicity, or TEQ, is compared to risk screening criteria. TEQs are a weighted quantity measure based on the toxicity of each member of the dioxin and dioxin-like compounds category relative to the most toxic members of the category. EPA uses the TEQs to account for how dioxin and dioxin-like compounds vary in toxicity. In order to calculate a TEQ, a toxic equivalent factor (TEF) is assigned to each member of the dioxin and dioxin-like compounds category. The TEF is the ratio of the toxicity of one of the compounds in this category to the toxicity of the two most toxic compounds in the category, which are each assigned a TEF of 1: 2,3,7,8-tetrachlorodibenzo-p-dioxin (commonly referred to as dioxin) and 1,2,3,7,8-pentachlorodibenzo-p-dioxin. TEFs that have been established through international agreements currently range from 1 to 0.0001 and are included with the sample results in **Table 6 (Appendix B)**.

4.2.1 Soil Analytical Results: Metals and PCBs

Soil analytical results for RCRA 8 metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver) are summarized in **Table 3 (Appendix B)**. As shown in the table, low levels of several metals were reported in all of the samples; however, no compounds were detected at concentrations above regulatory screening levels, except for arsenic. Arsenic concentrations exceed the Industrial RSL in all samples, but only exceeded the background level in six samples.

Although none of the prime samples reported cadmium above its RSL, the duplicate samples from test pits TP-38 and TP-40 reported cadmium at 13.6 mg/kg and 8.42 mg/kg, respectively, above the Residential RSL of 7.1 mg/kg. As such, it should be considered that cadmium may be elevated in these areas.

Selected fill samples from the area where fill had previously been observed and one fill and one native soil sample from the Alvie Carter area were analyzed for polychlorinated biphenols (PCBs). The results of the PCB analysis are presented in **Table 3 (Appendix B)**. The PCB compound PCB 1254 was detected in sample TP-40 FILL. The compound PCB 1260 was detected in samples TP-36 FILL, TP-38 FILL, and TP-42 FILL. In all cases, the compounds were reported at concentrations below screening levels.

4.2.2 Soil Analytical Results: VOCs

Fill samples from the area where fill had previously been observed, fill and native soil samples from the ACT area, and shallow soil samples from the North Ditch, were analyzed for volatile organic compounds (VOCs). Results of the VOC analyses are presented in **Table 4 (Appendix B)**. Several VOCs were reported above the laboratory detection limit; however, in all cases, the reported concentrations were below screening levels. In some instances, the laboratory detection levels (RDLs) are higher than the RSLs and as such, it is not possible to make a comparison between the sample result and the screening level. However, because so few VOCs appear to

be present in the sample set, it is unlikely that, if lower detection levels could be achieved, the sample results would report exceedance of screening levels.

4.2.3 Soil analytical Results: SVOCs

Fill samples from the area where fill had previously been observed, fill and native soil samples from the ACT area, and shallow soil samples from the North Ditch, were analyzed for SVOCs. Results of the SVOC analyses are presented in **Table 5 (Appendix B)**. Benzo(a)pyrene was reported in fill samples TP-36 FILL and TP-40 FILL at 0.134 mg/kg and 0.47 mg/kg, respectively, which exceed the Residential RSL of 0.11 mg/kg. In addition, the surface soil sample collected from location TP-37 (TP-37 SHALLOW) also reported benzo(a)pyrene above the Residential RSL at 0.211 mg/kg. The Industrial RSL of 2.1 mg/kg was not exceeded in these samples. As stipulated in the SCWP, because impacts were observed in the fill samples at locations TP-36 and TP-40, the underlying native soils were sampled for SVOCs. The native soil samples did not report an exceedance of screening levels for benzo(a)pyrene or any other SVOC. Other SVOCs were reported in all fill samples; however, in all cases, the reported concentrations were below screening levels.

SVOCs were not reported above a screening level in the North Ditch samples.

In some instances, the laboratory detection levels (RDLs) are higher than the RSLs and as such, it is not possible to make a comparison between the sample result and the screening level. However, because so few SVOCs appear to be present in the sample set, it is unlikely that, if lower detection levels could be achieved, the sample results would report exceedance of a screening level.

4.2.4 Dioxins/Furans

The soil sample from TP-41 FILL was selected for analyses of dioxins and furans as a burn pit was observed in this area. Results of the analyses are presented in **Table 6 (Appendix B)**. The sample reported several dioxins/furans congeners at concentrations above the laboratory detection limits; however, no concentrations exceeded a screening level. The Toxicity Equivalency Quotient (TEQ) for all congeners was calculated as 1.73 which does not exceed the EPA RSL of 4.8.

4.3 Groundwater Analytical Results

Groundwater sample results are presented in **Tables 7 through 11 (Appendix B)** and are summarized below. The tables include sample data from the previous round of samples collected from wells TOSA-MW01 through TOSA-MW03 as well as from the recent round of sampling which included all five monitoring wells. The analytical results were compared to the EPA MCLs for drinking water. In cases where an MCL has not been established, the results were compared to the EPA's Tap Water standard.

4.3.1 Groundwater Analytical Results: Dissolved Metals

Results for dissolved metals analyses are presented in **Table 7 (Appendix B)**. Note that the samples from the previous sampling event were analyzed for arsenic, barium, cadmium, chromium, lead, selenium, and silver were analyzed using EPA Method 6010B. Samples collected in the recent event were analyzed using EPA 6020 in order to obtain a lower detection level.

Arsenic exceeds the MCL of 0.010 mg/L in samples from all wells, with the exception of TOSA-MW01. In this well, in both sampling events, the Tap Water standard is exceeded but the results are below the MCL.

Hexavalent chromium was reported in the sample from TOSA-MW01 in the previous round of sampling at a concentration exceeding the Tap Water RSL; however, only total chromium was included as an analyte in the recent round of sampling. Total chromium was reported in the samples from TOSA-MW01, TOSA-MW03, and TOSA-MW04 and did not exceed the MCL of 0.1 mg/L.

4.3.2 Groundwater Analytical Results: VOCs

Results of the VOC analyses are presented in **Table 8 (Appendix B)**. Low concentrations of several VOCs were reported in the samples from wells TOSA-MW02, MW03, and MW05; however, in all cases the reported concentrations are below screening levels. In some instances, the laboratory detection levels (RDLs) are higher than the respective Tap Water screening levels and as such, it is not possible to make a comparison between the sample result and the screening level. However, because so few VOCs appear to be present in the sample set, it is unlikely that if lower detection levels could be achieved, the sample results would report an exceedance of a screening level.

4.3.3 Groundwater Analytical Results: SVOCs and 1,4-Dioxane

Results of the SVOC analyses are presented in **Table 9 (Appendix B)**. The previous sample set was analyzed for PAHs; the current sampling event reported SVOCs and 1,4-Dioxane. Four SVOC compounds were reported above the laboratory detection limit; however, no concentrations exceeded a screening level.

In some instances, the laboratory detection levels (RDLs) are higher than the respective Tap Water screening level and as such, it is not possible to make a comparison between the sample result and the screening level. However, because so few SVOCs appear to be present in the sample set, it is unlikely that if lower detection levels could be achieved, the sample results would report exceedance of a screening level.

The compound 1,4-Dioxane was detected above the laboratory detection limit in samples collected from four wells. The reported concentrations from MW01 and MW03 exceed the Tap Water RSL. No MCL has been established for this compound.

4.3.4 Groundwater Analytical Results: PFAS

Results of the PFAS analyses are presented in **Table 10 (Appendix B)**. Several PFAS compounds were reported above the laboratory detection limit in all samples. The compound PFOA was present in MW02 at concentrations in excess of the Tap Water RSL of 60 nanograms per liter (ng/L) during both groundwater sampling events. In addition, it was exceeded in sample TOSA-MW400, the duplicate of TOSA-MW04 during the current Site Characterization event. In the previous round of sampling, PFOS exceeded the Tap Water RSL of 40 ng/L in well TOSA-MW01.

4.3.5 Groundwater Analytical Results: Total Dissolved Solids

Results of the total dissolved solids (TDS) analyses are presented in **Table 11 (Appendix B)**. TDS values range from a low of 924 mg/L in the sample from TOSA MW04 to a high of 9,660 mg/L in the sample from TOSA MW-05.

4.3.6 Groundwater Analytical Results: Pesticides and PCBs

Samples from wells MW01, MW02, and MW03, were collected during the previous round of sampling and analyzed for Pesticides and PCBs. None of the compounds included in these analyses were reported above laboratory detection limit.

5.0 QUALITY ASSURANCE/QUALITY CONTROL

Quality control for the sampling program included using standardized sample collection and handling methods, documenting pertinent field information, and keeping chain-of-custody records. All sampling was conducted following Terracon's Standard Operating Procedures (SOPs).

The sampling work included the collection of 18 soil samples and five groundwater samples. Documentation provided with the laboratory analytical results reports included case narratives; analytical data with minimum method detection limits (MDLs) and reported detection limits (RDLs) listed for all analyses; surrogate recoveries for GC/MS analyses with laboratory control limits; chain-of-custody records; and a quality control summary, including method blanks, matrix spike/matrix spike duplicates (MS/MSD) with control limits, laboratory control samples and duplicates (LCS/LCSD) with control limits; and application of data qualifiers where warranted. Soil and groundwater sample analyses were conducted by Pace Analytical Laboratories. PFAS

samples did not have associated MS/MSDs analyzed, but did have LCS/LSCD, surrogate recoveries, and method blanks analyzed.

Assessment of the Data Quality Indicators (DQIs) for Precision, Bias and Accuracy, Representativeness, Comparability, Completeness, and Sensitivity are presented in the following subsections.

5.1 Precision

Precision was evaluated on the basis of relative percent difference (RPD) as a measure of reproducibility between LCS/LCSD pairs and MS/MSD pairs (*analytical precision*) and between field samples and field duplicate samples (*field precision*).

The RPD is calculated to evaluate precision using the following equation.

$$RPD = \frac{X_1 - X_2}{\left(\frac{X_1 + X_2}{2}\right)} \times 100$$

Where X_1 and X_2 are the reported concentrations of the samples being evaluated.

5.1.1 Analytical Precision

A summary of the Quality Control assessment for *analytical precision* is presented below.

■ Laboratory Set L1557295 (Soil Samples):

- The RPDs for the MSD associated with mercury for Laboratory Batch WG1959362 were outside the laboratory's control limits. As a result, a J3 flag was used to qualify this data. The affected analyte was detected in concentrations orders of magnitude below applicable screening levels. It is not anticipated the *analytical precision* issue will affect the conclusions of this report.
- The RPD for the MSD associated with bis(2-ethylhexyl)phthalate for Laboratory Batch WG1960736 was outside the laboratory's control limits. As a result, a J3 flag was used to qualify this data. The affected analyte was not detected in the affected samples, and this analyte was also not detected or detected in estimated concentrations (J value) well below regulatory screening levels in all other soil samples. It is not anticipated the *analytical precision* issue will affect the conclusions of this report.
- The RPD for the MSD associated with fluoranthene for Laboratory Batch WG1961298 and multiple SVOCs in Laboratory Batch WG1964751 were outside the laboratory's control limits. As a result, a J3 flag was used to qualify this data. Fluoranthene was detected well below any applicable regulatory standards in the affected samples. The other SVOCs were not detected in the affected sample.

Other DQI's were also within control. It is not anticipated the *analytical precision* issue will affect the conclusions of this report and those samples are well below applicable screening levels.

Based on the results of the RPD analyses of the MS/MSD and LCS/LCSD pairs and the evaluation provided above, ***analytical precision* is considered within control** for Laboratory Set L1557295 (Soil Samples).

■ **Laboratory Set L1555639 (Groundwater Samples):**

- The RPD for the LCSD associated with 1,1-dichloroethene and chloroethane for Laboratory Batch WG1958563 were outside the laboratory's control limits. As a result, a J3 flag was used to qualify this data. None of these analytes were detected in any of the affected samples and other DQI's were in control. It is not anticipated the *analytical precision* issue will affect the conclusions of this report.
- The RPD for the MSD associated with 25 VOCs for Laboratory batch WG1958563 were outside the laboratory's control limits. As a result, a J3 flag was used to qualify this data. None of these VOCs were detected in any of the affected samples. Additionally, the MS for these samples were in control. It is not anticipated the *analytical precision* issue will affect the conclusions of this report.

■ **Laboratory Set 222110910 (PFAS Groundwater Samples):**

- MS/MSD were not analyzed for PFAS samples. It was requested that a field-collected sample be used for MS/MSD analysis, but the laboratory noted that insufficient volume was provided for these analyses. While this represents a potential precision and or accuracy/bias issue, other DQIs were run on these samples and are in control.
- The RPDs for the LCS/LCSD pairs were within the laboratory control limits with the exception of NEtFOSA in the LCS/LCSD where the RPD was above (LCSD) or below (LCS) the laboratory control limit. Affected samples were either non-detect above the MDL or were detected in an estimated concentration (MW02) between the MDL and RDL. Additionally, there is no regulatory screening level for this analyte. This is not expected to affect the usability of this data or conclusions of this report.

Based on the results of the RPD analyses of the LCS/LCSD pairs and the evaluation provided above, ***analytical precision* is considered within control** for Laboratory Set L1555639 (Groundwater Samples).

5.1.2 Field Precision

Field duplicates were collected at a rate of 10 percent of soil and groundwater samples (or one field duplicate for up to 10 samples of each of these media). Three field duplicate soil samples for metals, VOCs, and SVOCs; two field duplicates for soil samples for PCBs; and one field duplicate groundwater sample were selected at random.

Analytical results for original samples and field duplicate pairs that are less than five times the laboratory's Reported Detection Limit (RDL) in the analytical reports were considered within control if the difference between the sample concentration and its duplicate was less than two times the RDL. When analytical results for the original sample and the field duplicate pairs are greater than five times the RDL, the duplicate pair was considered within control when the RPDs for the field duplicate pairs were within the control limits (50% for solid samples and 25% for groundwater samples). Results of duplicate samples are presented in Table 12 through 19, Appendix C).

■ Laboratory Set L1557295 (Soil Samples):

- 8 RCRA Metals in Soil **Table 12 (Appendix C)**
Reported concentrations for arsenic and cadmium for TP-38 Fill were less than 5 X RDL where the duplicate, TP-138 Fill, was greater than 5 x RDL. The difference between the sample and duplicate concentrations was greater than 2 X RDL in each case, so this pair are not considered within control. Additionally, the reported concentrations for arsenic in TP-40 Fill was less than RDL but the duplicate, TP-140 Fill, was less than 5 x RDL where the difference between the results (using ½ RDL as a conservative estimate for ND) was greater than 2 x RDL. This pair is not considered within control for arsenic. The calculated RPDs for cadmium and chromium (66.9% and 178.8%, respectively), are greater than the 50% control limits. There is no regulatory screening level for chromium. However, the duplicate sample is above the Residential RSL for cadmium, so this sample is considered to be above this RSL to be conservative.
- PCBs in Soil **Table 13 (Appendix C)**
The duplicate pairs are considered within control as all of the analytes achieve the requirements set out in the SOPs.
- VOCs in Soil **Table 14 (Appendix C)**
The duplicate pair ND-4/ND-104 had benzene concentrations that were both less than 5 x RDL but the difference between them was greater than 2 x RDL, so they are considered not within control. These concentrations are orders of magnitude below the RSLs, so this is not expected to affect the conclusions of this report.

- SVOCs in Soil **Table 15 (Appendix C)**

The duplicate pairs are considered within control as all of the analytes achieve the requirements set out in the SOPs.

Based on the results of the RPD analyses of the field duplicate sample pairs in soil and the evaluation provided above, **field precision is considered within control** for Laboratory Set L1557295 (Soil Samples) with the minor exceptions listed above.

- **Laboratory Set L1555639 (Groundwater Samples):**

- Dissolved Metals in Groundwater **Table 16 (Appendix C)**

The duplicate pair is considered within control as all of the analytes achieve the requirements set out in the SOPs

- VOCs in Groundwater **Table 17 (Appendix C)**

The duplicate pair is considered within control as all of the analytes achieve the requirements set out in the SOPs

- SVOCs in Groundwater **Table 18 (Appendix C)**

The duplicate pair is considered within control as all of the analytes achieve the requirements set out in the SOPs

Based on the results of the RPD analyses of the field duplicate sample pairs and the evaluation provided above, **field precision is considered within control** for Laboratory Set L1555639 (Groundwater Samples).

- **Laboratory Set 222110910 (PFAS Groundwater Samples):**

- PFAS in Groundwater **Table 19 (Appendix C)**

Several analytes (PFBA, PFBS, PFHpA, PFHxA, PFOA, PFPeA, PFHxS, and PFPeS) had calculated RPD values above the 25% control limit for groundwater samples. These values ranged from 48.8% (PFOA) to 72.3% (PFHxS). These analytes are not considered within control. Additionally, PFOS is not considered within control because the original and duplicate results were less than 5 x RDL but the difference between the two concentrations was slightly greater than the RDL. Samples were either non-detect, detected in an estimated concentration (J value), or detected below any regulatory reporting limit with the exception of PFOA in the duplicate sample (TOSAMW-400) which was above the Tap Water RSL. To be conservative, this concentration is considered to be above the RSL for the purposes of this report. MW02 also exceeded the RSL for PFOA.

Based on the results of the RPD analyses of the field duplicate sample pairs and the evaluation provided above, **field precision is considered within control** for Laboratory Set 222110910 (PFAS Groundwater Samples).

5.2 Bias and Accuracy

Bias and **Accuracy** were evaluated through a review of the method blanks, trip blanks, percent recoveries for LCS/LCSD, and percent recoveries for MS/MSD summaries provided by the laboratory. Method blanks and trip blanks were considered within control (i.e., *accuracy*) if the constituents analyzed were less than the analytical method reporting limits. LCS/LCSD and MS/MSD analyses were considered within control if the percent recoveries were within the laboratory's established limits (i.e., *bias*). A summary of the Quality Control assessment for *Bias* and *Accuracy* is presented below.

■ Laboratory Set L1557295 (Soil Samples):

- **Accuracy: Method Blank:** Arsenic and methylene chloride were detected in estimated concentrations (J value) in Batches WG19960669 and WG1964463, respectively. The affected arsenic samples had concentrations above the Industrial RSL as did nearly all samples analyzed in this investigation. The affected methylene chloride samples were well below applicable regulatory standards as well all other samples. It is unlikely this accuracy issue affected the usability of the data or the conclusions of this report.
- **Accuracy: Trip Blank:** No Trip Blank was submitted for the soil sample analysis.
- **Surrogate Recoveries:** The laboratory stated that the surrogate recovery for several surrogates related to the SVOC analyses for samples TP-33 Fill and TP-37 Shallow cannot be used for control limited evaluation due to dilution. A J7 value was applied to these surrogates. Due to this surrogate and dilution issue, it should be assumed that the corresponding SVOC results are estimated. SVOCs were either not detected or were detected (J flagged or detected) well below regulatory screening levels for the affected samples with the exception of benzo(a)pyrene in TP-37 Shallow. To be conservative, it can be assumed that benzo(a)pyrene does exceed the Residential RSL in this sample.
- **Bias: LCS/LCSD Percent Recoveries:** The LCS for bromoform and chlorodibromomethane (Batch WG1960779) were below the established quality control range for accuracy. A J4 value was assigned to this data. Based on the historical use of the Site, neither bromoform nor chlorodibromomethane are considered contaminants of concern for the Site. Additionally, the LCS/LCSD

(Batch WG1961752) and LCS Batch WG1964463) for vinyl acetate was above the established quality control range for accuracy. A J4 value was assigned to this data. No samples had detections of this analyte above the RDL or applicable screening levels. As such, the percent recoveries for these analytes being outside of the laboratory's control limits is not anticipated to affect the usability of the data.

- **Bias: MS/MSD Percent Recoveries:** The percent recovery for MS for mercury (Batch WG1959362) and the MS/MSD for allyl chloride (Batch WG1960779) interfered with the ability to make any accurate determination, causing a low value. A J6 qualifier was applied to this data. The affected soil samples were not detected above RDLs or applicable screening levels, and other DQIs were in control. This is not anticipated to affect the usability of the data.

The MS/MSD for multiple SVOCs (Batch WG1960736) and the MS/MSD for benzidine and hexachlorocyclopentadiene (Batch WG1960984) interfered with the ability to make any accurate determination, causing a low value. A J6 qualifier was applied to this data. Several of these analytes (and specifically benzidine and hexachlorocyclopentadiene) are poor performers with this laboratory method. As a result, this data should be rejected. These analytes are not considered contaminants of concern for the Site, and this is not anticipated to affect the usability of the remaining data set. The other, non-rejected, SVOCs should be considered estimated. However, they were not detected above RDLs or applicable screening levels. This is not anticipated to affect the usability of the data.

The percent recovery for the MS for several SVOCs (Batch WG1964751) interfered with the ability to make any accurate determination, causing a high value. A J5 qualifier was applied to this data. The affected soil samples were not detected above RDLs or applicable screening levels, and other DQIs were in control. This is not anticipated to affect the usability of the data.

Bias and Accuracy are considered within control for Laboratory Set L1557295. Some minor exceptions exist but are not expected to have an impact on the usability of the results.

■ **Laboratory Set L1555639 (Groundwater Samples):**

- **Accuracy: Method Blank:** All analytes in the method blanks were less than the laboratory RDLs.
- **Accuracy: Trip Blank:** A trip blank was submitted during this investigation. The trip blank had an estimated concentration (J value) for benzene and total xylenes. No field collected samples had detections of these analytes.

- **Surrogate Recoveries:** The laboratory noted that several surrogate recovery limits were exceeded (values were outside lower control limits) for some of the individual SVOC analyses run for TOSAMW-04 and TOSAMW-400. A J2 value was applied to this data. A duplicate analysis was performed by the laboratory on the affected sample and confirmed the results. As a result, SVOCs for these samples should be considered biased low. All affected samples were non-detect for SVOCs, and the other non-affected samples were non-detect for SVOCs where screening levels exist. Additionally, the SVOCs with regulatory limits are not generally considered contaminants of concern in the groundwater at the Site. While this issue may have a minor effect on the usability of the data for these affected samples, it is not expected to impact the overall usability of the data or conclusions of this report.
- **Bias: LCS/LCSD Percent Recoveries:** The percent recoveries of the analytes in the LCS for 1,1,1,2-tetrachloroethane, 1,2-dibromoethane, bromoform, and chlorodibromomethane (Batch WG1958563) and 2,4-dimethylphenyl (Batch WG1967253) were below the established quality control range for accuracy. A J4 value was assigned to this data. Due to this low bias, these results should be considered estimated. The correlating affected samples were not detected above RDLs and are not generally considered contaminants of concern for this Site. As such, the percent recoveries for these analytes being outside of the laboratory's control limits is not anticipated to affect the usability of the data.
- The LCS for benzidine and 3,3'-benzidine (Batch WG1957253) were below the established quality control range for accuracy. A J4 value was assigned to this data. These analytes are poor performers with this laboratory method. This data should be rejected. However, these analytes are not considered contaminants of concern for this Site, and this is not expected to affect the usability of the remaining data set. For the other listed VOCs, the correlating affected samples were not detected above RDLs. As such, the percent recoveries for these analytes being outside of the laboratory's control limits is not anticipated to affect the usability of the data.
- **Bias: MS/MSD Percent Recoveries:** The percent recovery for MS/MSD for mercury (Batch WG1957941) and the MS/MSD for 2-chloroethyl vinyl ether (Batch WG1958563), interfered with the ability to make any accurate determination, causing a low spike value. A J6 qualifier was applied to this data. None of these analytes in affected samples had concentrations above RDLs and other DQIs were in control. This is not anticipated to affect the usability of the data.

The MS/MSD for 3,3-dichlorobenzidine and benzidine (Batch WG1957253) interfered with the ability to make any accurate determination, causing a low spike

value. A J6 qualifier was applied to this data. These analytes are poor performers with this laboratory method. This data should be rejected. Additionally, the MS/MSD used for this SVOC analysis was not derived from a field-collected sample, so these DQIs cannot be utilized to properly evaluate bias and accuracy issues. Other DQIs are in control. SVOCs are not generally considered contaminants of concern in groundwater for this Site, and this is not expected to affect the usability of the remaining data set.

Bias and Accuracy are considered within control for Laboratory Set L1555639. Some minor exceptions exist but are not expected to have an impact on the usability of the results.

■ **Laboratory Set 222110910 (PFAS Groundwater Samples):**

- **Accuracy: Method Blank:** All analytes in the method blank were less than the laboratory MDLs. Two of the internal standards used for the method blank (d-NEtFOSA and d-NMeFOSA) had a recovery below the control limits. Other internal standards were in control, and no analytes were detected in the method blank. Due to this issue, the detected concentration of these analytes in the field-collected samples are not reliable. Neither of these analytes are considered contaminants of concern on the Site, and no regulatory screening levels exist for either of these analytes.
- **Accuracy: Trip Blank:** A trip blank was submitted during this investigation. All analytes were not detected above the MDL. A few internal standards had recoveries below the control limits (d-NEtFOSA and d-NMeFOSA), but all other internal standards are in control. Due to this issue, the detected concentration of these analytes in the field-collected samples are not reliable. Neither of these analytes are considered contaminants of concern on the Site, and no regulatory screening levels exist for either of these analytes.
- **Bias: LCS/LCSD Percent Recoveries:** Four internal standards used for the LCS analysis (NMeFOSE, NEtFOSAA, NEtFOSE, and NMeFOSA) and one used for the LCSD analysis (NEtFOSA) were outside the control limits. All LCS/LCSD analytes were in control with the exception of NEtFOSA as were all other internal standards used for these analyses. Due to these issues, data from these compounds (concentrations) should not be used when analyzing the data set. No regulatory screening levels exist for any of these analytes, and they are not considered contaminants of concern at the Site. Rejecting this data should not alter the conclusions of this report.

- **Bias: MS/MSD Percent Recoveries:** MS/MSD were not analyzed as part of this investigation.

Bias and Accuracy are considered within control for Laboratory Set 22211091. Some minor exceptions exist but are not expected to have an impact on the usability of the results.

■ **Laboratory Set L1557296 (Dioxins and Furans):**

- **Accuracy: Method Blank:** Four analytes (Total TCDF, Total PeCDF, 1,2,3,4,7,8-HxCDD, and Total HxCDD) had estimated (J flagged) concentrations in one of the method blanks. No regulatory screening levels exist for Total TCDF or Total PeCDF. 1,2,3,4,7,8-HxCDD was not detected in the field-collected sample, and the estimated concentration (J flagged) of Total HxCDD detected in the field sample was orders of magnitude below regulatory screening levels. This is not expected to affect the usability of this data or conclusions of this report.
- **Accuracy: Internal Standards:** The internal standard, OCDD-13C, had a recovery in TP-41 Fill outside of the target recovery range. This data is not usable for this sample and should be rejected. There are no regulatory RSLs for this analyte. Overall, the overall TEQ for this affected sample was not exceeded.
- **Accuracy: Trip Blank:** A trip blank was submitted during this investigation for VOC analysis only as specified.
- **Bias: LCS/LCSD Percent Recoveries:** An LCS sample was run for this data set. No exceptions were noted by the laboratory for this sample.
- **Bias: MS/MSD Percent Recoveries:** MS/MSD were not analyzed.

5.3 Representativeness

Representativeness is a qualitative parameter most concerned with proper design and execution of the sampling program to produce data that accurately and precisely represent environmental conditions. Selection of analytical methods, sampling methods, and locations representative of the media sampled were set forth in the proposal dated December 7, 2021. *Representativeness* in the field was achieved by implementing the scope of work in the proposal and using appropriate sampling methods, sample containers, sample handling, and preservation methods. *Representativeness* in the laboratory was achieved by using the proper analytical procedures, meeting sample holding times, and analyzing and assessing laboratory QA/QC samples.

Site Characterization Report

Redwood Road Dump VCP Site C121 ■ Salt Lake City, Utah

March 9, 2023 ■ Terracon Project No. 61227342 Task 4.2



Field Representativeness

Sampling was conducted in general accordance with the workplan and associated Standard Operating Procedures. The following deviations from the workplan occurred during the sampling event.

- A few locations were moved slightly due to access issues and/or nearby utilities. This is not expected to affect the usability of this data.

Laboratory Representativeness

Sample analyses followed the analytical methods listed in the workplan or equivalent EPA-approved variations of the listed methods.

- For Laboratory Report L1557296 (dioxins and furans – soil). The laboratory noted that, the isotope ratios were out of specification (I value) for three analytes. As a result, the laboratory only provides an estimated maximum concentration for these analytes, and the results are J flagged. These concentrations are orders of magnitude below regulatory screening levels (when present). As a result, this issue is not expected to have an effect on the usability of the data.

Representativeness is considered within control.

5.4 Comparability

Comparability is a qualitative term expressing the confidence with which one data set can be compared to another. The comparability goal was achieved using standardized sampling procedures in accordance with the workplan, use of standardized and approved laboratory analytical methods, and reporting the analytical results in appropriate and consistent units.

- Sampling was conducted in general accordance with the proposal's scope of work and associated Standard Operating Procedures. Deviations that occurred during the sampling event and are discussed in Section 5.3.
- Sample analyses followed the analytical methods listed in the proposal's scope of work or equivalent methods or EPA-approved variations of the listed methods.
- The units of measure reported by the laboratory were consistent with the units of measure used by the regulatory screening levels.
- The number of field duplicates specified in the proposal's scope of work was at least 10% of the field samples.

- **Metals:** Three field duplicate for sixteen soil samples, or 18.8%, which exceeds the 10% goal. One field duplicate for five groundwater samples, or 20%, which exceeds the 10% goal.
- **PCBs:** One field duplicate for ten soil samples or 10%, which equals the 10% goal.
- **VOCs:** Three field duplicate for sixteen soil samples, or 18.8%, which exceeds the 10% goal. One field duplicate for five groundwater samples, or 20%, which exceeds the 10% goal.
- **SVOCs:** Three field duplicate for seventeen soil samples, or 17.6%, which exceeds the 10% goal. One field duplicate for five groundwater samples, or 20%, which exceeds the 10% goal.
- **PFAS: Groundwater:** One field duplicate for five groundwater samples, or 20%, which exceeds the 10% goal.

Comparability is considered within control.

5.5 Completeness

The samples collected were submitted and analyzed by the laboratory according to the chain-of-custody. Additionally, the data collection followed the procedures and requirements as described in the proposal's scope of work. The data are considered usable as qualified. Although results from some specific analytes should be rejected due to surrogate or performance issues, the completeness for this sampling event was still well above the 90% threshold. Minor other exceptions exist as described above, but none are expected to affect the usability of the data or the conclusions of this report.

With acknowledgement of qualified results for the analytes listed above, the analytical data are acceptable for their intended use to evaluate constituent concentrations compared to applicable regulatory screening levels.

5.6 Sensitivity

Sensitivity refers to the capability of a method or instrument to discriminate between measurement responses representing different levels of the variable of interest. The sensitivity goal is for RDLs to be below comparative screening levels (November 2021), which vary considerably by analyte and in value and applicability. Overall, the level of sensitivity was sufficient to allow the identification of soil and groundwater constituents above applicable regulatory screening levels.

■ **Laboratory Set L1557295 (Soil Samples):**

- **RCRA 8 Metals:** The RDLs were all less than the EPA RSLs for analytes reported as less than the RDL.
- **VOCs:** The RDLs were all less than the EPA Residential RSLs, as applicable, for analytes reported as less than the RDL. The only exception to this was 1,2-dibromo-3-chloropropane that had RDLs that exceeded the EPA commercial and Residential RSL. This constituent was not reported above its RDLs or MDLs in any of the samples. Based on the historical use of the Site, this analyte is not considered contaminants of concern for the Site. As a result, this is not anticipated to affect the conclusions of this report.
- **SVOCs:** The RDLs for multiple SVOCs (Method 8270C only) in several samples were above the EPA Residential RSLs. This was mainly due to dilution issues. However, none of these SVOCs were detected above their RDLs nor had any estimated detections (J values), and these SVOCs are not considered contaminants of concern for this Site. As a result, this is not anticipated to affect the conclusions of this report.

■ **Laboratory Set L1555639 (Groundwater Samples):**

- **Dissolved Metals:** The RDLs were less than the regulatory screening levels for analytes reported as less than the RDL.
- **Hexavalent Chromium:** The RDLs for hexavalent chromium exceeded the Tap Water RSL. However, a sample with a detected hexavalent chromium did exceed this RSL. It is possible that other samples exceed this regulatory screening level despite the fact they were noted as being non-detect.
- **VOCs:** The RDLs for multiple VOCs in several samples were above the EPA Tap Water RSLs. However, none of these VOCs were detected above their RDLs nor had any estimated detections (J values). Based on the historical use of this Site, these VOCs are not considered to be contaminants of concern at the Site. Additionally, only 1,2-dibromo-3-chloropropane and 1,2-dibromoethane had RDLs that exceeded the MCL. None of these analytes were detected in any sample, and they are not considered contaminants of concern at the Site. This is not anticipated to affect the conclusions of this report.
- **SVOCs:** The RDLs for multiple SVOCs in several samples were above regulatory Tap Water RSLs. However, none of these SVOCs were detected above their RDLs

nor had any estimated detections (J values). Several of these VOCs are poor performers under this laboratory method. Additionally, these compounds do not readily partition from soil to groundwater and are not considered to be groundwater contaminants of concern at the Site. Only pentachlorophenol had an RDL that exceeded the MCL, and this was not otherwise detected and is not considered a contaminant of concern at this Site. These sensitivity issues are not anticipated to affect the conclusions of this report.

- **Laboratory Set 222110910 (PFAS Groundwater Samples):** The RDLs were less than the regulatory screening levels for analytes reported as less than the RDL.

The DQIs for *Sensitivity* were achieved. As such, ***Sensitivity was deemed acceptable.***

6.0 DISCUSSION

6.1 Fill and Native Soils

Observations made during the excavation of 10 test pits during this Site Characterization investigation and the previously dug 15 test pits show that fill at the Site, where present, consists primarily of fine-grained materials such as silt, clay, and silty and clayey sands. Debris, where encountered, is primarily concrete fragments and chunks of wood, with limited amounts of plastic piping, plastic sheeting, fabric, and metal scraps. Debris in the ACT area shows signs of burning (melted plastic and charred wood fragments). The fill is generally 1.5 to 3.5 feet in thickness where present. The exception to this is at the location of TP-37 where the fill is 6.5 feet deep. **Exhibit 5 (Appendix C)** shows the estimated thicknesses of fill observed throughout the Pilot Phase Area.

It should be noted that conditions under the remaining asphalt slab and in areas that have not been sampled have an inherent uncertainty due to the history of this Site. The potential to encounter additional impacts during Site development will be addressed in the RAP.

Samples collected from fill and native material during this investigation did not identify impacts above regulatory levels, except as discussed below.

6.1.1 Arsenic

Arsenic was found in both fill and native soil samples at concentrations exceeding the background concentration of 10.8 mg/kg. Arsenic concentrations exceeding 10.8 mg/kg were reported in the two shallow native soil samples collected from the North Ditch (ND-4 and ND-5) and in fill samples from test pits TP-33, TP-38, and TP-42. **Exhibit 6 (Appendix C)** shows where arsenic exceeds the background concentration.

6.1.2 Cadmium

Although not detected in the prime samples, cadmium was reported above the Residential RSL in the duplicate samples from test pits TP-38 and TP-40, suggesting it is elevated in these areas. The source of the cadmium is not known but may reflect dumping activity in the ACT area and random dumping near TP-38. **Exhibit 7 (Appendix C)** shows the areas where cadmium exceeds the Residential RSL.

6.1.3 Benzo(a)pyrene

The PAH benzo(a)pyrene was reported in fill samples at concentrations above Residential RSLs from test pits TP-36 in the central portion of the Site and TP-40, from the ACT area. Fill material in both of these test pits contained more debris than what was observed in most locations around the Site, suggesting the contaminant's occurrence may be associated with trash-laden materials. Native soils beneath the fill do not appear to have been impacted. A third sample, TP-37 SHALLOW, also reported benzo(a)pyrene above the Residential RSL. This sample was collected from shallow soils just north of the asphalt pad where Salt Lake City Corporation placed debris generated during their encampment cleanup efforts. Samples of materials beneath the surface (TP-37 FILL and TP-37 NATIVE) did not report impacts above screening levels. **Exhibit 8 (Appendix C)** shows the areas where benzo(a)pyrene exceeds the Residential RSL.

6.2 Groundwater

The results of the groundwater sampling did not identify significant impacts to groundwater at the Site. VOCs and SVOCs, which were sampled during this and the previous investigation, were not reported above laboratory detection limits with a few exceptions, and no concentrations were reported to exceed screening levels. Pesticides and PCBs were sampled in the previous event and were not reported above laboratory detection limits.

The direction of groundwater flow measured during this investigation is from the southeast to the northwest. This contradicts the measured groundwater flow from the previous investigation of northwest to southeast. There are several factors that may be influencing the shallow groundwater table in addition to seasonal variations. The low-lying area in the approximate center of the Site appears to collect surface water and drainage is sluggish. The 42-inch-diameter sewer main line that runs south to north along the western side of the Site may also affect flow in the shallow water table.

Values for total dissolved solids range from 924 to 9,660 mg/L. The UDEQ Division of Water Quality (DWQ) classifies groundwater by levels of TDS. Class 1, referred to as Pristine Ground Water contains less than 500 mg/L TDS. Class II is referred to as Drinking Water Quality Groundwater and contains TDS between 500 mg/L and 3,000 mg/L. Class III is also referred to as Limited Use Groundwater, with TDS levels ranging between 3,000 mg/L and 10,000 mg/L.

Groundwater at the Site is categorized as Limited Use Groundwater by these criteria and does not exceed a threshold.

Groundwater sampling results show that the higher levels of contaminants, specifically arsenic and PFAS compounds, are more elevated in wells TOSA-MW02 and TOSA-MW04, which are closest to the main landfill, and concentrations decrease toward the southeast, suggesting the prominent flow direction is to the southeast. As such, any impacts observed in the shallow groundwater are likely the result of migration from the landfill. The only reported impacts above a regulatory screening level appear to be from arsenic, 1,4-Dioxane, and PFAS, as discussed below.

6.2.1 Hexavalent Chromium

An MCL has not been established for hexavalent chromium; however, the Tap Water standard of 0.000035 mg/L was exceeded in the sample from TOSAMW-01, collected during the previous investigation. It was not detected above the laboratory reporting limit in the samples from TOSAW-2 and TOSAMW-03.

6.2.2 Arsenic

Dissolved arsenic was reported above the MCL and the Tap Water screening level. As with the occurrence of arsenic in soils in the Salt Lake Valley, it is relatively common to detect arsenic in groundwater above a regulatory screening level. **Exhibit 9 (Appendix C)** shows the concentrations of arsenic reported in the groundwater samples. As shown, arsenic concentrations decrease with distance from the main landfill.

6.2.3 1,4-Dioxane

This compound was reported in samples in low concentrations in MW-01, 02, 03 and 04. There is no Federal MCL; however, a Tap Water standard has been set at 0.00046 mg/L. The concentration reported in two wells exceeded the Tap Water screening level. According to the EPA's Technical Fact Sheet, 1,4-Dioxane, dated November 2017, is a common industrial contaminant and was historically used as a solvent stabilizer. It is frequently associated with groundwater plumes containing chlorinated solvents. It readily moves from soil to groundwater and is fairly resistant to biodegradation in the subsurface. Given the lack of source activities at the VCP Site, and its detection at very low concentrations in the samples, the VCP Site is not considered a source of 1,4-Dioxane. 1,4-Dioxane concentrations are plotted on **Exhibit 10 (Appendix C)**.

6.2.4 PFAS

The compound, PFOA, was reported at concentrations above the EPA Tap Water screening level in wells TOSA-MW02 (in the previous sampling round as well as the current round) and TOSA-MW04. These wells are closest to the main landfill, suggesting PFOA has entered the subsurface

from the landfill materials. While PFOS was reported in TOSA-MW01 above its RSL in the previous investigation, the exceedance was not as pronounced as that of the PFOA exceedances. PFOA concentrations are plotted on **Exhibit 11 (Appendix C)**.

7.0 CONCLUSIONS

Data from the Site Characterization of the VCP Site support observations made previously that impacts from landfilling and other industrial uses of the Site and nearby properties are minimal. Impacts to native soils have not been observed, with the exception of arsenic in shallow soils along the North Ditch. Fill materials, in some cases mixed with debris, occur over approximately 50 percent of the Site; however, sampling of the fill material has shown that, with the exception of materials from TP-33, TP-36, TP-38, TP-40, and TP-42, it is not impacted above screening levels. Surface material from TP-37 was also shown to contain PAHs above regulatory limits; but this is presumed to be minimal in extent.

Additional characterization of soils has been proposed to DERR under a new work plan to further define the extent of fill materials and soil in the North Ditch exceeding screening levels. These results will be used in the Remedial Action Plan to refine the remedial approach and develop more accurate cost estimates but are not anticipated to change the conclusions of this Site Characterization Report.

Observations and sampling results from the ACT area show there is more debris in this area than what has been observed in other locations at the Site. Although it does not appear to contain significant levels of contaminants, the nature of the debris makes it unsuitable for reuse. Materials that are not suitable to be used as fill should be segregated and disposed of appropriately.

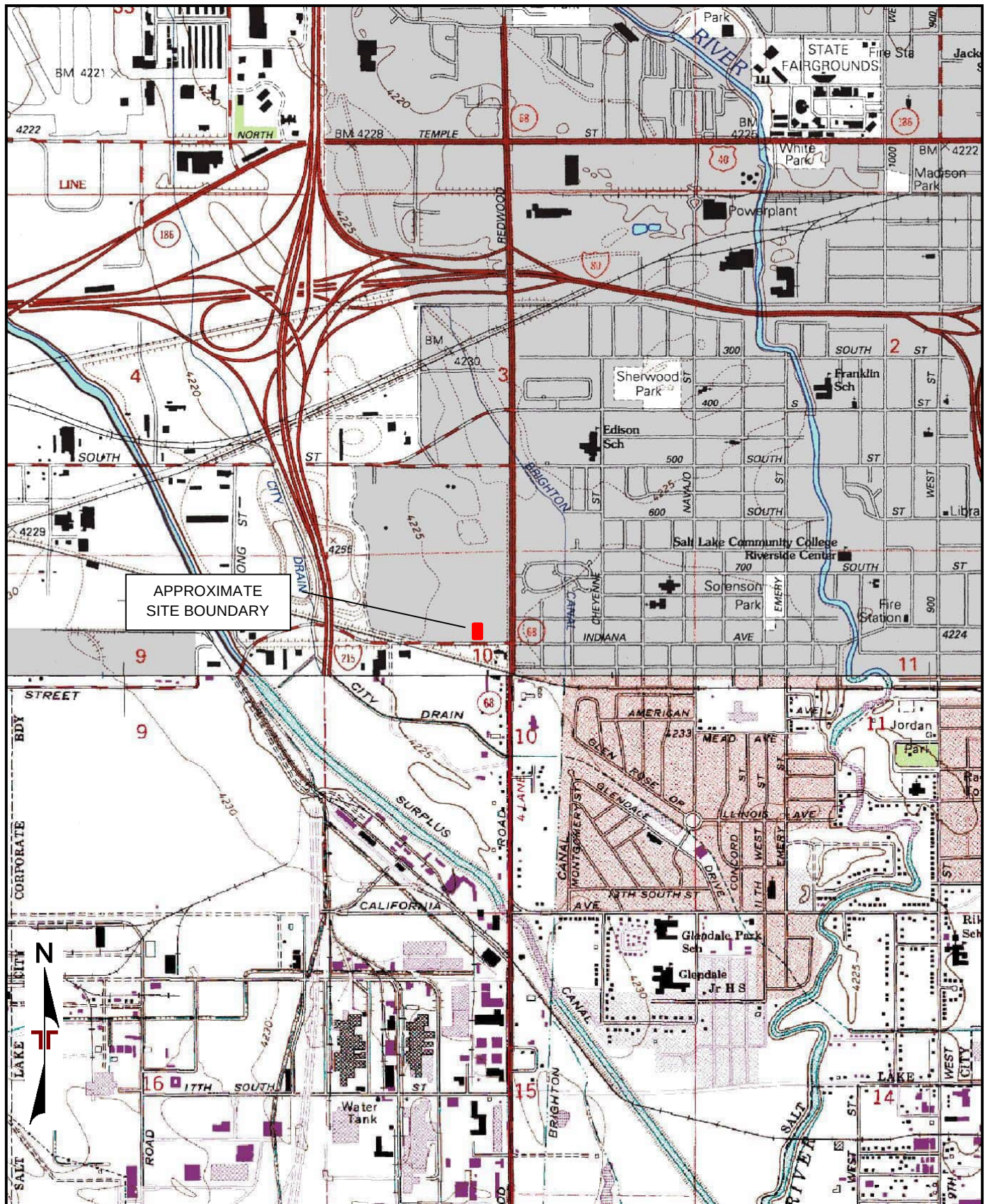
Significant groundwater impacts were not identified. Arsenic, 1,4-Dioxane, and PFOA are present at concentrations that exceed either the MCL or the Tap Water standard. Both screening levels are drinking water standards. As groundwater at the Site is not and will not be used as a drinking water source, the presence of these compounds is not likely to affect future residents of the proposed development. The final remedy to protect human health and the environment from these COCs in groundwater will be set forth in the RAP. For example, institutional controls (i.e., an environmental covenant) can be used to ensure there is no exposure to groundwater.

As reported in the previous investigation, chloroform may pose a potential for vapor intrusion into future buildings based on the soil gas analytical results. Additionally, methane appears to be present at elevated levels farther west of the Site. The presence of VOCs in soil gas at the Site can be addressed by a vapor intrusion mitigation system for future structures.

Terracon appreciates being of service to you on this project. If you have any questions, require additional information, or need additional assistance, please contact us.

APPENDIX A

Exhibits



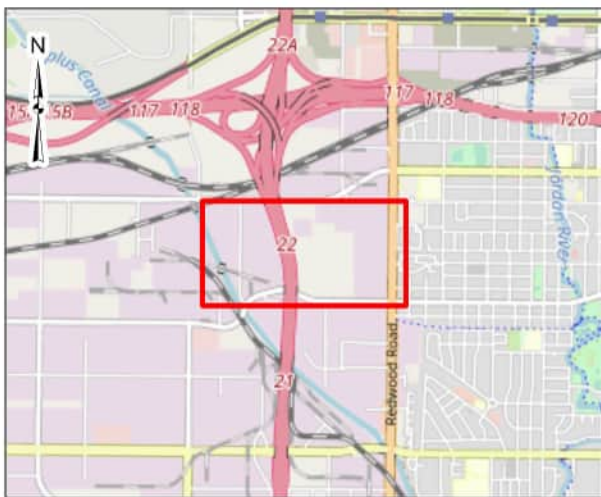
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Drawn by:	NS
Checked by:	AA
Approved by:	AA
Project No.	61227342
Scale:	1"=2,000'
File Name:	Ex 1
Date:	9/22

Terracon

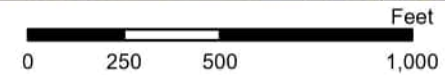
6949 S High Tech Dr Ste 100
 Midvale, UT 84047-3707

TOPOGRAPHIC MAP
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue Salt Lake City, UT

Exhibit
1



- Sewer Line
- - - Approximate North Ditch Alignment
- VCP Site Boundary
- Approximate CERLIS site landfilled area*



DATA SOURCES:
ESRI - Basemaps

* Boundaries of east and west landfill piles, as depicted in "Site Inspection Prioritization, Redwood Road Dump Site" UDEQ, 1995.

Project No.:
61227342
Date:
Dec 2022
Drawn By:
AST
Reviewed By:
NAS

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Pilot Phase and Dump Site Boundaries

Redwood Road Dump VCP Site C121

1850 West Indiana Avenue
Salt Lake City, Utah

Exhibit

2



VCP Site Boundary

Alvie Carter Trust (ACT) area and burn pit

Approximate North Ditch Alignment

Sewer Line

VCP Site Characterization Sample Location

Monitoring Well

Fill Sample

North Ditch Sample

Previous Sample Locations

Monitoring Well

Previous Investigation Test Pit

Test Pit for Observation Only

Previous Investigation Soil Gas Sample



Project No.: 61227342
Date: Feb 2023
Drawn By: AST
Reviewed By: NMS

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Site Diagram with Sample Location and Site Features
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue
Salt Lake City, Utah

Exhibit

3





-  Monitoring Well with Groundwater Elevation (ft, measured 11/10/2022)

 Alvie Carter Trust (ACT) area and burn pit

 Sewer Line

 Approximate North Ditch Alignment
-  VCP Site Boundary

 Groundwater Contour (ft)

 Approximate Groundwater Flow Direction

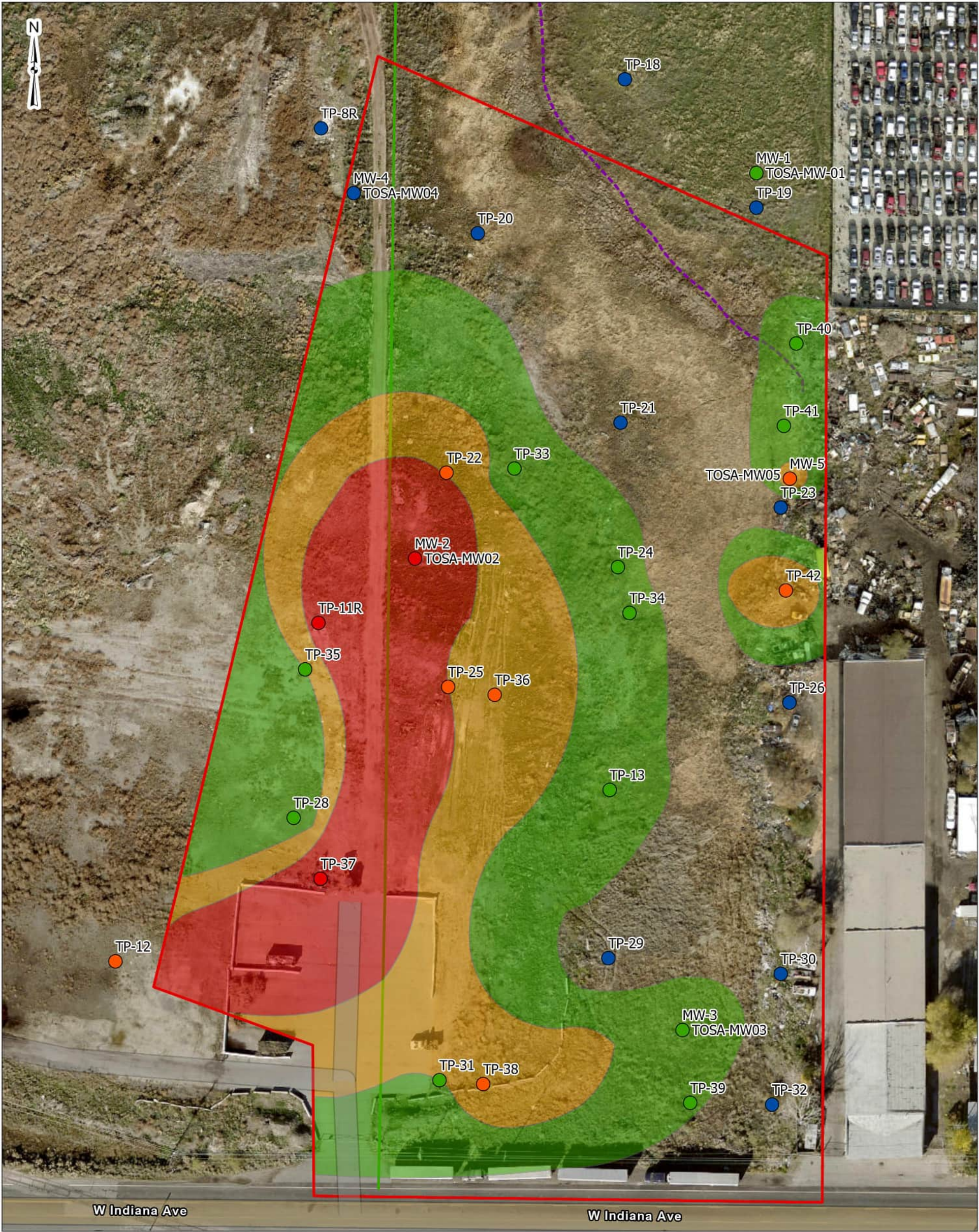


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Drawn By: AST
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Groundwater Elevations, November 2022	Exhibit
Redwood Road Dump VCP Site C121	
1850 West Indiana Avenue Salt Lake City, Utah	4



- VCP Site Boundary
- Approximate North Ditch Alignment
- Sewer Line

- Sample Location with Fill Thickness (ft)
- No Fill Observed
 - 1-3 ft
 - 3-5 ft
 - 5+ ft

- Approximate Extent of Fill
- 1-3 ft
 - 3-5 ft
 - 5+ ft

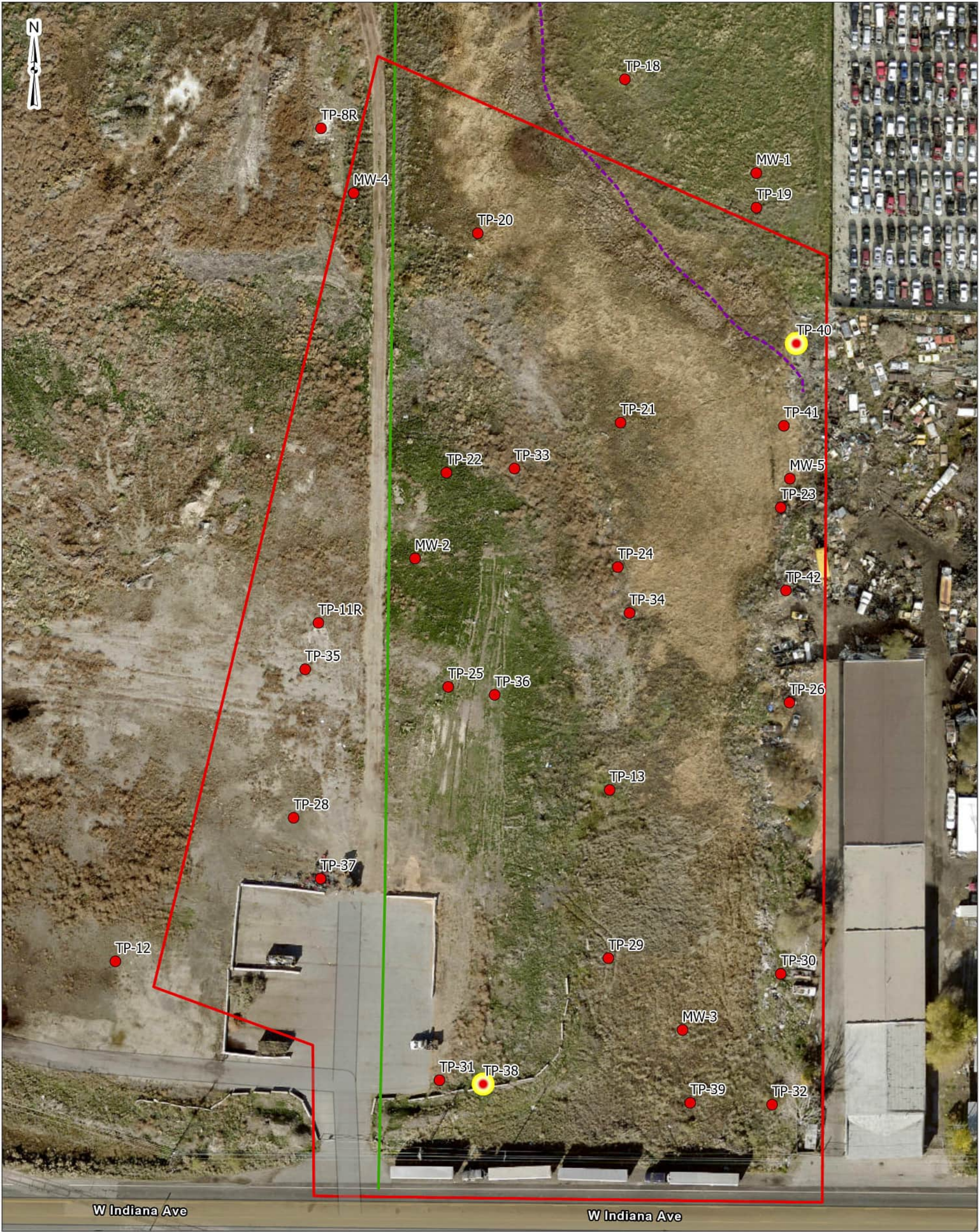


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Approximate Extent of Fill
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue
Salt Lake City, Utah

Exhibit
5



- Sample Location

--- Approximate North Ditch Alignment

— Sewer Line

□ VCP Site Boundary
- Cadmium Exceedances in Soil

● Exceeds Residential RSL



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Date: Dec 2022
Drawn By: AST
Reviewed By: NMS



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Cadmium Exceedances in Soil

Redwood Road Dump VCP Site C121

1850 West Indiana Avenue
Salt Lake City, Utah

Exhibit

7



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- Sample Location

Approximate North Ditch Alignment

Sewer Line

VCP Site Boundary
- PAH Exceedances in Soil

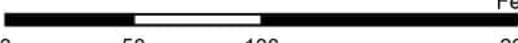
Exceeds Residential RSL



Project No.:
61227342
Date:
Jan 2023
Drawn By:
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Reviewed By:
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PAH Exceedances in Soil	Exhibit
Redwood Road Dump VCP Site C121	8
1850 West Indiana Avenue Salt Lake City, Utah	



- Monitoring Well with Arsenic Concentration (mg/l)
- Approximate North Ditch Alignment
- Sewer Line
- VCP Site Boundary
- Arsenic Exceedances in Groundwater
 - Exceeds MCL



Project No.: 61227342
Date: Jan 2023
Drawn By: AST
Reviewed By: NMS

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Arsenic Exceedances in Groundwater
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue
Salt Lake City, Utah

Exhibit

9



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- Monitoring Well with 1,4-Dioxane Concentrations (mg/l)
- Approximate North Ditch Alignment
- Sewer Line
- VCP Site Boundary
- 1,4-Dioxane Exceedances in Groundwater
- Exceeds Tapwater RSL



Project No.: 61227342
Date: Jan 2023
Drawn By: AST
Reviewed By: NMS

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1,4-Dioxane Exceedances in Groundwater
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue
Salt Lake City, Utah

Exhibit

10



- Monitoring Well with PFOA Concentrations (ng/L)
- Approximate North Ditch Alignment
- Sewer Line
- VCP Site Boundary

PFOA Exceedances in Groundwater

Exceeds Tapwater RSL



* Result is from MW40, duplicate of MW04.

Project No.: 61227342
Date: Jan 2023
Drawn By: AST
Reviewed By: NMS



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PFOA Exceedances in Groundwater

Redwood Road Dump VCP Site C121

1850 West Indiana Avenue
Salt Lake City, Utah

Exhibit

11

APPENDIX B

Tables

Table 1 - Sampling and Analytical Program
Redwood Road Dump Pilot Phase VCP Site C121
1850 West Indiana Ave, Salt Lake City, Utah
Terracon Project No. 61227342

Sample ID	Type and Designation	Purpose REC/Site Concern	Advancement Method	Estimated Depth	No. of Soil Samples per location	Soil Analytical ¹	Water Sample? (y/n)	Groundwater Analytical ¹
Fill								
TP-33	Fill Material Sample	Evaluate Fill material to be moved west of site	Mini Excavator	Composite of observed fill profile: approximately 0-1.8 feet	1: Fill	VOCs, RCRA Metals, SVOCs	N	n/a
TP-34	Fill Material Sample	Evaluate Fill material to be moved west of site	Mini Excavator	Composite of observed fill profile: approximately 0-2 feet	1: Fill	VOCs, RCRA Metals, SVOCs, PCBs	N	n/a
TP-35	Fill Material Sample	Evaluate Fill material to be moved west of site	Mini Excavator	Composite of observed fill profile: approximately 0-3 feet	1: Fill	VOCs, RCRA Metals, SVOCs, PCBs	N	n/a
TP-36	Fill Material Sample	Evaluate Fill material to be moved west of site	Mini Excavator	Composite of observed fill profile: approximately 0-4.5 feet	1: Fill	VOCs, RCRA Metals, SVOCs	N	n/a
	Native Soil Sample	Evaluate Potential Impacts to native soil from fill		approximately 4.5 feet below grade	1: Native	SVOCs	N	n/a
TP-37	Shallow Soil Sample	Evaluate potential impacts from homeless camp cleanouts	Mini Excavator	0-6 inches below grade	1: Shallow	VOCs, RCRA Metals, SVOCs, PCBs	N	n/a
	Fill Material Sample	Evaluate Fill material to be moved west of site		Composite of observed fill profile: approximately 0-6.5 feet	1: Fill	VOCs, RCRA Metals, SVOCs, PCBs	N	n/a
	Underlying Native Sample	Evaluate Potential Impacts to native soil from Fill		approximately 6.5 feet below grade	1: Native	SVOCs	N	n/a
TP-38	Fill Material Sample	Evaluate Fill material to be moved west of site	Mini Excavator	Composite of observed fill profile: approximately 0-4.5 feet	1: Fill	VOCs, RCRA Metals, SVOCs, PCBs	N	n/a
TP-39	Fill Material Sample	Evaluate Fill material to be moved west of site	Mini Excavator	Composite of observed fill profile: approximately 0-1.5 feet	1: Fill	VOCs, RCRA Metals, SVOCs	N	n/a
ACT / Burn Pit								
TP-40	Fill Material Sample	Evaluate Fill material in ACT area	Mini Excavator	Composite of observed fill profile: approximately 0-2.5 feet	1: Fill	VOCs, RCRA Metals, SVOCs, PCBs	N	n/a
	Underlying Native Sample	Evaluate Potential Impacts to native soil from fill		approximately 2.5 feet below grade	1: Native	VOCs, RCRA Metals, SVOCs, PCBs	N	n/a

Table 1 - Sampling and Analytical Program
Redwood Road Dump Pilot Phase VCP Site C121
1850 West Indiana Ave, Salt Lake City, Utah
Terracon Project No. 61227342

Sample ID	Type and Designation	Purpose REC/Site Concern	Advancement Method	Estimated Depth	No. of Soil Samples per location	Soil Analytical ¹	Water Sample? (y/n)	Groundwater Analytical ¹
TP-41	Fill Material Sample	Evaluate Fill material in ACT area	Mini Excavator	Composite of observed fill profile: approximately 0-1.0 feet	1: Fill	VOCs, RCRA Metals, SVOCs, Dioxins/furans	N	n/a
	Underlying Native Sample	Evaluate Potential Impacts to native soil from fill		approximately 1.0 feet below grade	1: Native	VOCs, RCRA Metals, SVOCs	N	n/a
TP-42	Fill Material Sample	Evaluate Fill material in ACT area	Mini Excavator	Composite of observed fill profile: approximately 0-3.5 feet	1: Fill	VOCs, RCRA Metals, SVOCs, PCBs	N	n/a
	Underlying Native Sample	Evaluate Potential Impacts to native soil from fill		approximately 3.5 feet below grade	1: Native	VOCs, RCRA Metals, SVOCs, PCBs	N	n/a
North Ditch								
ND-4	Surface Soil	Evaluate surface soils and sediments in North Ditch	Hand trowel	0-4"	1	VOCs, RCRA Metals, SVOCs	N	n/a
ND-5	Surface Soil	Evaluate surface soils and sediments in North Ditch	Hand trowel	0-4"	1	VOCs, RCRA Metals, SVOCs	N	n/a
Groundwater Assessment								
MW-01	Groundwater	Evaluate current groundwater conditions	2" Monitoring Well	n/a	0	n/a	Y	VOCs, RCRA Metals*, SVOCs, PFAS, 1,4-dioxane, TDS
MW-02	Groundwater	Evaluate current groundwater conditions	2" Monitoring Well	n/a	0	n/a	Y	VOCs, RCRA Metals*, SVOCs, PFAS, 1,4-dioxane, TDS
MW-03	Groundwater	Evaluate current groundwater conditions	2" Monitoring Well	n/a	0	n/a	Y	VOCs, RCRA Metals*, SVOCs, PFAS, 1,4-dioxane, TDS
MW-04	Groundwater	Evaluate upgradient groundwater conditions	2" Monitoring Well	n/a	0	n/a	Y	VOCs, RCRA Metals*, SVOCs, PFAS, 1,4-dioxane, TDS
MW-05	Groundwater	Evaluate groundwater adjacent to Alvie Carter property	2" Monitoring Well	n/a	0	n/a	Y	VOCs, RCRA Metals*, SVOCs, PFAS, 1,4-dioxane, TDS

Notes: n/a - not applicable.

¹Analytical Methods:

VOCs - Volatile organic compounds by EPA 8260. RCRA Metals - Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, and Silver. *Dissolved.

SVOCs - Semi-volatile Aromatic Hydrocarbons by EPA Method 8270. PAHs by EPA Method 8270 SIM. PCBs - Polychlorinated Biphenols by EPA Method 8082

Dioxins / furans by EPA Method 8290. PFAS - perfluoroalkyl substances by EPA Method Modified 537. 1,4 Dioxane by EPA Method 8270 SIM

TDS-Total dissolved solids by EPA SM 2540 C; ACBM - Asbestos-containing building materials by EPA Method 600/R-93/116

Table 2 - Groundwater Elevation Data
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Well ID	Date Water Level Measured	Top of Casing Elevation (ft)*	Depth to water (ft)	Groundwater Elevation (ft)*
TOSA-MW01	11/10/2022	4233.26	9.29	4223.97
TOSA-MW02	11/10/2022	4232.63	9.56	4223.07
TOSA-MW03	11/10/2022	4227.89	4.30	4223.59
TOSA-MW04	11/10/2022	4229.08	7.33	4221.75
TOSA-MW05	11/10/2022	4229.28	5.09	4224.19

*mean sea level elevation

Table 3 - Soil Analytical Results - Metals and PCBs
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Lab Sample ID							L1557295-01				L1557295-04				L1557295-07				L1557295-11				L1557295-14				L1557295-15			
Client Sample ID							TP-33 FILL				TP-34 FILL				TP-35 FILL				TP-36 FILL				TP-37 SHALLOW				TP-37 FILL			
Date Collected							11/10/2022				11/10/2022				11/10/2022				11/10/2022				11/10/2022				11/10/2022			
Analyte	CAS	Method	Units	RSL Residential	RSL Industrial	UDEQ SS SL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
ARSENIC	7440-38-2	6010B	mg/kg	0.68	3	10.8	13.2		0.661	2.55	7.45		0.636	2.46	9.83		0.608	2.35	6.95		0.579	2.23	6.02	B	0.577	2.23	6.07	B	0.626	2.42
BARIUM	7440-39-3	6010B	mg/kg	15,000	220,000	NE	235		0.109	0.638	143		0.105	0.614	205		0.1	0.587	186		0.0952	0.559	41.5		0.095	0.557	116		0.103	0.604
CADMIUM	7440-43-9	6010B	mg/kg	7.1	100	NE	0.999		0.0601	0.638	1		0.0578	0.614	0.992		0.0553	0.587	0.889		0.0526	0.559	0.535	J	0.0525	0.557	0.649		0.0569	0.604
CHROMIUM	7440-47-3	6010B	mg/kg	NE	NE	NE	28.1		0.17	1.28	14.6		0.163	1.23	49.3		0.156	1.17	21.9		0.149	1.12	9.04		0.148	1.11	21.5		0.161	1.21
LEAD	7439-92-1	6010B	mg/kg	400	800	NE	93.6		0.266	0.638	77.7		0.255	0.614	306		0.244	0.587	125		0.232	0.559	14.3		0.232	0.557	40.7		0.251	0.604
SELENIUM	7782-49-2	6010B	mg/kg	390	5,800	NE	3.27		0.975	2.55	<2.46		0.938	2.46	<2.35		0.896	2.35	0.924	J	0.853	2.23	<2.23		0.851	2.23	<2.42		0.923	2.42
SILVER	7440-22-4	6010B	mg/kg	390	5,800	NE	0.93	J	0.162	1.28	<1.23		0.156	1.23	0.793	J	0.149	1.17	<1.12		0.142	1.12	<1.11		0.142	1.11	<1.21		0.154	1.21
MERCURY	7439-97-6	7471A	mg/kg	11	46	NE	0.0507	J	0.023	0.0511	0.0584	J3 J6	0.0221	0.0491	<0.0469		0.0211	0.0469	0.0535		0.0201	0.0447	<0.0446		0.0201	0.0446	0.0768		0.0218	0.0484
PCB 1016	12674-11-2	8082	mg/kg	4.1	27	NE					<0.0417		0.0145	0.0417	<0.0399		0.0138	0.0399	<0.0380		0.0132	0.038	<0.0379		0.0132	0.0379	<0.0411		0.0143	0.0411
PCB 1221	11104-28-2	8082	mg/kg	0.2	0.83	NE					<0.0417		0.0145	0.0417	<0.0399		0.0138	0.0399	<0.0380		0.0132	0.038	<0.0379		0.0132	0.0379	<0.0411		0.0143	0.0411
PCB 1232	11141-16-5	8082	mg/kg	0.17	0.72	NE					<0.0417		0.0145	0.0417	<0.0399		0.0138	0.0399	<0.0380		0.0132	0.038	<0.0379		0.0132	0.0379	<0.0411		0.0143	0.0411
PCB 1242	53469-21-9	8082	mg/kg	0.23	0.95	NE					<0.0417		0.0145	0.0417	<0.0399		0.0138	0.0399	<0.0380		0.0132	0.038	<0.0379		0.0132	0.0379	<0.0411		0.0143	0.0411
PCB 1248	12672-29-6	8082	mg/kg	0.23	0.94	NE					<0.0209		0.00906	0.0209	<0.0199		0.00866	0.0199	<0.0190		0.00824	0.019	<0.0189		0.00822	0.0189	<0.0205		0.00892	0.0205
PCB 1254	11097-69-1	8082	mg/kg	0.24	0.97	NE					<0.0209		0.00906	0.0209	<0.0199		0.00866	0.0199	<0.0190		0.00824	0.019	<0.0189		0.00822	0.0189	<0.0205		0.00892	0.0205
PCB 1260	11096-82-5	8082	mg/kg	0.24	0.99	NE					<0.0209		0.00906	0.0209	<0.0199		0.00866	0.0199	0.0361		0.00824	0.019	<0.0189		0.00822	0.0189	<0.0205		0.00892	0.0205

Qualifiers:

B: The same analyte is found in the associated blank.

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.

J6: The sample matrix interfered with the ability to make any accurate determination; spike value is low

EPA RSL: Environmental Protection Agency Regional Screening Levels for Residential and Industrial Soils (November 2022; TR=1E-06; THQ=1.0).

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Bold value exceeds RDL.

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Color shaded value exceeds screening level; gray shading indicates sample not analyzed.

Table 3 - Soil Analytical Results - Metals and PCBs
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Lab Sample ID							L1557295-18				L1557295-21				L1557295-24				L1557295-26				L1557295-27				L1557295-29			
Client Sample ID							TP-38 FILL				TP-39 FILL				TP-40 FILL				TP-40 NATIVE				TP-41 FILL				TP-41 NATIVE			
Date Collected							11/10/2022				11/10/2022				11/10/2022				11/10/2022				11/10/2022				11/10/2022			
Analyte	CAS	Method	Units	RSL Residential	RSL Industrial	UDEQ SS SL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
ARSENIC	7440-38-2	6010B	mg/kg	0.68	3	10.8	7.33		0.601	2.32	3.87		0.624	2.41	<2.55		0.661	2.55	20.9		0.937	3.62	8.19		0.669	2.58	3.58		0.648	2.5
BARIUM	7440-39-3	6010B	mg/kg	15,000	220,000	NE	185		0.0989	0.58	142		0.103	0.603	184		0.109	0.638	235		0.154	0.904	174		0.11	0.646	95.9		0.107	0.626
CADMIUM	7440-43-9	6010B	mg/kg	7.1	100	NE	0.897		0.0547	0.58	0.612		0.0568	0.603	4.2		0.0601	0.638	4.67		0.0852	0.904	1.36		0.0609	0.646	0.368	J	0.059	0.626
CHROMIUM	7440-47-3	6010B	mg/kg	NE	NE	NE	16.9		0.154	1.16	15		0.16	1.21	936		0.17	1.28	36.9		0.241	1.81	13.3		0.172	1.29	16.4		0.166	1.25
LEAD	7439-92-1	6010B	mg/kg	400	800	NE	112		0.241	0.58	42.1		0.251	0.603	172		0.265	0.638	181		0.376	0.904	168		0.269	0.646	20.8		0.26	0.626
SELENIUM	7782-49-2	6010B	mg/kg	390	5,800	NE	1.28	J	0.887	2.32	1.35	J	0.921	2.41	<2.55		0.975	2.55	3.22	J	1.38	3.62	<2.58		0.987	2.58	<2.50		0.956	2.5
SILVER	7440-22-4	6010B	mg/kg	390	5,800	NE	0.162	J	0.147	1.16	<1.21		0.153	1.21	0.557	J	0.162	1.28	<1.81		0.23	1.81	<1.29		0.164	1.29	<1.25		0.159	1.25
MERCURY	7439-97-6	7471A	mg/kg	11	46	NE	0.125		0.0209	0.0464	0.0309	J	0.0217	0.0482	0.195		0.023	0.0511	0.173		0.0325	0.0723	0.0694		0.0233	0.0517	<0.0501		0.0225	0.0501
PCB 1016	12674-11-2	8082	mg/kg	4.1	27	NE	<0.0395		0.0137	0.0395	<0.0410		0.0142	0.041	<0.0434		0.0151	0.0434												
PCB 1221	11104-28-2	8082	mg/kg	0.2	0.83	NE	<0.0395		0.0137	0.0395	<0.0410		0.0142	0.041	<0.0434		0.0151	0.0434												
PCB 1232	11141-16-5	8082	mg/kg	0.17	0.72	NE	<0.0395		0.0137	0.0395	<0.0410		0.0142	0.041	<0.0434		0.0151	0.0434												
PCB 1242	53469-21-9	8082	mg/kg	0.23	0.95	NE	<0.0395		0.0137	0.0395	<0.0410		0.0142	0.041	<0.0434		0.0151	0.0434												
PCB 1248	12672-29-6	8082	mg/kg	0.23	0.94	NE	<0.0197		0.00856	0.0197	<0.0205		0.0089	0.0205	<0.0217		0.00942	0.0217												
PCB 1254	11097-69-1	8082	mg/kg	0.24	0.97	NE	<0.0197		0.00856	0.0197	<0.0205		0.0089	0.0205	0.0846		0.00942	0.0217												
PCB 1260	11096-82-5	8082	mg/kg	0.24	0.99	NE	0.0149	J	0.00856	0.0197	<0.0205		0.0089	0.0205	<0.0217		0.00942	0.0217												

Qualifiers:

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Table 3 - Soil Analytical Results - Metals and PCBs
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Lab Sample ID							L1557295-30				L1557295-32				L1557295-33				L1557295-35				L1557295-37				L1557295-38			
Client Sample ID							TP-42 FILL				TP-42 NATIVE				TP-138 FILL				TP-140 FILL				ND-4				ND-5			
Date Collected							11/10/2022				11/10/2022				11/10/2022				11/10/2022				11/10/2022				11/10/2022			
Analyte	CAS	Method	Units	RSL Residential	RSL Industrial	UDEQ SS SL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
ARSENIC	7440-38-2	6010B	mg/kg	0.68	3	10.8	15.1		0.655	2.53	4.65		0.629	2.43	15.9		0.553	2.13	12.2		0.794	3.06	18.1		1.46	5.64	13.3		0.884	3.41
BARIUM	7440-39-3	6010B	mg/kg	15,000	220,000	NE	212		0.108	0.632	151		0.103	0.607	184		0.0909	0.534	247		0.131	0.766	336		0.24	1.41	203		0.145	0.854
CADMIUM	7440-43-9	6010B	mg/kg	7.1	100	NE	2.94		0.0595	0.632	0.457	J	0.0572	0.607	13.6		0.0503	0.534	8.42		0.0722	0.766	5.67		0.133	1.41	3.86		0.0804	0.854
CHROMIUM	7440-47-3	6010B	mg/kg	NE	NE	NE	18.6		0.168	1.26	14.4		0.161	1.21	18.2		0.142	1.07	52.4		0.204	1.53	36.8		0.375	2.82	26.8		0.227	1.71
LEAD	7439-92-1	6010B	mg/kg	400	800	NE	341		0.263	0.632	25.9		0.252	0.607	137		0.222	0.534	271		0.319	0.766	241		0.586	1.41	167		0.355	0.854
SELENIUM	7782-49-2	6010B	mg/kg	390	5,800	NE	1.16	J	0.965	2.53	<2.43		0.927	2.43	1.33	J	0.816	2.13	<3.06		1.17	3.06	3.23	J	2.15	5.64	1.44	J	1.3	3.41
SILVER	7440-22-4	6010B	mg/kg	390	5,800	NE	0.323	J	0.16	1.26	<1.21		0.154	1.21	0.178	J	0.136	1.07	0.485	J	0.195	1.53	0.786	J	0.358	2.82	0.536	J	0.217	1.71
MERCURY	7439-97-6	7471A	mg/kg	11	46	NE	0.3		0.0227	0.0505	0.0226	J	0.0218	0.0485	0.0862		0.0192	0.0427	0.306		0.0276	0.0613	0.152		0.0507	0.113	0.138		0.0307	0.0683
PCB 1016	12674-11-2	8082	mg/kg	4.1	27	NE	<0.0430		0.0149	0.043	<0.0413		0.0143	0.0413	<0.0363		0.0126	0.0363	<0.0521		0.0181	0.0521								
PCB 1221	11104-28-2	8082	mg/kg	0.2	0.83	NE	<0.0430		0.0149	0.043	<0.0413		0.0143	0.0413	<0.0363		0.0126	0.0363	<0.0521		0.0181	0.0521								
PCB 1232	11141-16-5	8082	mg/kg	0.17	0.72	NE	<0.0430		0.0149	0.043	<0.0413		0.0143	0.0413	<0.0363		0.0126	0.0363	<0.0521		0.0181	0.0521								
PCB 1242	53469-21-9	8082	mg/kg	0.23	0.95	NE	<0.0430		0.0149	0.043	<0.0413		0.0143	0.0413	<0.0363		0.0126	0.0363	<0.0521		0.0181	0.0521								
PCB 1248	12672-29-6	8082	mg/kg	0.23	0.94	NE	<0.0215		0.00933	0.0215	<0.0206		0.00896	0.0206	<0.0181		0.00788	0.0181	<0.0260		0.0113	0.026								
PCB 1254	11097-69-1	8082	mg/kg	0.24	0.97	NE	<0.0215		0.00933	0.0215	<0.0206		0.00896	0.0206	<0.0181		0.00788	0.0181	0.0801		0.0113	0.026								
PCB 1260	11096-82-5	8082	mg/kg	0.24	0.99	NE	0.0269		0.00933	0.0215	<0.0206		0.00896	0.0206	0.0209		0.00788	0.0181	<0.0260		0.0113	0.026								

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Color shaded value exceeds screening level; gray shading indicates sample not analyzed.

Table 4 - Soil Analytical Results - VOCs
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Lab Sample ID						L1557295-02				L1557295-05				L1557295-08				L1557295-12			
Client Sample ID						TP-33 FILL				TP-34 FILL				TP-35 FILL				TP-36 FILL			
Date Collected						11/10/2022				11/10/2022				11/10/2022				11/10/2022			
Analyte	CAS	Method	Units	RSL Residential	RSL Industrial	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
ACETONE	67-64-1	8260B	mg/kg	70,000	1,100,000	0.108		0.029	0.07	0.0734		0.0246	0.0594	0.115		0.0246	0.0595	0.0581	J	0.0246	0.0594
ACRYLONITRILE	107-13-1	8260B	mg/kg	0.25	1.1	<0.0140		0.00283	0.014	<0.0119		0.0024	0.0119	<0.0119		0.0024	0.0119	<0.0119		0.0024	0.0119
ALLYL CHLORIDE	107-05-1	8260B	mg/kg	0.72	3.2	<0.00700		0.0056	0.007	<0.00594		0.00475	0.00594	<0.00595		0.00476	0.00595	<0.00594		0.00475	0.00594
BENZENE	71-43-2	8260B	mg/kg	1.2	5.1	0.0113		0.000525	0.0014	0.00299		0.000445	0.00119	0.00293		0.000446	0.00119	0.00364		0.000446	0.00119
BROMODICHLOROMETHANE	75-27-4	8260B	mg/kg	0.29	1.3	<0.00140		0.00101	0.0014	<0.00119		0.000861	0.00119	<0.00119		0.000863	0.00119	<0.00119		0.000861	0.00119
BROMOFORM	75-25-2	8260B	mg/kg	19	86	<0.00140		0.000594	0.0014	<0.00119		0.000503	0.00119	<0.00119		0.000505	0.00119	<0.00119		0.000504	0.00119
BROMOMETHANE	74-83-9	8260B	mg/kg	6.8	30	<0.00700		0.00164	0.007	<0.00594		0.00139	0.00594	<0.00595		0.00139	0.00595	<0.00594		0.00139	0.00594
CARBON DISULFIDE	75-15-0	8260B	mg/kg	770	3,500	0.00105	J	0.00098	0.0014	0.00129		0.000831	0.00119	0.00117	J	0.000833	0.00119	0.00122		0.000832	0.00119
CARBON TETRACHLORIDE	56-23-5	8260B	mg/kg	0.65	2.9	<0.00140		0.000347	0.0014	<0.00119		0.000294	0.00119	<0.00119		0.000295	0.00119	<0.00119		0.000295	0.00119
CHLOROBENZENE	108-90-7	8260B	mg/kg	280	1300	<0.00140		0.000269	0.0014	<0.00119		0.000228	0.00119	<0.00119		0.000229	0.00119	<0.00119		0.000228	0.00119
CHLORODIBROMOMETHANE	124-48-1	8260B	mg/kg	8.3	39	<0.00140		0.000314	0.0014	<0.00119		0.000266	0.00119	<0.00119		0.000267	0.00119	<0.00119		0.000266	0.00119
CHLOROETHANE	75-00-3	8260B	mg/kg	5,400	23,000	<0.00700		0.0014	0.007	<0.00594		0.00119	0.00594	<0.00595		0.00119	0.00595	<0.00594		0.00119	0.00594
CHLOROFORM	67-66-3	8260B	mg/kg	0.32	1.4	<0.00700		0.00144	0.007	<0.00594		0.00122	0.00594	<0.00595		0.00123	0.00595	<0.00594		0.00122	0.00594
CHLOROMETHANE	74-87-3	8260B	mg/kg	110	460	<0.00350		0.00091	0.0035	<0.00297		0.000772	0.00297	<0.00298		0.000774	0.00298	<0.00297		0.000772	0.00297
1,2-DIBROMOETHANE	106-93-4	8260B	mg/kg	0.036	0.16	<0.00140		0.00035	0.0014	<0.00119		0.000297	0.00119	<0.00119		0.000298	0.00119	<0.00119		0.000297	0.00119
DIBROMOMETHANE	74-95-3	8260B	mg/kg	24	99	<0.00140		0.00049	0.0014	<0.00119		0.000416	0.00119	<0.00119		0.000417	0.00119	<0.00119		0.000416	0.00119
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	8260B	mg/kg	0.0053	0.064	<0.00700		0.00266	0.007	<0.00594		0.00226	0.00594	<0.00595		0.00226	0.00595	<0.00594		0.00226	0.00594
1,2-DICHLOROBENZENE	95-50-1	8260B	mg/kg	1,800	9,300	<0.00140		0.000595	0.0014	<0.00119		0.000505	0.00119	<0.00119		0.000506	0.00119	<0.00119		0.000505	0.00119
1,3-DICHLOROBENZENE	541-73-1	8260B	mg/kg	NE	NE	<0.00140		0.00084	0.0014	<0.00119		0.000712	0.00119	<0.00119		0.000714	0.00119	<0.00119		0.000713	0.00119
1,4-DICHLOROBENZENE	106-46-7	8260B	mg/kg	2.6	11	<0.00140		0.00116	0.0014	<0.00119		0.000986	0.00119	<0.00119		0.000988	0.00119	<0.00119		0.000986	0.00119
DICHLORODIFLUOROMETHANE	75-71-8	8260B	mg/kg	87	370	<0.00700		0.000402	0.007	<0.00594		0.000341	0.00594	<0.00595		0.000342	0.00595	<0.00594		0.000341	0.00594
TRANS-1,4-DICHLORO-2-BUTENE	110-57-6	8260B	mg/kg	0.0074	0.032	<0.00350		0.00133	0.0035	<0.00297		0.00113	0.00297	<0.00298		0.00113	0.00298	<0.00297		0.00113	0.00297
1,1-DICHLOROETHANE	75-34-3	8260B	mg/kg	3.6	16	<0.00140		0.000375	0.0014	<0.00119		0.000318	0.00119	<0.00119		0.000319	0.00119	<0.00119		0.000318	0.00119
1,2-DICHLOROETHANE	107-06-2	8260B	mg/kg	0.46	2	<0.00140		0.00063	0.0014	<0.00119		0.000534	0.00119	<0.00119		0.000536	0.00119	<0.00119		0.000535	0.00119
1,1-DICHLOROETHENE	75-35-4	8260B	mg/kg	230	1,000	<0.00140		0.000497	0.0014	<0.00119		0.000422	0.00119	<0.00119		0.000423	0.00119	<0.00119		0.000422	0.00119
CIS-1,2-DICHLOROETHENE	156-59-2	8260B	mg/kg	160	2300	<0.00140		0.000665	0.0014	<0.00119		0.000564	0.00119	<0.00119		0.000565	0.00119	<0.00119		0.000564	0.00119
TRANS-1,2-DICHLOROETHENE	156-60-5	8260B	mg/kg	70	300	<0.00140		0.0007	0.0014	<0.00119		0.000594	0.00119	<0.00119		0.000595	0.00119	<0.00119		0.000594	0.00119
1,2-DICHLOROPROPANE	78-87-5	8260B	mg/kg	2.5	11	<0.00140		0.00023	0.0014	<0.00119		0.000195	0.00119	<0.00119		0.000195	0.00119	<0.00119		0.000195	0.00119
CIS-1,3-DICHLOROPROPENE	10061-01-5	8260B	mg/kg	NE	NE	<0.00140		0.000595	0.0014	<0.00119		0.000505	0.00119	<0.00119		0.000506	0.00119	<0.00119		0.000505	0.00119
TRANS-1,3-DICHLOROPROPENE	10061-02-6	8260B	mg/kg	NE	NE	<0.00140		0.000945	0.0014	<0.00119		0.000802	0.00119	<0.00119		0.000803	0.00119	<0.00119		0.000802	0.00119
ETHYLBENZENE	100-41-4	8260B	mg/kg	5.8	25	0.00101	J	0.00042	0.0014	0.000555	J	0.000356	0.00119	0.000475	J	0.000357	0.00119	0.000558	J	0.000356	0.00119
2-HEXANONE	591-78-6	8260B	mg/kg	200	1,300	<0.0140		0.00251	0.014	<0.0119		0.00213	0.0119	<0.0119		0.00213	0.0119	<0.0119		0.00213	0.0119
IODOMETHANE	74-88-4	8260B	mg/kg	NE	NE	<0.0140		0.00169	0.014	<0.0119		0.00144	0.0119	<0.0119		0.00144	0.0119	<0.0119		0.00144	0.0119
2-BUTANONE (MEK)	78-93-3	8260B	mg/kg	27,000	190,000	0.0168		0.00655	0.014	0.011	J	0.00556	0.0119	0.0225		0.00557	0.0119	0.0122		0.00556	0.0119
METHYLENE CHLORIDE	75-09-2	8260B	mg/kg	57	1,000	<0.00700		0.0014	0.007	<0.00594		0.00119	0.00594	<0.00595		0.00119	0.00595	<0.00594		0.00119	0.00594
4-METHYL-2-PENTANONE (MIBK)	108-10-1	8260B	mg/kg	33,000	140,000	<0.0140		0.00133	0.014	<0.0119		0.00113	0.0119	<0.0119		0.00113	0.0119	<0.0119		0.00113	0.0119
PENTACHLOROETHANE	76-01-7	8260B	mg/kg	7.7	36	<0.00700		0.0035	0.007	<0.00594		0.00297	0.00594	<0.00595		0.00298	0.00595	<0.00594		0.00297	0.00594
STYRENE	100-42-5	8260B	mg/kg	6,000	35,000	<0.00140		0.000312	0.0014	<0.00119		0.000265	0.00119	<0.00119		0.000265	0.00119	<0.00119		0.000265	0.00119
1,1,1,2-TETRACHLOROETHANE	630-20-6	8260B	mg/kg	2	8.8	<0.00140		0.000414	0.0014	<0.00119		0.000351	0.00119	<0.00119		0.000352	0.00119	<0.00119		0.000352	0.00119
1,1,2,2-TETRACHLOROETHANE	79-34-5	8260B	mg/kg	0.6	2.7	<0.00140		0.000323	0.0014	<0.00119		0.000274	0.00119	<0.00119		0.000275	0.00119	<0.00119		0.000274	0.00119
TETRACHLOROETHENE	127-18-4	8260B	mg/kg	24	100	0.000459	J	0.000455	0.0014	<0.00119		0.000386	0.00119	<0.00119		0.000387	0.00119	<0.00119		0.000386	0.00119
TOLUENE	108-88-3	8260B	mg/kg	4,900	47,000	0.00815		0.00172	0.007	0.00293	J	0.00146	0.00594	0.00337	J	0.00146	0.00595	0.0038	J	0.00146	0.00594
1,1,1-TRICHLOROETHANE	71-55-6	8260B	mg/kg	8,100	36,000	<0.00140		0.000518	0.0014	<0.00119		0.000439	0.00119	<0.00119		0.00044	0.00119	<0.00119		0.00044	0.00119
1,1,2-TRICHLOROETHANE	79-00-5	8260B	mg/kg	1.1	5	<0.00140		0.000595	0.0014	<0.00119		0.000505	0.00119	<0.00119		0.000506	0.00119	<0.00119		0.000505	0.00119
TRICHLOROETHENE	79-01-6	8260B	mg/kg	0.94	6	<0.00140		0.00028	0.0014	<0.00119		0.000237	0.00119	<0.00119		0.000238	0.00119	<0.00119		0.000238	0.00119
TRICHLOROFLUOROMETHANE	75-69-4	8260B	mg/kg	23,000	350,000	<0.00700		0.000498	0.007	<0.00594		0.000423	0.00594	<0.00595		0.000424	0.00595	<0.00594		0.000423	0.00594
1,2,3-TRICHLOROPROPANE	96-18-4	8260B	mg/kg	0.0051	0.11	<0.00350		0.000342	0.0035	<0.00297		0.00029	0.00297	<0.00298		0.00029	0.00298	<0.00297		0.00029	0.00297

Table 4 - Soil Analytical Results - VOCs
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Lab Sample ID						L1557295-02				L1557295-05				L1557295-08				L1557295-12			
Client Sample ID						TP-33 FILL				TP-34 FILL				TP-35 FILL				TP-36 FILL			
Date Collected						11/10/2022				11/10/2022				11/10/2022				11/10/2022			
Analyte	CAS	Method	Units	RSL Residential	RSL Industrial	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
VINYL ACETATE	108-05-4	8260B	mg/kg	910	3,800	<0.0140	J4	0.00139	0.014	<0.0119	J4	0.00118	0.0119	<0.0119	J4	0.00118	0.0119	<0.0119	J4	0.00118	0.0119
VINYL CHLORIDE	75-01-4	8260B	mg/kg	0.059	1.7	<0.00140		0.000316	0.0014	<0.00119		0.000268	0.00119	<0.00119		0.000269	0.00119	<0.00119		0.000269	0.00119
XYLENES, TOTAL	1330-20-7	8260B	mg/kg	580	2,500	0.00398	J	0.0007	0.0042	0.00189	J	0.000594	0.00356	0.00196	J	0.000595	0.00357	0.00217	J	0.000594	0.00356
1,4-DIOXANE	123-91-1	8260B	mg/kg	5.3	24	<0.140		0.106	0.14	<0.119		0.0902	0.119	<0.119		0.0905	0.119	<0.119		0.0903	0.119

Qualifiers:

B: The same analyte is found in the associated blank.
J: The identification of the analyte is acceptable; the reported value is an estimate.
J4: The associated batch QC was outside the established quality control range for accuracy
EPA RSL: Environmental Protection Agency Regional Screening Levels for Residential and Industrial Soils (November 2022; TR=1E-06; THQ=1.0).
mg/kg: Milligrams per kilogram
NE: Not Established.
<: Less than Reported Detection Limit (RDL).
Bold value exceeds RDL.
Blue italics value is RDL that exceeds screening level.
Color shaded value exceeds screening level.
*Blind duplicate of TP-38; **Blind duplicate of TP-40

Table 4 - Soil Analytical Results - VOCs
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Lab Sample ID						L1557295-14				L1557295-16				L1557295-19				L1557295-22			
Client Sample ID						TP-37 SHALLOW				TP-37 FILL				TP-38 FILL				TP-39 FILL			
Date Collected						11/10/2022				11/10/2022				11/10/2022				11/10/2022			
Analyte	CAS	Method	Units	RSL Residential	RSL Industrial	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
ACETONE	67-64-1	8260B	mg/kg	70,000	1,100,000	0.103		0.0231	0.0557	0.927		0.0324	0.0782	<0.0593		0.0245	0.0593	<0.0598		0.0248	0.0598
ACRYLONITRILE	107-13-1	8260B	mg/kg	0.25	1.1	<0.0111		0.00225	0.0111	<0.0156		0.00316	0.0156	<0.0119		0.00239	0.0119	<0.0120		0.00242	0.012
ALLYL CHLORIDE	107-05-1	8260B	mg/kg	0.72	3.2	<0.00557		0.00446	0.00557	<0.00782		0.00626	0.00782	<0.00593		0.00474	0.00593	<0.00598		0.00479	0.00598
BENZENE	71-43-2	8260B	mg/kg	1.2	5.1	0.00104	J	0.000418	0.00111	0.0104		0.000586	0.00156	0.00079	J	0.000444	0.00119	0.016		0.000449	0.0012
BROMODICHLOROMETHANE	75-27-4	8260B	mg/kg	0.29	1.3	<0.00111		0.000808	0.00111	<0.00156		0.00113	0.00156	<0.00119		0.000859	0.00119	<0.00120		0.000867	0.0012
BROMOFORM	75-25-2	8260B	mg/kg	19	86	<0.00111		0.000473	0.00111	<0.00156		0.000663	0.00156	<0.00119		0.000502	0.00119	<0.00120		0.000507	0.0012
BROMOMETHANE	74-83-9	8260B	mg/kg	6.8	30	<0.00557		0.0013	0.00557	<0.00782		0.00183	0.00782	<0.00593		0.00139	0.00593	<0.00598		0.0014	0.00598
CARBON DISULFIDE	75-15-0	8260B	mg/kg	770	3,500	<0.00111		0.00078	0.00111	0.00403		0.00109	0.00156	<0.00119		0.00083	0.00119	<0.00120		0.000837	0.0012
CARBON TETRACHLORIDE	56-23-5	8260B	mg/kg	0.65	2.9	<0.00111		0.000276	0.00111	<0.00156		0.000388	0.00156	<0.00119		0.000294	0.00119	<0.00120		0.000297	0.0012
CHLOROBENZENE	108-90-7	8260B	mg/kg	280	1300	<0.00111		0.000214	0.00111	<0.00156		0.0003	0.00156	<0.00119		0.000228	0.00119	<0.00120		0.00023	0.0012
CHLORODIBROMOMETHANE	124-48-1	8260B	mg/kg	8.3	39	<0.00111		0.00025	0.00111	<0.00156		0.00035	0.00156	<0.00119		0.000265	0.00119	<0.00120		0.000268	0.0012
CHLOROETHANE	75-00-3	8260B	mg/kg	5,400	23,000	<0.00557		0.00111	0.00557	<0.00782		0.00156	0.00782	<0.00593		0.00119	0.00593	<0.00598		0.0012	0.00598
CHLOROFORM	67-66-3	8260B	mg/kg	0.32	1.4	<0.00557		0.00115	0.00557	<0.00782		0.00161	0.00782	<0.00593		0.00122	0.00593	<0.00598		0.00123	0.00598
CHLOROMETHANE	74-87-3	8260B	mg/kg	110	460	<0.00279		0.000724	0.00279	<0.00391		0.00102	0.00391	<0.00296		0.00077	0.00296	<0.00299		0.000778	0.00299
1,2-DIBROMOETHANE	106-93-4	8260B	mg/kg	0.036	0.16	<0.00111		0.000279	0.00111	<0.00156		0.000391	0.00156	<0.00119		0.000296	0.00119	<0.00120		0.000299	0.0012
DIBROMOMETHANE	74-95-3	8260B	mg/kg	24	99	<0.00111		0.00039	0.00111	<0.00156		0.000547	0.00156	<0.00119		0.000415	0.00119	<0.00120		0.000419	0.0012
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	8260B	mg/kg	0.0053	0.064	<0.00557		0.00212	0.00557	<0.00782		0.00297	0.00782	<0.00593		0.00225	0.00593	<0.00598		0.00227	0.00598
1,2-DICHLOROBENZENE	95-50-1	8260B	mg/kg	1,800	9,300	<0.00111		0.000474	0.00111	<0.00156		0.000665	0.00156	<0.00119		0.000504	0.00119	<0.00120		0.000508	0.0012
1,3-DICHLOROBENZENE	541-73-1	8260B	mg/kg	NE	NE	<0.00111		0.000669	0.00111	<0.00156		0.000938	0.00156	<0.00119		0.000711	0.00119	<0.00120		0.000718	0.0012
1,4-DICHLOROBENZENE	106-46-7	8260B	mg/kg	2.6	11	<0.00111		0.000925	0.00111	<0.00156		0.0013	0.00156	<0.00119		0.000984	0.00119	<0.00120		0.000993	0.0012
DICHLORODIFLUOROMETHANE	75-71-8	8260B	mg/kg	87	370	<0.00557		0.00032	0.00557	<0.00782		0.000449	0.00782	<0.00593		0.00034	0.00593	<0.00598		0.000343	0.00598
TRANS-1,4-DICHLORO-2-BUTENE	110-57-6	8260B	mg/kg	0.0074	0.032	<0.00279		0.00106	0.00279	<0.00391		0.00149	0.00391	<0.00296		0.00113	0.00296	<0.00299		0.00114	0.00299
1,1-DICHLOROETHANE	75-34-3	8260B	mg/kg	3.6	16	<0.00111		0.000299	0.00111	<0.00156		0.000419	0.00156	<0.00119		0.000318	0.00119	<0.00120		0.000321	0.0012
1,2-DICHLOROETHANE	107-06-2	8260B	mg/kg	0.46	2	<0.00111		0.000502	0.00111	<0.00156		0.000704	0.00156	<0.00119		0.000533	0.00119	<0.00120		0.000538	0.0012
1,1-DICHLOROETHENE	75-35-4	8260B	mg/kg	230	1,000	<0.00111		0.000396	0.00111	<0.00156		0.000555	0.00156	<0.00119		0.000421	0.00119	<0.00120		0.000425	0.0012
CIS-1,2-DICHLOROETHENE	156-59-2	8260B	mg/kg	160	2300	<0.00111		0.000529	0.00111	<0.00156		0.000743	0.00156	<0.00119		0.000563	0.00119	<0.00120		0.000568	0.0012
TRANS-1,2-DICHLOROETHENE	156-60-5	8260B	mg/kg	70	300	<0.00111		0.000557	0.00111	<0.00156		0.000782	0.00156	<0.00119		0.000593	0.00119	<0.00120		0.000598	0.0012
1,2-DICHLOROPROPANE	78-87-5	8260B	mg/kg	2.5	11	<0.00111		0.000183	0.00111	<0.00156		0.000256	0.00156	<0.00119		0.000194	0.00119	<0.00120		0.000196	0.0012
CIS-1,3-DICHLOROPROPENE	10061-01-5	8260B	mg/kg	NE	NE	<0.00111		0.000474	0.00111	<0.00156		0.000665	0.00156	<0.00119		0.000504	0.00119	<0.00120		0.000508	0.0012
TRANS-1,3-DICHLOROPROPENE	10061-02-6	8260B	mg/kg	NE	NE	<0.00111		0.000752	0.00111	<0.00156		0.00106	0.00156	<0.00119		0.0008	0.00119	<0.00120		0.000808	0.0012
ETHYLBENZENE	100-41-4	8260B	mg/kg	5.8	25	<0.00111		0.000334	0.00111	0.00189		0.000469	0.00156	<0.00119		0.000356	0.00119	0.00114	J	0.000359	0.0012
2-HEXANONE	591-78-6	8260B	mg/kg	200	1,300	<0.0111		0.00199	0.0111	<0.0156		0.0028	0.0156	<0.0119		0.00212	0.0119	<0.0120		0.00214	0.012
IODOMETHANE	74-88-4	8260B	mg/kg	NE	NE	<0.0111		0.00135	0.0111	<0.0156		0.00189	0.0156	<0.0119		0.00143	0.0119	<0.0120		0.00145	0.012
2-BUTANONE (MEK)	78-93-3	8260B	mg/kg	27,000	190,000	0.0244		0.00522	0.0111	0.152		0.00732	0.0156	<0.0119		0.00555	0.0119	<0.0120		0.0056	0.012
METHYLENE CHLORIDE	75-09-2	8260B	mg/kg	57	1,000	<0.00557		0.00111	0.00557	<0.00782		0.00156	0.00782	<0.00593		0.00119	0.00593	<0.00598		0.0012	0.00598
4-METHYL-2-PENTANONE (MIBK)	108-10-1	8260B	mg/kg	33,000	140,000	0.00186	J	0.00106	0.0111	<0.0156		0.00149	0.0156	<0.0119		0.00113	0.0119	<0.0120		0.00114	0.012
PENTACHLOROETHANE	76-01-7	8260B	mg/kg	7.7	36	<0.00557		0.00279	0.00557	<0.00782		0.00391	0.00782	<0.00593		0.00296	0.00593	<0.00598		0.00299	0.00598
STYRENE	100-42-5	8260B	mg/kg	6,000	35,000	<0.00111		0.000249	0.00111	<0.00156		0.000349	0.00156	<0.00119		0.000264	0.00119	<0.00120		0.000267	0.0012
1,1,1,2-TETRACHLOROETHANE	630-20-6	8260B	mg/kg	2	8.8	<0.00111		0.00033	0.00111	<0.00156		0.000463	0.00156	<0.00119		0.000351	0.00119	<0.00120		0.000354	0.0012
1,1,2,2-TETRACHLOROETHANE	79-34-5	8260B	mg/kg	0.6	2.7	<0.00111		0.000257	0.00111	<0.00156		0.000361	0.00156	<0.00119		0.000274	0.00119	<0.00120		0.000276	0.0012
TETRACHLOROETHENE	127-18-4	8260B	mg/kg	24	100	<0.00111		0.000362	0.00111	<0.00156		0.000508	0.00156	<0.00119		0.000385	0.00119	<0.00120		0.000389	0.0012
TOLUENE	108-88-3	8260B	mg/kg	4,900	47,000	<0.00557		0.00137	0.00557	0.0107		0.00192	0.00782	<0.00593		0.00146	0.00593	0.00829		0.00147	0.00598
1,1,1-TRICHLOROETHANE	71-55-6	8260B	mg/kg	8,100	36,000	<0.00111		0.000412	0.00111	<0.00156		0.000579	0.00156	<0.00119		0.000438	0.00119	<0.00120		0.000443	0.0012
1,1,2-TRICHLOROETHANE	79-00-5	8260B	mg/kg	1.1	5	<0.00111		0.000474	0.00111	<0.00156		0.000665	0.00156	<0.00119		0.000504	0.00119	<0.00120		0.000508	0.0012
TRICHLOROETHENE	79-01-6	8260B	mg/kg	0.94	6	<0.00111		0.000223	0.00111	<0.00156		0.000313	0.00156	<0.00119		0.000237	0.00119	<0.00120		0.000239	0.0012
TRICHLOROFLUOROMETHANE	75-69-4	8260B	mg/kg	23,000	350,000	<0.00557		0.000397	0.00557	<0.00782		0.000557	0.00782	<0.00593		0.000422	0.00593	<0.00598		0.000426	0.00598
1,2,3-TRICHLOROPROPANE	96-18-4	8260B	mg/kg	0.0051	0.11	<0.00279		0.000272	0.00279	<0.00391		0.000382	0.00391	<0.00296		0.000289	0.00296	<0.00299		0.000292	0.00299

Table 4 - Soil Analytical Results - VOCs
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Lab Sample ID						L1557295-14				L1557295-16				L1557295-19				L1557295-22			
Client Sample ID						TP-37 SHALLOW				TP-37 FILL				TP-38 FILL				TP-39 FILL			
Date Collected						11/10/2022				11/10/2022				11/10/2022				11/10/2022			
Analyte	CAS	Method	Units	RSL Residential	RSL Industrial	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
VINYL ACETATE	108-05-4	8260B	mg/kg	910	3,800	<0.0111	J4	0.0011	0.0111	<0.0156	J4	0.00155	0.0156	<0.0119	J4	0.00117	0.0119	<0.0120	J4	0.00118	0.012
VINYL CHLORIDE	75-01-4	8260B	mg/kg	0.059	1.7	<0.00111		0.000252	0.00111	<0.00156		0.000353	0.00156	<0.00119		0.000268	0.00119	<0.00120		0.00027	0.0012
XYLENES, TOTAL	1330-20-7	8260B	mg/kg	580	2,500	0.000664	J	0.000557	0.00334	0.00565		0.000782	0.00469	0.000678	J	0.000593	0.00356	0.00231	J	0.000598	0.00359
1,4-DIOXANE	123-91-1	8260B	mg/kg	5.3	24	<0.111		0.0847	0.111	<0.156		0.119	0.156	<0.119		0.0901	0.119	<0.120		0.0909	0.12

Qualifiers:

B: The same analyte is found in the associated blank.
J: The identification of the analyte is acceptable; the reported value is an estimate.
J4: The associated batch QC was outside the established quality control range for accuracy
EPA RSL: Environmental Protection Agency Regional Screening Levels for Residential and Industrial Soils (November 2022; TR=1E-06; THQ=1.0).
mg/kg: Milligrams per kilogram
NE: Not Established.
<: Less than Reported Detection Limit (RDL).
Bold value exceeds RDL.
Blue italics value is RDL that exceeds screening level.
Color shaded value exceeds screening level.
*Blind duplicate of TP-38; **Blind duplicate of TP-40

Table 4 - Soil Analytical Results - VOCs
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Lab Sample ID						L1557295-25				L1557295-34				L1557295-36				L1557295-37			
Client Sample ID						TP-40 FILL				TP-138 FILL*				TP-140 FILL**				ND-4			
Date Collected						11/10/2022				11/10/2022				11/10/2022				11/10/2022			
Analyte	CAS	Method	Units	RSL Residential	RSL Industrial	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
ACETONE	67-64-1	8260B	mg/kg	70,000	1,100,000	0.0595		0.0232	0.0561	<0.0598		0.0247	0.0598	0.0755		0.0261	0.063	0.164		0.0583	0.141
ACRYLONITRILE	107-13-1	8260B	mg/kg	0.25	1.1	<0.0112		0.00227	0.0112	<0.0120		0.00241	0.012	<0.0126		0.00255	0.0126	<0.0282		0.00569	0.0282
ALLYL CHLORIDE	107-05-1	8260B	mg/kg	0.72	3.2	<0.00561		0.00449	0.00561	<0.00598		0.00478	0.00598	<0.00630		0.00504	0.0063	<0.0141		0.0113	0.0141
BENZENE	71-43-2	8260B	mg/kg	1.2	5.1	0.00131		0.000421	0.00112	0.000905	J	0.000448	0.0012	0.0018		0.000473	0.00126	0.00783		0.00106	0.00282
BROMODICHLOROMETHANE	75-27-4	8260B	mg/kg	0.29	1.3	<0.00112		0.000814	0.00112	<0.00120		0.000866	0.0012	<0.00126		0.000914	0.00126	<0.00282		0.00204	0.00282
BROMOFORM	75-25-2	8260B	mg/kg	19	86	<0.00112		0.000476	0.00112	<0.00120		0.000507	0.0012	<0.00126		0.000534	0.00126	<0.00282		0.00119	0.00282
BROMOMETHANE	74-83-9	8260B	mg/kg	6.8	30	<0.00561		0.00131	0.00561	<0.00598		0.0014	0.00598	<0.00630		0.00147	0.0063	<0.0141		0.0033	0.0141
CARBON DISULFIDE	75-15-0	8260B	mg/kg	770	3,500	<0.00112		0.000786	0.00112	<0.00120		0.000837	0.0012	<0.00126		0.000882	0.00126	<0.00282		0.00197	0.00282
CARBON TETRACHLORIDE	56-23-5	8260B	mg/kg	0.65	2.9	<0.00112		0.000278	0.00112	<0.00120		0.000296	0.0012	<0.00126		0.000313	0.00126	<0.00282		0.000699	0.00282
CHLOROBENZENE	108-90-7	8260B	mg/kg	280	1300	<0.00112		0.000216	0.00112	<0.00120		0.000229	0.0012	<0.00126		0.000242	0.00126	<0.00282		0.000541	0.00282
CHLORODIBROMOMETHANE	124-48-1	8260B	mg/kg	8.3	39	<0.00112		0.000251	0.00112	<0.00120		0.000268	0.0012	<0.00126		0.000282	0.00126	<0.00282		0.000631	0.00282
CHLOROETHANE	75-00-3	8260B	mg/kg	5,400	23,000	<0.00561		0.00112	0.00561	<0.00598		0.0012	0.00598	<0.00630		0.00126	0.0063	<0.0141		0.00282	0.0141
CHLOROFORM	67-66-3	8260B	mg/kg	0.32	1.4	<0.00561		0.00116	0.00561	<0.00598		0.00123	0.00598	<0.00630		0.0013	0.0063	<0.0141		0.0029	0.0141
CHLOROMETHANE	74-87-3	8260B	mg/kg	110	460	<0.00281		0.00073	0.00281	<0.00299		0.000777	0.00299	<0.00315		0.000819	0.00315	<0.00704		0.00183	0.00704
1,2-DIBROMOETHANE	106-93-4	8260B	mg/kg	0.036	0.16	<0.00112		0.000281	0.00112	<0.00120		0.000299	0.0012	<0.00126		0.000315	0.00126	<0.00282		0.000704	0.00282
DIBROMOMETHANE	74-95-3	8260B	mg/kg	24	99	<0.00112		0.000393	0.00112	<0.00120		0.000418	0.0012	<0.00126		0.000441	0.00126	<0.00282		0.000986	0.00282
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	8260B	mg/kg	0.0053	0.064	<0.00561		0.00213	0.00561	<0.00598		0.00227	0.00598	<0.00630		0.00239	0.0063	<0.0141		0.00535	0.0141
1,2-DICHLOROBENZENE	95-50-1	8260B	mg/kg	1,800	9,300	<0.00112		0.000477	0.00112	<0.00120		0.000508	0.0012	<0.00126		0.000536	0.00126	<0.00282		0.0012	0.00282
1,3-DICHLOROBENZENE	541-73-1	8260B	mg/kg	NE	NE	<0.00112		0.000674	0.00112	<0.00120		0.000717	0.0012	<0.00126		0.000756	0.00126	<0.00282		0.00169	0.00282
1,4-DICHLOROBENZENE	106-46-7	8260B	mg/kg	2.6	11	<0.00112		0.000932	0.00112	<0.00120		0.000992	0.0012	<0.00126		0.00105	0.00126	<0.00282		0.00234	0.00282
DICHLORODIFLUOROMETHANE	75-71-8	8260B	mg/kg	87	370	<0.00561		0.000322	0.00561	<0.00598		0.000343	0.00598	<0.00630		0.000362	0.0063	<0.0141		0.000809	0.0141
TRANS-1,4-DICHLORO-2-BUTENE	110-57-6	8260B	mg/kg	0.0074	0.032	<0.00281		0.00107	0.00281	<0.00299		0.00114	0.00299	<0.00315		0.0012	0.00315	<0.00704		0.00268	0.00704
1,1-DICHLOROETHANE	75-34-3	8260B	mg/kg	3.6	16	<0.00112		0.000301	0.00112	<0.00120		0.00032	0.0012	<0.00126		0.000338	0.00126	<0.00282		0.000755	0.00282
1,2-DICHLOROETHANE	107-06-2	8260B	mg/kg	0.46	2	<0.00112		0.000505	0.00112	<0.00120		0.000538	0.0012	<0.00126		0.000567	0.00126	<0.00282		0.00127	0.00282
1,1-DICHLOROETHENE	75-35-4	8260B	mg/kg	230	1,000	<0.00112		0.000399	0.00112	<0.00120		0.000424	0.0012	<0.00126		0.000447	0.00126	<0.00282		0.001	0.00282
CIS-1,2-DICHLOROETHENE	156-59-2	8260B	mg/kg	160	2300	<0.00112		0.000533	0.00112	<0.00120		0.000568	0.0012	<0.00126		0.000599	0.00126	<0.00282		0.00134	0.00282
TRANS-1,2-DICHLOROETHENE	156-60-5	8260B	mg/kg	70	300	<0.00112		0.000561	0.00112	<0.00120		0.000598	0.0012	<0.00126		0.00063	0.00126	<0.00282		0.00141	0.00282
1,2-DICHLOROPROPANE	78-87-5	8260B	mg/kg	2.5	11	<0.00112		0.000184	0.00112	<0.00120		0.000196	0.0012	<0.00126		0.000207	0.00126	<0.00282		0.000462	0.00282
CIS-1,3-DICHLOROPROPENE	10061-01-5	8260B	mg/kg	NE	NE	<0.00112		0.000477	0.00112	<0.00120		0.000508	0.0012	<0.00126		0.000536	0.00126	<0.00282		0.0012	0.00282
TRANS-1,3-DICHLOROPROPENE	10061-02-6	8260B	mg/kg	NE	NE	<0.00112		0.000758	0.00112	<0.00120		0.000807	0.0012	<0.00126		0.000851	0.00126	<0.00282		0.0019	0.00282
ETHYLBENZENE	100-41-4	8260B	mg/kg	5.8	25	<0.00112		0.000337	0.00112	<0.00120		0.000359	0.0012	<0.00126		0.000378	0.00126	0.00125	J	0.000845	0.00282
2-HEXANONE	591-78-6	8260B	mg/kg	200	1,300	<0.0112		0.00201	0.0112	<0.0120		0.00214	0.012	<0.0126		0.00226	0.0126	<0.0282		0.00504	0.0282
IODOMETHANE	74-88-4	8260B	mg/kg	NE	NE	<0.0112		0.00136	0.0112	<0.0120		0.00145	0.012	<0.0126		0.00153	0.0126	<0.0282		0.00341	0.0282
2-BUTANONE (MEK)	78-93-3	8260B	mg/kg	27,000	190,000	<0.0112		0.00525	0.0112	<0.0120		0.00559	0.012	<0.0126		0.0059	0.0126	0.033		0.0132	0.0282
METHYLENE CHLORIDE	75-09-2	8260B	mg/kg	57	1,000	<0.00561		0.00112	0.00561	<0.00598		0.0012	0.00598	<0.00630		0.00126	0.0063	0.00287	B J	0.00282	0.0141
4-METHYL-2-PENTANONE (MIBK)	108-10-1	8260B	mg/kg	33,000	140,000	<0.0112		0.00107	0.0112	<0.0120		0.00114	0.012	<0.0126		0.0012	0.0126	<0.0282		0.00268	0.0282
PENTACHLOROETHANE	76-01-7	8260B	mg/kg	7.7	36	<0.00561		0.00281	0.00561	<0.00598		0.00299	0.00598	<0.00630		0.00315	0.0063	<0.0141		0.00704	0.0141
STYRENE	100-42-5	8260B	mg/kg	6,000	35,000	<0.00112		0.00025	0.00112	<0.00120		0.000266	0.0012	<0.00126		0.000281	0.00126	<0.00282		0.000628	0.00282
1,1,1,2-TETRACHLOROETHANE	630-20-6	8260B	mg/kg	2	8.8	<0.00112		0.000332	0.00112	<0.00120		0.000354	0.0012	<0.00126		0.000373	0.00126	<0.00282		0.000834	0.00282
1,1,2,2-TETRACHLOROETHANE	79-34-5	8260B	mg/kg	0.6	2.7	<0.00112		0.000259	0.00112	<0.00120		0.000276	0.0012	<0.00126		0.000291	0.00126	<0.00282		0.000651	0.00282
TETRACHLOROETHENE	127-18-4	8260B	mg/kg	24	100	<0.00112		0.000365	0.00112	<0.00120		0.000388	0.0012	<0.00126		0.00041	0.00126	<0.00282		0.000916	0.00282
TOLUENE	108-88-3	8260B	mg/kg	4,900	47,000	<0.00561		0.00138	0.00561	<0.00598		0.00147	0.00598	<0.00630		0.00155	0.0063	0.0082	J	0.00347	0.0141
1,1,1-TRICHLOROETHANE	71-55-6	8260B	mg/kg	8,100	36,000	<0.00112		0.000415	0.00112	<0.00120		0.000442	0.0012	<0.00126		0.000466	0.00126	<0.00282		0.00104	0.00282
1,1,2-TRICHLOROETHANE	79-00-5	8260B	mg/kg	1.1	5	<0.00112		0.000477	0.00112	<0.00120		0.000508	0.0012	<0.00126		0.000536	0.00126	<0.00282		0.0012	0.00282
TRICHLOROETHENE	79-01-6	8260B	mg/kg	0.94	6	<0.00112		0.000225	0.00112	<0.00120		0.000239	0.0012	<0.00126		0.000252	0.00126	<0.00282		0.000564	0.00282
TRICHLOROFLUOROMETHANE	75-69-4	8260B	mg/kg	23,000	350,000	<0.00561		0.0004	0.00561	<0.00598		0.000425	0.00598	<0.00630		0.000449	0.0063	<0.0141		0.001	0.0141
1,2,3-TRICHLOROPROPANE	96-18-4	8260B	mg/kg	0.0051	0.11	<0.00281		0.000274	0.00281	<0.00299		0.000292	0.00299	<0.00315		0.000308	0.00315	<0.00704		0.000687	0.00704

Table 4 - Soil Analytical Results - VOCs
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Lab Sample ID						L1557295-25				L1557295-34				L1557295-36				L1557295-37			
Client Sample ID						TP-40 FILL				TP-138 FILL*				TP-140 FILL**				ND-4			
Date Collected						11/10/2022				11/10/2022				11/10/2022				11/10/2022			
Analyte	CAS	Method	Units	RSL Residential	RSL Industrial	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
				910	3,800	<0.0112	J4	0.00111	0.0112	<0.0120	J4	0.00118	0.012	<0.0126	J4	0.00125	0.0126	<0.0282	J4	0.00279	0.0282
VINYL ACETATE	108-05-4	8260B	mg/kg	0.059	1.7	<0.00112		0.000254	0.00112	<0.00120		0.00027	0.0012	<0.00126		0.000285	0.00126	<0.00282		0.000637	0.00282
VINYL CHLORIDE	75-01-4	8260B	mg/kg	580	2,500	<0.00337		0.000561	0.00337	<0.00359		0.000598	0.00359	<0.00378		0.00063	0.00378	0.00327	J	0.00141	0.00845
XYLENES, TOTAL	1330-20-7	8260B	mg/kg	5.3	24	<0.112		0.0853	0.112	<0.120		0.0908	0.12	<0.126		0.0958	0.126	<0.282		0.214	0.282
1,4-DIOXANE	123-91-1	8260B	mg/kg																		

Qualifiers:

B: The same analyte is found in the associated blank.
J: The identification of the analyte is acceptable; the reported value is an estimate.
J4: The associated batch QC was outside the established quality control range for accuracy
EPA RSL: Environmental Protection Agency Regional Screening Levels for Residential and Industrial Soils (November 2022; TR=1E-06; THQ=1.0).
mg/kg: Milligrams per kilogram
NE: Not Established.
<: Less than Reported Detection Limit (RDL).
Bold value exceeds RDL.
Blue italics value is RDL that exceeds screening level.
Color shaded value exceeds screening level.
*Blind duplicate of TP-38; **Blind duplicate of TP-40

Table 4 - Soil Analytical Results - VOCs
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Lab Sample ID						L1557295-38				L1557295-39			
Client Sample ID						ND-5				ND-104			
Date Collected						11/10/2022				11/10/2022			
Analyte	CAS	Method	Units	RSL Residential	RSL Industrial	Result	Q	MDL	RDL	Result	Q	MDL	RDL
ACETONE	67-64-1	8260B	mg/kg	70,000	1,100,000	0.174		0.0353	0.0854	<0.105		0.0434	0.105
ACRYLONITRILE	107-13-1	8260B	mg/kg	0.25	1.1	<0.0171		0.00345	0.0171	<0.0210		0.00423	0.021
ALLYL CHLORIDE	107-05-1	8260B	mg/kg	0.72	3.2	<0.00854		0.00683	0.00854	<0.0105		0.00838	0.0105
BENZENE	71-43-2	8260B	mg/kg	1.2	5.1	0.00492		0.00064	0.00171	0.0031		0.000786	0.0021
BROMODICHLOROMETHANE	75-27-4	8260B	mg/kg	0.29	1.3	<0.00171		0.00124	0.00171	<0.00210		0.00152	0.0021
BROMOFORM	75-25-2	8260B	mg/kg	19	86	<0.00171		0.000724	0.00171	<0.00210		0.000889	0.0021
BROMOMETHANE	74-83-9	8260B	mg/kg	6.8	30	<0.00854		0.002	0.00854	<0.0105		0.00245	0.0105
CARBON DISULFIDE	75-15-0	8260B	mg/kg	770	3,500	<0.00171		0.00119	0.00171	<0.00210		0.00147	0.0021
CARBON TETRACHLORIDE	56-23-5	8260B	mg/kg	0.65	2.9	<0.00171		0.000423	0.00171	<0.00210		0.00052	0.0021
CHLOROBENZENE	108-90-7	8260B	mg/kg	280	1300	<0.00171		0.000328	0.00171	<0.00210		0.000402	0.0021
CHLORODIBROMOMETHANE	124-48-1	8260B	mg/kg	8.3	39	<0.00171		0.000382	0.00171	<0.00210		0.000469	0.0021
CHLOROETHANE	75-00-3	8260B	mg/kg	5,400	23,000	<0.00854		0.00171	0.00854	<0.0105		0.0021	0.0105
CHLOROFORM	67-66-3	8260B	mg/kg	0.32	1.4	<0.00854		0.00176	0.00854	<0.0105		0.00216	0.0105
CHLOROMETHANE	74-87-3	8260B	mg/kg	110	460	<0.00427		0.00111	0.00427	<0.00524		0.00136	0.00524
1,2-DIBROMOETHANE	106-93-4	8260B	mg/kg	0.036	0.16	<0.00171		0.000427	0.00171	<0.00210		0.000524	0.0021
DIBROMOMETHANE	74-95-3	8260B	mg/kg	24	99	<0.00171		0.000597	0.00171	<0.00210		0.000733	0.0021
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	8260B	mg/kg	0.0053	0.064	<0.00854		0.00324	0.00854	<0.0105		0.00398	0.0105
1,2-DICHLOROBENZENE	95-50-1	8260B	mg/kg	1,800	9,300	<0.00171		0.000725	0.00171	<0.00210		0.000891	0.0021
1,3-DICHLOROBENZENE	541-73-1	8260B	mg/kg	NE	NE	<0.00171		0.00102	0.00171	<0.00210		0.00126	0.0021
1,4-DICHLOROBENZENE	106-46-7	8260B	mg/kg	2.6	11	<0.00171		0.00142	0.00171	<0.00210		0.00174	0.0021
DICHLORODIFLUOROMETHANE	75-71-8	8260B	mg/kg	87	370	<0.00854		0.00049	0.00854	<0.0105		0.000601	0.0105
TRANS-1,4-DICHLORO-2-BUTENE	110-57-6	8260B	mg/kg	0.0074	0.032	<0.00427		0.00162	0.00427	<0.00524		0.00199	0.00524
1,1-DICHLOROETHANE	75-34-3	8260B	mg/kg	3.6	16	<0.00171		0.000457	0.00171	<0.00210		0.000562	0.0021
1,2-DICHLOROETHANE	107-06-2	8260B	mg/kg	0.46	2	<0.00171		0.000768	0.00171	<0.00210		0.000943	0.0021
1,1-DICHLOROETHENE	75-35-4	8260B	mg/kg	230	1,000	<0.00171		0.000606	0.00171	<0.00210		0.000744	0.0021
CIS-1,2-DICHLOROETHENE	156-59-2	8260B	mg/kg	160	2300	<0.00171		0.000811	0.00171	<0.00210		0.000995	0.0021
TRANS-1,2-DICHLOROETHENE	156-60-5	8260B	mg/kg	70	300	<0.00171		0.000854	0.00171	<0.00210		0.00105	0.0021
1,2-DICHLOROPROPANE	78-87-5	8260B	mg/kg	2.5	11	<0.00171		0.00028	0.00171	<0.00210		0.000344	0.0021
CIS-1,3-DICHLOROPROPENE	10061-01-5	8260B	mg/kg	NE	NE	<0.00171		0.000725	0.00171	<0.00210		0.000891	0.0021
TRANS-1,3-DICHLOROPROPENE	10061-02-6	8260B	mg/kg	NE	NE	<0.00171		0.00115	0.00171	<0.00210		0.00141	0.0021
ETHYLBENZENE	100-41-4	8260B	mg/kg	5.8	25	0.000714	J	0.000512	0.00171	0.000639	J	0.000629	0.0021
2-HEXANONE	591-78-6	8260B	mg/kg	200	1,300	<0.0171		0.00306	0.0171	<0.0210		0.00375	0.021
IODOMETHANE	74-88-4	8260B	mg/kg	NE	NE	<0.0171		0.00207	0.0171	<0.0210		0.00254	0.021
2-BUTANONE (MEK)	78-93-3	8260B	mg/kg	27,000	190,000	0.0132	J	0.00799	0.0171	<0.0210		0.00981	0.021
METHYLENE CHLORIDE	75-09-2	8260B	mg/kg	57	1,000	0.00176	B J	0.00171	0.00854	0.00228	B J	0.0021	0.0105
4-METHYL-2-PENTANONE (MIBK)	108-10-1	8260B	mg/kg	33,000	140,000	<0.0171		0.00162	0.0171	<0.0210		0.00199	0.021
PENTACHLOROETHANE	76-01-7	8260B	mg/kg	7.7	36	<0.00854		0.00427	0.00854	<0.0105		0.00524	0.0105
STYRENE	100-42-5	8260B	mg/kg	6,000	35,000	<0.00171		0.000381	0.00171	<0.00210		0.000467	0.0021
1,1,1,2-TETRACHLOROETHANE	630-20-6	8260B	mg/kg	2	8.8	<0.00171		0.000505	0.00171	<0.00210		0.00062	0.0021
1,1,2,2-TETRACHLOROETHANE	79-34-5	8260B	mg/kg	0.6	2.7	<0.00171		0.000394	0.00171	<0.00210		0.000484	0.0021
TETRACHLOROETHENE	127-18-4	8260B	mg/kg	24	100	<0.00171		0.000555	0.00171	<0.00210		0.000681	0.0021
TOLUENE	108-88-3	8260B	mg/kg	4,900	47,000	0.00466	J	0.0021	0.00854	0.00323	J	0.00258	0.0105
1,1,1-TRICHLOROETHANE	71-55-6	8260B	mg/kg	8,100	36,000	<0.00171		0.000632	0.00171	<0.00210		0.000775	0.0021
1,1,2-TRICHLOROETHANE	79-00-5	8260B	mg/kg	1.1	5	<0.00171		0.000725	0.00171	<0.00210		0.000891	0.0021
TRICHLOROETHENE	79-01-6	8260B	mg/kg	0.94	6	<0.00171		0.000341	0.00171	<0.00210		0.000419	0.0021
TRICHLOROFLUOROMETHANE	75-69-4	8260B	mg/kg	23,000	350,000	<0.00854		0.000608	0.00854	<0.0105		0.000746	0.0105
1,2,3-TRICHLOROPROPANE	96-18-4	8260B	mg/kg	0.0051	0.11	<0.00427		0.000417	0.00427	<0.00524		0.000511	0.00524

Table 4 - Soil Analytical Results - VOCs
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Lab Sample ID						L1557295-38				L1557295-39			
Client Sample ID						ND-5				ND-104			
Date Collected						11/10/2022				11/10/2022			
Analyte	CAS	Method	Units	RSL Residential	RSL Industrial	Result	Q	MDL	RDL	Result	Q	MDL	RDL
VINYL ACETATE	108-05-4	8260B	mg/kg	910	3,800	<0.0171	J4	0.00169	0.0171	<0.0210	J4	0.00207	0.021
VINYL CHLORIDE	75-01-4	8260B	mg/kg	0.059	1.7	<0.00171		0.000386	0.00171	<0.00210		0.000474	0.0021
XYLENES, TOTAL	1330-20-7	8260B	mg/kg	580	2,500	0.00171	J	0.000854	0.00512	0.00167	J	0.00105	0.00629
1,4-DIOXANE	123-91-1	8260B	mg/kg	5.3	24	<0.171		0.13	0.171	<0.210		0.159	0.21

Qualifiers:

- B:** The same analyte is found in the associated blank.
J: The identification of the analyte is acceptable; the reported value is an estimate.
J4: The associated batch QC was outside the established quality control range for accuracy
EPA RSL: Environmental Protection Agency Regional Screening Levels for Residential and Industrial Soils (November 2022; TR=1E-06; THQ=1.0).
mg/kg: Milligrams per kilogram
NE: Not Established.
<: Less than Reported Detection Limit (RDL).
Bold value exceeds RDL.
Blue italics value is RDL that exceeds screening level.
Color shaded value exceeds screening level.
*Blind duplicate of TP-38; **Blind duplicate of TP-40

Table 5 - Soil Analytical Results - SVOCs
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Lab Sample ID						L1557295-01				L1557295-04				L1557295-07				L1557295-11				L1557295-13			
Client Sample ID						TP-33 FILL				TP-34 FILL				TP-35 FILL				TP-36 FILL				TP-36 NATIVE			
Date Collected						11/10/2022				11/10/2022				11/10/2022				11/10/2022				11/10/2022			
Analyte	CAS	Method	Units	RSL Residential	RSL Industrial	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
BENZIDINE	92-87-5	8270C	mg/kg	0.00053	0.01	<42.6		1.6	42.6	<20.5	J6	0.769	20.5	<3.92		0.147	3.92	<18.7		0.699	18.7				
BIS(2-CHLORETHOXY)METHANE	111-91-1	8270C	mg/kg	190	2,500	<8.50		0.255	8.5	<4.09		0.123	4.09	<0.781		0.0235	0.781	<3.72		0.112	3.72				
BIS(2-CHLOROETHYL)ETHER	111-44-4	8270C	mg/kg	0.23	1	<8.50		0.281	8.5	<4.09		0.135	4.09	<0.781		0.0258	0.781	<3.72		0.123	3.72				
2,2-OXYBIS(1-CHLOROPROPANE)	108-60-1	8270C	mg/kg	3,100	47,000	<8.50		0.368	8.5	<4.09		0.177	4.09	<0.781		0.0338	0.781	<3.72		0.161	3.72				
4-BROMOPHENYL-PHENYLETHER	101-55-3	8270C	mg/kg	NE	NE	<8.50		0.299	8.5	<4.09		0.144	4.09	<0.781		0.0275	0.781	<3.72		0.131	3.72				
4-CHLOROPHENYL-PHENYLETHER	7005-72-3	8270C	mg/kg	NE	NE	<8.50		0.296	8.5	<4.09		0.142	4.09	<0.781		0.0272	0.781	<3.72		0.13	3.72				
1,2-DICHLOROBENZENE	95-50-1	8270C	mg/kg	1,800	9,300	<8.50		0.251	8.5	<4.09		0.121	4.09	<0.781		0.0231	0.781	<3.72		0.11	3.72				
1,3-DICHLOROBENZENE	541-73-1	8270C	mg/kg	NE	NE	<8.50		0.258	8.5	<4.09		0.124	4.09	<0.781		0.0237	0.781	<3.72		0.113	3.72				
1,4-DICHLOROBENZENE	106-46-7	8270C	mg/kg	2.6	11	<8.50		0.253	8.5	<4.09		0.122	4.09	<0.781		0.0232	0.781	<3.72		0.111	3.72				
3,3-DICHLOROBENZIDINE	91-94-1	8270C	mg/kg	1.2	5.1	<8.50		0.314	8.5	<4.09		0.151	4.09	<0.781		0.0289	0.781	<3.72		0.137	3.72				
2,4-DINITROTOLUENE	121-14-2	8270C	mg/kg	1.7	7.4	<8.50		0.244	8.5	<4.09		0.117	4.09	<0.781		0.0224	0.781	<3.72		0.107	3.72				
2,6-DINITROTOLUENE	606-20-2	8270C	mg/kg	0.36	1.5	<8.50		0.278	8.5	<4.09		0.134	4.09	<0.781		0.0256	0.781	<3.72		0.122	3.72				
HEXACHLOROBENZENE	118-74-1	8270C	mg/kg	0.21	0.96	<8.50		0.301	8.5	<4.09		0.145	4.09	<0.781		0.0277	0.781	<3.72		0.132	3.72				
HEXACHLORO-1,3-BUTADIENE	87-68-3	8270C	mg/kg	1.2	5.3	<8.50		0.286	8.5	<4.09		0.138	4.09	<0.781		0.0263	0.781	<3.72		0.125	3.72				
HEXACHLOROCYCLOPENTADIENE	77-47-4	8270C	mg/kg	1.8	7.5	<8.50		0.447	8.5	<4.09	J6	0.215	4.09	<0.781		0.0411	0.781	<3.72		0.195	3.72				
HEXACHLOROETHANE	67-72-1	8270C	mg/kg	1.8	8	<8.50		0.334	8.5	<4.09		0.161	4.09	<0.781		0.0307	0.781	<3.72		0.146	3.72				
ISOPHORONE	78-59-1	8270C	mg/kg	570	2,400	<8.50		0.26	8.5	<4.09		0.125	4.09	<0.781		0.0239	0.781	<3.72		0.114	3.72				
NITROBENZENE	98-95-3	8270C	mg/kg	5.1	22	<8.50		0.296	8.5	<4.09		0.142	4.09	<0.781		0.0272	0.781	<3.72		0.13	3.72				
N-NITROSODIMETHYLAMINE	62-75-9	8270C	mg/kg	0.002	0.034	<8.50		1.26	8.5	<4.09	J6	0.607	4.09	<0.781		0.116	0.781	<3.72		0.552	3.72				
N-NITROSODIPHENYLAMINE	86-30-6	8270C	mg/kg	110	470	<8.50		0.643	8.5	<4.09		0.309	4.09	<0.781		0.0591	0.781	<3.72		0.281	3.72				
N-NITROSODI-N-PROPYLAMINE	621-64-7	8270C	mg/kg	0.078	0.33	<8.50		0.283	8.5	<4.09		0.136	4.09	<0.781		0.026	0.781	<3.72		0.124	3.72				
BENZYL BUTYL PHTHALATE	85-68-7	8270C	mg/kg	290	1,200	<8.50		0.266	8.5	<4.09		0.128	4.09	0.04	J	0.0244	0.781	<3.72		0.116	3.72				
BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	8270C	mg/kg	39	160	<8.50		1.08	8.5	<4.09	J3 J6	0.518	4.09	<0.781		0.099	0.781	0.936	J	0.471	3.72				
DI-N-BUTYL PHTHALATE	84-74-2	8270C	mg/kg	6,300	82,000	<8.50		0.291	8.5	<4.09		0.14	4.09	<0.781		0.0267	0.781	<3.72		0.127	3.72				
DIETHYL PHTHALATE	84-66-2	8270C	mg/kg	51,000	660,000	<8.50		0.281	8.5	<4.09		0.135	4.09	<0.781		0.0258	0.781	<3.72		0.123	3.72				
DIMETHYL PHTHALATE	131-11-3	8270C	mg/kg	NE	NE	<8.50		1.8	8.5	<4.09	J6	0.867	4.09	<0.781		0.165	0.781	<3.72		0.789	3.72				
DI-N-OCTYL PHTHALATE	117-84-0	8270C	mg/kg	630	8,200	<8.50		0.574	8.5	<4.09		0.276	4.09	<0.781		0.0528	0.781	<3.72		0.251	3.72				
1,2,4-TRICHLOROBENZENE	120-82-1	8270C	mg/kg	24	110	<8.50		0.266	8.5	<4.09		0.128	4.09	<0.781		0.0244	0.781	<3.72		0.116	3.72				
4-CHLORO-3-METHYLPHENOL	59-50-7	8270C	mg/kg	6,300	82,000	<8.50		0.276	8.5	<4.09		0.133	4.09	<0.781		0.0253	0.781	<3.72		0.121	3.72				
2-CHLOROPHENOL	95-57-8	8270C	mg/kg	390	5,800	<8.50		0.281	8.5	<4.09		0.135	4.09	<0.781		0.0258	0.781	<3.72		0.123	3.72				
2,4-DICHLOROPHENOL	120-83-2	8270C	mg/kg	190	2,500	<8.50		0.248	8.5	<4.09		0.119	4.09	<0.781		0.0228	0.781	<3.72		0.108	3.72				
2,4-DIMETHYLPHENOL	105-67-9	8270C	mg/kg	1,300	16,000	<8.50		0.222	8.5	<4.09		0.107	4.09	<0.781		0.0204	0.781	<3.72		0.0972	3.72				
4,6-DINITRO-2-METHYLPHENOL	534-52-1	8270C	mg/kg	5.1	66	<8.50		1.93	8.5	<4.09	J6	0.927	4.09	<0.781		0.177	0.781	<3.72		0.843	3.72				
2,4-DINITROPHENOL	51-28-5	8270C	mg/kg	130	1,600	<8.50		1.99	8.5	<4.09	J6	0.957	4.09	<0.781		0.183	0.781	<3.72		0.87	3.72				
2-NITROPHENOL	88-75-5	8270C	mg/kg	NE	NE	<8.50		0.304	8.5	<4.09		0.146	4.09	<0.781		0.0279	0.781	<3.72		0.133	3.72				
4-NITROPHENOL	100-02-7	8270C	mg/kg	NE	NE	<8.50		0.266	8.5	<4.09		0.128	4.09	<0.781		0.0244	0.781	<3.72		0.116	3.72				
PENTACHLOROPHENOL	87-86-5	8270C	mg/kg	1	4	<8.50		0.229	8.5	<4.09		0.11	4.09	<0.781		0.021	0.781	<3.72		0.1	3.72				
PHENOL	108-95-2	8270C	mg/kg	19,000	250,000	<8.50		0.342	8.5	<4.09		0.165	4.09	<0.781		0.0314	0.781	<3.72		0.15	3.72				
2,4,6-TRICHLOROPHENOL	88-06-2	8270C	mg/kg	49	210	<8.50		0.273	8.5	<4.09		0.131	4.09	<0.781		0.0251	0.781	<3.72		0.12	3.72				

Table 5 - Soil Analytical Results - SVOCs
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Lab Sample ID						L1557295-01				L1557295-04				L1557295-07				L1557295-11				L1557295-13			
Client Sample ID						TP-33 FILL				TP-34 FILL				TP-35 FILL				TP-36 FILL				TP-36 NATIVE			
Date Collected						11/10/2022				11/10/2022				11/10/2022				11/10/2022				11/10/2022			
Analyte	CAS	Method	Units	RSL Residential	RSL Industrial	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
ANTHRACENE	120-12-7	8270C-SIM	mg/kg	18,000	230,000	<0.0383		0.0147	0.0383	0.00667	J	0.0028	0.0074	0.007	J	0.0027	0.007	<0.0670		0.0257	0.067	<0.00730		0.0028	0.0073
ACENAPHTHENE	83-32-9	8270C-SIM	mg/kg	3,600	45,000	<0.0383		0.0134	0.0383	<0.00737		0.0026	0.0074	0.0025	J	0.0025	0.007	<0.0670		0.0233	0.067	<0.00730		0.0025	0.0073
ACENAPHTHYLENE	208-96-8	8270C-SIM	mg/kg	NE	NE	<0.0383		0.0138	0.0383	0.00451	J	0.0027	0.0074	0.0036	J	0.0025	0.007	<0.0670		0.0241	0.067	<0.00730		0.0026	0.0073
BENZO(A)ANTHRACENE	56-55-3	8270C-SIM	mg/kg	1.1	21	0.0272	J	0.011	0.0383	0.0142		0.0021	0.0074	0.0332		0.002	0.007	0.0427	J	0.0193	0.067	<0.00730		0.0021	0.0073
BENZO(A)PYRENE	50-32-8	8270C-SIM	mg/kg	0.11	2.1	0.0802		0.0114	0.0383	0.0239		0.0022	0.0074	0.0458		0.0021	0.007	0.134		0.02	0.067	<0.00730		0.0022	0.0073
BENZO(B)FLUORANTHENE	205-99-2	8270C-SIM	mg/kg	1.1	21	0.079		0.0098	0.0383	0.0318		0.0019	0.0074	0.0551		0.0018	0.007	0.126		0.0171	0.067	<0.00730		0.0019	0.0073
BENZO(G,H,I)PERYLENE	191-24-2	8270C-SIM	mg/kg	NE	NE	0.223		0.0113	0.0383	0.0381		0.0022	0.0074	0.0646		0.0021	0.007	0.149		0.0198	0.067	<0.00730		0.0022	0.0073
BENZO(K)FLUORANTHENE	207-08-9	8270C-SIM	mg/kg	11	210	0.0185	J	0.0137	0.0383	0.00872		0.0026	0.0074	0.0181		0.0025	0.007	0.0394	J	0.024	0.067	<0.00730		0.0026	0.0073
CHRYSENE	218-01-9	8270C-SIM	mg/kg	110	2,100	0.0306	J	0.0148	0.0383	0.0163		0.0029	0.0074	0.0348		0.0027	0.007	0.0452	J	0.0259	0.067	<0.00730		0.0028	0.0073
DIBENZ(A,H)ANTHRACENE	53-70-3	8270C-SIM	mg/kg	0.11	2.1	0.032	J	0.011	0.0383	0.00604	J	0.0021	0.0074	0.0109		0.002	0.007	0.0319	J	0.0192	0.067	<0.00730		0.0021	0.0073
FLUORANTHENE	206-44-0	8270C-SIM	mg/kg	2,400	30,000	0.0393		0.0144	0.0383	0.0233		0.0028	0.0074	0.0562		0.0027	0.007	0.0601	J	0.0254	0.067	<0.00730		0.0028	0.0073
FLUORENE	86-73-7	8270C-SIM	mg/kg	2,400	30,000	<0.0383		0.0131	0.0383	<0.00737		0.0025	0.0074	0.0034	J	0.0024	0.007	<0.0670		0.0229	0.067	<0.00730		0.0025	0.0073
INDENO(1,2,3-CD)PYRENE	193-39-5	8270C-SIM	mg/kg	1.1	21	0.103		0.0116	0.0383	0.0241		0.0022	0.0074	0.0386		0.0021	0.007	0.115		0.0202	0.067	<0.00730		0.0022	0.0073
NAPHTHALENE	91-20-3	8270C-SIM	mg/kg	2	8.6	<0.128		0.026	0.128	<0.0246		0.005	0.0246	0.0053	J	0.0048	0.0235	<0.223		0.0456	0.223	<0.0243		0.005	0.0243
PHENANTHRENE	85-01-8	8270C-SIM	mg/kg	NE	NE	0.0198	J	0.0147	0.0383	0.00966		0.0028	0.0074	0.0257		0.0027	0.007	0.026	J	0.0258	0.067	<0.00730		0.0028	0.0073
PYRENE	129-00-0	8270C-SIM	mg/kg	1,800	23,000	0.0509		0.0128	0.0383	0.0238		0.0025	0.0074	0.0522		0.0024	0.007	0.0677		0.0223	0.067	<0.00730		0.0024	0.0073
1-METHYLNAPHTHALENE	90-12-0	8270C-SIM	mg/kg	18	73	<0.128		0.0287	0.128	<0.0246		0.0055	0.0246	<0.0235		0.0053	0.0235	<0.223		0.0502	0.223	<0.0243		0.0055	0.0243
2-METHYLNAPHTHALENE	91-57-6	8270C-SIM	mg/kg	240	3,000	<0.128		0.0273	0.128	<0.0246		0.0052	0.0246	0.0052	J	0.005	0.0235	<0.223		0.0477	0.223	<0.0243		0.0052	0.0243
2-CHLORONAPHTHALENE	91-58-7	8270C-SIM	mg/kg	4,800	60,000	<0.128		0.0297	0.128	<0.0246		0.0057	0.0246	0.0081	J	0.0055	0.0235	<0.223		0.0521	0.223	<0.0243		0.0057	0.0243

Qualifiers:

B: The same analyte is found in the associated blank.

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.

J6: The sample matrix interfered with the ability to make any accurate determination; spike value is low

EPA RSL: Environmental Protection Agency Regional Screening Levels for Residential and Industrial

Soils (November 2022; TR=1E-06; THQ=1.0).

*Blind duplicate of TP-38; **Blind duplicate of TP-40

mg/kg: Milligrams per kilogram; **NE:** Not Established.

<: Less than Reported Detection Limit (RDL).

Bold value exceeds RDL; *Blue italics* value is RDL that exceeds screening level.

Color shaded value exceeds screening level.

Table 5 - Soil Analytical Results - SVOCs
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Lab Sample ID						L1557295-14				L1557295-15				L1557295-18				L1557295-21				L1557295-24			
Client Sample ID						TP-37 SHALLOW				TP-37 FILL				TP-38 FILL				TP-39 FILL				TP-40 FILL			
Date Collected						11/10/2022				11/10/2022				11/10/2022				11/10/2022				11/10/2022			
Analyte	CAS	Method	Units	RSL Residential	RSL Industrial	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
BENZIDINE	92-87-5	8270C	mg/kg	0.00053	0.01	<18.6		0.698	18.6	<4.04		0.151	4.04	<19.4		0.726	19.4	<2.01	J6	0.0755	2.01	<4.26		0.16	4.26
BIS(2-CHLORETHOXY)METHANE	111-91-1	8270C	mg/kg	190	2,500	<3.71		0.111	3.71	<0.805		0.0242	0.805	<3.86		0.116	3.86	<0.401		0.0121	0.401	<0.850		0.0255	0.85
BIS(2-CHLOROETHYL)ETHER	111-44-4	8270C	mg/kg	0.23	1	<3.71		0.123	3.71	<0.805		0.0266	0.805	<3.86		0.128	3.86	<0.401		0.0133	0.401	<0.850		0.0281	0.85
2,2-OXYBIS(1-CHLOROPROPANE)	108-60-1	8270C	mg/kg	3,100	47,000	<3.71		0.16	3.71	<0.805		0.0348	0.805	<3.86		0.167	3.86	<0.401		0.0174	0.401	<0.850		0.0368	0.85
4-BROMOPHENYL-PHENYLETHER	101-55-3	8270C	mg/kg	NE	NE	<3.71		0.13	3.71	<0.805		0.0283	0.805	<3.86		0.136	3.86	<0.401		0.0141	0.401	<0.850		0.0299	0.85
4-CHLOROPHENYL-PHENYLETHER	7005-72-3	8270C	mg/kg	NE	NE	<3.71		0.129	3.71	<0.805		0.028	0.805	<3.86		0.135	3.86	<0.401		0.014	0.401	<0.850		0.0296	0.85
1,2-DICHLOROBENZENE	95-50-1	8270C	mg/kg	1,800	9,300	<3.71		0.11	3.71	<0.805		0.0238	0.805	<3.86		0.115	3.86	<0.401		0.0119	0.401	<0.850		0.0251	0.85
1,3-DICHLOROBENZENE	541-73-1	8270C	mg/kg	NE	NE	<3.71		0.113	3.71	<0.805		0.0244	0.805	<3.86		0.117	3.86	<0.401		0.0122	0.401	<0.850		0.0258	0.85
1,4-DICHLOROBENZENE	106-46-7	8270C	mg/kg	2.6	11	<3.71		0.11	3.71	<0.805		0.0239	0.805	<3.86		0.115	3.86	<0.401		0.0119	0.401	<0.850		0.0253	0.85
3,3-DICHLOROBENZIDINE	91-94-1	8270C	mg/kg	1.2	5.1	<3.72		0.137	3.71	<0.805		0.0297	0.805	<3.86		0.143	3.86	<0.401		0.0148	0.401	<0.850		0.0314	0.85
2,4-DINITROTOLUENE	121-14-2	8270C	mg/kg	1.7	7.4	<3.71		0.106	3.71	<0.805		0.0231	0.805	<3.86		0.111	3.86	<0.401		0.0115	0.401	<0.850		0.0244	0.85
2,6-DINITROTOLUENE	606-20-2	8270C	mg/kg	0.36	1.5	<3.71		0.121	3.71	<0.805		0.0264	0.805	<3.86		0.126	3.86	<0.401		0.0131	0.401	<0.850		0.0278	0.85
HEXACHLOROBENZENE	118-74-1	8270C	mg/kg	0.21	0.96	<3.71		0.132	3.71	<0.805		0.0285	0.805	<3.86		0.137	3.86	<0.401		0.0142	0.401	<0.850		0.0301	0.85
HEXACHLORO-1,3-BUTADIENE	87-68-3	8270C	mg/kg	1.2	5.3	<3.71		0.125	3.71	<0.805		0.0271	0.805	<3.86		0.13	3.86	<0.401		0.0135	0.401	<0.850		0.0286	0.85
HEXACHLOROCYCLOPENTADIENE	77-47-4	8270C	mg/kg	1.8	7.5	<3.71		0.195	3.71	<0.805		0.0423	0.805	<3.86		0.203	3.86	<0.401	J6	0.0211	0.401	<0.850		0.0447	0.85
HEXACHLOROETHANE	67-72-1	8270C	mg/kg	1.8	8	<3.71		0.146	3.71	<0.805		0.0317	0.805	<3.86		0.152	3.86	<0.401		0.0158	0.401	<0.850		0.0334	0.85
ISOPHORONE	78-59-1	8270C	mg/kg	570	2,400	<3.71		0.114	3.71	<0.805		0.0247	0.805	<3.86		0.118	3.86	<0.401		0.0123	0.401	<0.850		0.026	0.85
NITROBENZENE	98-95-3	8270C	mg/kg	5.1	22	<3.71		0.129	3.71	<0.805		0.028	0.805	<3.86		0.135	3.86	<0.401		0.014	0.401	<0.850		0.0296	0.85
N-NITROSODIMETHYLAMINE	62-75-9	8270C	mg/kg	0.002	0.034	<3.71		0.551	3.71	<0.805		0.119	0.805	<3.86		0.573	3.86	<0.401		0.0595	0.401	<0.850		0.126	0.85
N-NITROSODIPHENYLAMINE	86-30-6	8270C	mg/kg	110	470	<3.71		0.281	3.71	<0.805		0.0609	0.805	<3.86		0.292	3.86	<0.401		0.0304	0.401	<0.850		0.0643	0.85
N-NITROSODI-N-PROPYLAMINE	621-64-7	8270C	mg/kg	0.078	0.33	<3.71		0.124	3.71	<0.805		0.0268	0.805	<3.86		0.129	3.86	<0.401		0.0134	0.401	<0.850		0.0283	0.85
BENZYL BUTYL PHTHALATE	85-68-7	8270C	mg/kg	290	1,200	<3.71		0.116	3.71	<0.805		0.0251	0.805	<3.86		0.121	3.86	<0.401		0.0125	0.401	<0.850		0.0265	0.85
BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	8270C	mg/kg	39	160	<3.71		0.47	3.71	<0.805		0.102	0.805	<3.86		0.49	3.86	<0.401		0.0509	0.401	0.614	J	0.108	0.85
DI-N-BUTYL PHTHALATE	84-74-2	8270C	mg/kg	6,300	82,000	<3.71		0.127	3.71	<0.805		0.0276	0.805	<3.86		0.132	3.86	<0.401		0.0137	0.401	<0.850		0.0291	0.85
DIETHYL PHTHALATE	84-66-2	8270C	mg/kg	51,000	660,000	<3.71		0.123	3.71	<0.805		0.0266	0.805	<3.86		0.128	3.86	<0.401		0.0133	0.401	<0.850		0.0281	0.85
DIMETHYL PHTHALATE	131-11-3	8270C	mg/kg	NE	NE	<3.71		0.787	3.71	<0.805		0.17	0.805	<3.86		0.819	3.86	<0.401		0.0851	0.401	<0.850		0.18	0.85
DI-N-OCTYL PHTHALATE	117-84-0	8270C	mg/kg	630	8,200	<3.71		0.251	3.71	<0.805		0.0544	0.805	<3.86		0.261	3.86	<0.401		0.0271	0.401	<0.850		0.0574	0.85
1,2,4-TRICHLOROBENZENE	120-82-1	8270C	mg/kg	24	110	<3.71		0.116	3.71	<0.805		0.0251	0.805	<3.86		0.121	3.86	<0.401		0.0125	0.401	<0.850		0.0265	0.85
4-CHLORO-3-METHYLPHENOL	59-50-7	8270C	mg/kg	6,300	82,000	<3.71		0.12	3.71	<0.805		0.0261	0.805	<3.86		0.125	3.86	<0.401		0.013	0.401	<0.850		0.0276	0.85
2-CHLOROPHENOL	95-57-8	8270C	mg/kg	390	5,800	<3.71		0.123	3.71	<0.805		0.0266	0.805	<3.86		0.128	3.86	<0.401		0.0133	0.401	<0.850		0.0281	0.85
2,4-DICHLOROPHENOL	120-83-2	8270C	mg/kg	190	2,500	<3.71		0.108	3.71	<0.805		0.0234	0.805	<3.86		0.113	3.86	<0.401		0.0117	0.401	<0.850		0.0248	0.85
2,4-DIMETHYLPHENOL	105-67-9	8270C	mg/kg	1,300	16,000	<3.71		0.097	3.71	<0.805		0.021	0.805	<3.86		0.101	3.86	<0.401		0.0105	0.401	<0.850		0.0222	0.85
4,6-DINITRO-2-METHYLPHENOL	534-52-1	8270C	mg/kg	5.1	66	<3.71		0.841	3.71	<0.805		0.183	0.805	<3.86		0.876	3.86	<0.401		0.091	0.401	<0.850		0.193	0.85
2,4-DINITROPHENOL	51-28-5	8270C	mg/kg	130	1,600	<3.71		0.868	3.71	<0.805		0.189	0.805	<3.86		0.904	3.86	<0.401		0.0939	0.401	<0.850		0.199	0.85
2-NITROPHENOL	88-75-5	8270C	mg/kg	NE	NE	<3.71		0.133	3.71	<0.805		0.0288	0.805	<3.86		0.138	3.86	<0.401		0.0143	0.401	<0.850		0.0304	0.85
4-NITROPHENOL	100-02-7	8270C	mg/kg	NE	NE	<3.71		0.116	3.71	<0.805		0.0251	0.805	<3.86		0.121	3.86	<0.401		0.0125	0.401	<0.850		0.0265	0.85
PENTACHLOROPHENOL	87-86-5	8270C	mg/kg	1	4	<3.71		0.0999	3.71	<0.805		0.0216	0.805	<3.86		0.104	3.86	<0.401		0.0108	0.401	<0.850		0.0228	0.85
PHENOL	108-95-2	8270C	mg/kg	19,000	250,000	<3.71		0.149	3.71	<0.805		0.0324	0.805	<3.86		0.156	3.86	<0.401		0.0162	0.401	<0.850		0.0342	0.85
2,4,6-TRICHLOROPHENOL	88-06-2	8270C	mg/kg	49	210	<3.71		0.119	3.71	<0.805		0.0259	0.805	<3.86		0.124	3.86	<0.401		0.0129	0.401	<0.850		0.0273	0.85

Table 5 - Soil Analytical Results - SVOCs
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Lab Sample ID						L1557295-14				L1557295-15				L1557295-18				L1557295-21				L1557295-24			
Client Sample ID						TP-37 SHALLOW				TP-37 FILL				TP-38 FILL				TP-39 FILL				TP-40 FILL			
Date Collected						11/10/2022				11/10/2022				11/10/2022				11/10/2022				11/10/2022			
Analyte	CAS	Method	Units	RSL Residential	RSL Industrial	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
ANTHRACENE	120-12-7	8270C-SIM	mg/kg	18,000	230,000	<0.134		0.0513	0.134	0.0029	J	0.0028	0.0073	0.0111		0.0027	0.007	<0.00723		0.0028	0.0072	0.0073	J	0.0029	0.0077
ACENAPHTHENE	83-32-9	8270C-SIM	mg/kg	3,600	45,000	<0.134		0.0466	0.134	<0.00725		0.0025	0.0073	0.0137		0.0024	0.007	<0.00723		0.0025	0.0072	<0.00766		0.0027	0.0077
ACENAPHTHYLENE	208-96-8	8270C-SIM	mg/kg	NE	NE	<0.134		0.0481	0.134	<0.00725		0.0026	0.0073	0.0039	J	0.0025	0.007	<0.00723		0.0026	0.0072	0.00892		0.0028	0.0077
BENZO(A)ANTHRACENE	56-55-3	8270C-SIM	mg/kg	1.1	21	0.0834	J	0.0386	0.134	0.0167		0.0021	0.0073	0.0327		0.002	0.007	0.00212	J	0.0021	0.0072	0.267		0.0022	0.0077
BENZO(A)PYRENE	50-32-8	8270C-SIM	mg/kg	0.11	2.1	0.211		0.0399	0.134	0.0251		0.0022	0.0073	0.0403		0.0021	0.007	0.0025	J	0.0022	0.0072	0.47		0.0023	0.0077
BENZO(B)FLUORANTHENE	205-99-2	8270C-SIM	mg/kg	1.1	21	0.173		0.0341	0.134	0.0278		0.0019	0.0073	0.0478		0.0018	0.007	0.00342	J	0.0018	0.0072	0.188		0.002	0.0077
BENZO(G,H,I)PERYLENE	191-24-2	8270C-SIM	mg/kg	NE	NE	0.279		0.0395	0.134	0.0297		0.0021	0.0073	0.0594		0.0021	0.007	0.00262	J	0.0021	0.0072	0.397		0.0023	0.0077
BENZO(K)FLUORANTHENE	207-08-9	8270C-SIM	mg/kg	11	210	<0.134		0.0479	0.134	0.00828		0.0026	0.0073	0.0158		0.0025	0.007	<0.00723		0.0026	0.0072	0.0368		0.0027	0.0077
CHRYSENE	218-01-9	8270C-SIM	mg/kg	110	2,100	0.267		0.0517	0.134	0.0176		0.0028	0.0073	0.0364		0.0027	0.007	<0.00723		0.0028	0.0072	0.348		0.003	0.0077
DIBENZ(A,H)ANTHRACENE	53-70-3	8270C-SIM	mg/kg	0.11	2.1	0.063	J	0.0383	0.134	0.00593	J	0.0021	0.0073	0.00901		0.002	0.007	<0.00723		0.0021	0.0072	0.0705		0.0022	0.0077
FLUORANTHENE	206-44-0	8270C-SIM	mg/kg	2,400	30,000	0.0855	J	0.0506	0.134	0.0318		0.0027	0.0073	0.0773		0.0026	0.007	0.00473	J	0.0027	0.0072	0.0477		0.0029	0.0077
FLUORENE	86-73-7	8270C-SIM	mg/kg	2,400	30,000	<0.134		0.0457	0.134	0.00365	J	0.0025	0.0073	0.00914		0.0024	0.007	<0.00723		0.0025	0.0072	0.00347	J	0.0026	0.0077
INDENO(1,2,3-CD)PYRENE	193-39-5	8270C-SIM	mg/kg	1.1	21	0.129	J	0.0403	0.134	0.0191		0.0022	0.0073	0.0354		0.0021	0.007	0.00236	J	0.0022	0.0072	0.109		0.0023	0.0077
NAPHTHALENE	91-20-3	8270C-SIM	mg/kg	2	8.6	<0.446		0.0909	0.446	<0.0242		0.0049	0.0242	0.0159	J	0.0047	0.0232	<0.0241		0.0049	0.0241	0.0214	J	0.0052	0.0255
PHENANTHRENE	85-01-8	8270C-SIM	mg/kg	NE	NE	<0.134		0.0515	0.134	0.0162		0.0028	0.0073	0.0501		0.0027	0.007	0.00282	J	0.0028	0.0072	0.0379		0.003	0.0077
PYRENE	129-00-0	8270C-SIM	mg/kg	1,800	23,000	0.167		0.0446	0.134	0.0348		0.0024	0.0073	0.0659		0.0023	0.007	0.00506	J	0.0024	0.0072	0.197		0.0026	0.0077
1-METHYLNAPHTHALENE	90-12-0	8270C-SIM	mg/kg	18	73	<0.446		0.1	0.446	<0.0242		0.0054	0.0242	0.0139	J	0.0052	0.0232	<0.0241		0.0054	0.0241	0.00784	J	0.0057	0.0255
2-METHYLNAPHTHALENE	91-57-6	8270C-SIM	mg/kg	240	3,000	<0.446		0.0952	0.446	0.0065	J	0.0052	0.0242	0.0189	J	0.005	0.0232	<0.0241		0.0052	0.0241	0.0104	J	0.0055	0.0255
2-CHLORONAPHTHALENE	91-58-7	8270C-SIM	mg/kg	4,800	60,000	<0.446		0.104	0.446	<0.0242		0.0056	0.0242	<0.0232		0.0054	0.0232	<0.0241		0.0056	0.0241	<0.0255		0.006	0.0255

Qualifiers:

B: The same analyte is found in the associated blank.

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.

J6: The sample matrix interfered with the ability to make any accurate determination; spike value is low

EPA RSL: Environmental Protection Agency Regional Screening Levels for Residential and Industrial Soils (November 2022; TR=1E-06; THQ=1.0).

*Blind duplicate of TP-38; **Blind duplicate of TP-40

mg/kg: Milligrams per kilogram; **NE:** Not Established.

<: Less than Reported Detection Limit (RDL).

Bold value exceeds RDL; *Blue italics* value is RDL that exceeds screening level.

Color shaded value exceeds screening level.

Table 5 - Soil Analytical Results - SVOCs
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Lab Sample ID										L1557295-26				L1557295-27				L1557295-29				L1557295-30				L1557295-32			
Client Sample ID										TP-40 NATIVE				TP-41 FILL				TP-41 NATIVE				TP-42 FILL				TP-42 NATIVE			
Date Collected										11/10/2022				11/10/2022				11/10/2022				11/10/2022				11/10/2022			
Analyte	CAS	Method	Units	RSL Residential	RSL Industrial	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
BENZIDINE	92-87-5	8270C	mg/kg	0.00053	0.01	<3.02		0.113	3.02	<4.32		0.162	4.32	<2.09		0.0784	2.09	<21.1		0.791	21.1	<2.03		0.076	2.03				
BIS(2-CHLORETHOXY)METHANE	111-91-1	8270C	mg/kg	190	2,500	<0.602		0.0181	0.602	<0.861		0.0258	0.861	<0.417		0.0125	0.417	<4.21		0.126	4.21	<0.404		0.0121	0.404				
BIS(2-CHLOROETHYL)ETHER	111-44-4	8270C	mg/kg	0.23	1	<0.602		0.0199	0.602	<0.861		0.0284	0.861	<0.417		0.0138	0.417	<4.21		0.139	4.21	<0.404		0.0133	0.404				
2,2-OXYBIS(1-CHLOROPROPANE)	108-60-1	8270C	mg/kg	3,100	47,000	<0.602		0.026	0.602	<0.861		0.0372	0.861	<0.417		0.018	0.417	<4.21		0.182	4.21	<0.404		0.0175	0.404				
4-BROMOPHENYL-PHENYLETHER	101-55-3	8270C	mg/kg	NE	NE	<0.602		0.0212	0.602	<0.861		0.0302	0.861	<0.417		0.0146	0.417	<4.21		0.148	4.21	<0.404		0.0142	0.404				
4-CHLOROPHENYL-PHENYLETHER	7005-72-3	8270C	mg/kg	NE	NE	<0.602		0.021	0.602	<0.861		0.03	0.861	<0.417		0.0145	0.417	<4.21		0.147	4.21	<0.404		0.0141	0.404				
1,2-DICHLOROBENZENE	95-50-1	8270C	mg/kg	1,800	9,300	<0.602		0.0178	0.602	<0.861		0.0255	0.861	<0.417		0.0124	0.417	<4.21		0.125	4.21	<0.404		0.012	0.404				
1,3-DICHLOROBENZENE	541-73-1	8270C	mg/kg	NE	NE	<0.602		0.0183	0.602	<0.861		0.0261	0.861	<0.417		0.0126	0.417	<4.21		0.128	4.21	<0.404		0.0123	0.404				
1,4-DICHLOROBENZENE	106-46-7	8270C	mg/kg	2.6	11	<0.602		0.0179	0.602	<0.861		0.0256	0.861	<0.417		0.0124	0.417	<4.21		0.125	4.21	<0.404		0.012	0.404				
3,3-DICHLOROBENZIDINE	91-94-1	8270C	mg/kg	1.2	5.1	<0.602		0.0222	0.602	<0.861		0.0318	0.861	<0.417		0.0154	0.417	<4.21		0.155	4.21	<0.404		0.0149	0.404				
2,4-DINITROTOLUENE	121-14-2	8270C	mg/kg	1.7	7.4	<0.602		0.0173	0.602	<0.861		0.0247	0.861	<0.417		0.012	0.417	<4.21		0.121	4.21	<0.404		0.0116	0.404				
2,6-DINITROTOLUENE	606-20-2	8270C	mg/kg	0.36	1.5	<0.602		0.0197	0.602	<0.861		0.0282	0.861	<0.417		0.0136	0.417	<4.21		0.138	4.21	<0.404		0.0132	0.404				
HEXACHLOROBENZENE	118-74-1	8270C	mg/kg	0.21	0.96	<0.602		0.0213	0.602	<0.861		0.0305	0.861	<0.417		0.0148	0.417	<4.21		0.149	4.21	<0.404		0.0143	0.404				
HEXACHLORO-1,3-BUTADIENE	87-68-3	8270C	mg/kg	1.2	5.3	<0.602		0.0203	0.602	<0.861		0.0289	0.861	<0.417		0.014	0.417	<4.21		0.142	4.21	<0.404		0.0136	0.404				
HEXACHLOROCYCLOPENTADIENE	77-47-4	8270C	mg/kg	1.8	7.5	<0.602		0.0316	0.602	<0.861		0.0452	0.861	<0.417		0.0219	0.417	<4.21		0.221	4.21	<0.404		0.0212	0.404				
HEXACHLOROETHANE	67-72-1	8270C	mg/kg	1.8	8	<0.602		0.0237	0.602	<0.861		0.0339	0.861	<0.417		0.0164	0.417	<4.21		0.166	4.21	<0.404		0.0159	0.404				
ISOPHORONE	78-59-1	8270C	mg/kg	570	2,400	<0.602		0.0184	0.602	<0.861		0.0264	0.861	<0.417		0.0128	0.417	<4.21		0.129	4.21	<0.404		0.0124	0.404				
NITROBENZENE	98-95-3	8270C	mg/kg	5.1	22	<0.602		0.021	0.602	<0.861		0.03	0.861	<0.417		0.0145	0.417	<4.21		0.147	4.21	<0.404		0.0141	0.404				
N-NITROSODIMETHYLAMINE	62-75-9	8270C	mg/kg	0.002	0.034	<0.602		0.0893	0.602	<0.861		0.128	0.861	<0.417		0.0618	0.417	<4.21		0.624	4.21	<0.404		0.0599	0.404				
N-NITROSODIPHENYLAMINE	86-30-6	8270C	mg/kg	110	470	<0.602		0.0456	0.602	<0.861		0.0651	0.861	<0.417		0.0315	0.417	<4.21		0.318	4.21	<0.404		0.0306	0.404				
N-NITROSODI-N-PROPYLAMINE	621-64-7	8270C	mg/kg	0.078	0.33	<0.602		0.0201	0.602	<0.861		0.0287	0.861	<0.417		0.0139	0.417	<4.21		0.14	4.21	<0.404		0.0135	0.404				
BENZYL BUTYL PHTHALATE	85-68-7	8270C	mg/kg	290	1,200	<0.602		0.0188	0.602	<0.861		0.0269	0.861	<0.417		0.013	0.417	<4.21		0.131	4.21	<0.404		0.0126	0.404				
BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	8270C	mg/kg	39	160	<0.602		0.0763	0.602	<0.861		0.109	0.861	<0.417		0.0528	0.417	<4.21		0.533	4.21	<0.404		0.0512	0.404				
DI-N-BUTYL PHTHALATE	84-74-2	8270C	mg/kg	6,300	82,000	<0.602		0.0206	0.602	<0.861		0.0295	0.861	<0.417		0.0143	0.417	<4.21		0.144	4.21	<0.404		0.0138	0.404				
DIETHYL PHTHALATE	84-66-2	8270C	mg/kg	51,000	660,000	<0.602		0.0199	0.602	<0.861		0.0284	0.861	<0.417		0.0138	0.417	<4.21		0.139	4.21	<0.404		0.0133	0.404				
DIMETHYL PHTHALATE	131-11-3	8270C	mg/kg	NE	NE	<0.602		0.128	0.602	<0.861		0.182	0.861	<0.417		0.0884	0.417	<4.21		0.892	4.21	<0.404		0.0857	0.404				
DI-N-OCTYL PHTHALATE	117-84-0	8270C	mg/kg	630	8,200	<0.602		0.0407	0.602	<0.861		0.0581	0.861	<0.417		0.0282	0.417	<4.21		0.284	4.21	<0.404		0.0273	0.404				
1,2,4-TRICHLOROBENZENE	120-82-1	8270C	mg/kg	24	110	<0.602		0.0188	0.602	<0.861		0.0269	0.861	<0.417		0.013	0.417	<4.21		0.131	4.21	<0.404		0.0126	0.404				
4-CHLORO-3-METHYLPHENOL	59-50-7	8270C	mg/kg	6,300	82,000	<0.602		0.0195	0.602	<0.861		0.0279	0.861	<0.417		0.0135	0.417	<4.21		0.136	4.21	<0.404		0.0131	0.404				
2-CHLOROPHENOL	95-57-8	8270C	mg/kg	390	5,800	<0.602		0.0199	0.602	<0.861		0.0284	0.861	<0.417		0.0138	0.417	<4.21		0.139	4.21	<0.404		0.0133	0.404				
2,4-DICHLOROPHENOL	120-83-2	8270C	mg/kg	190	2,500	<0.602		0.0175	0.602	<0.861		0.0251	0.861	<0.417		0.0121	0.417	<4.21		0.123	4.21	<0.404		0.0118	0.404				
2,4-DIMETHYLPHENOL	105-67-9	8270C	mg/kg	1,300	16,000	<0.602		0.0157	0.602	<0.861		0.0225	0.861	<0.417		0.0109	0.417	<4.21		0.11	4.21	<0.404		0.0106	0.404				
4,6-DINITRO-2-METHYLPHENOL	534-52-1	8270C	mg/kg	5.1	66	<0.602		0.137	0.602	<0.861		0.195	0.861	<0.417		0.0945	0.417	<4.21		0.954	4.21	<0.404		0.0916	0.404				
2,4-DINITROPHENOL	51-28-5	8270C	mg/kg	130	1,600	<0.602		0.141	0.602	<0.861		0.202	0.861	<0.417		0.0975	0.417	<4.21		0.984	4.21	<0.404		0.0945	0.404				
2-NITROPHENOL	88-75-5	8270C	mg/kg	NE	NE	<0.602		0.0215	0.602	<0.861		0.0308	0.861	<0.417		0.0149	0.417	<4.21		0.15	4.21	<0.404		0.0144	0.404				
4-NITROPHENOL	100-02-7	8270C	mg/kg	NE	NE	<0.602		0.0188	0.602	<0.861		0.0269	0.861	<0.417		0.013	0.417	<4.21		0.131	4.21	<0.404		0.0126	0.404				
PENTACHLOROPHENOL	87-86-5	8270C	mg/kg	1	4	<0.602		0.0162	0.602	<0.861		0.0231	0.861	<0.417		0.0112	0.417	<4.21		0.113	4.21	<0.404		0.0109	0.404				
PHENOL	108-95-2	8270C	mg/kg	19,000	250,000	<0.602		0.0242	0.602	<0.861		0.0346	0.861	<0.417		0.0168	0.417	<4.21		0.169	4.21	<0.404		0.0163	0.404				
2,4,6-TRICHLOROPHENOL	88-06-2	8270C	mg/kg	49	210	<0.602		0.0193	0.602	<0.861		0.0277	0.861	<0.417		0.0134	0.417	<4.21		0.135	4.21	<0.404		0.013	0.404				

Table 5 - Soil Analytical Results - SVOCs
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Lab Sample ID										L1557295-26				L1557295-27				L1557295-29				L1557295-30				L1557295-32			
Client Sample ID										TP-40 NATIVE				TP-41 FILL				TP-41 NATIVE				TP-42 FILL				TP-42 NATIVE			
Date Collected										11/10/2022				11/10/2022				11/10/2022				11/10/2022				11/10/2022			
Analyte	CAS	Method	Units	RSL Residential	RSL Industrial	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
ANTHRACENE	120-12-7	8270C-SIM	mg/kg	18,000	230,000	<0.0108		0.0042	0.0108	0.0109		0.003	0.0078	<0.00751		0.0029	0.0075	0.0136		0.0029	0.0076	<0.00728		0.0028	0.0073	<0.00728		0.0028	0.0073
ACENAPHTHENE	83-32-9	8270C-SIM	mg/kg	3,600	45,000	<0.0108		0.0038	0.0108	<0.00775		0.0027	0.0078	<0.00751		0.0026	0.0075	<0.00758		0.0026	0.0076	<0.00728		0.0025	0.0073	<0.00728		0.0025	0.0073
ACENAPHTHYLENE	208-96-8	8270C-SIM	mg/kg	NE	NE	<0.0108		0.0039	0.0108	0.00664	J	0.0028	0.0078	<0.00751		0.0027	0.0075	0.00791		0.0027	0.0076	<0.00728		0.0026	0.0073	<0.00728		0.0026	0.0073
BENZO(A)ANTHRACENE	56-55-3	8270C-SIM	mg/kg	1.1	21	0.0094	J	0.0031	0.0108	0.0478		0.0022	0.0078	<0.00751		0.0022	0.0075	0.0766		0.0022	0.0076	<0.00728		0.0021	0.0073	<0.00728		0.0021	0.0073
BENZO(A)PYRENE	50-32-8	8270C-SIM	mg/kg	0.11	2.1	0.0141		0.0032	0.0108	0.0539		0.0023	0.0078	<0.00751		0.0022	0.0075	0.0776		0.0023	0.0076	<0.00728		0.0022	0.0073	<0.00728		0.0022	0.0073
BENZO(B)FLUORANTHENE	205-99-2	8270C-SIM	mg/kg	1.1	21	0.00978	J	0.0028	0.0108	0.076		0.002	0.0078	<0.00751		0.0019	0.0075	0.0732		0.0019	0.0076	<0.00728		0.0019	0.0073	<0.00728		0.0019	0.0073
BENZO(G,H,I)PERYLENE	191-24-2	8270C-SIM	mg/kg	NE	NE	0.0199		0.0032	0.0108	0.0464		0.0023	0.0078	<0.00751		0.0022	0.0075	0.0556		0.0022	0.0076	<0.00728		0.0022	0.0073	<0.00728		0.0022	0.0073
BENZO(K)FLUORANTHENE	207-08-9	8270C-SIM	mg/kg	11	210	<0.0108		0.0039	0.0108	0.0262		0.0028	0.0078	<0.00751		0.0027	0.0075	0.0253		0.0027	0.0076	<0.00728		0.0026	0.0073	<0.00728		0.0026	0.0073
CHRYSENE	218-01-9	8270C-SIM	mg/kg	110	2,100	0.0121		0.0042	0.0108	0.0686		0.003	0.0078	<0.00751		0.0029	0.0075	0.0772		0.0029	0.0076	<0.00728		0.0028	0.0073	<0.00728		0.0028	0.0073
DIBENZ(A,H)ANTHRACENE	53-70-3	8270C-SIM	mg/kg	0.11	2.1	<0.0108		0.0031	0.0108	0.0101		0.0022	0.0078	<0.00751		0.0022	0.0075	0.0118		0.0022	0.0076	<0.00728		0.0021	0.0073	<0.00728		0.0021	0.0073
FLUORANTHENE	206-44-0	8270C-SIM	mg/kg	2,400	30,000	0.0074	J	0.0041	0.0108	0.0845		0.0029	0.0078	<0.00751		0.0028	0.0075	0.102		0.0029	0.0076	<0.00728		0.0028	0.0073	<0.00728		0.0028	0.0073
FLUORENE	86-73-7	8270C-SIM	mg/kg	2,400	30,000	<0.0108		0.0037	0.0108	<0.00775		0.0027	0.0078	<0.00751		0.0026	0.0075	<0.00758		0.0026	0.0076	<0.00728		0.0025	0.0073	<0.00728		0.0025	0.0073
INDENO(1,2,3-CD)PYRENE	193-39-5	8270C-SIM	mg/kg	1.1	21	0.00729	J	0.0033	0.0108	0.0461		0.0023	0.0078	<0.00751		0.0023	0.0075	0.0507		0.0023	0.0076	<0.00728		0.0022	0.0073	<0.00728		0.0022	0.0073
NAPHTHALENE	91-20-3	8270C-SIM	mg/kg	2	8.6	<0.0362		0.0074	0.0362	<0.0258		0.0053	0.0258	<0.0250		0.0051	0.025	0.01	J	0.0052	0.0253	0.0388		0.005	0.0243	<0.00728		0.005	0.0243
PHENANTHRENE	85-01-8	8270C-SIM	mg/kg	NE	NE	0.00436	J	0.0042	0.0108	0.0455		0.003	0.0078	<0.00751		0.0029	0.0075	0.0487		0.0029	0.0076	0.0032	J	0.0028	0.0073	<0.00728		0.0028	0.0073
PYRENE	129-00-0	8270C-SIM	mg/kg	1,800	23,000	0.0123		0.0036	0.0108	0.0791		0.0026	0.0078	<0.00751		0.0025	0.0075	0.105		0.0025	0.0076	0.00243	J	0.0024	0.0073	<0.00728		0.0024	0.0073
1-METHYLNAPHTHALENE	90-12-0	8270C-SIM	mg/kg	18	73	<0.0362		0.0081	0.0362	<0.0258		0.0058	0.0258	<0.0250		0.0056	0.025	0.011	J	0.0057	0.0253	0.024	J	0.0055	0.0243	<0.00728		0.0055	0.0243
2-METHYLNAPHTHALENE	91-57-6	8270C-SIM	mg/kg	240	3,000	<0.0362		0.0077	0.0362	<0.0258		0.0055	0.0258	<0.0250		0.0053	0.025	0.0136	J	0.0054	0.0253	0.0792		0.0052	0.0243	<0.00728		0.0052	0.0243
2-CHLORONAPHTHALENE	91-58-7	8270C-SIM	mg/kg	4,800	60,000	<0.0362		0.0084	0.0362	<0.0258		0.006	0.0258	<0.0250		0.0058	0.025	<0.0253		0.0059	0.0253	<0.0243		0.0057	0.0243	<0.00728		0.0057	0.0243

Qualifiers:

B: The same analyte is found in the associated blank.

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.

J6: The sample matrix interfered with the ability to make any accurate determination; spike value is low

EPA RSL: Environmental Protection Agency Regional Screening Levels for Residential and Industrial

Soils (November 2022; TR=1E-06; THQ=1.0).

*Blind duplicate of TP-38; **Blind duplicate of TP-40

mg/kg: Milligrams per kilogram; **NE:** Not Established.

<: Less than Reported Detection Limit (RDL).

Bold value exceeds RDL; *Blue italics* value is RDL that exceeds screening level.

Color shaded value exceeds screening level.

Table 5 - Soil Analytical Results - SVOCs
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Lab Sample ID										L1557295-33				L1557295-35				L1557295-37				L1557295-38			
Client Sample ID										TP-138 FILL*				TP-140 FILL**				ND-4				ND-5			
Date Collected										11/10/2022				11/10/2022				11/10/2022				11/10/2022			
Analyte	CAS	Method	Units	RSL Residential	RSL Industrial	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
BENZIDINE	92-87-5	8270C	mg/kg	0.00053	0.01	<17.8		0.668	17.8	<5.12		0.192	5.12	<4.71		0.176	4.71	<2.85		0.107	2.85				
BIS(2-CHLORETHOXY)METHANE	111-91-1	8270C	mg/kg	190	2,500	<3.55		0.107	3.55	<1.02		0.0306	1.02	<0.938		0.0282	0.938	<0.568		0.0171	0.568				
BIS(2-CHLOROETHYL)ETHER	111-44-4	8270C	mg/kg	0.23	1	<3.55		0.117	3.55	<1.02		0.0337	1.02	<0.938		0.031	0.938	<0.568		0.0188	0.568				
2,2-OXYBIS(1-CHLOROPROPANE)	108-60-1	8270C	mg/kg	3,100	47,000	<3.55		0.154	3.55	<1.02		0.0441	1.02	<0.938		0.0406	0.938	<0.568		0.0246	0.568				
4-BROMOPHENYL-PHENYLEETHER	101-55-3	8270C	mg/kg	NE	NE	<3.55		0.125	3.55	<1.02		0.0359	1.02	<0.938		0.033	0.938	<0.568		0.02	0.568				
4-CHLOROPHENYL-PHENYLEETHER	7005-72-3	8270C	mg/kg	NE	NE	<3.55		0.124	3.55	<1.02		0.0355	1.02	<0.938		0.0327	0.938	<0.568		0.0198	0.568				
1,2-DICHLOROBENZENE	95-50-1	8270C	mg/kg	1,800	9,300	<3.55		0.105	3.55	<1.02		0.0302	1.02	<0.938		0.0278	0.938	<0.568		0.0168	0.568				
1,3-DICHLOROBENZENE	541-73-1	8270C	mg/kg	NE	NE	<3.55		0.108	3.55	<1.02		0.0309	1.02	<0.938		0.0285	0.938	<0.568		0.0172	0.568				
1,4-DICHLOROBENZENE	106-46-7	8270C	mg/kg	2.6	11	<3.55		0.106	3.55	<1.02		0.0303	1.02	<0.938		0.0279	0.938	<0.568		0.0169	0.568				
3,3-DICHLOROBENZIDINE	91-94-1	8270C	mg/kg	1.2	5.1	<3.55		0.131	3.55	<1.02		0.0377	1.02	<0.938		0.0347	0.938	<0.568		0.021	0.568				
2,4-DINITROTOLUENE	121-14-2	8270C	mg/kg	1.7	7.4	<3.55		0.102	3.55	<1.02		0.0293	1.02	<0.938		0.0269	0.938	<0.568		0.0163	0.568				
2,6-DINITROTOLUENE	606-20-2	8270C	mg/kg	0.36	1.5	<3.55		0.116	3.55	<1.02		0.0334	1.02	<0.938		0.0307	0.938	<0.568		0.0186	0.568				
HEXACHLOROBENZENE	118-74-1	8270C	mg/kg	0.21	0.96	<3.55		0.126	3.55	<1.02		0.0362	1.02	<0.938		0.0332	0.938	<0.568		0.0201	0.568				
HEXACHLORO-1,3-BUTADIENE	87-68-3	8270C	mg/kg	1.2	5.3	<3.55		0.12	3.55	<1.02		0.0343	1.02	<0.938		0.0316	0.938	<0.568		0.0191	0.568				
HEXACHLOROCYCLOPENTADIENE	77-47-4	8270C	mg/kg	1.8	7.5	<3.55		0.187	3.55	<1.02		0.0536	1.02	<0.938		0.0493	0.938	<0.568		0.0299	0.568				
HEXACHLOROETHANE	67-72-1	8270C	mg/kg	1.8	8	<3.55		0.14	3.55	<1.02		0.0401	1.02	<0.938		0.0369	0.938	<0.568		0.0224	0.568				
ISOPHORONE	78-59-1	8270C	mg/kg	570	2,400	<3.55		0.109	3.55	<1.02		0.0313	1.02	<0.938		0.0287	0.938	<0.568		0.0174	0.568				
NITROBENZENE	98-95-3	8270C	mg/kg	5.1	22	<3.55		0.124	3.55	<1.02		0.0355	1.02	<0.938		0.0327	0.938	<0.568		0.0198	0.568				
N-NITROSODIMETHYLAMINE	62-75-9	8270C	mg/kg	0.002	0.034	<3.55		0.527	3.55	<1.02		0.151	1.02	<0.938		0.139	0.938	<0.568		0.0843	0.568				
N-NITROSODIPHENYLAMINE	86-30-6	8270C	mg/kg	110	470	<3.55		0.269	3.55	<1.02		0.0772	1.02	<0.938		0.071	0.938	<0.568		0.043	0.568				
N-NITROSODI-N-PROPYLAMINE	621-64-7	8270C	mg/kg	0.078	0.33	<3.55		0.118	3.55	<1.02		0.034	1.02	<0.938		0.0313	0.938	<0.568		0.0189	0.568				
BENZYL BUTYL PHTHALATE	85-68-7	8270C	mg/kg	290	1,200	<3.55		0.111	3.55	<1.02		0.0319	1.02	<0.938		0.0293	0.938	<0.568		0.0178	0.568				
BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	8270C	mg/kg	39	160	<3.55		0.45	3.55	0.159	J	0.129	1.02	<0.938		0.119	0.938	<0.568		0.072	0.568				
DI-N-BUTYL PHTHALATE	84-74-2	8270C	mg/kg	6,300	82,000	<3.55		0.122	3.55	<1.02		0.0349	1.02	<0.938		0.0321	0.938	<0.568		0.0195	0.568				
DIETHYL PHTHALATE	84-66-2	8270C	mg/kg	51,000	660,000	<3.55		0.117	3.55	<1.02		0.0337	1.02	<0.938		0.031	0.938	<0.568		0.0188	0.568				
DIMETHYL PHTHALATE	131-11-3	8270C	mg/kg	NE	NE	<3.55		0.754	3.55	<1.02		0.216	1.02	<0.938		0.199	0.938	<0.568		0.121	0.568				
DI-N-OCTYL PHTHALATE	117-84-0	8270C	mg/kg	630	8,200	<3.55		0.24	3.55	<1.02		0.0689	1.02	<0.938		0.0634	0.938	<0.568		0.0384	0.568				
1,2,4-TRICHLOROBENZENE	120-82-1	8270C	mg/kg	24	110	<3.55		0.111	3.55	<1.02		0.0319	1.02	<0.938		0.0293	0.938	<0.568		0.0178	0.568				
4-CHLORO-3-METHYLPHENOL	59-50-7	8270C	mg/kg	6,300	82,000	<3.55		0.115	3.55	<1.02		0.0331	1.02	<0.938		0.0304	0.938	<0.568		0.0184	0.568				
2-CHLOROPHENOL	95-57-8	8270C	mg/kg	390	5,800	<3.55		0.117	3.55	<1.02		0.0337	1.02	<0.938		0.031	0.938	<0.568		0.0188	0.568				
2,4-DICHLOROPHENOL	120-83-2	8270C	mg/kg	190	2,500	<3.55		0.104	3.55	<1.02		0.0297	1.02	<0.938		0.0273	0.938	<0.568		0.0166	0.568				
2,4-DIMETHYLPHENOL	105-67-9	8270C	mg/kg	1,300	16,000	<3.55		0.0929	3.55	<1.02		0.0267	1.02	<0.938		0.0245	0.938	<0.568		0.0149	0.568				
4,6-DINITRO-2-METHYLPHENOL	534-52-1	8270C	mg/kg	5.1	66	<3.55		0.806	3.55	<1.02		0.231	1.02	<0.938		0.213	0.938	<0.568		0.129	0.568				
2,4-DINITROPHENOL	51-28-5	8270C	mg/kg	130	1,600	<3.55		0.832	3.55	<1.02		0.239	1.02	<0.938		0.219	0.938	<0.568		0.133	0.568				
2-NITROPHENOL	88-75-5	8270C	mg/kg	NE	NE	<3.55		0.127	3.55	<1.02		0.0365	1.02	<0.938		0.0335	0.938	<0.568		0.0203	0.568				
4-NITROPHENOL	100-02-7	8270C	mg/kg	NE	NE	<3.55		0.111	3.55	<1.02		0.0319	1.02	<0.938		0.0293	0.938	<0.568		0.0178	0.568				
PENTACHLOROPHENOL	87-86-5	8270C	mg/kg	1	4	<3.55		0.0956	3.55	<1.02		0.0274	1.02	<0.938		0.0252	0.938	<0.568		0.0153	0.568				
PHENOL	108-95-2	8270C	mg/kg	19,000	250,000	<3.55		0.143	3.55	<1.02		0.0411	1.02	<0.938		0.0378	0.938	<0.568		0.0229	0.568				
2,4,6-TRICHLOROPHENOL	88-06-2	8270C	mg/kg	49	210	<3.55		0.114	3.55	<1.02		0.0328	1.02	<0.938		0.0301	0.938	<0.568		0.0183	0.568				

Table 5 - Soil Analytical Results - SVOCs
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Lab Sample ID										L1557295-33				L1557295-35				L1557295-37				L1557295-38			
Client Sample ID										TP-138 FILL*				TP-140 FILL**				ND-4				ND-5			
Date Collected										11/10/2022				11/10/2022				11/10/2022				11/10/2022			
Analyte	CAS	Method	Units	RSL Residential	RSL Industrial	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL				
ANTHRACENE	120-12-7	8270C-SIM	mg/kg	18,000	230,000	<0.0320		0.0123	0.032	<0.0460		0.0176	0.046	<0.0169		0.0065	0.0169	<0.0102		0.0039	0.0102				
ACENAPHTHENE	83-32-9	8270C-SIM	mg/kg	3,600	45,000	<0.0320		0.0112	0.032	<0.0460		0.0161	0.046	<0.0169		0.0059	0.0169	<0.0102		0.0036	0.0102				
ACENAPHTHYLENE	208-96-8	8270C-SIM	mg/kg	NE	NE	<0.0320		0.0115	0.032	<0.0460		0.0165	0.046	<0.0169		0.0061	0.0169	<0.0102		0.0037	0.0102				
BENZO(A)ANTHRACENE	56-55-3	8270C-SIM	mg/kg	1.1	21	0.0282	J	0.0092	0.032	0.196		0.0133	0.046	<0.0169		0.0049	0.0169	<0.0102		0.003	0.0102				
BENZO(A)PYRENE	50-32-8	8270C-SIM	mg/kg	0.11	2.1	0.0342		0.0096	0.032	0.369		0.0137	0.046	<0.0169		0.005	0.0169	<0.0102		0.0031	0.0102				
BENZO(B)FLUORANTHENE	205-99-2	8270C-SIM	mg/kg	1.1	21	0.0382		0.0082	0.032	0.144		0.0117	0.046	<0.0169		0.0043	0.0169	<0.0102		0.0026	0.0102				
BENZO(G,H,I)PERYLENE	191-24-2	8270C-SIM	mg/kg	NE	NE	0.055		0.0095	0.032	0.476		0.0136	0.046	<0.0169		0.005	0.0169	<0.0102		0.003	0.0102				
BENZO(K)FLUORANTHENE	207-08-9	8270C-SIM	mg/kg	11	210	0.0124	J	0.0114	0.032	0.0279	J	0.0164	0.046	<0.0169		0.0061	0.0169	<0.0102		0.0037	0.0102				
CHRYSENE	218-01-9	8270C-SIM	mg/kg	110	2,100	0.0251	J	0.0124	0.032	0.239		0.0178	0.046	<0.0169		0.0065	0.0169	<0.0102		0.004	0.0102				
DIBENZ(A,H)ANTHRACENE	53-70-3	8270C-SIM	mg/kg	0.11	2.1	<0.0320		0.0092	0.032	0.0631		0.0132	0.046	<0.0169		0.0049	0.0169	<0.0102		0.0029	0.0102				
FLUORANTHENE	206-44-0	8270C-SIM	mg/kg	2,400	30,000	0.0411		0.0121	0.032	0.0316	J	0.0173	0.046	<0.0169		0.0064	0.0169	<0.0102		0.0039	0.0102				
FLUORENE	86-73-7	8270C-SIM	mg/kg	2,400	30,000	<0.0320		0.011	0.032	<0.0460		0.0158	0.046	<0.0169		0.0058	0.0169	<0.0102		0.0035	0.0102				
INDENO(1,2,3-CD)PYRENE	193-39-5	8270C-SIM	mg/kg	1.1	21	0.0344		0.0097	0.032	0.11		0.0139	0.046	<0.0169		0.0051	0.0169	<0.0102		0.0031	0.0102				
NAPHTHALENE	91-20-3	8270C-SIM	mg/kg	2	8.6	<0.107		0.0218	0.107	<0.153		0.0313	0.153	<0.0564		0.0115	0.0564	<0.0341		0.007	0.0341				
PHENANTHRENE	85-01-8	8270C-SIM	mg/kg	NE	NE	0.0259	J	0.0123	0.032	0.025	J	0.0176	0.046	<0.0169		0.0065	0.0169	<0.0102		0.0039	0.0102				
PYRENE	129-00-0	8270C-SIM	mg/kg	1,800	23,000	0.0373		0.0107	0.032	0.132		0.0153	0.046	<0.0169		0.0056	0.0169	0.0037	J	0.0034	0.0102				
1-METHYLNAPHTHALENE	90-12-0	8270C-SIM	mg/kg	18	73	<0.107		0.024	0.107	<0.153		0.0345	0.153	<0.0564		0.0127	0.0564	<0.0341		0.0077	0.0341				
2-METHYLNAPHTHALENE	91-57-6	8270C-SIM	mg/kg	240	3,000	<0.107		0.0228	0.107	<0.153		0.0328	0.153	<0.0564		0.012	0.0564	<0.0341		0.0073	0.0341				
2-CHLORONAPHTHALENE	91-58-7	8270C-SIM	mg/kg	4,800	60,000	<0.107		0.0249	0.107	<0.153		0.0357	0.153	<0.0564		0.0131	0.0564	<0.0341		0.008	0.0341				

Qualifiers:

B: The same analyte is found in the associated blank.

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.

J6: The sample matrix interfered with the ability to make any accurate determination; spike value is low

EPA RSL: Environmental Protection Agency Regional Screening Levels for Residential and Industrial Soils (November 2022; TR=1E-06; THQ=1.0).

*Blind duplicate of TP-38; **Blind duplicate of TP-40

mg/kg: Milligrams per kilogram; **NE:** Not Established.

<: Less than Reported Detection Limit (RDL).

Bold value exceeds RDL; *Blue italics* value is RDL that exceeds screening level.

Color shaded value exceeds screening level.

Table 6 - Soil Analytical Results - Dioxins / Furans
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Lab Sample ID						10633842001		
Terracon Sample ID						TP-41 FILL		
Date Collected						11/10/2022		
Method	Analyte	Units	TEF	EPA RSL Residential	EPA RSL Commercial	Results	Q	RDL
8290	2,3,7,8-TCDF	ng/kg	0.1	NE	NE	<0.62		0.62
8290	2,3,7,8-TCDD	ng/kg	1	4.8	22	<0.65		0.65
8290	1,2,3,7,8-PeCDF	ng/kg	0.03	NE	NE	<0.66		0.66
8290	2,3,4,7,8-PeCDF	ng/kg	0.3	NE	NE	1.4	IJ	0.71
8290	1,2,3,7,8-PeCDD	ng/kg	1	NE	NE	<0.64		0.64
8290	1,2,3,4,7,8-HxCDF	ng/kg	0.1	NE	NE	1.8	J	0.61
8290	1,2,3,6,7,8-HxCDF	ng/kg	0.1	NE	NE	<0.81		0.81
8290	2,3,4,6,7,8-HxCDF	ng/kg	0.1	NE	NE	1.5	J	0.70
8290	1,2,3,7,8,9-HxCDF	ng/kg	0.1	NE	NE	<0.34		0.34
8290	1,2,3,4,7,8-HxCDD	ng/kg	0.1	100	470	<0.75		0.75
8290	1,2,3,6,7,8-HxCDD	ng/kg	0.1	100	470	1.4	IJ	0.61
8290	1,2,3,7,8,9-HxCDD	ng/kg	0.1	100	470	1.1	IJ	0.86
8290	1,2,3,4,6,7,8-HpCDF	ng/kg	0.01	NE	NE	13		0.82
8290	1,2,3,4,7,8,9-HpCDF	ng/kg	0.01	NE	NE	<1.2		1.2
8290	1,2,3,4,6,7,8-HpCDD	ng/kg	0.01	NE	NE	41		1.5
8290	OCDF	ng/kg	0.0003	NE	NE	22	Y	1.2
8290	OCDD	ng/kg	0.0003	NE	NE	600		1.8
8290	Total TCDF	ng/kg		NE	NE	13		0.62
8290	Total TCDD	ng/kg		4.8	22	<0.65		0.65
8290	Total PeCDF	ng/kg		NE	NE	20		0.66
8290	Total PeCDD	ng/kg		NE	NE	<0.64		0.64
8290	Total HxCDF	ng/kg		NE	NE	18		0.34
8290	Total HxCDD	ng/kg		100	470	3.7	J	0.61
8290	Total HpCDF	ng/kg		NE	NE	13		0.82
8290	Total HpCDD	ng/kg		NE	NE	85		1.5
8290	TEQ	ng/kg		4.8	22	1.73		

Qualifiers:

J = Estimated value

I = Isotope ratio out of specification

Y = Calculated using average of daily RFs

TEF - Toxic Equivalency Factors (Recommended TEFs for Human Health Risk Assessments of 2,3,7,8-Tetrachlorodibenzo-p-dioxin and Dioxin-Like Compounds, EPA, Dec 2010

EPA RSL: Environmental Protection Agency Regional Screening Levels for Residential and Industrial Soils

ng/kg: Nanograms per kilogram

NE: Not Established.

<: Less than Reported Detection Limit (RDL).

TEQ - Toxic Equivalency Quotient

Bold value exceeds RDL.

Table 7 - Groundwater Analytical Results - Dissolved Metals
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Sample Location ID						TOSA MW-01				TOSA MW-02				TOSA MW-03				TOSA MW-04				TOSA MW-05				TOSA MW-400*			
Lab Sample ID						L1455564-01				L1455564-02				L1455564-03															
Client Sample ID						TOSA MW-01				TOSA-MW-02				TOSA-MW-03															
Date Collected						01/26/2022				01/26/2022				01/26/2022															
Analyte	CAS	Method	Units	MCL	RSL Tapwater	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
ARSENIC,DISSOLVED	7440-38-2	6010B	mg/l	0.01	0.000052	0.00679	J	0.0044	0.01	0.249		0.0044	0.01	0.0135		0.0044	0.01												
BARIUM,DISSOLVED	7440-39-3	6010B	mg/l	2	3.8	0.0728		0.000736	0.005	0.0977		0.000736	0.005	0.0646		0.000736	0.005												
CADMIUM,DISSOLVED	7440-43-9	6010B	mg/l	0.005	0.0018	<0.00200		0.000479	0.002	0.00066	J	0.000479	0.002	0.000738	J	0.000479	0.002												
CHROMIUM,DISSOLVED	7440-47-3	6010B	mg/l	0.1	NE	<0.0100		0.0014	0.01	<0.0100		0.0014	0.01	<0.0100		0.0014	0.01												
LEAD,DISSOLVED	7439-92-1	6010B	mg/l	0.015	0.015	0.00345	J	0.00299	0.006	<0.00600		0.00299	0.006	<0.00600		0.00299	0.006												
SELENIUM,DISSOLVED	7782-49-2	6010B	mg/l	0.05	0.1	<0.0100		0.00735	0.01	0.0105		0.00735	0.01	0.0131		0.00735	0.01												
SILVER,DISSOLVED	7440-22-4	6010B	mg/l	NE	0.094	<0.00500		0.00154	0.005	<0.00500		0.00154	0.005	<0.00500		0.00154	0.005												
MERCURY,DISSOLVED	7439-97-6	7470A	mg/l	0.002	0.00063	<0.000200		0.0001	0.0002	<0.000200		0.0001	0.0002	<0.000200		0.0001	0.0002												
HEXAVALENT CHROMIUM	18540-29-9	7199	mg/l	NE	0.000035	0.000207	J	0.00015	0.0005	<0.000500		0.00015	0.0005	<0.000500		0.00015	0.0005												
Lab Sample ID						L1555639-01				L1555639-02				L1555639-03				L1555639-04				L1555639-05				L1555639-06			
Client Sample ID						TOSAMW-01				TOSAMW-02				TOSAMW-03				TOSAMW-04				TOSAMW-05				TOSAMW-400			
Date Collected						11/07/2022				11/07/2022				11/07/2022				11/07/2022				11/07/2022				11/07/2022			
Analyte	CAS	Method	Units	MCL	RSL Tapwater	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
ARSENIC,DISSOLVED	7440-38-2	6020	mg/l	0.01	0.000052	0.00254		0.00018	0.002	0.132		0.00018	0.002	0.0204		0.00018	0.002	0.382		0.00018	0.002	0.0224		0.00018	0.002	0.353		0.00018	0.002
BARIUM,DISSOLVED	7440-39-3	6020	mg/l	2	3.8	0.0403		0.000381	0.002	0.0496		0.000381	0.002	0.0194		0.000381	0.002	0.0718		0.000381	0.002	0.0831		0.00038	0.002	0.0643		0.000381	0.002
CADMIUM,DISSOLVED	7440-43-9	6020	mg/l	0.005	0.0018	<0.00100		0.00015	0.001	<0.00100		0.00015	0.001	<0.00100		0.00015	0.001	<0.00100		0.00015	0.001	<0.00100		0.00015	0.001	<0.00100		0.00015	0.001
CHROMIUM,DISSOLVED	7440-47-3	6020	mg/l	0.1	NE	0.00332		0.00124	0.002	<0.00200		0.00124	0.002	0.0113		0.00124	0.002	0.00225		0.00124	0.002	<0.00200		0.00124	0.002	0.00197	J	0.00124	0.002
LEAD,DISSOLVED	7439-92-1	6020	mg/l	0.015	0.015	0.00102	J	0.000849	0.002	<0.00200		0.000849	0.002	0.00629		0.000849	0.002	<0.00200		0.000849	0.002	0.0013	J	0.00085	0.002	<0.00200		0.000849	0.002
SELENIUM,DISSOLVED	7782-49-2	6020	mg/l	0.05	0.1	0.000394	J	0.0003	0.002	0.000705	J	0.0003	0.002	0.000958	J	0.0003	0.002	0.0155		0.0003	0.002	0.001	J	0.0003	0.002	0.0157		0.0003	0.002
SILVER,DISSOLVED	7440-22-4	6020	mg/l	NE	0.094	<0.00200		0.00007	0.002	<0.00200		0.00007	0.002	<0.00200		0.00007	0.002	<0.00200		0.00007	0.002	<0.00200		0.00007	0.002	<0.00200		0.00007	0.002
MERCURY,DISSOLVED	7439-97-6	7470A	mg/l	0.002	0.00063	<0.000200		0.0001	0.0002	<0.000200	J6	0.0001	0.0002	<0.000200		0.0001	0.0002	<0.000200		0.0001	0.0002	<0.000200		0.0001	0.0002	<0.000200		0.0001	0.0002
HEXAVALENT CHROMIUM	18540-29-9	7199	mg/l	NE	0.000035																								

Qualifiers:

J: The identification of the analyte is acceptable; the reported value is an estimate.

J6: The sample matrix interfered with the ability to make any accurate determination; spike value is low.

EPA MCL: Environmental Protection Agency Maximum Contaminant Level for drinking water (November 2022).

EPA RSL: Environmental Protection Agency Regional Screening Levels for Tapwater (November 2022; TR=1E-06; THQ=1.0).

mg/l: Milligrams per liter

NE: Not Established.

<: Less than Reported Detection Limit (RDL).

Bold value exceeds RDL.

Blue italics value is RDL that exceeds screening level.

Color shaded value exceeds screening level; gray shading indicates Not Analyzed

*Duplicate of TOSAMW-04

Table 8 - Groundwater Analytical Results - VOCs
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Sample Location ID						TOSA MW-01						TOSA MW-02					
Lab Sample ID						L1455564-01			L1555639-01			L1455564-02			L1555639-02		
Client Sample ID						TOSA MW-01			TOSAMW-01			TOSA-MW-02			TOSAMW-02		
Date Collected						01/26/2022			11/07/2022			01/26/2022			11/07/2022		
Analyte	CAS	Method	Units	MCL	RSL Tapwater	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
ACETONE	67-64-1	8260B	mg/l	NE	18	<0.0500		0.0113	0.05	<0.0500		0.0113	0.05	<0.0500		0.0113	0.05
ACROLEIN	107-02-8	8260B	mg/l	NE	0.000042	<0.0500	J3	0.00254	0.05	<0.0500		0.00254	0.05	<0.0500	J3	0.00254	0.05
ACRYLONITRILE	107-13-1	8260B	mg/l	NE	0.000052	<0.0100		0.000671	0.01	<0.0100		0.000671	0.01	<0.0100		0.000671	0.01
BENZENE	71-43-2	8260B	mg/l	0.005	0.00046	<0.00100		0.0000941	0.001	<0.00100		0.0000941	0.001	<0.00100		0.0000941	0.001
BROMOBENZENE	108-86-1	8260B	mg/l	NE	0.062	<0.00100		0.000118	0.001	<0.00100		0.000118	0.001	<0.00100		0.000118	0.001
BROMODICHLOROMETHANE	75-27-4	8260B	mg/l	0.08	0.00013	<0.00100		0.000136	0.001	<0.00100		0.000136	0.001	<0.00100		0.000136	0.001
BROMOFORM	75-25-2	8260B	mg/l	0.08	0.0033	<0.00100		0.000129	0.001	<0.00100		0.000129	0.001	<0.00100		0.000129	0.001
BROMOMETHANE	74-83-9	8260B	mg/l	NE	0.0075	<0.00500		0.000605	0.005	<0.00500		0.000605	0.005	<0.00500		0.000605	0.005
N-BUTYLBENZENE	104-51-8	8260B	mg/l	NE	1	<0.00100		0.000157	0.001	<0.00100		0.000157	0.001	<0.00100		0.000157	0.001
SEC-BUTYLBENZENE	135-98-8	8260B	mg/l	NE	2	<0.00100		0.000125	0.001	<0.00100		0.000125	0.001	<0.00100		0.000125	0.001
TERT-BUTYLBENZENE	98-06-6	8260B	mg/l	NE	0.69	<0.00100		0.000127	0.001	<0.00100		0.000127	0.001	<0.00100		0.000127	0.001
CARBON TETRACHLORIDE	56-23-5	8260B	mg/l	0.005	0.00046	<0.00100		0.000128	0.001	<0.00100		0.000128	0.001	<0.00100		0.000128	0.001
CHLOROBENZENE	108-90-7	8260B	mg/l	0.1	0.078	<0.00100		0.000116	0.001	<0.00100		0.000116	0.001	<0.00100		0.000116	0.001
CHLORODIBROMOMETHANE	124-48-1	8260B	mg/l	0.08	0.00087	<0.00100		0.00014	0.001	<0.00100		0.00014	0.001	<0.00100		0.00014	0.001
CHLOROETHANE	75-00-3	8260B	mg/l	NE	8.3	<0.00500		0.000192	0.005	<0.00500		0.000192	0.005	<0.00500		0.000192	0.005
2-CHLOROETHYL VINYL ETHER	110-75-8	8260B	mg/l	NE	NE	<0.0500		0.000575	0.05	<0.0500		0.000575	0.05	<0.0500		0.000575	0.05
CHLOROFORM	67-66-3	8260B	mg/l	0.08	0.00022	<0.00500		0.000111	0.005	<0.00500		0.000111	0.005	<0.00500		0.000111	0.005
CHLOROMETHANE	74-87-3	8260B	mg/l	NE	0.19	<0.00250		0.00096	0.0025	<0.00250		0.00096	0.0025	<0.00250		0.00096	0.0025
2-CHLOROTOLUENE	95-49-8	8260B	mg/l	NE	0.24	<0.00100		0.000106	0.001	<0.00100		0.000106	0.001	<0.00100		0.000106	0.001
4-CHLOROTOLUENE	106-43-4	8260B	mg/l	NE	0.25	<0.00100		0.000114	0.001	<0.00100		0.000114	0.001	<0.00100		0.000114	0.001
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	8260B	mg/l	0.0002	0.00000033	<0.00500		0.000276	0.005	<0.00500		0.000276	0.005	<0.00500		0.000276	0.005
1,2-DIBROMOETHANE	106-93-4	8260B	mg/l	5E-05	0.0000075	<0.00100		0.000126	0.001	<0.00100		0.000126	0.001	<0.00100		0.000126	0.001
DIBROMOMETHANE	74-95-3	8260B	mg/l	NE	0.0083	<0.00100		0.000122	0.001	<0.00100		0.000122	0.001	<0.00100		0.000122	0.001
1,2-DICHLOROBENZENE	95-50-1	8260B	mg/l	0.6	0.3	<0.00100		0.000107	0.001	<0.00100		0.000107	0.001	<0.00100		0.000107	0.001
1,3-DICHLOROBENZENE	541-73-1	8260B	mg/l	NE	NE	<0.00100		0.00011	0.001	<0.00100		0.00011	0.001	<0.00100		0.00011	0.001
1,4-DICHLOROBENZENE	106-46-7	8260B	mg/l	0.075	0.00048	<0.00100		0.00012	0.001	<0.00100		0.00012	0.001	<0.00100		0.00012	0.001
DICHLORODIFLUOROMETHANE	75-71-8	8260B	mg/l	NE	0.2	<0.00500		0.000374	0.005	<0.00500		0.000374	0.005	<0.00500		0.000374	0.005
1,1-DICHLOROETHANE	75-34-3	8260B	mg/l	NE	0.0028	<0.00100		0.0001	0.001	<0.00100		0.0001	0.001	<0.00100		0.0001	0.001
1,2-DICHLOROETHANE	107-06-2	8260B	mg/l	0.005	0.00017	<0.00100		0.0000819	0.001	<0.00100		0.0000819	0.001	<0.00100		0.0000819	0.001
1,1-DICHLOROETHENE	75-35-4	8260B	mg/l	0.007	0.28	<0.00100		0.000188	0.001	<0.00100		0.000188	0.001	<0.00100		0.000188	0.001
CIS-1,2-DICHLOROETHENE	156-59-2	8260B	mg/l	0.07	0.025	<0.00100		0.000126	0.001	<0.00100		0.000126	0.001	<0.00100		0.000126	0.001
TRANS-1,2-DICHLOROETHENE	156-60-5	8260B	mg/l	0.1	0.068	<0.00100		0.000149	0.001	<0.00100		0.000149	0.001	<0.00100		0.000149	0.001
1,2-DICHLOROPROPANE	78-87-5	8260B	mg/l	0.005	0.00085	<0.00100		0.000149	0.001	<0.00100		0.000149	0.001	<0.00100		0.000149	0.001
1,1-DICHLOROPROPENE	563-58-6	8260B	mg/l	NE	NE	<0.00100		0.000142	0.001	<0.00100		0.000142	0.001	<0.00100		0.000142	0.001
1,3-DICHLOROPROPANE	142-28-9	8260B	mg/l	NE	0.37	<0.00100		0.00011	0.001	<0.00100		0.00011	0.001	<0.00100		0.00011	0.001
CIS-1,3-DICHLOROPROPENE	10061-01-5	8260B	mg/l	NE	NE	<0.00100		0.000111	0.001	<0.00100		0.000111	0.001	<0.00100		0.000111	0.001
TRANS-1,3-DICHLOROPROPENE	10061-02-6	8260B	mg/l	NE	NE	<0.00100		0.000118	0.001	<0.00100		0.000118	0.001	<0.00100		0.000118	0.001
2,2-DICHLOROPROPANE	594-20-7	8260B	mg/l	NE	NE	<0.00100	J3	0.000161	0.001	<0.00100		0.000161	0.001	<0.00100	J3	0.000161	0.001
DI-ISOPROPYL ETHER	108-20-3	8260B	mg/l	NE	1.5	<0.00100		0.000105	0.001	<0.00100		0.000105	0.001	<0.00100		0.000105	0.001
ETHYLBENZENE	100-41-4	8260B	mg/l	0.7	0.0015	<0.00100		0.000137	0.001	<0.00100		0.000137	0.001	<0.00100		0.000137	0.001
HEXACHLORO-1,3-BUTADIENE	87-68-3	8260B	mg/l	NE	0.00014	<0.00100		0.000337	0.001	<0.00100		0.000337	0.001	<0.00100		0.000337	0.001
ISOPROPYLBENZENE	98-82-8	8260B	mg/l	NE	0.45	<0.00100		0.000105	0.001	<0.00100		0.000105	0.001	<0.00100		0.000105	0.001
P-ISOPROPYLTOLUENE	99-87-6	8260B	mg/l	NE	NE	<0.00100		0.00012	0.001	<0.00100		0.00012	0.001	<0.00100		0.00012	0.001

Table 8 - Groundwater Analytical Results - VOCs
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Sample Location ID						TOSA MW-01						TOSA MW-02					
Lab Sample ID						L1455564-01			L1555639-01			L1455564-02			L1555639-02		
Client Sample ID						TOSA MW-01			TOSAMW-01			TOSA-MW-02			TOSAMW-02		
Date Collected						01/26/2022			11/07/2022			01/26/2022			11/07/2022		
Analyte	CAS	Method	Units	MCL	RSL Tapwater	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
2-BUTANONE (MEK)	78-93-3	8260B	mg/l	NE	5.6	<0.0100		0.00119	0.01	<0.0100		0.00119	0.01	<0.0100		0.00119	0.01
METHYLENE CHLORIDE	75-09-2	8260B	mg/l	0.005	0.011	<0.00500		0.00043	0.005	<0.00500		0.00043	0.005	<0.00500		0.00043	0.005
4-METHYL-2-PENTANONE (MIBK)	108-10-1	8260B	mg/l	NE	6.3	<0.0100		0.000478	0.01	<0.0100		0.000478	0.01	<0.0100		0.000478	0.01
METHYL TERT-BUTYL ETHER	1634-04-4	8260B	mg/l	NE	0.014	<0.00100		0.000101	0.001	<0.00100		0.000101	0.001	0.000237	J	0.000101	0.001
NAPHTHALENE	91-20-3	8260B	mg/l	NE	0.00012	<0.00500	J4	0.001	0.005	<0.00500		0.001	0.005	<0.00500	J4	0.001	0.005
N-PROPYLBENZENE	103-65-1	8260B	mg/l	NE	0.66	<0.00100		0.0000993	0.001	<0.00100		0.0000993	0.001	<0.00100		0.0000993	0.001
STYRENE	100-42-5	8260B	mg/l	0.1	1.2	<0.00100		0.000118	0.001	<0.00100		0.000118	0.001	<0.00100		0.000118	0.001
1,1,1,2-TETRACHLOROETHANE	630-20-6	8260B	mg/l	NE	0.00057	<0.00100		0.000147	0.001	<0.00100		0.000147	0.001	<0.00100		0.000147	0.001
1,1,2,2-TETRACHLOROETHANE	79-34-5	8260B	mg/l	NE	0.000076	<0.00100		0.000133	0.001	<0.00100		0.000133	0.001	<0.00100		0.000133	0.001
1,1,2-TRICHLOROTRIFLUOROETHANE	76-13-1	8260B	mg/l	NE	10	<0.00100		0.00018	0.001	<0.00100		0.00018	0.001	<0.00100		0.00018	0.001
TETRACHLOROETHENE	127-18-4	8260B	mg/l	0.005	0.011	<0.00100		0.0003	0.001	<0.00100		0.0003	0.001	<0.00100		0.0003	0.001
TOLUENE	108-88-3	8260B	mg/l	1	1.1	<0.00100		0.000278	0.001	<0.00100		0.000278	0.001	<0.00100		0.000278	0.001
1,2,3-TRICHLOROBENZENE	87-61-6	8260B	mg/l	NE	0.007	<0.00100	J3	0.00023	0.001	<0.00100		0.00023	0.001	<0.00100	J3	0.00023	0.001
1,2,4-TRICHLOROBENZENE	120-82-1	8260B	mg/l	0.07	0.0012	<0.00100	J3	0.000481	0.001	<0.00100		0.000481	0.001	<0.00100	J3	0.000481	0.001
1,1,1-TRICHLOROETHANE	71-55-6	8260B	mg/l	0.2	8	<0.00100		0.000149	0.001	<0.00100		0.000149	0.001	<0.00100		0.000149	0.001
1,1,2-TRICHLOROETHANE	79-00-5	8260B	mg/l	0.005	0.00028	<0.00100		0.000158	0.001	<0.00100		0.000158	0.001	<0.00100		0.000158	0.001
TRICHLOROETHENE	79-01-6	8260B	mg/l	0.005	0.00049	<0.00100		0.00019	0.001	<0.00100		0.00019	0.001	<0.00100		0.00019	0.001
TRICHLOROFLUOROMETHANE	75-69-4	8260B	mg/l	NE	5.2	<0.00500		0.00016	0.005	<0.00500		0.00016	0.005	<0.00500		0.00016	0.005
1,2,3-TRICHLOROPROPANE	96-18-4	8260B	mg/l	NE	0.00000075	<0.00250		0.000237	0.0025	<0.00250		0.000237	0.0025	<0.00250		0.000237	0.0025
1,2,4-TRIMETHYLBENZENE	95-63-6	8260B	mg/l	NE	0.056	<0.00100		0.000322	0.001	<0.00100		0.000322	0.001	<0.00100		0.000322	0.001
1,2,3-TRIMETHYLBENZENE	526-73-8	8260B	mg/l	NE	0.055	<0.00100	J4	0.000104	0.001	<0.00100		0.000104	0.001	<0.00100	J4	0.000104	0.001
1,3,5-TRIMETHYLBENZENE	108-67-8	8260B	mg/l	NE	0.06	<0.00100		0.000104	0.001	<0.00100		0.000104	0.001	<0.00100		0.000104	0.001
VINYL CHLORIDE	75-01-4	8260B	mg/l	0.002	0.000019	<0.00100		0.000234	0.001	<0.00100		0.000234	0.001	<0.00100		0.000234	0.001
XYLENES, TOTAL	1330-20-7	8260B	mg/l	10	0.19	<0.00300		0.000174	0.003	<0.00300		0.000174	0.003	<0.00300		0.000174	0.003

Qualifiers:

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.

J4: The associated batch QC was outside the established quality control range for accuracy.

EPA MCL: Environmental Protection Agency Maximum Contaminant Level for drinking water (November 2022).

EPA RSL: Environmental Protection Agency Regional Screening Levels for Tapwater (November 2022; TR=1E-06; THQ=1.0).

mg/l: Milligrams per liter

NE: Not Established.

<: Less than Reported Detection Limit (RDL).

Bold value exceeds RDL.

Blue italics value is RDL that exceeds screening level.

Color shaded value exceeds screening level.

*Duplicate of TOSAMW-04

Table 8 - Groundwater Analytical Results - VOCs
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Sample Location ID						TOSA MW-03							TOSA MW-04				TOSA MW-05				TOSA MW-400*				
Lab Sample ID						L1455564-03				L1555639-03				L1555639-04				L1555639-05				L1555639-06			
Client Sample ID						TOSA-MW-03				TOSAMW-03				TOSAMW-04				TOSAMW-05				TOSAMW-06			
Date Collected						01/26/2022				11/07/2022				11/07/2022				11/07/2022				11/07/2022			
Analyte	CAS	Method	Units	MCL	RSL Tapwater	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
ACETONE	67-64-1	8260B	mg/l	NE	18	<0.0500		0.0113	0.05	<0.0500		0.0113	0.05	<0.0500		0.0113	0.05	<0.0500		0.0113	0.05	<0.0500		0.0113	0.05
ACROLEIN	107-02-8	8260B	mg/l	NE	0.000042	<0.0500	J3	0.00254	0.05	<0.0500		0.00254	0.05	<0.0500		0.00254	0.05	<0.0500		0.00254	0.05	<0.0500		0.00254	0.05
ACRYLONITRILE	107-13-1	8260B	mg/l	NE	0.000052	<0.0100		0.000671	0.01	<0.0100		0.000671	0.01	<0.0100		0.000671	0.01	<0.0100		0.000671	0.01	<0.0100		0.000671	0.01
BENZENE	71-43-2	8260B	mg/l	0.005	0.00046	<0.00100		0.0000941	0.001	<0.00100		0.0000941	0.001	<0.00100		0.0000941	0.001	<0.00100		0.0000941	0.001	<0.00100		9.41E-05	0.001
BROMOBENZENE	108-86-1	8260B	mg/l	NE	0.062	<0.00100		0.000118	0.001	<0.00100		0.000118	0.001	<0.00100		0.000118	0.001	<0.00100		0.000118	0.001	<0.00100		0.000118	0.001
BROMODICHLOROMETHANE	75-27-4	8260B	mg/l	0.08	0.00013	<0.00100		0.000136	0.001	<0.00100		0.000136	0.001	<0.00100		0.000136	0.001	<0.00100		0.000136	0.001	<0.00100		0.000136	0.001
BROMOFORM	75-25-2	8260B	mg/l	0.08	0.0033	<0.00100		0.000129	0.001	<0.00100	J4	0.000129	0.001	<0.00100	J4	0.000129	0.001	<0.00100	J4	0.000129	0.001	<0.00100		0.000129	0.001
BROMOMETHANE	74-83-9	8260B	mg/l	NE	0.0075	<0.00500		0.000605	0.005	<0.00500		0.000605	0.005	<0.00500		0.000605	0.005	<0.00500		0.000605	0.005	<0.00500		0.000605	0.005
N-BUTYLBENZENE	104-51-8	8260B	mg/l	NE	1	<0.00100		0.000157	0.001	<0.00100		0.000157	0.001	<0.00100		0.000157	0.001	<0.00100		0.000157	0.001	<0.00100		0.000157	0.001
SEC-BUTYLBENZENE	135-98-8	8260B	mg/l	NE	2	<0.00100		0.000125	0.001	<0.00100		0.000125	0.001	<0.00100		0.000125	0.001	<0.00100		0.000125	0.001	<0.00100		0.000125	0.001
TERT-BUTYLBENZENE	98-06-6	8260B	mg/l	NE	0.69	<0.00100		0.000127	0.001	<0.00100		0.000127	0.001	<0.00100		0.000127	0.001	<0.00100		0.000127	0.001	<0.00100		0.000127	0.001
CARBON TETRACHLORIDE	56-23-5	8260B	mg/l	0.005	0.00046	<0.00100		0.000128	0.001	<0.00100		0.000128	0.001	<0.00100		0.000128	0.001	<0.00100		0.000128	0.001	<0.00100		0.000128	0.001
CHLOROBENZENE	108-90-7	8260B	mg/l	0.1	0.078	<0.00100		0.000116	0.001	<0.00100		0.000116	0.001	<0.00100		0.000116	0.001	<0.00100		0.000116	0.001	<0.00100		0.000116	0.001
CHLORODIBROMOMETHANE	124-48-1	8260B	mg/l	0.08	0.00087	<0.00100		0.00014	0.001	<0.00100	J4	0.00014	0.001	<0.00100	J4	0.00014	0.001	<0.00100	J4	0.00014	0.001	<0.00100		0.00014	0.001
CHLOROETHANE	75-00-3	8260B	mg/l	NE	8.3	<0.00500		0.000192	0.005	<0.00500	J3	0.000192	0.005	<0.00500	J3	0.000192	0.005	<0.00500	J3	0.000192	0.005	<0.00500		0.000192	0.005
2-CHLOROETHYL VINYL ETHER	110-75-8	8260B	mg/l	NE	NE	<0.0500		0.000575	0.05	<0.0500		0.000575	0.05	<0.0500		0.000575	0.05	<0.0500		0.000575	0.05	<0.0500		0.000575	0.05
CHLOROFORM	67-66-3	8260B	mg/l	0.08	0.00022	<0.00500		0.000111	0.005	<0.00500		0.000111	0.005	<0.00500		0.000111	0.005	<0.00500		0.000111	0.005	0.000173 J		0.000111	0.005
CHLOROMETHANE	74-87-3	8260B	mg/l	NE	0.19	<0.00250		0.00096	0.0025	<0.00250		0.00096	0.0025	<0.00250		0.00096	0.0025	<0.00250		0.00096	0.0025	<0.00250		0.00096	0.0025
2-CHLOROTOLUENE	95-49-8	8260B	mg/l	NE	0.24	<0.00100		0.000106	0.001	<0.00100		0.000106	0.001	<0.00100		0.000106	0.001	<0.00100		0.000106	0.001	<0.00100		0.000106	0.001
4-CHLOROTOLUENE	106-43-4	8260B	mg/l	NE	0.25	<0.00100		0.000114	0.001	<0.00100		0.000114	0.001	<0.00100		0.000114	0.001	<0.00100		0.000114	0.001	<0.00100		0.000114	0.001
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	8260B	mg/l	0.0002	0.00000033	<0.00500		0.000276	0.005	<0.00500		0.000276	0.005	<0.00500		0.000276	0.005	<0.00500		0.000276	0.005	<0.00500		0.000276	0.005
1,2-DIBROMOETHANE	106-93-4	8260B	mg/l	5E-05	0.0000075	<0.00100		0.000126	0.001	<0.00100	J4	0.000126	0.001	<0.00100	J4	0.000126	0.001	<0.00100	J4	0.000126	0.001	<0.00100		0.000126	0.001
DIBROMOMETHANE	74-95-3	8260B	mg/l	NE	0.0083	<0.00100		0.000122	0.001	<0.00100		0.000122	0.001	<0.00100		0.000122	0.001	<0.00100		0.000122	0.001	<0.00100		0.000122	0.001
1,2-DICHLOROBENZENE	95-50-1	8260B	mg/l	0.6	0.3	<0.00100		0.000107	0.001	<0.00100		0.000107	0.001	<0.00100		0.000107	0.001	<0.00100		0.000107	0.001	<0.00100		0.000107	0.001
1,3-DICHLOROBENZENE	541-73-1	8260B	mg/l	NE	NE	<0.00100		0.00011	0.001	<0.00100		0.00011	0.001	<0.00100		0.00011	0.001	<0.00100		0.00011	0.001	<0.00100		0.00011	0.001
1,4-DICHLOROBENZENE	106-46-7	8260B	mg/l	0.075	0.00048	<0.00100		0.00012	0.001	<0.00100		0.00012	0.001	<0.00100		0.00012	0.001	<0.00100		0.00012	0.001	<0.00100		0.00012	0.001
DICHLORODIFLUOROMETHANE	75-71-8	8260B	mg/l	NE	0.2	<0.00500		0.000374	0.005	<0.00500		0.000374	0.005	<0.00500		0.000374	0.005	<0.00500		0.000374	0.005	<0.00500		0.000374	0.005
1,1-DICHLOROETHANE	75-34-3	8260B	mg/l	NE	0.0028	<0.00100		0.0001	0.001	0.000178 J		0.0001	0.001	<0.00100		0.0001	0.001	0.000126 J	J	0.0001	0.001	<0.00100		0.0001	0.001
1,2-DICHLOROETHANE	107-06-2	8260B	mg/l	0.005	0.00017	<0.00100		0.0000819	0.001	<0.00100		0.0000819	0.001	<0.00100		0.0000819	0.001	<0.00100		0.0000819	0.001	<0.00100		8.19E-05	0.001
1,1-DICHLOROETHENE	75-35-4	8260B	mg/l	0.007	0.28	<0.00100		0.000188	0.001	<0.00100	J3	0.000188	0.001	<0.00100	J3	0.000188	0.001	<0.00100	J3	0.000188	0.001	<0.00100		0.000188	0.001
CIS-1,2-DICHLOROETHENE	156-59-2	8260B	mg/l	0.07	0.025	<0.00100		0.000126	0.001	<0.00100		0.000126	0.001	<0.00100		0.000126	0.001	<0.00100		0.000126	0.001	<0.00100		0.000126	0.001
TRANS-1,2-DICHLOROETHENE	156-60-5	8260B	mg/l	0.1	0.068	<0.00100		0.000149	0.001	<0.00100		0.000149	0.001	<0.00100		0.000149	0.001	<0.00100		0.000149	0.001	<0.00100		0.000149	0.001
1,2-DICHLOROPROPANE	78-87-5	8260B	mg/l	0.005	0.00085	<0.00100		0.000149	0.001	<0.00100		0.000149	0.001	<0.00100		0.000149	0.001	<0.00100		0.000149	0.001	<0.00100		0.000149	0.001
1,1-DICHLOROPROPENE																									

Table 8 - Groundwater Analytical Results - VOCs
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Sample Location ID						TOSA MW-03								TOSA MW-04				TOSA MW-05				TOSA MW-400*			
Lab Sample ID						L1455564-03				L1555639-03				L1555639-04				L1555639-05				L1555639-06			
Client Sample ID						TOSA-MW-03				TOSAMW-03				TOSAMW-04				TOSAMW-05				TOSAMW-06			
Date Collected						01/26/2022				11/07/2022				11/07/2022				11/07/2022				11/07/2022			
Analyte	CAS	Method	Units	MCL	RSL Tapwater	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
2-BUTANONE (MEK)	78-93-3	8260B	mg/l	NE	5.6	<0.0100		0.00119	0.01	<0.0100		0.00119	0.01	<0.0100		0.00119	0.01	<0.0100		0.00119	0.01	<0.0100		0.00119	0.01
METHYLENE CHLORIDE	75-09-2	8260B	mg/l	0.005	0.011	<0.00500		0.00043	0.005	<0.00500		0.00043	0.005	<0.00500		0.00043	0.005	<0.00500		0.00043	0.005	<0.00500		0.00043	0.005
4-METHYL-2-PENTANONE (MIBK)	108-10-1	8260B	mg/l	NE	6.3	<0.0100		0.000478	0.01	<0.0100		0.000478	0.01	<0.0100		0.000478	0.01	<0.0100		0.000478	0.01	<0.0100		0.000478	0.01
METHYL TERT-BUTYL ETHER	1634-04-4	8260B	mg/l	NE	0.014	<0.00100		0.000101	0.001	<0.00100		0.000101	0.001	<0.00100		0.000101	0.001	<0.00100		0.000101	0.001	<0.00100		0.000101	0.001
NAPHTHALENE	91-20-3	8260B	mg/l	NE	0.00012	<0.00500	J4	0.001	0.005	<0.00500		0.001	0.005	<0.00500		0.001	0.005	<0.00500		0.001	0.005	<0.00500		0.001	0.005
N-PROPYLBENZENE	103-65-1	8260B	mg/l	NE	0.66	<0.00100		0.0000993	0.001	<0.00100		0.0000993	0.001	<0.00100		0.0000993	0.001	<0.00100		0.0000993	0.001	<0.00100		9.93E-05	0.001
STYRENE	100-42-5	8260B	mg/l	0.1	1.2	<0.00100		0.000118	0.001	<0.00100		0.000118	0.001	<0.00100		0.000118	0.001	<0.00100		0.000118	0.001	<0.00100		0.000118	0.001
1,1,1,2-TETRACHLOROETHANE	630-20-6	8260B	mg/l	NE	0.00057	<0.00100		0.000147	0.001	<0.00100	J4	0.000147	0.001	<0.00100	J4	0.000147	0.001	<0.00100	J4	0.000147	0.001	<0.00100	J4	0.000147	0.001
1,1,2,2-TETRACHLOROETHANE	79-34-5	8260B	mg/l	NE	0.000076	<0.00100		0.000133	0.001	<0.00100		0.000133	0.001	<0.00100		0.000133	0.001	<0.00100		0.000133	0.001	<0.00100		0.000133	0.001
1,1,2-TRICHLOROTRIFLUOROETHANE	76-13-1	8260B	mg/l	NE	10	<0.00100		0.00018	0.001	<0.00100		0.00018	0.001	<0.00100		0.00018	0.001	<0.00100		0.00018	0.001	<0.00100		0.00018	0.001
TETRACHLOROETHENE	127-18-4	8260B	mg/l	0.005	0.011	<0.00100		0.0003	0.001	<0.00100		0.0003	0.001	<0.00100		0.0003	0.001	<0.00100		0.0003	0.001	<0.00100		0.0003	0.001
TOLUENE	108-88-3	8260B	mg/l	1	1.1	<0.00100		0.000278	0.001	<0.00100		0.000278	0.001	<0.00100		0.000278	0.001	<0.00100		0.000278	0.001	<0.00100		0.000278	0.001
1,2,3-TRICHLOROBENZENE	87-61-6	8260B	mg/l	NE	0.007	<0.00100	J3	0.00023	0.001	<0.00100		0.00023	0.001	<0.00100		0.00023	0.001	<0.00100		0.00023	0.001	<0.00100		0.00023	0.001
1,2,4-TRICHLOROBENZENE	120-82-1	8260B	mg/l	0.07	0.0012	<0.00100	J3	0.000481	0.001	<0.00100		0.000481	0.001	<0.00100		0.000481	0.001	<0.00100		0.000481	0.001	<0.00100		0.000481	0.001
1,1,1-TRICHLOROETHANE	71-55-6	8260B	mg/l	0.2	8	<0.00100		0.000149	0.001	<0.00100		0.000149	0.001	<0.00100		0.000149	0.001	<0.00100		0.000149	0.001	<0.00100		0.000149	0.001
1,1,2-TRICHLOROETHANE	79-00-5	8260B	mg/l	0.005	0.00028	<0.00100		0.000158	0.001	<0.00100		0.000158	0.001	<0.00100		0.000158	0.001	<0.00100		0.000158	0.001	<0.00100		0.000158	0.001
TRICHLOROETHENE	79-01-6	8260B	mg/l	0.005	0.00049	<0.00100		0.00019	0.001	<0.00100		0.00019	0.001	<0.00100		0.00019	0.001	<0.00100		0.00019	0.001	<0.00100		0.00019	0.001
TRICHLOROFLUOROMETHANE	75-69-4	8260B	mg/l	NE	5.2	<0.00500		0.00016	0.005	<0.00500		0.00016	0.005	<0.00500		0.00016	0.005	<0.00500		0.00016	0.005	<0.00500		0.00016	0.005
1,2,3-TRICHLOROPROPANE	96-18-4	8260B	mg/l	NE	0.00000075	<0.00250		0.000237	0.0025	<0.00250		0.000237	0.0025	<0.00250		0.000237	0.0025	<0.00250		0.000237	0.0025	<0.00250		0.000237	0.0025
1,2,4-TRIMETHYLBENZENE	95-63-6	8260B	mg/l	NE	0.056	<0.00100		0.000322	0.001	<0.00100		0.000322	0.001	<0.00100		0.000322	0.001	<0.00100		0.000322	0.001	<0.00100		0.000322	0.001
1,2,3-TRIMETHYLBENZENE	526-73-8	8260B	mg/l	NE	0.055	<0.00100	J4	0.000104	0.001	<0.00100		0.000104	0.001	<0.00100		0.000104	0.001	<0.00100		0.000104	0.001	<0.00100		0.000104	0.001
1,3,5-TRIMETHYLBENZENE	108-67-8	8260B	mg/l	NE	0.06	<0.00100		0.000104	0.001	<0.00100		0.000104	0.001	<0.00100		0.000104	0.001	<0.00100		0.000104	0.001	<0.00100		0.000104	0.001
VINYL CHLORIDE	75-01-4	8260B	mg/l	0.002	0.000019	<0.00100		0.000234	0.001	<0.00100		0.000234	0.001	<0.00100		0.000234	0.001	<0.00100		0.000234	0.001	<0.00100		0.000234	0.001
XYLENES, TOTAL	1330-20-7	8260B	mg/l	10	0.19	<0.00300		0.000174	0.003	<0.00300		0.000174	0.003	<0.00300		0.000174	0.003	<0.00300		0.000174	0.003	<0.00300		0.000174	0.003

Qualifiers:

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.

J4: The associated batch QC was outside the established quality control range for accuracy.

EPA MCL: Environmental Protection Agency Maximum Contaminant Level for drinking water (November 2022).

EPA RSL: Environmental Protection Agency Regional Screening Levels for Tapwater (November 2022; TR=1E-06; THQ=1.0).

mg/l: Milligrams per liter

NE: Not Established.

<: Less than Reported Detection Limit (RDL).

Bold value exceeds RDL.

Blue italics value is RDL that exceeds screening level.

Color shaded value exceeds screening level.

*Duplicate of TOSAMW-04

Table 9 - Groundwater Analytical Results - SVOCs and 1,4-Dioxane
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Sample Location ID						TOSA MW-01								TOSA MW-02							
Lab Sample ID						L1455564-01				L1555639-01				L1455564-02				L1555639-02			
Client Sample ID						TOSA MW-01				TOSAMW-01				TOSA-MW-02				TOSAMW-02			
Date Collected						01/26/2022				11/07/2022				01/26/2022				11/07/2022			
Analyte	CAS	Method	Units	MCL	RSL Tapwater	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
BENZIDINE	92-87-5	8270C	mg/l	NE	0.00000011					<0.0100	J4	0.00374	0.01					<0.0100	J4	0.00374	0.01
BIS(2-CHLORETHOXY)METHANE	111-91-1	8270C	mg/l	NE	0.059					<0.0100		0.000116	0.01					<0.0100		0.000116	0.01
BIS(2-CHLOROETHYL)ETHER	111-44-4	8270C	mg/l	NE	0.000014					<0.0100		0.000137	0.01					<0.0100		0.000137	0.01
2,2-OXYBIS(1-CHLOROPROPANE)	108-60-1	8270C	mg/l	NE	0.71					<0.0100		0.00021	0.01					<0.0100		0.00021	0.01
4-BROMOPHENYL-PHENYLETHER	101-55-3	8270C	mg/l	NE	NE					<0.0100		0.0000877	0.01					<0.0100		0.0000877	0.01
4-CHLOROPHENYL-PHENYLETHER	7005-72-3	8270C	mg/l	NE	NE					<0.0100		0.0000926	0.01					<0.0100		0.0000926	0.01
1,2-DICHLOROBENZENE	95-50-1	8270C	mg/l	0.6	0.3					<0.0100		0.0000713	0.01					<0.0100		0.0000713	0.01
1,3-DICHLOROBENZENE	541-73-1	8270C	mg/l	NE	NE					<0.0100		0.000132	0.01					<0.0100		0.000132	0.01
1,4-DICHLOROBENZENE	106-46-7	8270C	mg/l	0.075	0.00048					<0.0100		0.0000942	0.01					<0.0100		0.0000942	0.01
3,3-DICHLOROBENZIDINE	91-94-1	8270C	mg/l	NE	0.00013					<0.0100	J4	0.000212	0.01					<0.0100	J4	0.000212	0.01
2,4-DINITROTOLUENE	121-14-2	8270C	mg/l	NE	0.00024					<0.0100		0.0000983	0.01					<0.0100		0.0000983	0.01
2,6-DINITROTOLUENE	606-20-2	8270C	mg/l	NE	0.000049					<0.0100		0.00025	0.01					<0.0100		0.00025	0.01
HEXACHLOROBENZENE	118-74-1	8270C	mg/l	0.001	0.0000098					<0.00100		0.0000755	0.001					<0.00100		0.0000755	0.001
HEXACHLORO-1,3-BUTADIENE	87-68-3	8270C	mg/l	NE	0.00014					<0.0100		0.0000968	0.01					<0.0100		0.0000968	0.01
HEXACHLOROCYCLOPENTADIENE	77-47-4	8270C	mg/l	0.05	0.00041					<0.0100		0.0000598	0.01					<0.0100		0.0000598	0.01
HEXACHLOROETHANE	67-72-1	8270C	mg/l	NE	0.00033					<0.0100		0.000127	0.01					<0.0100		0.000127	0.01
ISOPHORONE	78-59-1	8270C	mg/l	NE	0.078					<0.0100		0.000143	0.01					<0.0100		0.000143	0.01
NITROBENZENE	98-95-3	8270C	mg/l	NE	0.00014					<0.0100		0.000297	0.01					<0.0100		0.000297	0.01
N-NITROSODIMETHYLAMINE	62-75-9	8270C	mg/l	NE	0.00000011					<0.0100		0.000998	0.01					<0.0100		0.000998	0.01
N-NITROSODIPHENYLAMINE	86-30-6	8270C	mg/l	NE	0.012					<0.0100		0.00237	0.01					<0.0100		0.00237	0.01
N-NITROSODI-N-PROPYLAMINE	621-64-7	8270C	mg/l	NE	0.000011					<0.0100		0.000261	0.01					<0.0100		0.000261	0.01
BENZYL BUTYL PHTHALATE	85-68-7	8270C	mg/l	NE	0.016					<0.00300		0.000765	0.003					<0.00300		0.000765	0.003
BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	8270C	mg/l	0.006	0.0056					<0.00300		0.000895	0.003					<0.00300		0.000895	0.003
DI-N-BUTYL PHTHALATE	84-74-2	8270C	mg/l	NE	0.9					<0.00300		0.000453	0.003					<0.00300		0.000453	0.003
DIETHYL PHTHALATE	84-66-2	8270C	mg/l	NE	15					<0.00300		0.000287	0.003					<0.00300		0.000287	0.003
DIMETHYL PHTHALATE	131-11-3	8270C	mg/l	NE	NE					<0.00300		0.00026	0.003					<0.00300		0.00026	0.003
DI-N-OCTYL PHTHALATE	117-84-0	8270C	mg/l	NE	0.2					<0.00300		0.000932	0.003					<0.00300		0.000932	0.003
1,2,4-TRICHLOROBENZENE	120-82-1	8270C	mg/l	0.07	0.0012					<0.0100		0.0000698	0.01					<0.0100		0.0000698	0.01
4-CHLORO-3-METHYLPHENOL	59-50-7	8270C	mg/l	NE	1.4					<0.0100		0.000131	0.01					<0.0100		0.000131	0.01
2-CHLOROPHENOL	95-57-8	8270C	mg/l	NE	0.091					<0.0100		0.000133	0.01					<0.0100		0.000133	0.01
2,4-DICHLOROPHENOL	120-83-2	8270C	mg/l	NE	0.046					<0.0100		0.000102	0.01					<0.0100		0.000102	0.01
2,4-DIMETHYLPHENOL	105-67-9	8270C	mg/l	NE	0.36					<0.0100	J4	0.0000636	0.01					<0.0100	J4	0.0000636	0.01
4,6-DINITRO-2-METHYLPHENOL	534-52-1	8270C	mg/l	NE	0.0015					<0.0100		0.00112	0.01					<0.0100		0.00112	0.01
2,4-DINITROPHENOL	51-28-5	8270C	mg/l	NE	0.039					<0.0100		0.00593	0.01					<0.0100		0.00593	0.01
2-NITROPHENOL	88-75-5	8270C	mg/l	NE	NE					<0.0100		0.000117	0.01					<0.0100		0.000117	0.01
4-NITROPHENOL	100-02-7	8270C	mg/l	NE	NE					<0.0100		0.000143	0.01					<0.0100		0.000143	0.01
PENTACHLOROPHENOL	87-86-5	8270C	mg/l	0.001	0.000041					<0.0100		0.000313	0.01					<0.0100		0.000313	0.01
PHENOL	108-95-2	8270C	mg/l	NE	5.8					<0.0100		0.00433	0.01					<0.0100		0.00433	0.01
2,4,6-TRICHLOROPHENOL	88-06-2	8270C	mg/l	NE	0.0041					<0.0100		0.0001	0.01					<0.0100		0.0001	0.01

Table 9 - Groundwater Analytical Results - SVOCs and 1,4-Dioxane
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Sample Location ID						TOSA MW-01								TOSA MW-02							
Lab Sample ID						L1455564-01				L1555639-01				L1455564-02				L1555639-02			
Client Sample ID						TOSA MW-01				TOSAMW-01				TOSA-MW-02				TOSAMW-02			
Date Collected						01/26/2022				11/07/2022				01/26/2022				11/07/2022			
Analyte	CAS	Method	Units	MCL	RSL Tapwater	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
ANTHRACENE	120-12-7	8270C-SIM	mg/l	NE	1.8	<0.0000500		0.000019	0.00005	<0.0000500		0.000019	0.00005	<0.0000500		0.000019	0.00005	<0.0000500		0.000019	0.00005
ACENAPHTHENE	83-32-9	8270C-SIM	mg/l	NE	0.53	<0.0000500		0.000019	0.00005	<0.0000500		0.000019	0.00005	<0.0000500		0.000019	0.00005	<0.0000500		0.000019	0.00005
ACENAPHTHYLENE	208-96-8	8270C-SIM	mg/l	NE	NE	<0.0000500		0.0000171	0.00005	<0.0000500		0.0000171	0.00005	<0.0000500		0.0000171	0.00005	<0.0000500		0.0000171	0.00005
BENZO(A)ANTHRACENE	56-55-3	8270C-SIM	mg/l	NE	0.00003	<0.0000500		0.0000203	0.00005	<0.0000500		0.0000203	0.00005	<0.0000500		0.0000203	0.00005	<0.0000500		0.0000203	0.00005
BENZO(A)PYRENE	50-32-8	8270C-SIM	mg/l	0.0002	0.000025	<0.0000500		0.0000184	0.00005	<0.0000500		0.0000184	0.00005	<0.0000500		0.0000184	0.00005	<0.0000500		0.0000184	0.00005
BENZO(B)FLUORANTHENE	205-99-2	8270C-SIM	mg/l	NE	0.00025	<0.0000500		0.0000168	0.00005	<0.0000500		0.0000168	0.00005	<0.0000500		0.0000168	0.00005	<0.0000500		0.0000168	0.00005
BENZO(G,H,I)PERYLENE	191-24-2	8270C-SIM	mg/l	NE	NE	<0.0000500		0.0000184	0.00005	<0.0000500		0.0000184	0.00005	<0.0000500		0.0000184	0.00005	<0.0000500		0.0000184	0.00005
BENZO(K)FLUORANTHENE	207-08-9	8270C-SIM	mg/l	NE	0.0025	<0.0000500		0.0000202	0.00005	<0.0000500		0.0000202	0.00005	<0.0000500		0.0000202	0.00005	<0.0000500		0.0000202	0.00005
CHRYSENE	218-01-9	8270C-SIM	mg/l	NE	0.025	<0.0000500		0.0000179	0.00005	<0.0000500		0.0000179	0.00005	<0.0000500		0.0000179	0.00005	<0.0000500		0.0000179	0.00005
DIBENZ(A,H)ANTHRACENE	53-70-3	8270C-SIM	mg/l	NE	0.000025	<0.0000500		0.000016	0.00005	<0.0000500		0.000016	0.00005	<0.0000500		0.000016	0.00005	<0.0000500		0.000016	0.00005
FLUORANTHENE	206-44-0	8270C-SIM	mg/l	NE	0.8	<0.000100		0.000027	0.0001	<0.000100		0.000027	0.0001	<0.000100		0.000027	0.0001	<0.000100		0.000027	0.0001
FLUORENE	86-73-7	8270C-SIM	mg/l	NE	0.29	<0.0000500		0.0000169	0.00005	<0.0000500		0.0000169	0.00005	<0.0000500		0.0000169	0.00005	<0.0000500		0.0000169	0.00005
INDENO(1,2,3-CD)PYRENE	193-39-5	8270C-SIM	mg/l	NE	0.00025	<0.0000500		0.0000158	0.00005	<0.0000500		0.0000158	0.00005	<0.0000500		0.0000158	0.00005	<0.0000500		0.0000158	0.00005
NAPHTHALENE	91-20-3	8270C-SIM	mg/l	NE	0.00012	<0.000250		0.0000917	0.00025	<0.000250		0.0000917	0.00025	<0.000250		0.0000917	0.00025	<0.000250		0.0000917	0.00025
PHENANTHRENE	85-01-8	8270C-SIM	mg/l	NE	NE	<0.0000500		0.000018	0.00005	<0.0000500		0.000018	0.00005	<0.0000500		0.000018	0.00005	<0.0000500		0.000018	0.00005
PYRENE	129-00-0	8270C-SIM	mg/l	NE	0.12	<0.0000500		0.0000169	0.00005	<0.0000500		0.0000169	0.00005	<0.0000500		0.0000169	0.00005	<0.0000500		0.0000169	0.00005
1-METHYLNAPHTHALENE	90-12-0	8270C-SIM	mg/l	NE	0.0011	<0.000250		0.0000687	0.00025	<0.000250		0.0000687	0.00025	<0.000250		0.0000687	0.00025	<0.000250		0.0000687	0.00025
2-METHYLNAPHTHALENE	91-57-6	8270C-SIM	mg/l	NE	0.036	<0.000250		0.0000674	0.00025	<0.000250		0.0000674	0.00025	<0.000250		0.0000674	0.00025	<0.000250		0.0000674	0.00025
2-CHLORONAPHTHALENE	91-58-7	8270C-SIM	mg/l	NE	0.75	<0.000250		0.0000682	0.00025	<0.000250		0.0000682	0.00025	<0.000250		0.0000682	0.00025	<0.000250		0.0000682	0.00025
1,4-DIOXANE	123-91-1	8270E	mg/l	NE	0.00046					0.00198		0.0000447	0.0004					0.000432		0.0000447	0.0004

Qualifiers:

J: The identification of the analyte is acceptable; the reported value is an estimate.

J4: The associated batch QC was outside the established quality control range for accuracy.

EPA MCL: Environmental Protection Agency Maximum Contaminant Level for drinking water (November 2022).

EPA RSL: Environmental Protection Agency Regional Screening Levels for Tapwater (November 2022; TR=1E-06; THQ=1.0).

mg/l: Milligrams per liter

NE: Not Established.

<: Less than Reported Detection Limit (RDL).

Bold value exceeds RDL.

Blue italics value is RDL that exceeds screening level.

Color shaded value exceeds screening level; gray shading indicates Sample Not Analyzed

*Duplicate of TOSAMW-04

Table 9 - Groundwater Analytical Results - SVOCs and 1,4-Dioxane
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Sample Location ID						TOSA MW-03								TOSA MW-04				TOSA MW-05				TOSA MW-400*			
Lab Sample ID						L1455564-03				L1555639-03				L1555639-04				L1555639-05				L1555639-06			
Client Sample ID						TOSA-MW-03				TOSAMW-03				TOSAMW-04				TOSAMW-05				TOSAMW-400			
Date Collected						01/26/2022				11/07/2022				11/07/2022				11/07/2022				11/07/2022			
Analyte	CAS	Method	Units	MCL	RSL Tapwater	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
BENZIDINE	92-87-5	8270C	mg/l	NE	0.00000011					<0.0100	J4	0.00374	0.01	<0.0100	J4	0.00374	0.01	<0.0100	J4	0.00374	0.01	<0.0118	J4	0.00441	0.0118
BIS(2-CHLOROETHOXY)METHANE	111-91-1	8270C	mg/l	NE	0.059					<0.0100		0.000116	0.01	<0.0100		0.000116	0.01	<0.0100		0.000116	0.01	<0.0118		0.000137	0.0118
BIS(2-CHLOROETHYL)ETHER	111-44-4	8270C	mg/l	NE	0.000014					<0.0100		0.000137	0.01	<0.0100		0.000137	0.01	<0.0100		0.000137	0.01	<0.0118		0.000162	0.0118
2,2-OXYBIS(1-CHLOROPROPANE)	108-60-1	8270C	mg/l	NE	0.71					<0.0100		0.00021	0.01	<0.0100		0.00021	0.01	<0.0100		0.00021	0.01	<0.0118		0.000248	0.0118
4-BROMOPHENYL-PHENYLETHER	101-55-3	8270C	mg/l	NE	NE					<0.0100		0.0000877	0.01	<0.0100		0.0000877	0.01	<0.0100		0.0000877	0.01	<0.0118		0.000103	0.0118
4-CHLOROPHENYL-PHENYLETHER	7005-72-3	8270C	mg/l	NE	NE					<0.0100		0.0000926	0.01	<0.0100		0.0000926	0.01	<0.0100		0.0000926	0.01	<0.0118		0.000109	0.0118
1,2-DICHLORO BENZENE	95-50-1	8270C	mg/l	0.6	0.3					<0.0100		0.0000713	0.01	<0.0100		0.0000713	0.01	<0.0100		0.0000713	0.01	<0.0118		8.41E-05	0.0118
1,3-DICHLORO BENZENE	541-73-1	8270C	mg/l	NE	NE					<0.0100		0.000132	0.01	<0.0100		0.000132	0.01	<0.0100		0.000132	0.01	<0.0118		0.000156	0.0118
1,4-DICHLORO BENZENE	106-46-7	8270C	mg/l	0.075	0.00048					<0.0100		0.0000942	0.01	<0.0100		0.0000942	0.01	<0.0100		0.0000942	0.01	<0.0118		0.000111	0.0118
3,3-DICHLORO BENZIDINE	91-94-1	8270C	mg/l	NE	0.00013					<0.0100	J4	0.000212	0.01	<0.0100	J4	0.000212	0.01	<0.0100	J4	0.000212	0.01	<0.0118	J4	0.00025	0.0118
2,4-DINITROTOLUENE	121-14-2	8270C	mg/l	NE	0.00024					<0.0100		0.0000983	0.01	<0.0100		0.0000983	0.01	<0.0100		0.0000983	0.01	<0.0118		0.000116	0.0118
2,6-DINITROTOLUENE	606-20-2	8270C	mg/l	NE	0.000049					<0.0100		0.00025	0.01	<0.0100		0.00025	0.01	<0.0100		0.00025	0.01	<0.0118		0.000295	0.0118
HEXACHLORO BENZENE	118-74-1	8270C	mg/l	0.001	0.0000098					<0.00100		0.0000755	0.001	<0.00100		0.0000755	0.001	<0.00100		0.0000755	0.001	<0.00118		8.91E-05	0.00118
HEXACHLORO-1,3-BUTADIENE	87-68-3	8270C	mg/l	NE	0.00014					<0.0100		0.0000968	0.01	<0.0100		0.0000968	0.01	<0.0100		0.0000968	0.01	<0.0118		0.000114	0.0118
HEXACHLOROCYCLOPENTADIENE	77-47-4	8270C	mg/l	0.05	0.00041					<0.0100		0.0000598	0.01	<0.0100		0.0000598	0.01	<0.0100		0.0000598	0.01	<0.0118		7.06E-05	0.0118
HEXACHLOROETHANE	67-72-1	8270C	mg/l	NE	0.00033					<0.0100		0.000127	0.01	<0.0100		0.000127	0.01	<0.0100		0.000127	0.01	<0.0118		0.00015	0.0118
ISOPHORONE	78-59-1	8270C	mg/l	NE	0.078					<0.0100		0.000143	0.01	<0.0100		0.000143	0.01	<0.0100		0.000143	0.01	<0.0118		0.000169	0.0118
NITROBENZENE	98-95-3	8270C	mg/l	NE	0.00014					<0.0100		0.000297	0.01	<0.0100		0.000297	0.01	<0.0100		0.000297	0.01	<0.0118		0.00035	0.0118
N-NITROSODIMETHYLAMINE	62-75-9	8270C	mg/l	NE	0.00000011					<0.0100		0.000998	0.01	<0.0100		0.000998	0.01	<0.0100		0.000998	0.01	<0.0118		0.00118	0.0118
N-NITROSODIPHENYLAMINE	86-30-6	8270C	mg/l	NE	0.012					<0.0100		0.00237	0.01	<0.0100		0.00237	0.01	<0.0100		0.00237	0.01	<0.0118		0.0028	0.0118
N-NITROSODI-N-PROPYLAMINE	621-64-7	8270C	mg/l	NE	0.000011					<0.0100		0.000261	0.01	<0.0100		0.000261	0.01	<0.0100		0.000261	0.01	<0.0118		0.000308	0.0118
BENZYL BUTYL PHTHALATE	85-68-7	8270C	mg/l	NE	0.016					<0.00300		0.000765	0.003	<0.00300		0.000765	0.003	<0.00300		0.000765	0.003	<0.00354		0.000903	0.00354
BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	8270C	mg/l	0.006	0.0056					<0.00300		0.000895	0.003	<0.00300		0.000895	0.003	<0.00300		0.000895	0.003	<0.00354		0.00106	0.00354
DI-N-BUTYL PHTHALATE	84-74-2	8270C	mg/l	NE	0.9					<0.00300		0.000453	0.003	<0.00300		0.000453	0.003	<0.00300		0.000453	0.003	<0.00354		0.000535	0.00354
DIETHYL PHTHALATE	84-66-2	8270C	mg/l	NE	15					<0.00300		0.000287	0.003	<0.00300		0.000287	0.003	<0.00300		0.000287	0.003	<0.00354		0.000339	0.00354
DIMETHYL PHTHALATE	131-11-3	8270C	mg/l	NE	NE					<0.00300		0.00026	0.003	<0.00300		0.00026	0.003	<0.00300		0.00026	0.003	<0.00354		0.000307	0.00354
DI-N-OCTYL PHTHALATE	117-84-0	8270C	mg/l	NE	0.2					<0.00300		0.000932	0.003	<0.00300		0.000932	0.003	<0.00300		0.000932	0.003	<0.00354		0.0011	0.00354
1,2,4-TRICHLORO BENZENE	120-82-1	8270C	mg/l	0.07	0.0012					<0.0100		0.0000698	0.01	<0.0100		0.0000698	0.01	<0.0100		0.0000698	0.01	<0.0118		8.24E-05	0.0118
4-CHLORO-3-METHYLPHENOL	59-50-7	8270C	mg/l	NE	1.4					<0.0100		0.000131	0.01	<0.0100		0.000131	0.01	<0.0100		0.000131	0.01	<0.0118		0.000155	0.0118
2-CHLOROPHENOL	95-57-8	8270C	mg/l	NE	0.091					<0.0100		0.000133	0.01	<0.0100		0.000133	0.01	<0.0100		0.000133	0.01	<0.0118		0.000157	0.0118
2,4-DICHLOROPHENOL	120-83-2	8270C	mg/l	NE	0.046					<0.0100		0.000102	0.01	<0.0100		0.000102	0.01	<0.0100		0.000102	0.01	<0.0118		0.00012	0.0118
2,4-DIMETHYLPHENOL	105-67-9	8270C	mg/l	NE	0.36					<0.0100	J4	0.0000636	0.01	<0.0100	J4	0.0000636	0.01	<0.0100	J4	0.0000636	0.01	<0.0118	J4	0.000075	0.0118
4,6-DINITRO-2-METHYLPHENOL	534-52-1	8270C	mg/l	NE	0.0015					<0.0100		0.00112	0.01	<0.0100		0.00112	0.01	<0.0100		0.00112	0.01	<0.0118		0.00132	0.0118
2,4-DINITROPHENOL	51-28-5	8270C	mg/l	NE	0.039					<0.0100		0.00593	0.01	<0.0100		0.00593	0.01	<0.0100		0.00593	0.01	<0.0118		0.007	0.0118
2-NITROPHENOL	88-75-5	8270C	mg/l	NE	NE					<0.0100		0.000117	0.01	<0.0100		0.000117	0.01	<0.0100		0.000117	0.01	<0.0118		0.000138	0.0118
4-NITROPHENOL	100-02-7	8270C	mg/l	NE	NE					<0.0100		0.000143	0.01	<0.0100		0.000143	0.01	<0.0100		0.000143	0.01	<0.0118		0.000169	0.0118
PENTACHLOROPHENOL	87-86-5	8270C	mg/l	0.001	0.000041					<0.0100		0.000313	0.01	<0.0100		0.000313	0.01	<0.0100		0.000313	0.01	<0.0118		0.000369	0.0118
PHENOL	108-95-2	8270C	mg/l	NE	5.8					<0.0100		0.00433	0.01	<0.0100		0.00433	0.01	<0.0100		0.00433	0.01	<0.0118		0.00511	0.0118
2,4,6-TRICHLOROPHENOL	88-06-2	8270C	mg/l	NE	0.0041					<0.0100		0.0001	0.01	<0.0100		0.0001	0.01	<0.0100		0.0001	0.01	<0.0118		0.000118	0.0118

Table 9 - Groundwater Analytical Results - SVOCs and 1,4-Dioxane
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Sample Location ID						TOSA MW-03								TOSA MW-04				TOSA MW-05				TOSA MW-400*			
Lab Sample ID						L1455564-03				L1555639-03				L1555639-04				L1555639-05				L1555639-06			
Client Sample ID						TOSA-MW-03				TOSAMW-03				TOSAMW-04				TOSAMW-05				TOSAMW-400			
Date Collected						01/26/2022				11/07/2022				11/07/2022				11/07/2022				11/07/2022			
Analyte	CAS	Method	Units	MCL	RSL Tapwater	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
ANTHRACENE	120-12-7	8270C-SIM	mg/l	NE	1.8	<0.0000500		0.000019	0.00005	<0.0000500		0.000019	0.00005	<0.0000500		0.000019	0.00005	<0.0000500		0.000019	0.00005	<0.0000500		0.000019	0.00005
ACENAPHTHENE	83-32-9	8270C-SIM	mg/l	NE	0.53	<0.0000500		0.000019	0.00005	<0.0000500		0.000019	0.00005	<0.0000500		0.000019	0.00005	<0.0000500		0.000019	0.00005	<0.0000500		0.000019	0.00005
ACENAPHTHYLENE	208-96-8	8270C-SIM	mg/l	NE	NE	<0.0000500		0.0000171	0.00005	<0.0000500		0.0000171	0.00005	<0.0000500		0.0000171	0.00005	<0.0000500		0.0000171	0.00005	<0.0000500		1.71E-05	0.00005
BENZO(A)ANTHRACENE	56-55-3	8270C-SIM	mg/l	NE	0.00003	<0.0000500		0.0000203	0.00005	<0.0000500		0.0000203	0.00005	<0.0000500		0.0000203	0.00005	<0.0000500		0.0000203	0.00005	<0.0000500		2.03E-05	0.00005
BENZO(A)PYRENE	50-32-8	8270C-SIM	mg/l	0.0002	0.000025	<0.0000500		0.0000184	0.00005	<0.0000500		0.0000184	0.00005	<0.0000500		0.0000184	0.00005	<0.0000500		0.0000184	0.00005	<0.0000500		1.84E-05	0.00005
BENZO(B)FLUORANTHENE	205-99-2	8270C-SIM	mg/l	NE	0.00025	<0.0000500		0.0000168	0.00005	<0.0000500		0.0000168	0.00005	<0.0000500		0.0000168	0.00005	<0.0000500		0.0000168	0.00005	<0.0000500		1.68E-05	0.00005
BENZO(G,H,I)PERYLENE	191-24-2	8270C-SIM	mg/l	NE	NE	<0.0000500		0.0000184	0.00005	<0.0000500		0.0000184	0.00005	<0.0000500		0.0000184	0.00005	<0.0000500		0.0000184	0.00005	<0.0000500		1.84E-05	0.00005
BENZO(K)FLUORANTHENE	207-08-9	8270C-SIM	mg/l	NE	0.0025	<0.0000500		0.0000202	0.00005	<0.0000500		0.0000202	0.00005	<0.0000500		0.0000202	0.00005	<0.0000500		0.0000202	0.00005	<0.0000500		2.02E-05	0.00005
CHRYSENE	218-01-9	8270C-SIM	mg/l	NE	0.025	<0.0000500		0.0000179	0.00005	<0.0000500		0.0000179	0.00005	<0.0000500		0.0000179	0.00005	0.0000185	J	0.0000179	0.00005	<0.0000500		1.79E-05	0.00005
DIBENZ(A,H)ANTHRACENE	53-70-3	8270C-SIM	mg/l	NE	0.000025	<0.0000500		0.000016	0.00005	<0.0000500		0.000016	0.00005	<0.0000500		0.000016	0.00005	<0.0000500		0.000016	0.00005	<0.0000500		0.000016	0.00005
FLUORANTHENE	206-44-0	8270C-SIM	mg/l	NE	0.8	<0.000100		0.000027	0.0001	<0.000100		0.000027	0.0001	<0.000100		0.000027	0.0001	0.0000843	J	0.000027	0.0001	<0.000100		0.000027	0.0001
FLUORENE	86-73-7	8270C-SIM	mg/l	NE	0.29	<0.0000500		0.0000169	0.00005	<0.0000500		0.0000169	0.00005	<0.0000500		0.0000169	0.00005	<0.0000500		0.0000169	0.00005	<0.0000500		1.69E-05	0.00005
INDENO(1,2,3-CD)PYRENE	193-39-5	8270C-SIM	mg/l	NE	0.00025	<0.0000500		0.0000158	0.00005	<0.0000500		0.0000158	0.00005	<0.0000500		0.0000158	0.00005	<0.0000500		0.0000158	0.00005	<0.0000500		1.58E-05	0.00005
NAPHTHALENE	91-20-3	8270C-SIM	mg/l	NE	0.00012	<0.000250		0.0000917	0.00025	<0.000250		0.0000917	0.00025	<0.000250		0.0000917	0.00025	<0.000250		0.0000917	0.00025	<0.000250		9.17E-05	0.00025
PHENANTHRENE	85-01-8	8270C-SIM	mg/l	NE	NE	<0.0000500		0.000018	0.00005	<0.0000500		0.000018	0.00005	<0.0000500		0.000018	0.00005	0.0000212	J	0.000018	0.00005	<0.0000500		0.000018	0.00005
PYRENE	129-00-0	8270C-SIM	mg/l	NE	0.12	<0.0000500		0.0000169	0.00005	<0.0000500		0.0000169	0.00005	<0.0000500		0.0000169	0.00005	0.0000993	J	0.0000169	0.00005	<0.0000500		1.69E-05	0.00005
1-METHYLNAPHTHALENE	90-12-0	8270C-SIM	mg/l	NE	0.0011	<0.000250		0.0000687	0.00025	<0.000250		0.0000687	0.00025	<0.000250		0.0000687	0.00025	<0.000250		0.0000687	0.00025	<0.000250		6.87E-05	0.00025
2-METHYLNAPHTHALENE	91-57-6	8270C-SIM	mg/l	NE	0.036	<0.000250		0.0000674	0.00025	<0.000250		0.0000674	0.00025	<0.000250		0.0000674	0.00025	<0.000250		0.0000674	0.00025	<0.000250		6.74E-05	0.00025
2-CHLORONAPHTHALENE	91-58-7	8270C-SIM	mg/l	NE	0.75	<0.000250		0.0000682	0.00025	<0.000250		0.0000682	0.00025	<0.000250		0.0000682	0.00025	<0.000250		0.0000682	0.00025	<0.000250		6.82E-05	0.00025
1,4-DIOXANE	123-91-1	8270E	mg/l	NE	0.00046					0.000872		0.0000447	0.0004	0.000436		0.0000447	0.0004	<0.000400		0.0000447	0.0004	0.000567		4.47E-05	0.0004

Qualifiers:

J: The identification of the analyte is acceptable; the reported value is an estimate.
J4: The associated batch QC was outside the established quality control range for accuracy.
EPA MCL: Environmental Protection Agency Maximum Contaminant Level for drinking water (November 2022).
EPA RSL: Environmental Protection Agency Regional Screening Levels for Tapwater (November 2022; TR=1E-06; THQ=1.0).
mg/l: Milligrams per liter
NE: Not Established.
<: Less than Reported Detection Limit (RDL).
Bold value exceeds RDL.
Blue italics value is RDL that exceeds screening level.
Color shaded value exceeds screening level; gray shading indicates Sample Not Analyzed
*Duplicate of TOSAMW-04

Table 10 - Groundwater Analytical Results - PFAS
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Lab Sample ID						22201317201				22211091001				22201317202				22211091002			
Client Sample ID						TOSA-MW01				TOSA-MW01				TOSA-MW02				TOSA-MW02			
Date Collected						1/26/2022				11/7/2022				1/26/2022				11/7/2022			
Analyte	CAS	Method	Units	MCL	RSL Tapwater	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
10:2FTS	120226-60-0	EPA 537 Mod	ng/L	NE	NE					1.93	U	1.93	4.55					1.74	U	1.74	4.1
11CI-PF3OUdS	763051-92-9	EPA 537 Mod	ng/L	NE	NE		U	0.915	4.07	1.02	U	1.02	4.55		U	0.886	3.94	0.922	U	0.922	4.1
4:2 Fluorotelomer sulfonate (4:2 FTS)	757124-72-4	EPA 537 Mod	ng/L	NE	NE		U	1.26	4.07	1.41	U	1.41	4.55		U	1.22	3.94	1.27	U	1.27	4.1
6:2 Fluorotelomer sulfonate (6:2 FTS)	27619-97-2	EPA 537 Mod	ng/L	NE	NE		U	1.52	4.07	1.7	U	1.7	4.55	400		1.48	3.94	602		1.54	4.1
8:2 Fluorotelomer sulfonate (8:2 FTS)	39108-34-4	EPA 537 Mod	ng/L	NE	NE		U	1.08	4.07	1.2	U	1.2	4.55		U	1.04	3.94	1.09	U	1.09	4.1
9CI-PF3ONS	756426-58-1	EPA 537 Mod	ng/L	NE	NE		U	0.915	4.07	1.02	U	1.02	4.55		U	0.886	3.94	0.922	U	0.922	4.1
ADONA	919005-14-4	EPA 537 Mod	ng/L	NE	NE		U	0.874	4.07	0.977	U	0.977	4.55		U	0.846	3.94	0.881	U	0.881	4.1
HFPO-DA	13252-13-6	EPA 537 Mod	ng/L	NE	60		U	6.78	20.3	7.58	U	7.58	22.7		U	6.56	19.7	6.83	U	6.83	20.5
NEtFOSA	4151-50-2	EPA 537 Mod	ng/L	NE	NE					1.59	U	1.59	9.09					4.27	J	1.43	8.2
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	EPA 537 Mod	ng/L	NE	NE		U	1.61	8.13	1.8	U	1.8	9.09		U	1.56	7.87	1.62	U	1.62	8.2
NEtFOSE	1691-99-2	EPA 537 Mod	ng/L	NE	NE					1.15	U	1.15	9.09					1.03	U	1.03	8.2
NFDHA	151772-58-6	EPA 537 Mod	ng/L	NE	NE					1.7	U	1.7	4.55					1.54	U	1.54	4.1
NMeFOSA	31506-32-8	EPA 537 Mod	ng/L	NE	NE					1.89	U	1.89	9.09					1.7	U	1.7	8.2
methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	EPA 537 Mod	ng/L	NE	NE		U	0.915	8.13	1.02	U	1.02	9.09		U	0.886	7.87	0.922	U	0.922	8.2
NMeFOSE	24448-09-7	EPA 537 Mod	ng/L	NE	NE					1.48	U	1.48	9.09					1.33	U	1.33	8.2
Perfluorobutanoic acid (PFBA)	375-22-4	EPA 537 Mod	ng/L	NE	NE	15		1.54	4.07	2.94	J	2.94	4.55	361		1.5	3.94	507		1.56	4.1
Perfluorobutanesulfonic acid (PFBS)	375-73-5	EPA 537 Mod	ng/L	NE	6000	11.3		0.63	4.07	3.10	J	3.1	4.55	108		0.61	3.94	120		0.635	4.1
Perfluorodecanoic acid (PFDA)	335-76-2	EPA 537 Mod	ng/L	NE	NE		U	1.46	4.07	1.64	U	1.64	4.55		U	1.42	3.94	1.48	U	1.48	4.1
Perfluorodecane Sulfonate (PFDS)	335-77-3	EPA 537 Mod	ng/L	NE	NE		U	1.24	4.07	1.39	U	1.39	4.55		U	1.2	3.94	1.25	U	1.25	4.1
Perfluorododecanoic acid (PFDoA)	307-55-1	EPA 537 Mod	ng/L	NE	NE		U	1.32	4.07	1.48	U	1.48	4.55		U	1.28	3.94	1.33	U	1.33	4.1
PFDoS	79780-39-5	EPA 537 Mod	ng/L	NE	NE					1.49	U	1.49	4.55					1.34	U	1.34	4.1
PFEESA	113507-82-7	EPA 537 Mod	ng/L	NE	NE					1.76	U	1.76	4.55					1.59	U	1.59	4.1
Perfluoroheptanoic acid (PFHpA)	375-85-9	EPA 537 Mod	ng/L	NE	NE	7.19		1.18	4.07	1.32	U	1.32	4.55	299		1.14	3.94	354		1.19	4.1
Perfluoro-1-heptanesulfonate (PFHpS)	375-92-8	EPA 537 Mod	ng/L	NE	NE		U	1.24	4.07	1.39	U	1.39	4.55		U	1.2	3.94	2.03	J	1.25	4.1
Perfluorohexanoic acid (PFHxA)	307-24-4	EPA 537 Mod	ng/L	NE	NE	9.32		0.955	4.07	1.07	U	1.07	4.55	1190		0.925	3.94	1600		0.963	4.1
PFHxDA	67905-19-5	EPA 537 Mod	ng/L	NE	NE					1.7	U	1.7	4.55					1.54	U	1.54	4.1
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	EPA 537 Mod	ng/L	NE	390	13.9		1.26	4.07	2.30	J	2.3	4.55	113		1.22	3.94	161		1.27	4.1
PFMBA	863090-89-5	EPA 537 Mod	ng/L	NE	NE					1.7	U	1.7	4.55					1.54	U	1.54	4.1
PFMPA	377-73-1	EPA 537 Mod	ng/L	NE	NE					1.58	U	1.58	4.55					1.42	U	1.42	4.1
Perfluorononanoic acid (PFNA)	375-95-1	EPA 537 Mod	ng/L	NE	59		U	0.996	4.07	1.11	U	1.11	4.55		U	0.965	3.94	2.91	J	1	4.1
PFNS	68259-12-1	EPA 537 Mod	ng/L	NE	NE		U	1.77	4.07	1.98	U	1.98	4.55		U	1.71	3.94	1.78	U	1.78	4.1
Perfluorooctanoic acid (PFOA)	335-67-1	EPA 537 Mod	ng/L	NE	60	26.8		0.854	4.07	2.27	J	2.27	4.55	194		0.827	3.94	216		0.861	4.1
PFODA	16517-11-6	EPA 537 Mod	ng/L	NE	NE					1.17	U	1.17	4.55					1.06	U	1.06	4.1
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	EPA 537 Mod	ng/L	NE	40	53.7		0.772	4.07	1.90	J	1.9	4.55	21.2		0.748	3.94	27.6		0.779	4.1
Perfluorooctane Sulfonamide (FOSA)	754-91-6	EPA 537 Mod	ng/L	NE	NE		U	0.752	4.07	0.841	U	0.841	4.55		U	0.728	3.94	0.758	U	0.758	4.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	EPA 537 Mod	ng/L	NE	NE	9.31		0.894	4.07	1.00	U	1	4.55	1930		4.33	19.7	2850		4.51	20.5
Perfluoropentanesulfonic acid (PFPeS)	2706-91-4	EPA 537 Mod	ng/L	NE	NE		U	1.04	4.07	1.16	U	1.16	4.55	45.1		1	3.94	64.5		1.05	4.1
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	EPA 537 Mod	ng/L	NE	NE		U	1.16	4.07	1.3	U	1.3	4.55		U	1.12	3.94	1.17	U	1.17	4.1
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	EPA 537 Mod	ng/L	NE	NE		U	1.25	4.07	1.4	U	1.4	4.55		U	1.21	3.94	1.26	U	1.26	4.1
Perfluoroundecanoic acid (PFUdA)	2058-94-8	EPA 537 Mod	ng/L	NE	NE		U	1.26	4.07	1.41	U	1.41	4.55		U	1.22	3.94	1.27	U	1.27	4.1

Qualifiers:

U: Indicates the compound was analyzed for but not detected

J: Indicates the result is between the MDL and RDL

EPA RSL: Environmental Protection

ng/L: Nanograms per liter; NE: Not Established; grey shaded values Not Analyzed

Bold value exceeds RDL; *Blue italics* value is RDL that exceeds screening level;

Color shaded value exceeds screening level.

*Duplicate of TOSAMW-04

Table 10 - Groundwater Analytical Results - PFAS
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Lab Sample ID						22201317203				22211091003				22211091004				22211091005				22211091006			
Client Sample ID						TOSA-MW03				TOSA-MW03				TOSA-MW04				TOSA-MW05				TOSA-MW400*			
Date Collected						1/26/2022				11/7/2022				11/7/2022				11/7/2022				11/7/2022			
Analyte	CAS	Method	Units	MCL	RSL Tapwater	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL	Result	Q	MDL	RDL
10:2FTS	120226-60-0	EPA 537 Mod	ng/L	NE	NE					1.61	U	1.61	3.79	1.66	U	1.66	3.91	1.63	U	1.63	3.85	1.74	U	1.74	4.10
11CI-PF3OUdS	763051-92-9	EPA 537 Mod	ng/L	NE	NE		U	0.9	4.00	0.852	U	0.852	3.79	0.879	U	0.879	3.91	0.865	U	0.865	3.85	0.922	U	0.922	4.10
4:2 Fluorotelomer sulfonate (4:2 FTS)	757124-72-4	EPA 537 Mod	ng/L	NE	NE		U	1.24	4.00	1.17	U	1.17	3.79	1.21	U	1.21	3.91	1.19	U	1.19	3.85	1.27	U	1.27	4.10
6:2 Fluorotelomer sulfonate (6:2 FTS)	27619-97-2	EPA 537 Mod	ng/L	NE	NE		U	1.5	4.00	1.42	U	1.42	3.79	39.5		1.46	3.91		J	1.44	3.85	31.2		1.54	4.10
8:2 Fluorotelomer sulfonate (8:2 FTS)	39108-34-4	EPA 537 Mod	ng/L	NE	NE		U	1.06	4.00	1	U	1	3.79	1.04	U	1.04	3.91	1.02	U	1.02	3.85	1.09	U	1.09	4.10
9CI-PF3ONS	756426-58-1	EPA 537 Mod	ng/L	NE	NE		U	0.9	4.00	0.852	U	0.852	3.79	0.879	U	0.879	3.91	0.865	U	0.865	3.85	0.922	U	0.922	4.10
ADONA	919005-14-4	EPA 537 Mod	ng/L	NE	NE		U	0.86	4.00	0.814	U	0.814	3.79	0.84	U	0.84	3.91	0.827	U	0.827	3.85	0.881	U	0.881	4.10
HFPO-DA	13252-13-6	EPA 537 Mod	ng/L	NE	60		U	6.67	20	6.32	U	6.32	18.9	6.51	U	6.51	19.5	6.41	U	6.41	19.2	6.83	U	6.83	20.5
NEtFOSA	4151-50-2	EPA 537 Mod	ng/L	NE	NE					1.33	U	1.33	7.58	1.37	U	1.37	7.81	1.35	U	1.35	7.69	1.43	U	1.43	8.20
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	EPA 537 Mod	ng/L	NE	NE		U	1.58	8.00	1.5	U	1.5	7.58	1.54	U	1.54	7.81	1.52	U	1.52	7.69	1.62	U	1.62	8.20
NEtFOSE	1691-99-2	EPA 537 Mod	ng/L	NE	NE					0.956	U	0.956	7.58	0.986	U	0.986	7.81	0.971	U	0.971	7.69	1.03	U	1.03	8.20
NFDHA	151772-58-6	EPA 537 Mod	ng/L	NE	NE					1.42	U	1.42	3.79	1.46	U	1.46	3.91	1.44	U	1.44	3.85	1.54	U	1.54	4.10
NMeFOSA	31506-32-8	EPA 537 Mod	ng/L	NE	NE					1.57	U	1.57	7.58	1.62	U	1.62	7.81	1.6	U	1.6	7.69	1.7	U	1.7	8.20
methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	EPA 537 Mod	ng/L	NE	NE		U	0.9	8.00	0.852	U	0.852	7.58	0.879	U	0.879	7.81	0.865	U	0.865	7.69	0.922	U	0.922	8.20
NMeFOSE	24448-09-7	EPA 537 Mod	ng/L	NE	NE					1.23	U	1.23	7.58	1.27	U	1.27	7.81	1.25	U	1.25	7.69	1.33	U	1.33	8.20
Perfluorobutanoic acid (PFBA)	375-22-4	EPA 537 Mod	ng/L	NE	NE	35.8		1.52	4.00	14.6		1.44	3.79	424		1.48	3.91	36.1		1.46	3.85	778		1.56	4.10
Perfluorobutanesulfonic acid (PFBS)	375-73-5	EPA 537 Mod	ng/L	NE	6000	18.4		0.62	4.00	5.63		0.587	3.79	99.8		0.605	3.91	17		0.596	3.85	171		0.635	4.10
Perfluorodecanoic acid (PFDA)	335-76-2	EPA 537 Mod	ng/L	NE	NE		U	1.44	4.00	1.36	U	1.36	3.79	1.41	U	1.41	3.91	1.38	U	1.38	3.85	1.48	U	1.48	4.10
Perfluorodecane Sulfonate (PFDS)	335-77-3	EPA 537 Mod	ng/L	NE	NE		U	1.22	4.00	1.16	U	1.16	3.79	1.19	U	1.19	3.91	1.17	U	1.17	3.85	1.25	U	1.25	4.10
Perfluorododecanoic acid (PFDoA)	307-55-1	EPA 537 Mod	ng/L	NE	NE		U	1.3	4.00	1.23	U	1.23	3.79	1.27	U	1.27	3.91	1.25	U	1.25	3.85	1.33	U	1.33	4.10
PFDoS	79780-39-5	EPA 537 Mod	ng/L	NE	NE					1.24	U	1.24	3.79	1.28	U	1.28	3.91	1.26	U	1.26	3.85	1.34	U	1.34	4.10
PFEESA	113507-82-7	EPA 537 Mod	ng/L	NE	NE					1.47	U	1.47	3.79	1.51	U	1.51	3.91	1.49	U	1.49	3.85	1.59	U	1.59	4.10
Perfluoroheptanoic acid (PFHpA)	375-85-9	EPA 537 Mod	ng/L	NE	NE	14.6		1.16	4.00	8.13		1.1	3.79	119		1.13	3.91	13.8		1.12	3.85	215		1.19	4.10
Perfluoro-1-heptanesulfonate (PFHpS)	375-92-8	EPA 537 Mod	ng/L	NE	NE		U	1.22	4.00	1.16	U	1.16	3.79	1.19	U	1.19	3.91	1.17	U	1.17	3.85	1.25	U	1.25	4.10
Perfluorohexanoic acid (PFHxA)	307-24-4	EPA 537 Mod	ng/L	NE	NE	82		0.94	4.00	23.3		0.89	3.79	857		0.918	3.91	21.3		0.904	3.85	1710		4.82	20.5
PFHxDA	67905-19-5	EPA 537 Mod	ng/L	NE	NE					1.42	U	1.42	3.79	1.46	U	1.46	3.91	1.44	U	1.44	3.85	1.54	U	1.54	4.10
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	EPA 537 Mod	ng/L	NE	390	31.1		1.24	4.00	6.84		1.17	3.79	68.5		1.21	3.91	29.2		1.19	3.85	146		1.27	4.10
PFMBA	863090-89-5	EPA 537 Mod	ng/L	NE	NE					1.42	U	1.42	3.79	1.46	U	1.46	3.91	1.44	U	1.44	3.85	1.54	U	1.54	4.10
PFMPA	377-73-1	EPA 537 Mod	ng/L	NE	NE					1.32	U	1.32	3.79	1.36	U	1.36	3.91	1.34	U	1.34	3.85	1.42	U	1.42	4.10
Perfluorononanoic acid (PFNA)	375-95-1	EPA 537 Mod	ng/L	NE	59		U	0.98	4.00	0.928	U	0.928	3.79	0.957	U	0.957	3.91	3.46	J	0.942	3.85	1	U	1	4.10
PFNS	68259-12-1	EPA 537 Mod	ng/L	NE	NE		U	1.74	4.00	1.65	U	1.65	3.79	1.7	U	1.7	3.91	1.67	U	1.67	3.85	1.78	U	1.78	4.10
Perfluorooctanoic acid (PFOA)	335-67-1	EPA 537 Mod	ng/L	NE	60	21.9		0.84	4.00	14.3		0.795	3.79	52.2		0.82	3.91	47.3		0.808	3.85	85.9		0.861	4.10
PFODA	16517-11-6	EPA 537 Mod	ng/L	NE	NE					0.975	U	0.975	3.79	1.01	U	1.01	3.91	0.99	U	0.99	3.85	1.06	U	1.06	4.10
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	EPA 537 Mod	ng/L	NE	40	14.5		0.76	4.00	4.32		0.72	3.79	3.93		0.742	3.91	37.6		0.731	3.85	8.58		0.779	4.10
Perfluorooctane Sulfonamide (FOSA)	754-91-6	EPA 537 Mod	ng/L	NE	NE		U	0.74	4.00	0.701	U	0.701	3.79	0.723	U	0.723	3.91	0.857	J	0.712	3.85	0.758	U	0.758	4.10
Perfluoropentanoic acid (PFPeA)	2706-90-3	EPA 537 Mod	ng/L	NE	NE	113		0.88	4.00	33.3		0.833	3.79	1740		4.30	19.5	22.2		0.846	3.85	3350		4.51	20.5
Perfluoropentanesulfonic acid (PFPeS)	2706-91-4	EPA 537 Mod	ng/L	NE	NE	6.08		1.02	4.00	0.966	U	0.966	3.79	36		0.996	3.91	2.12	J	0.981	3.85	68.1		1.05	4.10
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	EPA 537 Mod	ng/L	NE	NE		U	1.14	4.00	1.08	U	1.08	3.79	1.11	U	1.11	3.91	1.1	U	1.1	3.85	1.17	U	1.17	4.10
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	EPA 537 Mod	ng/L	NE	NE		U	1.23	4.00	1.16	U	1.16	3.79	1.2	U	1.2	3.91	1.18	U	1.18	3.85	1.26	U	1.26	4.10
Perfluoroundecanoic acid (PFUdA)	2058-94-8	EPA 537 Mod	ng/L	NE	NE		U	1.24	4.00	1.17	U	1.17	3.79	1.21	U	1.21	3.91	1.19	U	1.19	3.85	1.27	U	1.27	4.10

Qualifiers:

U: Indicates the compound was analyzed for but not detected

J: Indicates the result is between the MDL and RDL

EPA RSL: Environmental Protection

ng/L: Nanograms per liter; NE: Not Established; grey shaded values Not Analyzed

Bold value exceeds RDL; *Blue italics* value is RDL that exceeds screening level;

Color shaded value exceeds screening level.

*Duplicate of TOSAMW-04

Table 11 - Groundwater Analytical Results - Total Dissolved Solids
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

Lab Sample ID			L1555639-01	L1555639-02	L1555639-03	L1555639-04	L1555639-05
Client Sample ID			TOSAMW-01	TOSAMW-02	TOSAMW-03	TOSAMW-04	TOSAMW-05
Date Collected			11/07/2022	11/07/2022	11/07/2022	11/07/2022	11/07/2022
Analyte	Method	Units	Result	Result	Result	Result	Result
DISSOLVED SOLIDS	2540 C-2011	mg/l	2000	2790	1600	924	9660

Table 12 - Duplicate Pair–Metals in Soil
Redwood Road Dump VCP Site 121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

			Original Sample					Duplicate Sample							
Lab Sample ID			L1557295-18					L1557295-33							
Client Sample ID			TP-38 FILL					TP-138 FILL							
Date Collected			11/10/2022					11/10/2022							
Analyte	Method	Units	Result	Q	High Limit	High Limit Type	Dilution Factor	Result	Q	High Limit	High Limit Type	Dilution Factor	Results ≥ 5 x RDL?	RPD	RPD Within +/- 50% for Soil?
ARSENIC	6010B	mg/kg	7.33		2.32	RDL	1	15.9		2.13	RDL	1	No, Original results < 5 x RDL but Duplicate results > 5 x RDL, RPD not calculated. <u>Field Duplicate pair not within control</u> because the difference between the Original and Duplicate sample results was greater than 2 x RDL.		
BARIUM	6010B	mg/kg	185		0.58	RDL	1	184		0.534	RDL	1	Yes, RPD calculated	0.5%	Yes
CADMIUM	6010B	mg/kg	0.897		0.58	RDL	1	13.6		0.534	RDL	1	No, Original results < 5 x RDL but Duplicate results > 5 x RDL, RPD not calculated. <u>Field Duplicate pair not within control</u> because the difference between the Original and Duplicate sample results was greater than 2 x RDL.		
CHROMIUM	6010B	mg/kg	16.9		1.16	RDL	1	18.2		1.07	RDL	1	Yes, RPD calculated	7.4%	Yes
LEAD	6010B	mg/kg	112		0.58	RDL	1	137		0.534	RDL	1	Yes, RPD calculated	20.1%	Yes
SELENIUM	6010B	mg/kg	1.28	J	2.32	RDL	1	1.33	J	2.13	RDL	1	No, Original and Duplicate results < 5 x RDL, RPD not calculated. <u>Field Duplicate pair within control</u> because the difference between the Original and Duplicate sample results was less than 2 x RDL.		
SILVER	6010B	mg/kg	0.162	J	1.16	RDL	1	0.178	J	1.07	RDL	1	No, Original and Duplicate results < 5 x RDL, RPD not calculated. <u>Field Duplicate pair within control</u> because the difference between the Original and Duplicate sample results was less than 2 x RDL.		
MERCURY	7471A	mg/kg	0.125		0.0464	RDL	1	0.0862		0.0427	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. <u>Field Duplicate pair within control</u> because the difference between the Original and Duplicate sample RDLs was less than RDL.		

**Table 12 - Duplicate Pair–Metals in Soil
Redwood Road Dump VCP Site 121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2**

			Original Sample					Duplicate Sample							
Lab Sample ID			L1557295-24					L1557295-35							
Client Sample ID			TP-40 FILL					TP-140 FILL							
Date Collected			11/10/2022					11/10/2022							
Analyte	Method	Units	Result	Q	High Limit	High Limit Type	Dilution Factor	Result	Q	High Limit	High Limit Type	Dilution Factor	Results ≥ 5 x RDL?	RPD	RPD Within +/- 50% for Soil?
ARSENIC	6010B	mg/kg	ND		2.55	RDL	1	12.2		3.06	RDL	1	No, Original results < RDL but Duplicate results < 5 x RDL. <u>Field Duplicate not within control</u> because the difference between the Original and duplicate samples results (using 1/2 the RDL as a conservative estimate for ND) was greater than 2 x RDL.		
BARIUM	6010B	mg/kg	184		0.638	RDL	1	247		0.766	RDL	1	Yes, RPD calculated	29.2%	Yes
CADMIUM	6010B	mg/kg	4.2		0.638	RDL	1	8.42		0.766	RDL	1	Yes, RPD calculated	66.9%	NO
CHROMIUM	6010B	mg/kg	936		1.28	RDL	1	52.4		1.53	RDL	1	Yes, RPD calculated	178.8%	NO
LEAD	6010B	mg/kg	172		0.638	RDL	1	271		0.766	RDL	1	Yes, RPD calculated	44.7%	Yes
SELENIUM	6010B	mg/kg	ND		2.55	RDL	1	ND		3.06	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. <u>Field Duplicate pair within control</u> because the difference between the Original and Duplicate sample RDLs was less than RDL.		
SILVER	6010B	mg/kg	0.557	J	1.28	RDL	1	0.485	J	1.53	RDL	1	No, Original and Duplicate results < 5 x RDL, RPD not calculated. <u>Field Duplicate pair within control</u> because the difference between the Original and Duplicate sample results was less than 2 x RDL.		
MERCURY	7471A	mg/kg	0.195		0.0511	RDL	1	0.306		0.0613	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. <u>Field Duplicate pair within control</u> because the difference between the Original and Duplicate sample RDLs was less than RDL.		

Table 12 - Duplicate Pair–Metals in Soil
Redwood Road Dump VCP Site 121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

			Original Sample					Duplicate Sample							
Lab Sample ID			L1557295-37					L1557295-39							
Client Sample ID			ND-4					ND-104							
Date Collected			11/10/2022					11/10/2022							
Analyte	Method	Units	Result	Q	High Limit	High Limit Type	Dilution Factor	Result	Q	High Limit	High Limit Type	Dilution Factor	Results ≥ 5 x RDL?	RPD	RPD Within +/- 50% for Soil?
ARSENIC	6010B	mg/kg	18.1		5.64	RDL	1	13.6		4.19	RDL	1	No, Original and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than 2 x RDL.		
BARIUM	6010B	mg/kg	336		1.41	RDL	1	242		1.05	RDL	1	Yes, RPD calculated	32.5%	Yes
CADMIUM	6010B	mg/kg	5.67		1.41	RDL	1	4.25		1.05	RDL	1	No, Original and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than 2 x RDL.		
CHROMIUM	6010B	mg/kg	36.8		2.82	RDL	1	28.3		2.1	RDL	1	Yes, RPD calculated	26.1%	Yes
LEAD	6010B	mg/kg	241		1.41	RDL	1	155		1.05	RDL	1	Yes, RPD calculated	43.4%	Yes
SELENIUM	6010B	mg/kg	3.23	J	5.64	RDL	1	4.36	J	4.19	RDL	1	No, Original and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than 2 x RDL.		
SILVER	6010B	mg/kg	0.786	J	2.82	RDL	1	0.7	J	2.1	RDL	1	No, Original and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than 2 x RDL.		
MERCURY	7471A	mg/kg	0.152		0.113	RDL	1	0.158		0.0838	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		

Qualifiers (Q):

J - The identification of the analyte is acceptable; the reported value is an estimate.

mg/kg: Milligrams per kilogram.

RDL - Laboratory reported detection limit.

RPD - Relative Percent Difference was calculated when analyte concentrations are greater than or equal to five times the RDL. QA/QC RPD Goal is less than 50% for solid samples.

For analytes reported at concentrations less than five times the RDL, the QA/QC Goal is the difference between the sample and its duplicate is less than two times the RDL for solid samples.

**Table 13 - Duplicate Pair–PCBs in Soil
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2**

			Original Sample					Duplicate Sample							
Lab Sample ID			L1557295-18					L1557295-33							
Client Sample ID			TP-38 FILL					TP-138 FILL							
Date Collected			11/10/2022					11/10/2022							
Analyte	Method	Units	Result	Q	High Limit	High Limit Type	Dilution Factor	Result	Q	High Limit	High Limit Type	Dilution Factor	Results ≥ 5 x RDL?	RPD	RPD Within +/- 50% for Soil?
PCB 1016	6010B	mg/kg	ND		0.0395	RDL	1	ND		0.0363	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
PCB 1221	6010B	mg/kg	ND		0.0395	RDL	1	ND		0.0363	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
PCB 1232	6010B	mg/kg	ND		0.0395	RDL	1	ND		0.0363	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
PCB 1242	6010B	mg/kg	ND		0.0395	RDL	1	ND		0.0363	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
PCB 1248	6010B	mg/kg	ND		0.0197	RDL	1	ND		0.0181	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
PCB 1254	6010B	mg/kg	ND		0.0197	RDL	1	ND		0.0181	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
PCB 1260	6010B	mg/kg	0.0149	J	0.0197	RDL	1	0.0209		0.0181	RDL	1	No, Original and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than 2 x RDL.		

Table 13 - Duplicate Pair-PCBs in Soil
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

			Original Sample					Duplicate Sample							
Lab Sample ID			L1557295-24					L1557295-35							
Client Sample ID			TP-40 FILL					TP-140 FILL							
Date Collected			11/10/2022					11/10/2022							
Analyte	Method	Units	Result	Q	High Limit	High Limit Type	Dilution Factor	Result	Q	High Limit	High Limit Type	Dilution Factor	Results ≥ 5 x RDL?	RPD	RPD Within +/- 50% for Soil?
PCB 1016	6010B	mg/kg	ND		0.0434	RDL	1	ND		0.0521	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
PCB 1221	6010B	mg/kg	ND		0.0434	RDL	1	ND		0.0521	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
PCB 1232	6010B	mg/kg	ND		0.0434	RDL	1	ND		0.0521	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
PCB 1242	6010B	mg/kg	ND		0.0434	RDL	1	ND		0.0521	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
PCB 1248	6010B	mg/kg	ND		0.0217	RDL	1	ND		0.026	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
PCB 1254	6010B	mg/kg	ND		0.0217	RDL	1	0.0801		0.026	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
PCB 1260	6010B	mg/kg	ND		0.0217	RDL	1	ND		0.026	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		

Qualifiers (Q):

J - The identification of the analyte is acceptable; the reported value is an estimate.

P1 - RPD value not applicable for sample concentrations less than 5 times the reporting limit.

mg/kg: Milligrams per kilogram.

RDL - Laboratory reported detection limit.

RPD - Relative Percent Difference was calculated when analyte concentrations are greater than or equal to five times the RDL. QA/QC RPD Goal is less than 50% for solid samples.

For analytes reported at concentrations less than five times the RDL, the QA/QC Goal is the difference between the sample and its duplicate is less than two times the RDL for solid samples.

Table 14 - Duplicate Pairs–VOCs in Soils
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

			Original Sample					Duplicate Sample							
Lab Sample ID			L1557295-18					L1557295-33							
Client Sample ID			TP-38 FILL					TP-138 FILL							
Date Collected			11/10/2022					11/10/2022							
Analyte	Method	Units	Result	Q	High Limit	High Limit Type	Dilution Factor	Result	Q	High Limit	High Limit Type	Dilution Factor	Results ≥ 5 x RDL?	RPD	RPD Within +/- 50% for Soil?
ACETONE	8260B	mg/kg	ND		0.0593	RDL	1	ND		0.0598	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
ACRYLONITRILE	8260B	mg/kg	ND		0.0119	RDL	1	ND		0.012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
ALLYL CHLORIDE	8260B	mg/kg	ND		0.0059	RDL	1	ND		0.00598	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
BENZENE	8260B	mg/kg	ND		0.0012	RDL	1	0.000905	J	0.0012	RDL	1	No, Original results < RDL but Duplicate results < 5 x RDL. Field Duplicate within control because the difference between the Original and duplicate samples results (using 1/2 the RDL as a conservative estimate for ND) was lessr than 2 x RDL.		
BROMODICHLOROMETHANE	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
BROMOFORM	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
BROMOMETHANE	8260B	mg/kg	ND		0.0059	RDL	1	ND		0.00598	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CARBON DISULFIDE	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CARBON TETRACHLORIDE	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CHLOROBENZENE	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CHLORODIBROMOMETHANE	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CHLOROETHANE	8260B	mg/kg	ND		0.0059	RDL	1	ND		0.00598	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CHLOROFORM	8260B	mg/kg	ND		0.0059	RDL	1	ND		0.00598	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CHLOROMETHANE	8260B	mg/kg	ND		0.003	RDL	1	ND		0.00299	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,2-DIBROMOETHANE	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		

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DIBROMOMETHANE	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,2-DIBROMO-3-CHLOROPROPAN	8260B	mg/kg	ND		0.0059	RDL	1	ND		0.00598	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,2-DICHLOROBENZENE	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,3-DICHLOROBENZENE	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,4-DICHLOROBENZENE	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
DICHLORODIFLUOROMETHANE	8260B	mg/kg	ND		0.0059	RDL	1	ND		0.00598	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
TRANS-1,4-DICHLORO-2-BUTENE	8260B	mg/kg	ND		0.003	RDL	1	ND		0.00299	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,1-DICHLOROETHANE	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,2-DICHLOROETHANE	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,1-DICHLOROETHENE	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CIS-1,2-DICHLOROETHENE	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
TRANS-1,2-DICHLOROETHENE	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,2-DICHLOROPROPANE	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CIS-1,3-DICHLOROPROPENE	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
TRANS-1,3-DICHLOROPROPENE	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
ETHYLBENZENE	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2-HEXANONE	8260B	mg/kg	ND		0.0119	RDL	1	ND		0.012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		

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IODOMETHANE	8260B	mg/kg	ND		0.0119	RDL	1	ND		0.012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2-BUTANONE (MEK)	8260B	mg/kg	ND		0.0119	RDL	1	ND		0.012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
METHYLENE CHLORIDE	8260B	mg/kg	ND		0.0059	RDL	1	ND		0.00598	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
4-METHYL-2-PENTANONE (MIBK)	8260B	mg/kg	ND		0.0119	RDL	1	ND		0.012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
PENTACHLOROETHANE	8260B	mg/kg	ND		0.0059	RDL	1	ND		0.00598	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
STYRENE	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,1,1,2-TETRACHLOROETHANE	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,1,2,2-TETRACHLOROETHANE	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
TETRACHLOROETHENE	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
TOLUENE	8260B	mg/kg	ND		0.0059	RDL	1	ND		0.00598	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,1,1-TRICHLOROETHANE	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,1,2-TRICHLOROETHANE	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
TRICHLOROETHENE	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
TRICHLOROFLUOROMETHANE	8260B	mg/kg	ND		0.0059	RDL	1	ND		0.00598	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,2,3-TRICHLOROPROPANE	8260B	mg/kg	ND		0.003	RDL	1	ND		0.00299	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
VINYL ACETATE	8260B	mg/kg	ND	J4	0.0119	RDL	1	ND	J4	0.012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
VINYL CHLORIDE	8260B	mg/kg	ND		0.0012	RDL	1	ND		0.0012	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		

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XYLENES, TOTAL	8260B	mg/kg	0.000678	J	0.0036	RDL	1	ND		0.00359	RDL	1	No, Original results < 5 x RDL but Duplicate results < RDL. Field Duplicate within control because the difference between the Original and duplicate samples results (using 1/2 the RDL as a conservative estimate for ND) was lessr than 2 x RDL.		
1,4-DIOXANE	8260B	mg/kg	ND		0.119	RDL	1	ND		0.12	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		

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			Original Sample					Duplicate Sample							
Lab Sample ID			L1557295-24					L1557295-35							
Client Sample ID			TP-40 FILL					TP-140 FILL							
Date Collected			11/10/2022					11/10/2022							
Analyte	Method	Units	Result	Q	High Limit	High Limit Type	Dilution Factor	Result	Q	High Limit	High Limit Type	Dilution Factor	Results ≥ 5 x RDL?	RPD	RPD Within +/- 50% for Soil?
ACETONE	8260B	mg/kg	0.0595		0.0561	RDL	1	0.0595		0.0561	RDL	1	No, Original and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than 2 x RDL.		
ACRYLONITRILE	8260B	mg/kg	ND		0.0112	RDL	1	ND		0.0112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
ALLYL CHLORIDE	8260B	mg/kg	ND		0.0056	RDL	1	ND		0.00561	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
BENZENE	8260B	mg/kg	0.00131		0.0011	RDL	1	0.00131		0.00112	RDL	1	No, Original and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than 2 x RDL.		
BROMODICHLOROMETHANE	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
BROMOFORM	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
BROMOMETHANE	8260B	mg/kg	ND		0.0056	RDL	1	ND		0.00561	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CARBON DISULFIDE	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CARBON TETRACHLORIDE	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CHLOROBENZENE	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CHLORODIBROMOMETHANE	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CHLOROETHANE	8260B	mg/kg	ND		0.0056	RDL	1	ND		0.00561	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CHLOROFORM	8260B	mg/kg	ND		0.0056	RDL	1	ND		0.00561	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CHLOROMETHANE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00281	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		

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1,2-DIBROMOETHANE	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
DIBROMOMETHANE	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,2-DIBROMO-3-CHLOROPROPAN	8260B	mg/kg	ND		0.0056	RDL	1	ND		0.00561	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,2-DICHLOROBENZENE	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,3-DICHLOROBENZENE	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,4-DICHLOROBENZENE	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
DICHLORODIFLUOROMETHANE	8260B	mg/kg	ND		0.0056	RDL	1	ND		0.00561	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
TRANS-1,4-DICHLORO-2-BUTENE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00281	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,1-DICHLOROETHANE	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,2-DICHLOROETHANE	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,1-DICHLOROETHENE	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CIS-1,2-DICHLOROETHENE	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
TRANS-1,2-DICHLOROETHENE	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,2-DICHLOROPROPANE	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CIS-1,3-DICHLOROPROPENE	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
TRANS-1,3-DICHLOROPROPENE	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
ETHYLBENZENE	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		

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2-HEXANONE	8260B	mg/kg	ND		0.0112	RDL	1	ND		0.0112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
IODOMETHANE	8260B	mg/kg	ND		0.0112	RDL	1	ND		0.0112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2-BUTANONE (MEK)	8260B	mg/kg	ND		0.0112	RDL	1	ND		0.0112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
METHYLENE CHLORIDE	8260B	mg/kg	ND		0.0056	RDL	1	ND		0.00561	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
4-METHYL-2-PENTANONE (MIBK)	8260B	mg/kg	ND		0.0112	RDL	1	ND		0.0112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
PENTACHLOROETHANE	8260B	mg/kg	ND		0.0056	RDL	1	ND		0.00561	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
STYRENE	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,1,1,2-TETRACHLOROETHANE	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,1,2,2-TETRACHLOROETHANE	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
TETRACHLOROETHENE	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
TOLUENE	8260B	mg/kg	ND		0.0056	RDL	1	ND		0.00561	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,1,1-TRICHLOROETHANE	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,1,2-TRICHLOROETHANE	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
TRICHLOROETHENE	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
TRICHLOROFLUOROMETHANE	8260B	mg/kg	ND		0.0056	RDL	1	ND		0.00561	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,2,3-TRICHLOROPROPANE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00281	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
VINYL ACETATE	8260B	mg/kg	ND	J4	0.0112	RDL	1	ND	J4	0.0112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		

Table 14 - Duplicate Pairs–VOCs in Soils
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VINYL CHLORIDE	8260B	mg/kg	ND		0.0011	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
XYLENES, TOTAL	8260B	mg/kg	ND		0.0034	RDL	1	ND		0.00337	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,4-DIOXANE	8260B	mg/kg	ND		0.112	RDL	1	ND		0.112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		

Table 14 - Duplicate Pairs–VOCs in Soils
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
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			Original Sample					Duplicate Sample							
Lab Sample ID			L1557295-37					L1557295-39							
Client Sample ID			ND-4					ND-104							
Date Collected			11/10/2022					11/10/2022							
Analyte	Method	Units	Result	Q	High Limit	High Limit Type	Dilution Factor	Result	Q	High Limit	High Limit Type	Dilution Factor	Results ≥ 5 x RDL?	RPD	RPD Within +/- 50% for Soil?
ACETONE	8260B	mg/kg	0.164		0.141	RDL	1	0.0595		0.0561	RDL	1	No, Original and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than 2 x RDL.		
ACRYLONITRILE	8260B	mg/kg	ND		0.0282	RDL	1	ND		0.0112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
ALLYL CHLORIDE	8260B	mg/kg	ND		0.0141	RDL	1	ND		0.00561	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
BENZENE	8260B	mg/kg	0.00783		0.0028	RDL	1	0.00131		0.00112	RDL	1	No, Original and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair not within control because the difference between the Original and Duplicate sample results was greater than 2 x RDL.		
BROMODICHLOROMETHANE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
BROMOFORM	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
BROMOMETHANE	8260B	mg/kg	ND		0.0141	RDL	1	ND		0.00561	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CARBON DISULFIDE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CARBON TETRACHLORIDE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CHLOROBENZENE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CHLORODIBROMOMETHANE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CHLOROETHANE	8260B	mg/kg	ND		0.0141	RDL	1	ND		0.00561	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CHLOROFORM	8260B	mg/kg	ND		0.0141	RDL	1	ND		0.00561	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CHLOROMETHANE	8260B	mg/kg	ND		0.007	RDL	1	ND		0.00281	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		

Table 14 - Duplicate Pairs–VOCs in Soils
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1,2-DIBROMOETHANE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
DIBROMOMETHANE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,2-DIBROMO-3-CHLOROPROPAN	8260B	mg/kg	ND		0.0141	RDL	1	ND		0.00561	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,2-DICHLOROBENZENE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,3-DICHLOROBENZENE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,4-DICHLOROBENZENE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
DICHLORODIFLUOROMETHANE	8260B	mg/kg	ND		0.0141	RDL	1	ND		0.00561	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
TRANS-1,4-DICHLORO-2-BUTENE	8260B	mg/kg	ND		0.007	RDL	1	ND		0.00281	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,1-DICHLOROETHANE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,2-DICHLOROETHANE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,1-DICHLOROETHENE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CIS-1,2-DICHLOROETHENE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
TRANS-1,2-DICHLOROETHENE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,2-DICHLOROPROPANE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CIS-1,3-DICHLOROPROPENE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
TRANS-1,3-DICHLOROPROPENE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
ETHYLBENZENE	8260B	mg/kg	0.00125	J	0.0028	RDL	1	ND		0.00112	RDL	1	No, Original results < 5 x RDL but Duplicate results < RDL. Field Duplicate within control because the difference between the Original and duplicate samples results (using 1/2 the RDL as a conservative estimate for ND) was lessr than 2 x RDL.		

Table 14 - Duplicate Pairs–VOCs in Soils
Redwood Road Dump VCP Site C121
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2-HEXANONE	8260B	mg/kg	ND		0.0282	RDL	1	ND		0.0112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
IODOMETHANE	8260B	mg/kg	ND		0.0282	RDL	1	ND		0.0112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2-BUTANONE (MEK)	8260B	mg/kg	0.033		0.0282	RDL	1	ND		0.0112	RDL	1	No, Original results < 5 x RDL but Duplicate results < RDL. Field Duplicate within control because the difference between the Original and duplicate samples results (using 1/2 the RDL as a conservative estimate for ND) was lessr than 2 x RDL.		
METHYLENE CHLORIDE	8260B	mg/kg	0.00287	B J	0.0141	RDL	1	ND		0.00561	RDL	1	No, Original results < 5 x RDL but Duplicate results < RDL. Field Duplicate within control because the difference between the Original and duplicate samples results (using 1/2 the RDL as a conservative estimate for ND) was lessr than 2 x RDL.		
4-METHYL-2-PENTANONE (MIBK)	8260B	mg/kg	ND		0.0282	RDL	1	ND		0.0112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
PENTACHLOROETHANE	8260B	mg/kg	ND		0.0141	RDL	1	ND		0.00561	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
STYRENE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,1,1,2-TETRACHLOROETHANE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,1,2,2-TETRACHLOROETHANE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
TETRACHLOROETHENE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
TOLUENE	8260B	mg/kg	0.0082	J	0.0141	RDL	1	ND		0.00561	RDL	1	No, Original results < 5 x RDL but Duplicate results < RDL. Field Duplicate within control because the difference between the Original and duplicate samples results (using 1/2 the RDL as a conservative estimate for ND) was lessr than 2 x RDL.		
1,1,1-TRICHLOROETHANE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,1,2-TRICHLOROETHANE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
TRICHLOROETHENE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
TRICHLOROFLUOROMETHANE	8260B	mg/kg	ND		0.0141	RDL	1	ND		0.00561	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,2,3-TRICHLOROPROPANE	8260B	mg/kg	ND		0.007	RDL	1	ND		0.00281	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.	#VALUE!	Yes
VINYL ACETATE	8260B	mg/kg	ND	J4	0.0282	RDL	1	ND	J4	0.0112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.	#VALUE!	NO

Table 14 - Duplicate Pairs–VOCs in Soils
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VINYL CHLORIDE	8260B	mg/kg	ND		0.0028	RDL	1	ND		0.00112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
XYLENES, TOTAL	8260B	mg/kg	0.00327	J	0.0085	RDL	1	ND		0.00337	RDL	1	No, Original results < 5 x RDL but Duplicate results < RDL. Field Duplicate within control because the difference between the Original and duplicate samples results (using 1/2 the RDL as a conservative estimate for ND) was lessr than 2 x RDL.		
1,4-DIOXANE	8260B	mg/kg	ND		0.282	RDL	1	ND		0.112	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		

Table 15 - Duplicate Pair - SVOCs in Soil
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 6122732 Task 4.2

Lab Sample ID			Original Sample					Duplicate Sample							
Client Sample ID			L1557295-18					L1557295-33							
Date Collected			TP-38 FILL					TP-138 FILL							
			11/10/2022					11/10/2022							
Analyte	Method	Units	Result	Q	High Limit	High Limit Type	Dilution Factor	Result	Q	High Limit	High Limit Type	Dilution Factor	Results ≥ 5 x RDL?	RPD	RPD Within +/- 50% for Soil?
BENZIDINE	8270C	mg/kg	ND		19.4	RDL	10	ND		17.8	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
BIS(2-CHLORETHOXY)METHANE	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
BIS(2-CHLOROETHYL)ETHER	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2,2-OXYBIS(1-CHLOROPROPANE)	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
4-BROMOPHENYL-PHENYLETHER	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
4-CHLOROPHENYL-PHENYLETHER	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,2-DICHLOROBENZENE	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,3-DICHLOROBENZENE	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,4-DICHLOROBENZENE	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
3,3-DICHLOROBENZIDINE	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2,4-DINITROTOLUENE	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2,6-DINITROTOLUENE	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
HEXACHLOROBENZENE	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
HEXACHLORO-1,3-BUTADIENE	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
HEXACHLOROCYCLOPENTADIENE	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		

Table 15 - Duplicate Pair - SVOCs in Soil
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1850 West Indiana Avenue, Salt Lake City, Utah
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HEXACHLOROETHANE	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
ISOPHORONE	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
NITROBENZENE	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
N-NITROSODIMETHYLAMINE	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
N-NITROSODIPHENYLAMINE	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
N-NITROSODI-N-PROPYLAMINE	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
BENZYLBUTYL PHTHALATE	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
BIS(2-ETHYLHEXYL)PHTHALATE	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
DI-N-BUTYL PHTHALATE	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
DIETHYL PHTHALATE	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
DIMETHYL PHTHALATE	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
DI-N-OCTYL PHTHALATE	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,2,4-TRICHLOROBENZENE	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
4-CHLORO-3-METHYLPHENOL	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2-CHLOROPHENOL	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2,4-DICHLOROPHENOL	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2,4-DIMETHYLPHENOL	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
4,6-DINITRO-2-METHYLPHENOL	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		

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2,4-DINITROPHENOL	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2-NITROPHENOL	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
4-NITROPHENOL	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
PENTACHLOROPHENOL	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
PHENOL	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2,4,6-TRICHLOROPHENOL	8270C	mg/kg	ND		3.86	RDL	10	ND		3.55	RDL	10	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
ANTHRACENE	8270C-SIM	mg/kg	0.0111		0.00696	RDL	1	ND		0.032	RDL	5	No, Original < 5X RDL, but Duplicate < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results (using 1/2 RDL as conservative estimate for ND) was less than 2 x RDL.		
ACENAPHTHENE	8270C-SIM	mg/kg	0.0137		0.00696	RDL	1	ND		0.032	RDL	5	No, Original < 5X RDL, but Duplicate < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results (using 1/2 RDL as conservative estimate for ND) was less than 2 x RDL.		
ACENAPHTHYLENE	8270C-SIM	mg/kg	0.0039	J	0.00696	RDL	1	ND		0.032	RDL	5	No, Original < 5X RDL, but Duplicate < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results (using 1/2 RDL as conservative estimate for ND) was less than 2 x RDL.		
BENZO(A)ANTHRACENE	8270C-SIM	mg/kg	0.0327		0.00696	RDL	1	0.0282	J	0.032	RDL	5	No, Original and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than 2 x RDL.		
BENZO(A)PYRENE	8270C-SIM	mg/kg	0.0403		0.00696	RDL	1	0.0342		0.032	RDL	5	No, Original results > 5 x RDL but Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and duplicate samples results was less than 2 x RDL.		
BENZO(B)FLUORANTHENE	8270C-SIM	mg/kg	0.0478		0.00696	RDL	1	0.0382		0.032	RDL	5	No, Original results > 5 x RDL but Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and duplicate samples results was less than 2 x RDL.		
BENZO(G,H,I)PERYLENE	8270C-SIM	mg/kg	0.0594		0.00696	RDL	1	0.055		0.032	RDL	5	No, Original results > 5 x RDL but Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and duplicate samples results was less than 2 x RDL.		
BENZO(K)FLUORANTHENE	8270C-SIM	mg/kg	0.0158		0.00696	RDL	1	0.0124	J	0.032	RDL	5	No, Original and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than 2 x RDL.		
CHRYSENE	8270C-SIM	mg/kg	0.0364		0.00696	RDL	1	0.0251	J	0.032	RDL	5	No, Original results > 5 x RDL but Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and duplicate samples results was less than 2 x RDL.		
DIBENZ(A,H)ANTHRACENE	8270C-SIM	mg/kg	0.00901		0.00696	RDL	1	ND		0.032	RDL	5	No, Original < 5X RDL, but Duplicate < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results (using 1/2 RDL as conservative estimate for ND) was less than 2 x RDL.		
FLUORANTHENE	8270C-SIM	mg/kg	0.0773		0.00696	RDL	1	0.0411		0.032	RDL	5	No, Original results > 5 x RDL but Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and duplicate samples results was less than 2 x RDL.		
FLUORENE	8270C-SIM	mg/kg	0.00914		0.00696	RDL	1	ND		0.032	RDL	5	No, Original < 5X RDL, but Duplicate < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results (using 1/2 RDL as conservative estimate for ND) was less than 2 x RDL.		

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INDENO(1,2,3-CD)PYRENE	8270C-SIM	mg/kg	0.0354		0.00696	RDL	1	0.0344		0.032	RDL	5	No, Original results > 5 x RDL but Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and duplicate samples results was less than 2 x RDL.		
NAPHTHALENE	8270C-SIM	mg/kg	0.0159	J	0.0232	RDL	1	ND		0.107	RDL	5	No, Original < 5X RDL, but Duplicate < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results (using 1/2 RDL as conservative estimate for ND) was less than 2 x RDL.		
PHENANTHRENE	8270C-SIM	mg/kg	0.0501		0.00696	RDL	1	0.0259	J	0.032	RDL	5	No, Original results > 5 x RDL but Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and duplicate samples results was less than 2 x RDL.		
PYRENE	8270C-SIM	mg/kg	0.0659		0.00696	RDL	1	0.0373		0.032	RDL	5	No, Original results > 5 x RDL but Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and duplicate samples results was less than 2 x RDL.		
1-METHYLNAPHTHALENE	8270C-SIM	mg/kg	0.0139	J	0.0232	RDL	1	ND		0.107	RDL	5	No, Original < 5X RDL, but Duplicate < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results (using 1/2 RDL as conservative estimate for ND) was less than 2 x RDL.		
2-METHYLNAPHTHALENE	8270C-SIM	mg/kg	0.0189	J	0.0232	RDL	1	ND		0.107	RDL	5	No, Original < 5X RDL, but Duplicate < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results (using 1/2 RDL as conservative estimate for ND) was less than 2 x RDL.		
2-CHLORONAPHTHALENE	8270C-SIM	mg/kg	ND		0.0232	RDL	1	ND		0.107	RDL	5	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		

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			Original Sample					Duplicate Sample							
Lab Sample ID			L1557295-24					L1557295-35							
Client Sample ID			TP-40 FILL					TP-140 FILL							
Date Collected			11/10/2022					11/10/2022							
Analyte	Method	Units	Result	Q	High Limit	High Limit Type	Dilution Factor	Result	Q	High Limit	High Limit Type	Dilution Factor	Results ≥ 5 x RDL?	RPD	RPD Within +/- 50% for Soil?
BENZIDINE	8270C	mg/kg	ND		4.26	RDL	2	ND		5.12	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
BIS(2-CHLORETHOXY)METHANE	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
BIS(2-CHLOROETHYL)ETHER	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2,2-OXYBIS(1-CHLOROPROPANE)	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
4-BROMOPHENYL-PHENYLEETHER	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
4-CHLOROPHENYL-PHENYLEETHER	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,2-DICHLOROBENZENE	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,3-DICHLOROBENZENE	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,4-DICHLOROBENZENE	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
3,3-DICHLOROBENZIDINE	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2,4-DINITROTOLUENE	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2,6-DINITROTOLUENE	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
HEXACHLOROBENZENE	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
HEXACHLORO-1,3-BUTADIENE	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
HEXACHLOROCYCLOPENTADIENE	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		

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HEXACHLOROETHANE	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
ISOPHORONE	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
NITROBENZENE	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
N-NITROSODIMETHYLAMINE	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
N-NITROSODIPHENYLAMINE	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
N-NITROSODI-N-PROPYLAMINE	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
BENZYLBUTYL PHTHALATE	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
BIS(2-ETHYLHEXYL)PHTHALATE	8270C	mg/kg	ND		0.85	RDL	2	ND	J	1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
DI-N-BUTYL PHTHALATE	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
DIETHYL PHTHALATE	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
DIMETHYL PHTHALATE	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
DI-N-OCTYL PHTHALATE	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,2,4-TRICHLOROBENZENE	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
4-CHLORO-3-METHYLPHENOL	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2-CHLOROPHENOL	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2,4-DICHLOROPHENOL	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2,4-DIMETHYLPHENOL	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
4,6-DINITRO-2-METHYLPHENOL	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		

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2,4-DINITROPHENOL	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2-NITROPHENOL	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
4-NITROPHENOL	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
PENTACHLOROPHENOL	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
PHENOL	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2,4,6-TRICHLOROPHENOL	8270C	mg/kg	ND		0.85	RDL	2	ND		1.02	RDL	2	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
ANTHRACENE	8270C-SIM	mg/kg	0.0073		0.00766	RDL	1	ND		0.046	RDL	5	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
ACENAPHTHENE	8270C-SIM	mg/kg	ND		0.00766	RDL	1	ND		0.046	RDL	5	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
ACENAPHTHYLENE	8270C-SIM	mg/kg	0.00892		0.00766	RDL	1	ND		0.046	RDL	5	No, Original results < 5 x RDL but Duplicate results < RDL. Field Duplicate within control because the difference between the Original and duplicate samples results (using 1/2 the RDL as a conservative estimate for ND) was lessr than 2 x RDL.		
BENZO(A)ANTHRACENE	8270C-SIM	mg/kg	0.267	J	0.00766	RDL	1	0.196		0.046	RDL	5	No, Original results > 5 x RDL and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than 2 x RDL.		
BENZO(A)PYRENE	8270C-SIM	mg/kg	0.47		0.00766	RDL	1	0.369		0.046	RDL	5	Yes, RPD calculated	24.1%	Yes
BENZO(B)FLUORANTHENE	8270C-SIM	mg/kg	0.188	J	0.00766	RDL	1	0.144		0.046	RDL	5	No, Original results > 5 x RDL and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than 2 x RDL.		
BENZO(G,H,I)PERYLENE	8270C-SIM	mg/kg	0.397		0.00766	RDL	1	0.476		0.046	RDL	5	Yes, RPD calculated	18.1%	Yes
BENZO(K)FLUORANTHENE	8270C-SIM	mg/kg	0.0368		0.00766	RDL	1	0.0279	J	0.046	RDL	5	No, Original and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than 2 x RDL.		
CHRYSENE	8270C-SIM	mg/kg	0.348		0.00766	RDL	1	0.239		0.046	RDL	5	Yes, RPD calculated	37.1%	Yes
DIBENZ(A,H)ANTHRACENE	8270C-SIM	mg/kg	0.0705		0.00766	RDL	1	0.0631		0.046	RDL	5	No, Original results > 5 x RDL and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than 2 x RDL.		
FLUORANTHENE	8270C-SIM	mg/kg	0.0477	J	0.00766	RDL	1	0.0316	J	0.046	RDL	5	No, Original results > 5 x RDL and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than 2 x RDL.		
FLUORENE	8270C-SIM	mg/kg	0.00347		0.00766	RDL	1	ND		0.046	RDL	5	No, Original results < 5 x RDL but Duplicate results < RDL. Field Duplicate within control because the difference between the Original and duplicate samples results (using 1/2 the RDL as a conservative estimate for ND) was lessr than 2 x RDL.		

Table 15 - Duplicate Pair - SVOCs in Soil
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 6122732 Task 4.2

INDENO(1,2,3-CD)PYRENE	8270C-SIM	mg/kg	0.109	J	0.00766	RDL	1	0.11		0.046	RDL	5	No, Original results > 5 x RDL and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than 2 x RDL.		
NAPHTHALENE	8270C-SIM	mg/kg	0.0214		0.0255	RDL	1	ND		0.153	RDL	5	No, Original results < 5 x RDL but Duplicate results < RDL. Field Duplicate within control because the difference between the Original and duplicate samples results (using 1/2 the RDL as a conservative estimate for ND) was lessr than 2 x RDL.		
PHENANTHRENE	8270C-SIM	mg/kg	0.0379	J	0.00766	RDL	1	0.025	J	0.046	RDL	5	No, Original and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than 2 x RDL.		
PYRENE	8270C-SIM	mg/kg	0.197		0.00766	RDL	1	0.132		0.046	RDL	5	No, Original results > 5 x RDL and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than 2 x RDL.		
1-METHYLNAPHTHALENE	8270C-SIM	mg/kg	0.00784		0.0255	RDL	1	ND		0.153	RDL	5	No, Original results < 5 x RDL but Duplicate results < RDL. Field Duplicate within control because the difference between the Original and duplicate samples results (using 1/2 the RDL as a conservative estimate for ND) was lessr than 2 x RDL.		
2-METHYLNAPHTHALENE	8270C-SIM	mg/kg	0.0104		0.0255	RDL	1	ND		0.153	RDL	5	No, Original results < 5 x RDL but Duplicate results < RDL. Field Duplicate within control because the difference between the Original and duplicate samples results (using 1/2 the RDL as a conservative estimate for ND) was lessr than 2 x RDL.		
2-CHLORONAPHTHALENE	8270C-SIM	mg/kg	ND		0.0255	RDL	1	ND		0.153	RDL	5	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		

Table 15 - Duplicate Pair - SVOCs in Soil
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 6122732 Task 4.2

Lab Sample ID			Original Sample					Duplicate Sample							
Client Sample ID			L1557295-37					L1557295-39							
Date Collected			ND-4					ND-104							
			11/10/2022					11/10/2022							
Analyte	Method	Units	Result	Q	High Limit	High Limit Type	Dilution Factor	Result	Q	High Limit	High Limit Type	Dilution Factor	Results ≥ 5 x RDL?	RPD	RPD Within +/- 50% for Soil?
BENZIDINE	8270C	mg/kg	ND		4.71	RDL	1	ND		3.5	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
BIS(2-CHLORETHOXY)METHANE	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
BIS(2-CHLOROETHYL)ETHER	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2,2-OXYBIS(1-CHLOROPROPANE)	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
4-BROMOPHENYL-PHENYLETHER	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
4-CHLOROPHENYL-PHENYLETHER	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,2-DICHLOROBENZENE	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,3-DICHLOROBENZENE	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,4-DICHLOROBENZENE	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
3,3-DICHLOROBENZIDINE	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2,4-DINITROTOLUENE	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2,6-DINITROTOLUENE	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
HEXACHLOROBENZENE	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
HEXACHLORO-1,3-BUTADIENE	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
HEXACHLOROCYCLOPENTADIENE	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		

Table 15 - Duplicate Pair - SVOCs in Soil
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HEXACHLOROETHANE	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
ISOPHORONE	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
NITROBENZENE	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
N-NITROSODIMETHYLAMINE	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
N-NITROSODIPHENYLAMINE	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
N-NITROSODI-N-PROPYLAMINE	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
BENZYL BUTYL PHTHALATE	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
BIS(2-ETHYLHEXYL)PHTHALATE	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
DI-N-BUTYL PHTHALATE	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
DIETHYL PHTHALATE	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
DIMETHYL PHTHALATE	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
DI-N-OCTYL PHTHALATE	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1,2,4-TRICHLOROBENZENE	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
4-CHLORO-3-METHYLPHENOL	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2-CHLOROPHENOL	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2,4-DICHLOROPHENOL	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2,4-DIMETHYLPHENOL	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
4,6-DINITRO-2-METHYLPHENOL	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		

Table 15 - Duplicate Pair - SVOCs in Soil
Redwood Road Dump VCP Site C121
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2,4-DINITROPHENOL	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2-NITROPHENOL	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
4-NITROPHENOL	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
PENTACHLOROPHENOL	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
PHENOL	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2,4,6-TRICHLOROPHENOL	8270C	mg/kg	ND		0.938	RDL	1	ND		0.698	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
ANTHRACENE	8270C-SIM	mg/kg	ND		0.0169	RDL	1	ND		0.0126	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
ACENAPHTHENE	8270C-SIM	mg/kg	ND		0.0169	RDL	1	ND		0.0126	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
ACENAPHTHYLENE	8270C-SIM	mg/kg	ND		0.0169	RDL	1	ND		0.0126	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
BENZO(A)ANTHRACENE	8270C-SIM	mg/kg	ND		0.0169	RDL	1	ND		0.0126	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
BENZO(A)PYRENE	8270C-SIM	mg/kg	ND		0.0169	RDL	1	ND		0.0126	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
BENZO(B)FLUORANTHENE	8270C-SIM	mg/kg	ND		0.0169	RDL	1	ND		0.0126	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
BENZO(G,H,I)PERYLENE	8270C-SIM	mg/kg	ND		0.0169	RDL	1	ND		0.0126	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
BENZO(K)FLUORANTHENE	8270C-SIM	mg/kg	ND		0.0169	RDL	1	ND		0.0126	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
CHRYSENE	8270C-SIM	mg/kg	ND		0.0169	RDL	1	ND		0.0126	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
DIBENZ(A,H)ANTHRACENE	8270C-SIM	mg/kg	ND		0.0169	RDL	1	ND		0.0126	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
FLUORANTHENE	8270C-SIM	mg/kg	ND		0.0169	RDL	1	ND		0.0126	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
FLUORENE	8270C-SIM	mg/kg	ND		0.0169	RDL	1	ND		0.0126	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		

Table 15 - Duplicate Pair - SVOCs in Soil
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 6122732 Task 4.2

INDENO(1,2,3-CD)PYRENE	8270C-SIM	mg/kg	ND		0.0169	RDL	1	ND		0.0126	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
NAPHTHALENE	8270C-SIM	mg/kg	ND		0.0564	RDL	1	ND		0.0419	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
PHENANTHRENE	8270C-SIM	mg/kg	ND		0.0169	RDL	1	ND		0.0126	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
PYRENE	8270C-SIM	mg/kg	ND		0.0169	RDL	1	ND		0.0126	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
1-METHYLNAPHTHALENE	8270C-SIM	mg/kg	ND		0.0564	RDL	1	ND	J	0.0419	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2-METHYLNAPHTHALENE	8270C-SIM	mg/kg	ND		0.0564	RDL	1	ND		0.0419	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		
2-CHLORONAPHTHALENE	8270C-SIM	mg/kg	ND		0.0564	RDL	1	ND		0.0419	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than 2 x RDL.		

Qualifiers (Q): J: The identification of the analyte is acceptable; the reported value is an estimate.

mg/kg: Milligrams per kilogram.

RDL - Laboratory reported detection limit.

RPD - Relative Percent Difference was calculated when analyte concentrations are greater than or equal to five times the RDL. QA/QC RPD Goal is less than 50% for solid samples.

For analytes reported at concentrations less than five times the RDL, the QA/QC Goal is the difference between the sample and its duplicate is less than two times the RDL for solid samples.

Table 16 - Duplicate Pair–Dissolved Metals in Groundwater
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

			Original Sample					Duplicate Sample							
Lab Sample ID			L1555639-04					L1555639-06							
Client Sample ID			TOSAMW-04					TOSAMW-400							
Date Collected			11/7/2022					11/7/2022							
Analyte	Method	Units	Result	Q	High Limit	High Limit Type	Dilution Factor	Result	Q	High Limit	High Limit Type	Dilution Factor	Results ≥ 5 x RDL?	RPD	RPD Within +/- 25% for Groundwater?
ARSENIC,DISSOLVED	6010B	mg/l	0.382		0.002	RDL	1	0.353		0.002	RDL	1	No, Original and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than RDL.		
BARIUM,DISSOLVED	6010B	mg/l	0.0718		0.002	RDL	1	0.0643		0.002	RDL	1	Yes, RPD calculated	11.0%	Yes
CADMIUM,DISSOLVED	6010B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate results < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than RDL.		
CHROMIUM,DISSOLVED	6010B	mg/l	0.00225		0.002	RDL	1	0.00197	J	0.002	RDL	1	No, Original and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than RDL.		
LEAD,DISSOLVED	6010B	mg/l	ND		0.002	RDL	1	ND		0.002	RDL	1	No, Original and Duplicate results < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than RDL.		
SELENIUM,DISSOLVED	6010B	mg/l	0.0155		0.002	RDL	1	0.0157		0.002	RDL	1	Yes, RPD calculated	1.3%	Yes
SILVER,DISSOLVED	6010B	mg/l	ND		0.002	RDL	1	ND		0.002	RDL	1	No, Original and Duplicate results < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than RDL.		
MERCURY,DISSOLVED	6010B	mg/l	ND		0.0002	RDL	1	ND		0.0002	RDL	1	No, Original and Duplicate results < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than RDL.		

Qualifiers (Q):

J: The identification of the analyte is acceptable; the reported value is an estimate.

B: The same analyte is found in the associated blank. .

mg/l: Milligrams per liter.

Bold value exceeds Method Detection Limit (MDL). Color shaded value exceeds screening level.

RDL - Laboratory reported detection limit.

RPD - Relative Percent Difference was calculated when analyte concentrations are greater than or equal to five times the RDL. QA/QC RPD Goal is less than 25% for groundwater samples.

For analytes reported at concentrations less than five times the RDL, the QA/QC Goal is the difference between the sample and its duplicate is less than RDL for groundwater samples.

Table 17 - Duplicate Pair–VOCs in Groundwater
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

			Original Sample					Duplicate Sample							
Lab Sample ID			L1555639-04					L1555639-06							
Client Sample ID			TOSAMW-04					TOSAMW-400							
Date Collected			11/7/2022					11/7/2022							
Analyte	Method	Units	Result	Q	High Limit	High Limit Type	Dilution Factor	Result	Q	High Limit	High Limit Type	Dilution Factor	Results ≥ 5 x RDL?	RPD	RPD Within +/- 25% for Groundwater?
ACETONE	8260B	mg/l	ND		0.05	RDL	1	ND		0.05	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
ACROLEIN	8260B	mg/l	ND		0.05	RDL	1	ND		0.05	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
ACRYLONITRILE	8260B	mg/l	ND		0.01	RDL	1	ND		0.01	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
BENZENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
BROMOBENZENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
BROMODICHLOROMETHANE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
BROMOFORM	8260B	mg/l	ND	J4	0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
BROMOMETHANE	8260B	mg/l	ND		0.005	RDL	1	ND		0.005	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
N-BUTYLBENZENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
SEC-BUTYLBENZENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
TERT-BUTYLBENZENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
CARBON TETRACHLORIDE	8260B	mg/l	0.000333	J	0.001	RDL	1	ND		0.001	RDL	1	No, Original results < 5 x RDL but Duplicate results < RDL. Field Duplicate within control because the difference between the Original and duplicate samples results (using 1/2 the RDL as a conservative estimate for ND) was less than RDL.		
CHLOROBENZENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
CHLORODIBROMOMETHANE	8260B	mg/l	ND	J4	0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
CHLOROETHANE	8260B	mg/l	ND	J3	0.005	RDL	1	ND		0.005	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		

Table 17 - Duplicate Pair–VOCs in Groundwater
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

			Original Sample					Duplicate Sample							
Lab Sample ID			L1555639-04					L1555639-06							
Client Sample ID			TOSAMW-04					TOSAMW-400							
Date Collected			11/7/2022					11/7/2022							
Analyte	Method	Units	Result	Q	High Limit	High Limit Type	Dilution Factor	Result	Q	High Limit	High Limit Type	Dilution Factor	Results ≥ 5 x RDL?	RPD	RPD Within +/- 25% for Groundwater?
CHLOROFORM	8260B	mg/l	ND		0.005	RDL	1	0.000173	J	0.005	RDL	1	No, Original results < RDL but Duplicate results < 5 x RDL. Field Duplicate within control because the difference between the Original and duplicate samples results (using 1/2 the RDL as a conservative estimate for ND) was less than RDL.		
CHLOROMETHANE	8260B	mg/l	ND		0.0025	RDL	1	ND		0.0025	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
2-CHLOROTOLUENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
4-CHLOROTOLUENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
1,2-DIBROMO-3-CHLOROPROPANE	8260B	mg/l	ND		0.005	RDL	1	ND		0.005	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
1,2-DIBROMOETHANE	8260B	mg/l	ND	J4	0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
DIBROMOMETHANE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
1,2-DICHLOROBENZENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
1,3-DICHLOROBENZENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
1,4-DICHLOROBENZENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
DICHLORODIFLUOROMETHANE	8260B	mg/l	ND		0.005	RDL	1	ND		0.005	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
1,1-DICHLOROETHANE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than RDL.		
1,2-DICHLOROETHANE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
1,1-DICHLOROETHENE	8260B	mg/l	ND	J3	0.001	RDL	1	ND	J	0.001	RDL	1	No, Original and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than RDL.		
CIS-1,2-DICHLOROETHENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than RDL.		

Table 17 - Duplicate Pair–VOCs in Groundwater
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

			Original Sample					Duplicate Sample							
Lab Sample ID			L1555639-04					L1555639-06							
Client Sample ID			TOSAMW-04					TOSAMW-400							
Date Collected			11/7/2022					11/7/2022							
Analyte	Method	Units	Result	Q	High Limit	High Limit Type	Dilution Factor	Result	Q	High Limit	High Limit Type	Dilution Factor	Results ≥ 5 x RDL?	RPD	RPD Within +/- 25% for Groundwater?
TRANS-1,2-DICHLOROETHENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
1,2-DICHLOROPROPANE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
1,1-DICHLOROPROPENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
1,3-DICHLOROPROPANE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
CIS-1,3-DICHLOROPROPENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
TRANS-1,3-DICHLOROPROPENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
2,2-DICHLOROPROPANE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
DI-ISOPROPYL ETHER	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
ETHYLBENZENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
HEXACHLORO-1,3-BUTADIENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
ISOPROPYLBENZENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
P-ISOPROPYLTOLUENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
2-BUTANONE (MEK)	8260B	mg/l	ND		0.01	RDL	1	ND		0.01	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
METHYLENE CHLORIDE	8260B	mg/l	ND		0.005	RDL	1	ND		0.005	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
4-METHYL-2-PENTANONE (MIBK)	8260B	mg/l	ND		0.01	RDL	1	ND		0.01	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		

Table 17 - Duplicate Pair–VOCs in Groundwater
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

			Original Sample					Duplicate Sample							
Lab Sample ID			L1555639-04					L1555639-06							
Client Sample ID			TOSAMW-04					TOSAMW-400							
Date Collected			11/7/2022					11/7/2022							
Analyte	Method	Units	Result	Q	High Limit	High Limit Type	Dilution Factor	Result	Q	High Limit	High Limit Type	Dilution Factor	Results ≥ 5 x RDL?	RPD	RPD Within +/- 25% for Groundwater?
METHYL TERT-BUTYL ETHER	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
NAPHTHALENE	8260B	mg/l	ND		0.005	RDL	1	ND		0.005	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
N-PROPYLBENZENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
STYRENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
1,1,1,2-TETRACHLOROETHANE	8260B	mg/l	ND	J4	0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
1,1,2,2-TETRACHLOROETHANE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
1,1,2-TRICHLOROTRIFLUOROETHAN	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
TETRACHLOROETHENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than RDL.		
TOLUENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
1,2,3-TRICHLOROBENZENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
1,2,4-TRICHLOROBENZENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		

Table 17 - Duplicate Pair–VOCs in Groundwater
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

			Original Sample					Duplicate Sample							
Lab Sample ID			L1555639-04					L1555639-06							
Client Sample ID			TOSAMW-04					TOSAMW-400							
Date Collected			11/7/2022					11/7/2022							
Analyte	Method	Units	Result	Q	High Limit	High Limit Type	Dilution Factor	Result	Q	High Limit	High Limit Type	Dilution Factor	Results ≥ 5 x RDL?	RPD	RPD Within +/- 25% for Groundwater?
1,1,1-TRICHLOROETHANE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than RDL.		
1,1,2-TRICHLOROETHANE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
TRICHLOROETHENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
TRICHLOROFLUOROMETHANE	8260B	mg/l	ND		0.005	RDL	1	ND		0.005	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
1,2,3-TRICHLOROPROPANE	8260B	mg/l	ND		0.0025	RDL	1	ND		0.0025	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
1,2,4-TRIMETHYLBENZENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
1,2,3-TRIMETHYLBENZENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
1,3,5-TRIMETHYLBENZENE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
VINYL CHLORIDE	8260B	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
XYLENES, TOTAL	8260B	mg/l	ND		0.003	RDL	1	ND		0.003	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
2-CHLOROETHYL VINYL ETHER	8260B	mg/l	ND		0.05	RDL	1	ND		0.05	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		

Qualifiers (Q):

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.

J4: The associated batch QC was outside the established quality control range for accuracy.

P1: RPD value not applicable for sample concentrations less than 5 times the reporting limit.

mg/l: Milligrams per liter.

RDL - Laboratory reported detection limit.

RPD - Relative Percent Difference was calculated when analyte concentrations are greater than or equal to five times the RDL. QA/QC RPD

Goal is less than 25% for groundwater samples.

For analytes reported at concentrations less than five times the RDL, the QA/QC Goal is the difference between the sample and its duplicate is less than RDL for groundwater samples.

**Table 18 - Duplicate Pair–SVOCs in Groundwater
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2**

			Original Sample					Duplicate Sample							
Lab Sample ID			L1555639-04					L1555639-06							
Client Sample ID			TOSAMW-04					TOSAMW-400							
Date Collected			11/7/2022					11/7/2022							
Analyte	Method	Units	Result	Q	High Limit	High Limit Type	Dilution Factor	Result	Q	High Limit	High Limit Type	Dilution Factor	Results ≥ 5 x RDL?	RPD	RPD Within +/- 25% for Groundwater?
BENZIDINE	8270C	mg/l	ND	J4	0.01	RDL	1	ND	J4	0.0118	RDL	1.18	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
BIS(2-CHLORETHOXY)METHANE	8270C	mg/l	ND		0.01	RDL	1	ND		0.05	RDL	1.18	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
BIS(2-CHLOROETHYL)ETHER	8270C	mg/l	ND		0.01	RDL	1	ND		0.01	RDL	1.18	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
2,2-OXYBIS(1-CHLOROPROPANE)	8270C	mg/l	ND		0.01	RDL	1	ND		0.001	RDL	1.18	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
4-BROMOPHENYL-PHENYLETHER	8270C	mg/l	ND		0.01	RDL	1	ND		0.001	RDL	1.18	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
4-CHLOROPHENYL-PHENYLETHER	8270C	mg/l	ND		0.01	RDL	1	ND		0.001	RDL	1.18	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
1,2-DICHLOROBENZENE	8270C	mg/l	ND		0.01	RDL	1	ND		0.001	RDL	1.18	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
1,3-DICHLOROBENZENE	8270C	mg/l	ND		0.01	RDL	1	ND		0.005	RDL	1.18	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
1,4-DICHLOROBENZENE	8270C	mg/l	ND		0.01	RDL	1	ND		0.001	RDL	1.18	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
3,3-DICHLOROBENZIDINE	8270C	mg/l	ND	J4	0.01	RDL	1	ND	J4	0.001	RDL	1.18	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
2,4-DINITROTOLUENE	8270C	mg/l	ND		0.01	RDL	1	ND		0.001	RDL	1.18	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
2,6-DINITROTOLUENE	8270C	mg/l	ND		0.01	RDL	1	ND		0.001	RDL	1.18	No, Original results < 5 x RDL but Duplicate results < RDL. Field Duplicate within control because the difference between the Original and duplicate samples results (using 1/2 the RDL as a conservative estimate for ND) was less than RDL.		
HEXACHLOROBENZENE	8270C	mg/l	ND		0.001	RDL	1	ND		0.001	RDL	1.18	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
HEXACHLORO-1,3-BUTADIENE	8270C	mg/l	ND	J4	0.01	RDL	1	ND		0.001	RDL	1.18	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
HEXACHLOROCYCLOPENTADIENE	8270C	mg/l	ND	J3	0.01	RDL	1	ND		0.005	RDL	1.18	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
HEXACHLOROETHANE	8270C	mg/l	ND		0.01	RDL	1	ND		0.05	RDL	1.18	No, Original and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than RDL.		

**Table 18 - Duplicate Pair–SVOCs in Groundwater
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2**

			Original Sample					Duplicate Sample							
Lab Sample ID			L1555639-04					L1555639-06							
Client Sample ID			TOSAMW-04					TOSAMW-400							
Date Collected			11/7/2022					11/7/2022							
Analyte	Method	Units	Result	Q	High Limit	High Limit Type	Dilution Factor	Result	Q	High Limit	High Limit Type	Dilution Factor	Results ≥ 5 x RDL?	RPD	RPD Within +/- 25% for Groundwater?
ISOPHORONE	8270C	mg/l	ND		0.01	RDL	1	ND		0.005	RDL	1.18	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
NITROBENZENE	8270C	mg/l	ND		0.01	RDL	1	ND		0.0025	RDL	1.18	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
N-NITROSODIMETHYLAMINE	8270C	mg/l	ND		0.01	RDL	1	ND		0.001	RDL	1.18	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
N-NITROSODIPHENYLAMINE	8270C	mg/l	ND		0.01	RDL	1	ND		0.001	RDL	1.18	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
N-NITROSODI-N-PROPYLAMINE	8270C	mg/l	ND	J4	0.01	RDL	1	ND		0.005	RDL	1.18	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
BENZYL BUTYL PHTHALATE	8270C	mg/l	ND		0.003	RDL	1	ND		0.001	RDL	1.18	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
BIS(2-ETHYLHEXYL)PHTHALATE	8270C	mg/l	ND		0.003	RDL	1	ND		0.001	RDL	1.18	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
DI-N-BUTYL PHTHALATE	8270C	mg/l	ND		0.003	RDL	1	ND		0.001	RDL	1.18	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
DIETHYL PHTHALATE	8270C	mg/l	ND		0.003	RDL	1	ND		0.001	RDL	1.18	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
DIMETHYL PHTHALATE	8270C	mg/l	ND		0.003	RDL	1	ND		0.005	RDL	1.18	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
DI-N-OCTYL PHTHALATE	8270C	mg/l	ND		0.003	RDL	1	ND		0.001	RDL	1.18	No, Original and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than RDL.		
1,2,4-TRICHLOROBENZENE	8270C	mg/l	ND		0.01	RDL	1	ND		0.001	RDL	1.18	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
4-CHLORO-3-METHYLPHENOL	8270C	mg/l	ND		0.01	RDL	1	ND		0.001	RDL	1.18	No, Original and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than RDL.		
2-CHLOROPHENOL	8270C	mg/l	ND		0.01	RDL	1	ND		0.001	RDL	1.18	No, Original and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than RDL.		
2,4-DICHLOROPHENOL	8270C	mg/l	ND		0.01	RDL	1	ND		0.001	RDL	1.18	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
2,4-DIMETHYLPHENOL	8270C	mg/l	ND	J4	0.01	RDL	1	ND	J4	0.001	RDL	1.18	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		

Table 19 - Duplicate Pair–PFAS in Groundwater
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

			Original Sample					Duplicate Sample							
Lab Sample ID			22211091004					22211091006							
Client Sample ID			TOSAMW-04					TOSAMW-400							
Date Collected			11/7/2022					11/7/2022							
Analyte	Method	Units	Result	Q	High Limit	High Limit Type	Dilution Factor	Result	Q	High Limit	High Limit Type	Dilution Factor	Results ≥ 5 x RDL?	RPD	RPD Within +/- 25% for Groundwater?
10:2FTS	EPA 537 Mod	ng/L	ND	U	3.91	RDL	1	ND	U	4.10	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
11CI-PF3OUdS	EPA 537 Mod	ng/L	ND	U	3.91	RDL	1	ND	U	4.10	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
4:2 Fluorotelomer sulfonate (4:2 FTS)	EPA 537 Mod	ng/L	ND	U	3.91	RDL	1	ND	U	4.10	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
6:2 Fluorotelomer sulfonate (6:2 FTS)	EPA 537 Mod	ng/L	39.5		3.91	RDL	1	31.2		4.10	RDL	1	Yes, RPD calculated	23.5%	Yes
8:2 Fluorotelomer sulfonate (8:2 FTS)	EPA 537 Mod	ng/L	ND	U	3.91	RDL	1	ND	U	4.10	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
9CI-PF3ONS	EPA 537 Mod	ng/L	ND	U	3.91	RDL	1	ND	U	4.10	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
ADONA	EPA 537 Mod	ng/L	ND	U	3.91	RDL	1	ND	U	4.10	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
HFPO-DA	EPA 537 Mod	ng/L	ND	U	7.81	RDL	1	ND	U	20.5	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
NEtFOSA	EPA 537 Mod	ng/L	ND	U	7.81	RDL	1	ND	U	8.20	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	EPA 537 Mod	ng/L	ND	U	7.81	RDL	1	ND	U	8.20	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
NEtFOSE	EPA 537 Mod	ng/L	ND	U	7.81	RDL	1	ND	U	8.20	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
NFDHA	EPA 537 Mod	ng/L	ND	U	7.81	RDL	1	ND	U	8.20	RDL	1	No, Original results < 5 x RDL but Duplicate results < RDL. Field Duplicate within control because the difference between the Original and duplicate samples results (using 1/2 the RDL as a conservative estimate for ND) was less than RDL.		
NMeFOSA	EPA 537 Mod	ng/L	ND	U	7.81	RDL	1	ND	U	8.20	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	EPA 537 Mod	ng/L	ND	U	7.81	RDL	1	ND	U	8.20	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
NMeFOSE	EPA 537 Mod	ng/L	ND	U	7.81	RDL	1	ND	U	8.20	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
Perfluorobutanoic acid (PFBA)	EPA 537 Mod	ng/L	424		3.91	RDL	1	778		4.10	RDL	1	Yes, RPD calculated	58.9%	NO

Table 19 - Duplicate Pair–PFAS in Groundwater
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

			Original Sample					Duplicate Sample							
Lab Sample ID			22211091004					22211091006							
Client Sample ID			TOSAMW-04					TOSAMW-400							
Date Collected			11/7/2022					11/7/2022							
Analyte	Method	Units	Result	Q	High Limit	High Limit Type	Dilution Factor	Result	Q	High Limit	High Limit Type	Dilution Factor	Results ≥ 5 x RDL?	RPD	RPD Within +/- 25% for Groundwater?
Perfluorobutanesulfonic acid (PFBS)	EPA 537 Mod	ng/L	99.8		3.91	RDL	1	171		4.10	RDL	1	Yes, RPD calculated	52.6%	NO
Perfluorodecanoic acid (PFDA)	EPA 537 Mod	ng/L	ND	U	3.91	RDL	1	ND	U	4.10	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
Perfluorodecane Sulfonate (PFDS)	EPA 537 Mod	ng/L	ND	U	3.91	RDL	1	ND	U	4.10	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
Perfluorododecanoic acid (PFDoA)	EPA 537 Mod	ng/L	ND	U	3.91	RDL	1	ND	U	4.10	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
PFDoS	EPA 537 Mod	ng/L	ND	U	3.91	RDL	1	ND	U	4.10	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
PFEESA	EPA 537 Mod	ng/L	ND	U	3.91	RDL	1	ND	U	4.10	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
Perfluoroheptanoic acid (PFHpA)	EPA 537 Mod	ng/L	119		3.91	RDL	1	215		4.10	RDL	1	Yes, RPD calculated	57.5%	NO
Perfluoro-1-heptanesulfonate (PFHpS)	EPA 537 Mod	ng/L	ND	U	3.91	RDL	1	ND	U	4.10	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
Perfluorohexanoic acid (PFHxA)	EPA 537 Mod	ng/L	857		3.91	RDL	1	1710		4.10	RDL	1	Yes, RPD calculated	66.5%	NO
PFHxDA	EPA 537 Mod	ng/L	ND	U	3.91	RDL	1	ND	U	4.10	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
Perfluorohexanesulfonic acid (PFHxS)	EPA 537 Mod	ng/L	68.5		3.91	RDL	1	146		4.10	RDL	1	Yes, RPD calculated	72.3%	NO
PFMBA	EPA 537 Mod	ng/L	ND	U	3.91	RDL	1	ND	U	4.10	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
PFMPA	EPA 537 Mod	ng/L	ND	U	3.91	RDL	1	ND	U	4.10	RDL	1	No, Original and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than RDL.		
Perfluorononanoic acid (PFNA)	EPA 537 Mod	ng/L	ND	U	3.91	RDL	1	ND	U	4.10	RDL	1	No, Original and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample results was less than RDL.		
PFNS	EPA 537 Mod	ng/L	ND	U	3.91	RDL	1	ND	U	4.10	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
Perfluorooctanoic acid (PFOA)	EPA 537 Mod	ng/L	52.2		3.91	RDL	1	85.9		4.10	RDL	1	Yes, RPD calculated	48.8%	NO
PFODA	EPA 537 Mod	ng/L	ND	U	3.91	RDL	1	ND	U	4.10	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		

Table 19 - Duplicate Pair–PFAS in Groundwater
Redwood Road Dump VCP Site C121
1850 West Indiana Avenue, Salt Lake City, Utah
Terracon Project No. 61227342 Task 4.2

			Original Sample					Duplicate Sample							
Lab Sample ID			22211091004					22211091006							
Client Sample ID			TOSAMW-04					TOSAMW-400							
Date Collected			11/7/2022					11/7/2022							
Analyte	Method	Units	Result	Q	High Limit	High Limit Type	Dilution Factor	Result	Q	High Limit	High Limit Type	Dilution Factor	Results ≥ 5 x RDL?	RPD	RPD Within +/- 25% for Groundwater?
Perfluorooctanesulfonic acid (PFOS)	EPA 537 Mod	ng/L	3.93		3.91	RDL	1	8.58		4.10	RDL	1	No, Original and Duplicate results < 5 x RDL, RPD not calculated. Field Duplicate pair not within control because the difference between the Original and Duplicate sample results was greater than RDL.		
Perfluorooctane Sulfonamide (FOSA)	EPA 537 Mod	ng/L	ND	U	3.91	RDL	1	ND	U	4.10	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
Perfluoropentanoic acid (PFPeA)	EPA 537 Mod	ng/L	1740		19.5	RDL	5	3550		4.10	RDL	5	Yes, RPD calculated	68.4%	NO
PFPeS	EPA 537 Mod	ng/L	36		3.91	RDL	1	68.1		4.10	RDL	1	Yes, RPD calculated	61.7%	NO
Perfluorotetradecanoic acid (PFTeDA)	EPA 537 Mod	ng/L	ND	U	3.91	RDL	1	ND	U	4.10	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
Perfluorotridecanoic acid (PFTrDA)	EPA 537 Mod	ng/L	ND	U	3.91	RDL	1	ND	U	4.10	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		
Perfluoroundecanoic acid (PFUdA)	EPA 537 Mod	ng/L	ND	U	3.91	RDL	1	ND	U	4.10	RDL	1	No, Original and Duplicate both < RDL, RPD not calculated. Field Duplicate pair within control because the difference between the Original and Duplicate sample RDLs was less than RDL.		

Qualifiers (Q):

J: The identification of the analyte is acceptable; the reported value is an estimate.

U: Indicates the compound was analyzed for but not detected

ng/l: Nanograms per liter.

RDL - Laboratory reported detection limit.

RPD - Relative Percent Difference was calculated when analyte concentrations are greater than or equal to five times the RDL. QA/QC RPD

Goal is less than 25% for groundwater samples.

For analytes reported at concentrations less than five times the RDL, the QA/QC Goal is the difference between the sample and its duplicate is less than RDL for groundwater samples.

APPENDIX C

Test Pit and Monitoring Well Construction Logs

WELL LOG NO. TOSA-MW04

Page 1 of 1

PROJECT: Redwood Road Dump VCP

CLIENT: SLC Sustainability
Salt Lake City, Ut

SITE: 1850 W. Indiana Ave
Salt Lake City, Utah

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. ENVIRONMENTAL SMART LOG 61227342 RWRD DUMP VCP MWS GINT 11-9-22 ML.GPJ TERRACON_DATATEMPLATE.GDT 11/15/22

GRAPHIC LOG	LOCATION See Exhibit A-2		INSTALLATION DETAILS		DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (%)	PID (ppm)	Sample
	DEPTH	MATERIAL DESCRIPTION	Well Completion:							
		SILT (ML) , topsoil, brown, slight moist, organics - roots	Concrete							
	1.5			2" PVC Blank 0'-2.5' Bentonite Seal 1'-2'					0.0	
		SANDY SILT (ML) , brown						90	0.0	
	2.5								0.0	
		SILTY SAND (SM) , interbedded w/ 6" silt layers, slight moist to wet @ 5', very fine grained sand, 40% fines		10-20 Silica Sand Pack 2'-12.5'		5			0.0	
			2" Slotted (0.010) PVC Screen 2.5'-12.5'				30	0.0		
					10			0.0		
			End Cap				60	0.0		
	15.0				15			0.0		
	Boring Terminated at 15 Feet									

Boring Terminated at 15 Feet

The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.

Advancement Method: Direct Push		Notes: Stick-up completion w/ steel protective cover
Abandonment Method:		
WATER LEVEL OBSERVATIONS		Well Started: 11-03-2022
Groundwater Encountered While Drilling		Well Completed: 11-03-2022
		Drill Rig: Geoprobe
	6949 S High Tech Dr Ste 100 Midvale, UT	Driller: DPS
		Project No.: 61227342
		Exhibit: B-1

WELL LOG NO. TOSA-MW05

Page 1 of 1

PROJECT: Redwood Road Dump VCP

CLIENT: SLC Sustainability
Salt Lake City, Ut

SITE: 1850 W. Indiana Ave
Salt Lake City, Utah

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. ENVIRONMENTAL SMART LOG 61227342 RWRD DUMP VCP MWS GINT 11-9-22 ML.GPJ TERRACON_DATATEMPLATE.GDT 11/15/22

GRAPHIC LOG	LOCATION	INSTALLATION DETAILS		DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (%)	PID (ppm)	Sample
	See Exhibit A-2	Well Completion:							
DEPTH	MATERIAL DESCRIPTION								
	FILL - SANDY SILT , dark brown, contains brick fragments and peices of wood		Concrete						
			2" PVC Blank 0'-2.5' Bentonite Seal 1'-2'					0.0	
3.5							40	0.0	
	SANDY SILT (ML) , gray brown, moist to wet, stiff, very fine grain sand		10-20 Silica Sand Pack 2'-12.5'					0.0	
			2" Slotted (0.010) PVC Screen 2.5'-12.5'				70	0.0	
8.0								0.0	
	SAND WITH SILT (SP-SM) , interbedded w/ 6" silt layers, wet, fine to coarse grained sand		End Cap					0.0	
							20	0.0	
15.0								0.0	
Boring Terminated at 15 Feet									

The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.

Advancement Method: Direct Push		Notes: Stick-up completion w/ steel protective cover	
Abandonment Method:			
WATER LEVEL OBSERVATIONS	 6949 S High Tech Dr Ste 100 Midvale, UT	Well Started: 11-03-2022	Well Completed: 11-03-2022
 Groundwater Encountered While Drilling		Drill Rig: Geoprobe	Driller: DPS
		Project No.: 61227342	Exhibit: B-1

TEST PIT LOG NO. TP-33

Page 1 of 1

PROJECT: Redwood Road Site RAP

CLIENT: Salt Lake City Corporation
Salt Lake City, Utah

SITE: 1850 West Indiana Avenue
Salt Lake City, Utah

GRAPHIC LOG	LOCATION	See Exhibit 2			
	DEPTH	MATERIAL DESCRIPTION			
		FILL - SILTY SAND WITH DEBRIS , topsoil with lots of organics/roots (0-0.75'), brown, loose to medium dense with broken wood chunks and broken concrete blocks.			
		1': 0.75 inch plastic pipe entering excavation from SW.			
	1.5	FILL - SILTY SAND , dark brown, medium dense. Minor amounts of thin plastic.			
	1.8				
		SILT , Yellowish brown, well-graded, slightly plastic, moist.			
	2.3	Test Pit Terminated at 2.25 Feet			

The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.

Advancement Method: Excavation		Notes: Sample TP-33 at 0' to 1.75' composite. Sample TP-33 VOC at 0.75'. Sample TP-33 at 2'.	
Abandonment Method: Backfilled with excavated soils and compacted with excavator bucket.			
WATER LEVEL OBSERVATIONS		Test Pit Started: 11-10-2022	Test Pit Completed: 11-10-2022
Groundwater not encountered		Excavator: DPS	Operator: DPS
		Project No.: 61227342	Exhibit: B-33

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TEST PIT LOG NO. TP-34

Page 1 of 1

PROJECT: Redwood Road Site RAP

CLIENT: Salt Lake City Corporation
Salt Lake City, Utah

SITE: 1850 West Indiana Avenue
Salt Lake City, Utah

GRAPHIC LOG	LOCATION	DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	PID (ppm)
	See Exhibit 2				
DEPTH	MATERIAL DESCRIPTION				
0.0	FILL - SILTY SAND , dark brown, loose with organics/roots.				0.1
1.0	1': Medium dense to loose with medium cobbles and a lot of pieces of wood.				0.0
2.0					
2.5	SILT WITH SAND , yellowish brown, well-graded, slightly plastic, damp.				0.0
	Test Pit Terminated at 2.5 Feet				

The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.

Advancement Method: Excavation		Notes: Sample TP-34 at 0' to 2' composite. Sample TP-34 VOC at 1'. Sample TP-34 at 2.25'.	
Abandonment Method: Backfilled with excavated soils and compacted with excavator bucket.			
WATER LEVEL OBSERVATIONS		Test Pit Started: 11-10-2022	Test Pit Completed: 11-10-2022
Groundwater not encountered		Excavator: DPS	Operator: DPS
		Project No.: 61227342	Exhibit: B-34

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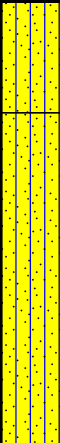
TEST PIT LOG NO. TP-35

Page 1 of 1

PROJECT: Redwood Road Site RAP

CLIENT: Salt Lake City Corporation
Salt Lake City, Utah

SITE: 1850 West Indiana Avenue
Salt Lake City, Utah

GRAPHIC LOG	LOCATION See Exhibit 2		DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	PID (ppm)
	DEPTH	MATERIAL DESCRIPTION				
		<u>FILL - SILTY SAND</u> , lots of organic/roots with mulch, medium dense.				0.1
	0.8	<u>FILL - SILTY SAND WITH DEBRIS</u> , brown, medium dense with lots of small gravel.				0.0
		2.5: Fabric and clothing.				0.0
	3.0	<u>SILT WITH SAND</u> , light brown, medium dense, moist.				0.2
	3.5	<i>Test Pit Terminated at 3.5 Feet</i>				

The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.

Advancement Method: Excavation		Notes: Sample TP-35 at 0' to 3' composite. Sample TP-35 VOC at 1.5'. Sample TP-35 at 3.25'.	
Abandonment Method: Backfilled with excavated soils and compacted with excavator bucket.			
WATER LEVEL OBSERVATIONS	 6949 S High Tech Dr Ste 100 Midvale, UT	Test Pit Started: 11-10-2022	Test Pit Completed: 11-10-2022
<i>Groundwater not encountered</i>		Excavator: DPS	Operator: DPS
		Project No.: 61227342	Exhibit: B-35

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TEST PIT LOG NO. TP-36

Page 1 of 1

PROJECT: Redwood Road Site RAP

CLIENT: Salt Lake City Corporation
Salt Lake City, Utah

SITE: 1850 West Indiana Avenue
Salt Lake City, Utah

GRAPHIC LOG	LOCATION See Exhibit 2		DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	PID (ppm)
	DEPTH	MATERIAL DESCRIPTION				
		FILL - SANDY SILT , brown, loose to medium dense with organics and large roots.	5			0.0
	1.0	FILL - SANDY SILT WITH GRAVEL WITH DEBRIS , brown, medium dense to dense with lots of small pea gravel and some small cobbles. Metal straps, bound electrical wires, small hard plastic.				0.0
	2.5	2.5: Thin plastic liner.				0.0
		FILL - SILT , brown, medium dense with large roots with cut ends.				0.0
	4.5	SILT , light brown, well-graded, medium dense.				0.0
	5.0	Test Pit Terminated at 5 Feet				

The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.

Advancement Method: Excavation		Notes: Sample TP-36 at 0' to 4.5' composite. Sample TP-36 VOC at 2.5'. Sample TP-36 at 4.75'.
Abandonment Method: Backfilled with excavated soils and compacted with excavator bucket.		
WATER LEVEL OBSERVATIONS		Test Pit Started: 11-10-2022
Groundwater not encountered		Test Pit Completed: 11-10-2022
		Excavator: DPS
	6949 S High Tech Dr Ste 100 Midvale, UT	Operator: DPS
		Project No.: 61227342
		Exhibit: B-36

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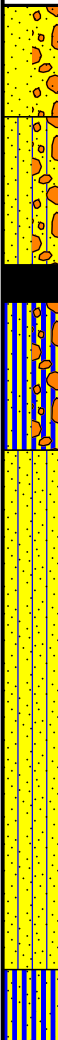
TEST PIT LOG NO. TP-37

Page 1 of 1

PROJECT: Redwood Road Site RAP

CLIENT: Salt Lake City Corporation
Salt Lake City, Utah

SITE: 1850 West Indiana Avenue
Salt Lake City, Utah

GRAPHIC LOG	LOCATION See Exhibit 2		DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	PID (ppm)
	DEPTH	MATERIAL DESCRIPTION				
		<u>FILL - POORLY GRADED SAND WITH GRAVEL</u> , black gravel road base.	5			0.3
	0.8	<u>FILL - SILTY SAND WITH GRAVEL</u> , dark gray, loose to dense with asphalt and large cobbles.				0.1
	1.8	<u>FILL - ASPHALT</u> , 3" layer of broken asphalt.				0.9
	2.0	<u>FILL - SANDY SILT WITH GRAVEL WITH DEBRIS</u> , brown, medium dense to dense with lots of small pea gravel and some small to medium cobbles.				1.6
	3.0	<u>FILL - SILTY SAND</u> , light brown, medium dense with small to medium cobbles and concrete chunks.				0.5
	6.5	<u>SANDY SILT</u> , light grayish brown, well-graded, medium dense.				0.0
	7.0	<i>Test Pit Terminated at 7 Feet</i>				0.0

The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.

Advancement Method:
Excavation

Abandonment Method:
Backfilled with excavated soils and compacted with excavator bucket.

Notes:

Sample TP-37 Surface at 0' to 0.5'.
Sample TP-37 at 0' to 6.5' composite.
Sample TP-37 VOC at 3'.
Sample TP-37 at 6.75'.

WATER LEVEL OBSERVATIONS

Groundwater not encountered

Terracon
6949 S High Tech Dr Ste 100
Midvale, UT

Test Pit Started: 11-10-2022

Test Pit Completed: 11-10-2022

Excavator: DPS

Operator: DPS

Project No.: 61227342

Exhibit: B-37

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TEST PIT LOG NO. TP-38

Page 1 of 1

PROJECT: Redwood Road Site RAP

CLIENT: Salt Lake City Corporation
Salt Lake City, Utah

SITE: 1850 West Indiana Avenue
Salt Lake City, Utah

GRAPHIC LOG	LOCATION	See Exhibit 2			
	DEPTH	MATERIAL DESCRIPTION			
	0.3	FILL - POORLY GRADED SAND WITH GRAVEL. Dark gray to black, loose to medium dense, with trace organics. Thin plastic liner at 0.25'. FILL - SILTY SAND , brown, small gravel with trace small cobbles. Several 2" lenses of loose well-graded sand.			
	2.0	FILL - GRAVELLY SILT WITH SAND , light brown with small gravel, medium dense.			
	4.5	SILT , light grayish brown, moist.			
	7.5	Test Pit Terminated at 7.5 Feet			

The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.

Advancement Method: Excavation		Notes: Sample TP-38 at 0' to 4.5' composite. Sample TP-38 VOC at 2'. Sample TP-38 at 4.75'. Sample TP-138 (Duplicate sample of 0'-4.5' composite).	
Abandonment Method: Backfilled with excavated soils and compacted with excavator bucket.			
WATER LEVEL OBSERVATIONS		Test Pit Started: 11-10-2022	Test Pit Completed: 11-10-2022
Groundwater not encountered		Excavator: DPS	Operator: DPS
		Project No.: 61227342	Exhibit: B-38

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TEST PIT LOG NO. TP-39

Page 1 of 1

PROJECT: Redwood Road Site RAP

CLIENT: Salt Lake City Corporation
Salt Lake City, Utah

SITE: 1850 West Indiana Avenue
Salt Lake City, Utah

GRAPHIC LOG	LOCATION See Exhibit 2		DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	PID (ppm)
	DEPTH	MATERIAL DESCRIPTION				
	0.8	<u>FILL - SILT WITH SAND</u> , dark brown, loose to medium dense, lots of organics and small roots.	5			0.0
		<u>FILL - SILT WITH SAND</u> , light brown, medium dense, trace organics.				0.0
	1.5	<u>SILT</u> , light brownish gray, medium dense, slightly plastic, moist.				0.0
						0.0
						0.0
	4.5': Wet.					0.0
5.0	<i>Test Pit Terminated at 5 Feet</i>					

The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.

Advancement Method: Excavation		Notes: Sample TP-39 at 0' to 1.5' composite. Sample TP-39 VOC at 0.75'. Sample TP-39 at 1.75'.
Abandonment Method: Backfilled with excavated soils and compacted with excavator bucket.		
WATER LEVEL OBSERVATIONS		Test Pit Started: 11-10-2022
 Groundwater encountered approximately 4.5 ft bgs		Test Pit Completed: 11-10-2022
		Excavator: DPS
	6949 S High Tech Dr Ste 100 Midvale, UT	Operator: DPS
		Project No.: 61227342
		Exhibit: B-39

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TEST PIT LOG NO. TP-40

Page 1 of 1

PROJECT: Redwood Road Site RAP

CLIENT: Salt Lake City Corporation
Salt Lake City, Utah

SITE: 1850 West Indiana Avenue
Salt Lake City, Utah

GRAPHIC LOG	LOCATION	See Exhibit 2		DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	PID (ppm)
	DEPTH	MATERIAL DESCRIPTION					
	0	FILL - SANDY SILT WITH DEBRIS , dark brown, loose to medium dense, trace organics in first 0.5'. Debris included burnt wood (native and processed), melted plastic, broken bricks, broken concrete, and small pieces of hard plastic.					1.1
	1.5						0.8
	2.25	2.25': Saturation; free water entering excavation.			▽		0.3
	2.5	SILT , light yellowish brown, very soft, saturated.					0.0
	3.0	Test Pit Terminated at 3 Feet					

The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.

Advancement Method: Excavation		Notes: Sample TP-40 at 0' to 2.5' composite. Sample TP-40 VOC at 1.5'. Sample TP-40 at 2.75'. Sample TP-140 (Duplicate sample of 0' to 2.5' composite)
Abandonment Method: Backfilled with excavated soils and compacted with excavator bucket.		
WATER LEVEL OBSERVATIONS		Test Pit Started: 11-10-2022
▽ Groundwater encountered approximately 2.25 ft bgs		Test Pit Completed: 11-10-2022
		Excavator: DPS
	6949 S High Tech Dr Ste 100 Midvale, UT	Operator: DPS
		Project No.: 61227342
		Exhibit: B-40

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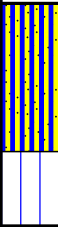
TEST PIT LOG NO. TP-41

Page 1 of 1

PROJECT: Redwood Road Site RAP

CLIENT: Salt Lake City Corporation
Salt Lake City, Utah

SITE: 1850 West Indiana Avenue
Salt Lake City, Utah

GRAPHIC LOG	LOCATION	See Exhibit 2		DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	PID (ppm)
	DEPTH	MATERIAL DESCRIPTION					
	0.0	FILL - SANDY SILT WITH DEBRIS , Dark brown, soft, moist to saturated. Debris included burnt wood, broken bricks, white hard plastic.					0.0
	0.75	Saturated; free water entering excavation.			▽		0.0
	1.0	SILT , light yellowish brown, very soft, saturated.					0.0
	1.5	Test Pit Terminated at 1.5 Feet					

The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.

Advancement Method: Excavation		Notes: Sample TP-41 at 0' to 1' composite. Sample TP-41 VOC at 0.5'. Sample TP-41 at 1.25'.
Abandonment Method: Backfilled with excavated soils and compacted with excavator bucket.		
WATER LEVEL OBSERVATIONS		Test Pit Started: 11-10-2022
▽ Groundwater encountered approximately 0.75 ft bgs		Test Pit Completed: 11-10-2022
		Excavator: DPS
	6949 S High Tech Dr Ste 100 Midvale, UT	Operator: DPS
		Project No.: 61227342
		Exhibit: B-41

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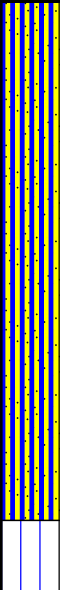
TEST PIT LOG NO. TP-42

Page 1 of 1

PROJECT: Redwood Road Site RAP

CLIENT: Salt Lake City Corporation
Salt Lake City, Utah

SITE: 1850 West Indiana Avenue
Salt Lake City, Utah

GRAPHIC LOG	LOCATION See Exhibit 2		DEPTH (ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	PID (ppm)
	DEPTH	MATERIAL DESCRIPTION				
		FILL - SANDY SILT WITH DEBRIS , Dark brown, soft, moist to wet. Debris included wood, broken bricks, concrete block with rebar, metal piping (electrical conduit).				0.0
						0.0
						0.0
				▽		0.0
	3.5					0.0
		SILT , light yellowish brown, very soft, saturated.				0.0
4.0	Test Pit Terminated at 4 Feet					

The stratification lines represent the approximate transition between differing soil types and/or rock types; in-situ these transitions may be gradual or may occur at different depths than shown.

Advancement Method: Excavation		Notes: Sample TP-42 at 0' to 3.5' composite. Sample TP-42 VOC at 2'. Sample TP-42 at 3.75'.	
Abandonment Method: Backfilled with excavated soils and compacted with excavator bucket.			
WATER LEVEL OBSERVATIONS	 6949 S High Tech Dr Ste 100 Midvale, UT	Test Pit Started: 11-10-2022	Test Pit Completed: 11-10-2022
 Groundwater encountered approximately 3 ft bgs		Excavator: DPS	Operator: DPS
		Project No.: 61227342	Exhibit: B-42

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APPENDIX D

Chain of Custody and Laboratory Data Sheets

Terracon - Salt Lake City, UT

Sample Delivery Group: L1557295
Samples Received: 11/12/2022
Project Number: 61227342 Task 4.1
Description:

Report To: Nancy Saunders
6949 South High Tech Drive
Midvale, UT 84047

Entire Report Reviewed By:



Chris Ward
Project Manager

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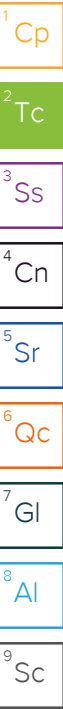
Pace Analytical National12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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¹ Cp
² Tc
³ Ss
⁴ Cn
⁵ Sr
⁶ Qc
⁷ Gl
⁸ Al
⁹ Sc

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SAMPLE SUMMARY

TP-33 FILL L1557295-01 Solid

Collected by
Steve Maliszkeski

Collected date/time
11/10/22 11:26

Received date/time
11/12/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959322	1	11/15/22 10:31	11/15/22 10:38	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1959360	1	11/17/22 10:50	11/18/22 12:59	SRT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1960669	1	11/19/22 07:53	11/21/22 00:24	CCE	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1960736	20	11/17/22 09:15	11/18/22 01:16	JRM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1961292	5	11/17/22 23:28	11/21/22 12:52	DSH	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

⁴ Cn

TP-33 FILL L1557295-02 Solid

Collected by
Steve Maliszkeski

Collected date/time
11/10/22 11:25

Received date/time
11/12/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959322	1	11/15/22 10:31	11/15/22 10:38	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1963742	1	11/16/22 08:37	11/23/22 14:20	ADM	Mt. Juliet, TN

⁵ Sr

⁶ Qc

⁷ Gl

TP-34 FILL L1557295-04 Solid

Collected by
Steve Maliszkeski

Collected date/time
11/10/22 11:50

Received date/time
11/12/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959322	1	11/15/22 10:31	11/15/22 10:38	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1959362	1	11/15/22 09:52	11/16/22 11:27	SRT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1960669	1	11/19/22 07:53	11/20/22 23:49	CCE	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG1961287	1	11/17/22 16:31	11/18/22 05:27	KLA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1960736	10	11/17/22 09:15	11/18/22 00:12	JRM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1961292	1	11/17/22 23:28	11/18/22 15:37	JRM	Mt. Juliet, TN

⁸ Al

⁹ Sc

TP-34 FILL L1557295-05 Solid

Collected by
Steve Maliszkeski

Collected date/time
11/10/22 11:53

Received date/time
11/12/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959323	1	11/15/22 10:21	11/15/22 10:28	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1963742	1	11/16/22 08:37	11/23/22 14:42	ADM	Mt. Juliet, TN

TP-35 FILL L1557295-07 Solid

Collected by
Steve Maliszkeski

Collected date/time
11/10/22 12:25

Received date/time
11/12/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959323	1	11/15/22 10:21	11/15/22 10:28	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1959360	1	11/17/22 10:50	11/18/22 13:01	SRT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1960669	1	11/19/22 07:53	11/21/22 00:27	CCE	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG1961287	1	11/17/22 16:31	11/18/22 05:56	KLA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1960984	2	11/18/22 06:01	11/21/22 09:45	JRM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1961292	1	11/17/22 23:28	11/18/22 17:04	JRM	Mt. Juliet, TN

TP-35 FILL L1557295-08 Solid

Collected by
Steve Maliszkeski

Collected date/time
11/10/22 12:27

Received date/time
11/12/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959323	1	11/15/22 10:21	11/15/22 10:28	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1963742	1	11/16/22 08:37	11/23/22 15:04	ADM	Mt. Juliet, TN

SAMPLE SUMMARY

TRIP BLANK L1557295-10 GW

				Collected by Steve Maliszkeski	Collected date/time 11/10/22 00:00	Received date/time 11/12/22 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1960779	1	11/16/22 15:33	11/16/22 15:33	ADM	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

TP-36 FILL L1557295-11 Solid

				Collected by Steve Maliszkeski	Collected date/time 11/10/22 12:05	Received date/time 11/12/22 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959323	1	11/15/22 10:21	11/15/22 10:28	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1959360	1	11/17/22 10:50	11/18/22 13:04	SRT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1960669	1	11/19/22 07:53	11/21/22 00:30	CCE	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG1961287	1	11/17/22 16:31	11/18/22 06:55	KLA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1960984	10	11/18/22 06:01	11/21/22 12:15	JRM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1961292	10	11/17/22 23:28	11/18/22 17:39	JRM	Mt. Juliet, TN

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

TP-36 FILL L1557295-12 Solid

				Collected by Steve Maliszkeski	Collected date/time 11/10/22 12:08	Received date/time 11/12/22 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959323	1	11/15/22 10:21	11/15/22 10:28	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1963742	1	11/16/22 08:37	11/23/22 15:26	ADM	Mt. Juliet, TN

⁸ Al

⁹ Sc

TP-36 NATIVE L1557295-13 Solid

				Collected by Steve Maliszkeski	Collected date/time 11/10/22 12:15	Received date/time 11/12/22 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1964943	1	11/26/22 11:34	11/26/22 11:57	CMK	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1964751	1	11/24/22 08:13	11/25/22 07:46	HLA	Mt. Juliet, TN

TP-37 SHALLOW L1557295-14 Solid

				Collected by Steve Maliszkeski	Collected date/time 11/10/22 13:00	Received date/time 11/12/22 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959323	1	11/15/22 10:21	11/15/22 10:28	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1959360	1	11/17/22 10:50	11/18/22 13:06	SRT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1960669	1	11/19/22 07:53	11/21/22 00:33	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1963742	1	11/16/22 08:37	11/23/22 15:48	ADM	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG1961287	1	11/17/22 16:31	11/18/22 07:04	KLA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1960984	10	11/18/22 06:01	11/21/22 12:36	JRM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1961292	20	11/17/22 23:28	11/18/22 18:13	JRM	Mt. Juliet, TN

TP-37 FILL L1557295-15 Solid

				Collected by Steve Maliszkeski	Collected date/time 11/10/22 13:15	Received date/time 11/12/22 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959323	1	11/15/22 10:21	11/15/22 10:28	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1959360	1	11/17/22 10:50	11/18/22 13:09	SRT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1960669	1	11/19/22 07:53	11/21/22 00:35	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1963742	1	11/16/22 08:37	11/23/22 16:10	ADM	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG1961287	1	11/17/22 16:31	11/18/22 06:06	KLA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1960984	2	11/18/22 06:01	11/21/22 10:07	JRM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1961292	1	11/17/22 23:28	11/18/22 16:29	JRM	Mt. Juliet, TN

SAMPLE SUMMARY

TP-37 FILL L1557295-16 Solid

				Collected by Steve Maliszkeski	Collected date/time 11/10/22 13:18	Received date/time 11/12/22 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959323	1	11/15/22 10:21	11/15/22 10:28	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1963742	1	11/16/22 08:37	11/23/22 16:32	ADM	Mt. Juliet, TN

TP-38 FILL L1557295-18 Solid

				Collected by Steve Maliszkeski	Collected date/time 11/10/22 14:06	Received date/time 11/12/22 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959323	1	11/15/22 10:21	11/15/22 10:28	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1959360	1	11/17/22 10:50	11/18/22 13:11	SRT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1960669	1	11/19/22 07:53	11/21/22 00:38	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1963742	1	11/16/22 08:37	11/23/22 16:54	ADM	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG1961287	1	11/17/22 16:31	11/18/22 06:16	KLA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1960984	10	11/18/22 06:01	11/21/22 11:53	JRM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1961292	1	11/17/22 23:28	11/18/22 16:46	JRM	Mt. Juliet, TN

TP-38 FILL L1557295-19 Solid

				Collected by Steve Maliszkeski	Collected date/time 11/10/22 14:10	Received date/time 11/12/22 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959323	1	11/15/22 10:21	11/15/22 10:28	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1963742	1	11/16/22 08:37	11/23/22 17:16	ADM	Mt. Juliet, TN

TP-39 FILL L1557295-21 Solid

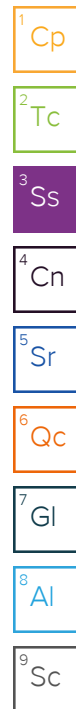
				Collected by Steve Maliszkeski	Collected date/time 11/10/22 13:40	Received date/time 11/12/22 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959326	1	11/15/22 10:10	11/15/22 10:19	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1959360	1	11/17/22 10:50	11/18/22 12:33	SRT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1960670	1	11/21/22 18:41	11/22/22 23:16	ABL	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG1961287	1	11/17/22 16:31	11/18/22 04:18	KLA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1960984	1	11/18/22 06:01	11/18/22 15:35	JRM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1961292	1	11/17/22 23:28	11/18/22 13:53	JRM	Mt. Juliet, TN

TP-39 FILL L1557295-22 Solid

				Collected by Steve Maliszkeski	Collected date/time 11/10/22 13:43	Received date/time 11/12/22 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959326	1	11/15/22 10:10	11/15/22 10:19	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1963742	1	11/16/22 08:37	11/23/22 17:38	ADM	Mt. Juliet, TN

TP-40 FILL L1557295-24 Solid

				Collected by Steve Maliszkeski	Collected date/time 11/10/22 09:35	Received date/time 11/12/22 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959326	1	11/15/22 10:10	11/15/22 10:19	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1959360	1	11/17/22 10:50	11/18/22 13:14	SRT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1960669	1	11/19/22 07:53	11/21/22 00:41	CCE	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG1961287	1	11/17/22 16:31	11/18/22 06:25	KLA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1960984	2	11/18/22 06:01	11/21/22 10:28	JRM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1961292	1	11/17/22 23:28	11/18/22 17:21	JRM	Mt. Juliet, TN



SAMPLE SUMMARY

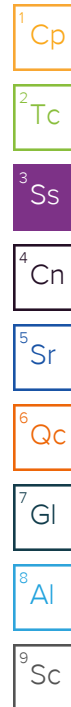
TP-40 FILL L1557295-25 Solid

Collected by
Steve Maliszkeski

Collected date/time
11/10/22 09:30

Received date/time
11/12/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959326	1	11/15/22 10:10	11/15/22 10:19	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1963742	1	11/16/22 08:37	11/23/22 18:00	ADM	Mt. Juliet, TN



TP-40 NATIVE L1557295-26 Solid

Collected by
Steve Maliszkeski

Collected date/time
11/10/22 09:40

Received date/time
11/12/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959326	1	11/15/22 10:10	11/15/22 10:19	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1959360	1	11/17/22 10:50	11/18/22 13:17	SRT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1960669	1	11/19/22 07:53	11/21/22 10:14	CCE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1963742	1	11/16/22 08:37	11/23/22 18:22	ADM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1960984	1	11/18/22 06:01	11/18/22 16:37	JRM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1961292	1	11/17/22 23:28	11/18/22 15:02	JRM	Mt. Juliet, TN

TP-41 FILL L1557295-27 Solid

Collected by
Steve Maliszkeski

Collected date/time
11/10/22 10:50

Received date/time
11/12/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959326	1	11/15/22 10:10	11/15/22 10:19	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1959360	1	11/17/22 10:50	11/18/22 13:24	SRT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1960669	1	11/19/22 07:53	11/20/22 23:25	CCE	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1960984	2	11/18/22 06:01	11/21/22 10:49	JRM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1961292	1	11/17/22 23:28	11/18/22 15:20	JRM	Mt. Juliet, TN

TP-41 FILL L1557295-28 Solid

Collected by
Steve Maliszkeski

Collected date/time
11/10/22 10:51

Received date/time
11/12/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959326	1	11/15/22 10:10	11/15/22 10:19	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1963742	1	11/16/22 08:37	11/23/22 18:44	ADM	Mt. Juliet, TN

TP-41 NATIVE L1557295-29 Solid

Collected by
Steve Maliszkeski

Collected date/time
11/10/22 11:00

Received date/time
11/12/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959326	1	11/15/22 10:10	11/15/22 10:19	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1959360	1	11/17/22 10:50	11/18/22 13:27	SRT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1960670	1	11/21/22 18:41	11/23/22 00:04	ABL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1963742	1	11/16/22 08:37	11/23/22 19:05	ADM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1960984	1	11/18/22 06:01	11/18/22 13:53	JRM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1961298	1	11/17/22 16:54	11/18/22 04:49	AMG	Mt. Juliet, TN

TP-42 FILL L1557295-30 Solid

Collected by
Steve Maliszkeski

Collected date/time
11/10/22 10:15

Received date/time
11/12/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959326	1	11/15/22 10:10	11/15/22 10:19	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1959360	1	11/17/22 10:50	11/18/22 13:29	SRT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1960670	1	11/21/22 18:41	11/23/22 00:07	ABL	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG1961287	1	11/17/22 16:31	11/18/22 04:48	KLA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1960984	10	11/18/22 06:01	11/18/22 18:41	JRM	Mt. Juliet, TN

SAMPLE SUMMARY

TP-42 FILL L1557295-30 Solid

				Collected by Steve Maliszkeski	Collected date/time 11/10/22 10:15	Received date/time 11/12/22 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1961298	1	11/17/22 16:54	11/18/22 11:04	AMG	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

TP-42 FILL L1557295-31 Solid

				Collected by Steve Maliszkeski	Collected date/time 11/10/22 10:15	Received date/time 11/12/22 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959326	1	11/15/22 10:10	11/15/22 10:19	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1963742	1	11/16/22 08:37	11/23/22 19:27	ADM	Mt. Juliet, TN

TP-42 NATIVE L1557295-32 Solid

				Collected by Steve Maliszkeski	Collected date/time 11/10/22 10:20	Received date/time 11/12/22 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959327	1	11/15/22 13:13	11/15/22 13:19	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1959360	1	11/17/22 10:50	11/18/22 13:32	SRT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1960670	1	11/21/22 18:41	11/23/22 00:10	ABL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1963742	1	11/16/22 08:37	11/23/22 19:48	ADM	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG1961287	1	11/17/22 16:31	11/18/22 04:58	KLA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1960984	1	11/18/22 06:01	11/18/22 15:15	JRM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1961298	1	11/17/22 16:54	11/18/22 05:09	AMG	Mt. Juliet, TN

TP-138 FILL L1557295-33 Solid

				Collected by Steve Maliszkeski	Collected date/time 11/10/22 20:00	Received date/time 11/12/22 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959327	1	11/15/22 13:13	11/15/22 13:19	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1959360	1	11/17/22 10:50	11/18/22 13:34	SRT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1960670	1	11/21/22 18:41	11/23/22 00:18	ABL	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG1961287	1	11/17/22 16:31	11/18/22 06:35	KLA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1960984	10	11/18/22 06:01	11/21/22 11:32	JRM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1961298	5	11/17/22 16:54	11/18/22 11:24	AMG	Mt. Juliet, TN

TP-138 FILL L1557295-34 Solid

				Collected by Steve Maliszkeski	Collected date/time 11/10/22 20:01	Received date/time 11/12/22 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959327	1	11/15/22 13:13	11/15/22 13:19	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1963742	1	11/16/22 08:37	11/23/22 20:11	ADM	Mt. Juliet, TN

TP-140 FILL L1557295-35 Solid

				Collected by Steve Maliszkeski	Collected date/time 11/10/22 20:30	Received date/time 11/12/22 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959327	1	11/15/22 13:13	11/15/22 13:19	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1959360	1	11/17/22 10:50	11/18/22 13:37	SRT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1960670	1	11/21/22 18:41	11/23/22 00:21	ABL	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG1961287	1	11/17/22 16:31	11/18/22 06:45	KLA	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1960984	2	11/18/22 06:01	11/21/22 11:11	JRM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1961298	5	11/17/22 16:54	11/21/22 15:12	AMG	Mt. Juliet, TN

SAMPLE SUMMARY

TP-140 FILL L1557295-36 Solid

Collected by
Steve Maliszkeski

Collected date/time
11/10/22 20:30

Received date/time
11/12/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959327	1	11/15/22 13:13	11/15/22 13:19	CMK	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1963742	1	11/16/22 08:37	11/23/22 20:32	ADM	Mt. Juliet, TN

ND-4 L1557295-37 Solid

Collected by
Steve Maliszkeski

Collected date/time
11/10/22 10:20

Received date/time
11/12/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959327	1	11/15/22 13:13	11/15/22 13:19	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1959360	1	11/17/22 10:50	11/18/22 13:39	SRT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1960670	1	11/21/22 18:41	11/23/22 00:24	ABL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1964463	1	11/16/22 08:37	11/25/22 19:48	ADM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1960984	1	11/18/22 06:01	11/18/22 14:54	JRM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1961298	1	11/17/22 16:54	11/18/22 05:28	AMG	Mt. Juliet, TN

ND-5 L1557295-38 Solid

Collected by
Steve Maliszkeski

Collected date/time
11/10/22 10:00

Received date/time
11/12/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959327	1	11/15/22 13:13	11/15/22 13:19	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1959360	1	11/17/22 10:50	11/18/22 13:42	SRT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1960670	1	11/21/22 18:41	11/23/22 00:27	ABL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1964463	1	11/16/22 08:37	11/25/22 20:12	ADM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1960984	1	11/18/22 06:01	11/18/22 17:18	JRM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1961298	1	11/17/22 16:54	11/18/22 05:48	AMG	Mt. Juliet, TN

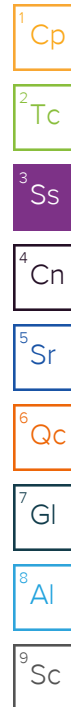
ND-104 L1557295-39 Solid

Collected by
Steve Maliszkeski

Collected date/time
11/10/22 10:25

Received date/time
11/12/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1959327	1	11/15/22 13:13	11/15/22 13:19	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1959360	1	11/17/22 10:50	11/18/22 13:44	SRT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1960670	1	11/21/22 18:41	11/23/22 00:30	ABL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1964463	1	11/16/22 08:37	11/25/22 20:37	ADM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1960984	1	11/18/22 06:01	11/18/22 14:13	JRM	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1961298	1	11/17/22 16:54	11/18/22 06:08	AMG	Mt. Juliet, TN

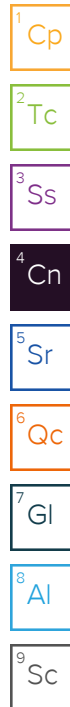


CASE NARRATIVE

Unless qualified or notated within the narrative below, all sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. 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.



Chris Ward
Project Manager



Mercury by Method 7471A

The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Batch	Lab Sample ID	Analytes
WG1959362	(MS) R3861944-3, L1557295-04	Mercury

The associated batch QC was outside the established quality control range for precision.

Batch	Lab Sample ID	Analytes
WG1959362	(MSD) R3861944-4, L1557295-04	Mercury

Metals (ICP) by Method 6010B

The same analyte is found in the associated blank.

Batch	Analyte	Lab Sample ID
WG1960669	Arsenic	L1557295-14, 15

Volatile Organic Compounds (GC/MS) by Method 8260B

The same analyte is found in the associated blank.

Batch	Analyte	Lab Sample ID
WG1964463	Methylene Chloride	L1557295-37, 38, 39

The associated batch QC was below the established quality control range for accuracy.

Batch	Lab Sample ID	Analytes
WG1960779	(LCS) R3862932-1, L1557295-10	Bromoform and Chlorodibromomethane

The associated batch QC was above the established quality control range for accuracy.

Batch	Lab Sample ID	Analytes
WG1963742	(LCS) R3865000-1, (LCSD) R3865000-2, L1557295-02, 05, 08, 12, 14, 15, 16, 18, 19, 22, 25, 26, 28, 29, 31, 32, 34, 36	Vinyl acetate
WG1964463	(LCS) R3865156-1, L1557295-37, 38, 39	Vinyl acetate

The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Batch	Lab Sample ID	Analytes
WG1960779	(MS) R3862932-4, (MSD) R3862932-5	Allyl chloride

CASE NARRATIVE

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Surrogate recovery cannot be used for control limit evaluation due to dilution.

Batch	Analyte	Lab Sample ID
WG1960736	2,4,6-Tribromophenol	L1557295-01
WG1960736	2-Fluorobiphenyl	L1557295-01
WG1960736	2-Fluorophenol	L1557295-01
WG1960736	Nitrobenzene-d5	L1557295-01
WG1960736	Phenol-d5	L1557295-01
WG1960736	p-Terphenyl-d14	L1557295-01

The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Batch	Lab Sample ID	Analytes
WG1960736	(MS) R3862551-3, (MSD) R3862551-4, L1557295-04	2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Benzidine, Benzylbutyl phthalate, Bis(2-ethylhexyl)phthalate, Dimethyl phthalate, Hexachlorocyclopentadiene and n-Nitrosodimethylamine
WG1960984	(MS) R3863275-3, (MSD) R3863275-4, L1557295-21	Benzidine and Hexachlorocyclopentadiene

The associated batch QC was outside the established quality control range for precision.

Batch	Lab Sample ID	Analytes
WG1960736	(MSD) R3862551-4, L1557295-04	Bis(2-ethylhexyl)phthalate

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

Surrogate recovery cannot be used for control limit evaluation due to dilution.

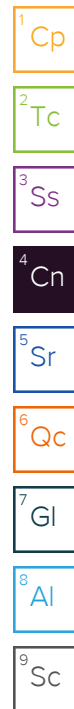
Batch	Analyte	Lab Sample ID
WG1961292	2-Fluorobiphenyl	L1557295-14
WG1961292	Nitrobenzene-d5	L1557295-14
WG1961292	p-Terphenyl-d14	L1557295-14

The sample matrix interfered with the ability to make any accurate determination; spike value is high.

Batch	Lab Sample ID	Analytes
WG1964751	(MS) R3866170-3	Benzo(a)anthracene, Benzo(a)pyrene, Chrysene, Fluoranthene, Phenanthrene and Pyrene

The associated batch QC was outside the established quality control range for precision.

Batch	Lab Sample ID	Analytes
WG1961298	(MSD) R3863532-4	Fluoranthene
WG1964751	(MSD) R3866170-4	Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Chrysene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene and Pyrene



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	78.3		1	11/15/2022 10:38	WG1959322

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.0507	<u>J</u>	0.0230	0.0511	1	11/18/2022 12:59	WG1959360

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Arsenic	13.2		0.661	2.55	1	11/21/2022 00:24	WG1960669
Barium	235		0.109	0.638	1	11/21/2022 00:24	WG1960669
Cadmium	0.999		0.0601	0.638	1	11/21/2022 00:24	WG1960669
Chromium	28.1		0.170	1.28	1	11/21/2022 00:24	WG1960669
Lead	93.6		0.266	0.638	1	11/21/2022 00:24	WG1960669
Selenium	3.27		0.975	2.55	1	11/21/2022 00:24	WG1960669
Silver	0.930	<u>J</u>	0.162	1.28	1	11/21/2022 00:24	WG1960669

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzidine	U		1.60	42.6	20	11/18/2022 01:16	WG1960736
Bis(2-chlorethoxy)methane	U		0.255	8.50	20	11/18/2022 01:16	WG1960736
Bis(2-chloroethyl)ether	U		0.281	8.50	20	11/18/2022 01:16	WG1960736
2,2-Oxybis(1-Chloropropane)	U		0.368	8.50	20	11/18/2022 01:16	WG1960736
4-Bromophenyl-phenylether	U		0.299	8.50	20	11/18/2022 01:16	WG1960736
4-Chlorophenyl-phenylether	U		0.296	8.50	20	11/18/2022 01:16	WG1960736
1,2-Dichlorobenzene	U		0.251	8.50	20	11/18/2022 01:16	WG1960736
1,3-Dichlorobenzene	U		0.258	8.50	20	11/18/2022 01:16	WG1960736
1,4-Dichlorobenzene	U		0.253	8.50	20	11/18/2022 01:16	WG1960736
3,3-Dichlorobenzidine	U		0.314	8.50	20	11/18/2022 01:16	WG1960736
2,4-Dinitrotoluene	U		0.244	8.50	20	11/18/2022 01:16	WG1960736
2,6-Dinitrotoluene	U		0.278	8.50	20	11/18/2022 01:16	WG1960736
Hexachlorobenzene	U		0.301	8.50	20	11/18/2022 01:16	WG1960736
Hexachloro-1,3-butadiene	U		0.286	8.50	20	11/18/2022 01:16	WG1960736
Hexachlorocyclopentadiene	U		0.447	8.50	20	11/18/2022 01:16	WG1960736
Hexachloroethane	U		0.334	8.50	20	11/18/2022 01:16	WG1960736
Isophorone	U		0.260	8.50	20	11/18/2022 01:16	WG1960736
Nitrobenzene	U		0.296	8.50	20	11/18/2022 01:16	WG1960736
n-Nitrosodimethylamine	U		1.26	8.50	20	11/18/2022 01:16	WG1960736
n-Nitrosodiphenylamine	U		0.643	8.50	20	11/18/2022 01:16	WG1960736
n-Nitrosodi-n-propylamine	U		0.283	8.50	20	11/18/2022 01:16	WG1960736
Benzylbutyl phthalate	U		0.266	8.50	20	11/18/2022 01:16	WG1960736
Bis(2-ethylhexyl)phthalate	U		1.08	8.50	20	11/18/2022 01:16	WG1960736
Di-n-butyl phthalate	U		0.291	8.50	20	11/18/2022 01:16	WG1960736
Diethyl phthalate	U		0.281	8.50	20	11/18/2022 01:16	WG1960736
Dimethyl phthalate	U		1.80	8.50	20	11/18/2022 01:16	WG1960736
Di-n-octyl phthalate	U		0.574	8.50	20	11/18/2022 01:16	WG1960736
1,2,4-Trichlorobenzene	U		0.266	8.50	20	11/18/2022 01:16	WG1960736
4-Chloro-3-methylphenol	U		0.276	8.50	20	11/18/2022 01:16	WG1960736
2-Chlorophenol	U		0.281	8.50	20	11/18/2022 01:16	WG1960736
2,4-Dichlorophenol	U		0.248	8.50	20	11/18/2022 01:16	WG1960736
2,4-Dimethylphenol	U		0.222	8.50	20	11/18/2022 01:16	WG1960736
4,6-Dinitro-2-methylphenol	U		1.93	8.50	20	11/18/2022 01:16	WG1960736

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2,4-Dinitrophenol	U		1.99	8.50	20	11/18/2022 01:16	WG1960736
2-Nitrophenol	U		0.304	8.50	20	11/18/2022 01:16	WG1960736
4-Nitrophenol	U		0.266	8.50	20	11/18/2022 01:16	WG1960736
Pentachlorophenol	U		0.229	8.50	20	11/18/2022 01:16	WG1960736
Phenol	U		0.342	8.50	20	11/18/2022 01:16	WG1960736
2,4,6-Trichlorophenol	U		0.273	8.50	20	11/18/2022 01:16	WG1960736
(S) 2-Fluorophenol	52.9	J7		12.0-120		11/18/2022 01:16	WG1960736
(S) Phenol-d5	45.9	J7		10.0-120		11/18/2022 01:16	WG1960736
(S) Nitrobenzene-d5	51.5	J7		10.0-122		11/18/2022 01:16	WG1960736
(S) 2-Fluorobiphenyl	52.7	J7		15.0-120		11/18/2022 01:16	WG1960736
(S) 2,4,6-Tribromophenol	55.0	J7		10.0-127		11/18/2022 01:16	WG1960736
(S) p-Terphenyl-d14	52.1	J7		10.0-120		11/18/2022 01:16	WG1960736

Sample Narrative:

L1557295-01 WG1960736: Cannot run at lower dilution due to viscosity of extract

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.0147	0.0383	5	11/21/2022 12:52	WG1961292
Acenaphthene	U		0.0134	0.0383	5	11/21/2022 12:52	WG1961292
Acenaphthylene	U		0.0138	0.0383	5	11/21/2022 12:52	WG1961292
Benzo(a)anthracene	0.0272	J	0.0110	0.0383	5	11/21/2022 12:52	WG1961292
Benzo(a)pyrene	0.0802		0.0114	0.0383	5	11/21/2022 12:52	WG1961292
Benzo(b)fluoranthene	0.0790		0.00977	0.0383	5	11/21/2022 12:52	WG1961292
Benzo(g,h,i)perylene	0.223		0.0113	0.0383	5	11/21/2022 12:52	WG1961292
Benzo(k)fluoranthene	0.0185	J	0.0137	0.0383	5	11/21/2022 12:52	WG1961292
Chrysene	0.0306	J	0.0148	0.0383	5	11/21/2022 12:52	WG1961292
Dibenz(a,h)anthracene	0.0320	J	0.0110	0.0383	5	11/21/2022 12:52	WG1961292
Fluoranthene	0.0393		0.0144	0.0383	5	11/21/2022 12:52	WG1961292
Fluorene	U		0.0131	0.0383	5	11/21/2022 12:52	WG1961292
Indeno(1,2,3-cd)pyrene	0.103		0.0116	0.0383	5	11/21/2022 12:52	WG1961292
Naphthalene	U		0.0260	0.128	5	11/21/2022 12:52	WG1961292
Phenanthrene	0.0198	J	0.0147	0.0383	5	11/21/2022 12:52	WG1961292
Pyrene	0.0509		0.0128	0.0383	5	11/21/2022 12:52	WG1961292
1-Methylnaphthalene	U		0.0287	0.128	5	11/21/2022 12:52	WG1961292
2-Methylnaphthalene	U		0.0273	0.128	5	11/21/2022 12:52	WG1961292
2-Chloronaphthalene	U		0.0297	0.128	5	11/21/2022 12:52	WG1961292
(S) Nitrobenzene-d5	78.2			14.0-149		11/21/2022 12:52	WG1961292
(S) 2-Fluorobiphenyl	55.7			34.0-125		11/21/2022 12:52	WG1961292
(S) p-Terphenyl-d14	98.0			23.0-120		11/21/2022 12:52	WG1961292

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

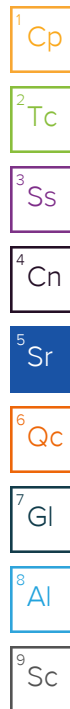
9Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	71.4		1	11/15/2022 10:38	WG1959322

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.108		0.0290	0.0700	1	11/23/2022 14:20	WG1963742
Acrylonitrile	U		0.00283	0.0140	1	11/23/2022 14:20	WG1963742
Allyl chloride	U		0.00560	0.00700	1	11/23/2022 14:20	WG1963742
Benzene	0.0113		0.000525	0.00140	1	11/23/2022 14:20	WG1963742
Bromodichloromethane	U		0.00101	0.00140	1	11/23/2022 14:20	WG1963742
Bromoform	U		0.000594	0.00140	1	11/23/2022 14:20	WG1963742
Bromomethane	U		0.00164	0.00700	1	11/23/2022 14:20	WG1963742
Carbon disulfide	0.00105	J	0.000980	0.00140	1	11/23/2022 14:20	WG1963742
Carbon tetrachloride	U		0.000347	0.00140	1	11/23/2022 14:20	WG1963742
Chlorobenzene	U		0.000269	0.00140	1	11/23/2022 14:20	WG1963742
Chlorodibromomethane	U		0.000314	0.00140	1	11/23/2022 14:20	WG1963742
Chloroethane	U		0.00140	0.00700	1	11/23/2022 14:20	WG1963742
Chloroform	U		0.00144	0.00700	1	11/23/2022 14:20	WG1963742
Chloromethane	U		0.000910	0.00350	1	11/23/2022 14:20	WG1963742
1,2-Dibromoethane	U		0.000350	0.00140	1	11/23/2022 14:20	WG1963742
Dibromomethane	U		0.000490	0.00140	1	11/23/2022 14:20	WG1963742
1,2-Dibromo-3-Chloropropane	U		0.00266	0.00700	1	11/23/2022 14:20	WG1963742
1,2-Dichlorobenzene	U		0.000595	0.00140	1	11/23/2022 14:20	WG1963742
1,3-Dichlorobenzene	U		0.000840	0.00140	1	11/23/2022 14:20	WG1963742
1,4-Dichlorobenzene	U		0.00116	0.00140	1	11/23/2022 14:20	WG1963742
Dichlorodifluoromethane	U		0.000402	0.00700	1	11/23/2022 14:20	WG1963742
trans-1,4-Dichloro-2-butene	U		0.00133	0.00350	1	11/23/2022 14:20	WG1963742
1,1-Dichloroethane	U		0.000375	0.00140	1	11/23/2022 14:20	WG1963742
1,2-Dichloroethane	U		0.000630	0.00140	1	11/23/2022 14:20	WG1963742
1,1-Dichloroethene	U		0.000497	0.00140	1	11/23/2022 14:20	WG1963742
cis-1,2-Dichloroethene	U		0.000665	0.00140	1	11/23/2022 14:20	WG1963742
trans-1,2-Dichloroethene	U		0.000700	0.00140	1	11/23/2022 14:20	WG1963742
1,2-Dichloropropane	U		0.000230	0.00140	1	11/23/2022 14:20	WG1963742
cis-1,3-Dichloropropene	U		0.000595	0.00140	1	11/23/2022 14:20	WG1963742
trans-1,3-Dichloropropene	U		0.000945	0.00140	1	11/23/2022 14:20	WG1963742
Ethylbenzene	0.00101	J	0.000420	0.00140	1	11/23/2022 14:20	WG1963742
2-Hexanone	U		0.00251	0.0140	1	11/23/2022 14:20	WG1963742
Iodomethane	U		0.00169	0.0140	1	11/23/2022 14:20	WG1963742
2-Butanone (MEK)	0.0168		0.00655	0.0140	1	11/23/2022 14:20	WG1963742
Methylene Chloride	U		0.00140	0.00700	1	11/23/2022 14:20	WG1963742
4-Methyl-2-pentanone (MIBK)	U		0.00133	0.0140	1	11/23/2022 14:20	WG1963742
Pentachloroethane	U		0.00350	0.00700	1	11/23/2022 14:20	WG1963742
Styrene	U		0.000312	0.00140	1	11/23/2022 14:20	WG1963742
1,1,1,2-Tetrachloroethane	U		0.000414	0.00140	1	11/23/2022 14:20	WG1963742
1,1,2,2-Tetrachloroethane	U		0.000323	0.00140	1	11/23/2022 14:20	WG1963742
Tetrachloroethene	0.000459	J	0.000455	0.00140	1	11/23/2022 14:20	WG1963742
Toluene	0.00815		0.00172	0.00700	1	11/23/2022 14:20	WG1963742
1,1,1-Trichloroethane	U		0.000518	0.00140	1	11/23/2022 14:20	WG1963742
1,1,2-Trichloroethane	U		0.000595	0.00140	1	11/23/2022 14:20	WG1963742
Trichloroethene	U		0.000280	0.00140	1	11/23/2022 14:20	WG1963742
Trichlorofluoromethane	U		0.000498	0.00700	1	11/23/2022 14:20	WG1963742
1,2,3-Trichloropropane	U		0.000342	0.00350	1	11/23/2022 14:20	WG1963742
Vinyl acetate	U	J4	0.00139	0.0140	1	11/23/2022 14:20	WG1963742
Vinyl chloride	U		0.000316	0.00140	1	11/23/2022 14:20	WG1963742
Xylenes, Total	0.00398	J	0.000700	0.00420	1	11/23/2022 14:20	WG1963742



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.106	0.140	1	11/23/2022 14:20	WG1963742
(S) Toluene-d8	117			75.0-131		11/23/2022 14:20	WG1963742
(S) 4-Bromofluorobenzene	90.2			67.0-138		11/23/2022 14:20	WG1963742
(S) 1,2-Dichloroethane-d4	97.0			70.0-130		11/23/2022 14:20	WG1963742

Sample Narrative:

L1557295-02 WG1963742: Previous run also had low IS/SURR recovery. Matrix effect.

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	81.4		1	11/15/2022 10:38	WG1959322

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.0584	J3 J6	0.0221	0.0491	1	11/16/2022 11:27	WG1959362

Metals (ICP) by Method 6010B

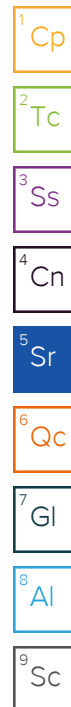
Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Arsenic	7.45		0.636	2.46	1	11/20/2022 23:49	WG1960669
Barium	143		0.105	0.614	1	11/20/2022 23:49	WG1960669
Cadmium	1.00		0.0578	0.614	1	11/20/2022 23:49	WG1960669
Chromium	14.6		0.163	1.23	1	11/20/2022 23:49	WG1960669
Lead	77.7		0.255	0.614	1	11/20/2022 23:49	WG1960669
Selenium	U		0.938	2.46	1	11/20/2022 23:49	WG1960669
Silver	U		0.156	1.23	1	11/20/2022 23:49	WG1960669

Polychlorinated Biphenyls (GC) by Method 8082

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
PCB 1016	U		0.0145	0.0417	1	11/18/2022 05:27	WG1961287
PCB 1221	U		0.0145	0.0417	1	11/18/2022 05:27	WG1961287
PCB 1232	U		0.0145	0.0417	1	11/18/2022 05:27	WG1961287
PCB 1242	U		0.0145	0.0417	1	11/18/2022 05:27	WG1961287
PCB 1248	U		0.00906	0.0209	1	11/18/2022 05:27	WG1961287
PCB 1254	U		0.00906	0.0209	1	11/18/2022 05:27	WG1961287
PCB 1260	U		0.00906	0.0209	1	11/18/2022 05:27	WG1961287
(S) Decachlorobiphenyl	65.3			10.0-135		11/18/2022 05:27	WG1961287
(S) Tetrachloro-m-xylene	63.0			10.0-139		11/18/2022 05:27	WG1961287

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzidine	U	J6	0.769	20.5	10	11/18/2022 00:12	WG1960736
Bis(2-chlorethoxy)methane	U		0.123	4.09	10	11/18/2022 00:12	WG1960736
Bis(2-chloroethyl)ether	U		0.135	4.09	10	11/18/2022 00:12	WG1960736
2,2-Oxybis(1-Chloropropane)	U		0.177	4.09	10	11/18/2022 00:12	WG1960736
4-Bromophenyl-phenylether	U		0.144	4.09	10	11/18/2022 00:12	WG1960736
4-Chlorophenyl-phenylether	U		0.142	4.09	10	11/18/2022 00:12	WG1960736
1,2-Dichlorobenzene	U		0.121	4.09	10	11/18/2022 00:12	WG1960736
1,3-Dichlorobenzene	U		0.124	4.09	10	11/18/2022 00:12	WG1960736
1,4-Dichlorobenzene	U		0.122	4.09	10	11/18/2022 00:12	WG1960736
3,3-Dichlorobenzidine	U		0.151	4.09	10	11/18/2022 00:12	WG1960736
2,4-Dinitrotoluene	U		0.117	4.09	10	11/18/2022 00:12	WG1960736
2,6-Dinitrotoluene	U		0.134	4.09	10	11/18/2022 00:12	WG1960736
Hexachlorobenzene	U		0.145	4.09	10	11/18/2022 00:12	WG1960736
Hexachloro-1,3-butadiene	U		0.138	4.09	10	11/18/2022 00:12	WG1960736
Hexachlorocyclopentadiene	U	J6	0.215	4.09	10	11/18/2022 00:12	WG1960736
Hexachloroethane	U		0.161	4.09	10	11/18/2022 00:12	WG1960736
Isophorone	U		0.125	4.09	10	11/18/2022 00:12	WG1960736
Nitrobenzene	U		0.142	4.09	10	11/18/2022 00:12	WG1960736
n-Nitrosodimethylamine	U	J6	0.607	4.09	10	11/18/2022 00:12	WG1960736
n-Nitrosodiphenylamine	U		0.309	4.09	10	11/18/2022 00:12	WG1960736



TP-34 FILL

Collected date/time: 11/10/22 11:50

SAMPLE RESULTS - 04

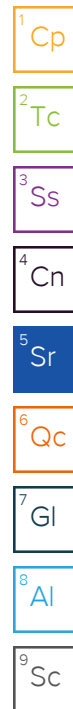
L1557295

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
n-Nitrosodi-n-propylamine	U		0.136	4.09	10	11/18/2022 00:12	WG1960736
Benzylbutyl phthalate	U		0.128	4.09	10	11/18/2022 00:12	WG1960736
Bis(2-ethylhexyl)phthalate	U	J3 J6	0.518	4.09	10	11/18/2022 00:12	WG1960736
Di-n-butyl phthalate	U		0.140	4.09	10	11/18/2022 00:12	WG1960736
Diethyl phthalate	U		0.135	4.09	10	11/18/2022 00:12	WG1960736
Dimethyl phthalate	U	J6	0.867	4.09	10	11/18/2022 00:12	WG1960736
Di-n-octyl phthalate	U		0.276	4.09	10	11/18/2022 00:12	WG1960736
1,2,4-Trichlorobenzene	U		0.128	4.09	10	11/18/2022 00:12	WG1960736
4-Chloro-3-methylphenol	U		0.133	4.09	10	11/18/2022 00:12	WG1960736
2-Chlorophenol	U		0.135	4.09	10	11/18/2022 00:12	WG1960736
2,4-Dichlorophenol	U		0.119	4.09	10	11/18/2022 00:12	WG1960736
2,4-Dimethylphenol	U		0.107	4.09	10	11/18/2022 00:12	WG1960736
4,6-Dinitro-2-methylphenol	U	J6	0.927	4.09	10	11/18/2022 00:12	WG1960736
2,4-Dinitrophenol	U	J6	0.957	4.09	10	11/18/2022 00:12	WG1960736
2-Nitrophenol	U		0.146	4.09	10	11/18/2022 00:12	WG1960736
4-Nitrophenol	U		0.128	4.09	10	11/18/2022 00:12	WG1960736
Pentachlorophenol	U		0.110	4.09	10	11/18/2022 00:12	WG1960736
Phenol	U		0.165	4.09	10	11/18/2022 00:12	WG1960736
2,4,6-Trichlorophenol	U		0.131	4.09	10	11/18/2022 00:12	WG1960736
(S) 2-Fluorophenol	61.7			12.0-120		11/18/2022 00:12	WG1960736
(S) Phenol-d5	58.0			10.0-120		11/18/2022 00:12	WG1960736
(S) Nitrobenzene-d5	62.4			10.0-122		11/18/2022 00:12	WG1960736
(S) 2-Fluorobiphenyl	63.3			15.0-120		11/18/2022 00:12	WG1960736
(S) 2,4,6-Tribromophenol	75.3			10.0-127		11/18/2022 00:12	WG1960736
(S) p-Terphenyl-d14	68.2			10.0-120		11/18/2022 00:12	WG1960736

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.00667	J	0.00282	0.00737	1	11/18/2022 15:37	WG1961292
Acenaphthene	U		0.00257	0.00737	1	11/18/2022 15:37	WG1961292
Acenaphthylene	0.00451	J	0.00265	0.00737	1	11/18/2022 15:37	WG1961292
Benzo(a)anthracene	0.0142		0.00212	0.00737	1	11/18/2022 15:37	WG1961292
Benzo(a)pyrene	0.0239		0.00220	0.00737	1	11/18/2022 15:37	WG1961292
Benzo(b)fluoranthene	0.0318		0.00188	0.00737	1	11/18/2022 15:37	WG1961292
Benzo(g,h,i)perylene	0.0381		0.00217	0.00737	1	11/18/2022 15:37	WG1961292
Benzo(k)fluoranthene	0.00872		0.00264	0.00737	1	11/18/2022 15:37	WG1961292
Chrysene	0.0163		0.00285	0.00737	1	11/18/2022 15:37	WG1961292
Dibenz(a,h)anthracene	0.00604	J	0.00211	0.00737	1	11/18/2022 15:37	WG1961292
Fluoranthene	0.0233		0.00279	0.00737	1	11/18/2022 15:37	WG1961292
Fluorene	U		0.00252	0.00737	1	11/18/2022 15:37	WG1961292
Indeno(1,2,3-cd)pyrene	0.0241		0.00222	0.00737	1	11/18/2022 15:37	WG1961292
Naphthalene	U		0.00501	0.0246	1	11/18/2022 15:37	WG1961292
Phenanthrene	0.00966		0.00284	0.00737	1	11/18/2022 15:37	WG1961292
Pyrene	0.0238		0.00246	0.00737	1	11/18/2022 15:37	WG1961292
1-Methylnaphthalene	U		0.00551	0.0246	1	11/18/2022 15:37	WG1961292
2-Methylnaphthalene	U		0.00524	0.0246	1	11/18/2022 15:37	WG1961292
2-Chloronaphthalene	U		0.00572	0.0246	1	11/18/2022 15:37	WG1961292
(S) Nitrobenzene-d5	54.1			14.0-149		11/18/2022 15:37	WG1961292
(S) 2-Fluorobiphenyl	61.1			34.0-125		11/18/2022 15:37	WG1961292
(S) p-Terphenyl-d14	73.0			23.0-120		11/18/2022 15:37	WG1961292



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.2		1	11/15/2022 10:28	WG1959323

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0734		0.0246	0.0594	1	11/23/2022 14:42	WG1963742
Acrylonitrile	U		0.00240	0.0119	1	11/23/2022 14:42	WG1963742
Allyl chloride	U		0.00475	0.00594	1	11/23/2022 14:42	WG1963742
Benzene	0.00299		0.000445	0.00119	1	11/23/2022 14:42	WG1963742
Bromodichloromethane	U		0.000861	0.00119	1	11/23/2022 14:42	WG1963742
Bromoform	U		0.000503	0.00119	1	11/23/2022 14:42	WG1963742
Bromomethane	U		0.00139	0.00594	1	11/23/2022 14:42	WG1963742
Carbon disulfide	0.00129		0.000831	0.00119	1	11/23/2022 14:42	WG1963742
Carbon tetrachloride	U		0.000294	0.00119	1	11/23/2022 14:42	WG1963742
Chlorobenzene	U		0.000228	0.00119	1	11/23/2022 14:42	WG1963742
Chlorodibromomethane	U		0.000266	0.00119	1	11/23/2022 14:42	WG1963742
Chloroethane	U		0.00119	0.00594	1	11/23/2022 14:42	WG1963742
Chloroform	U		0.00122	0.00594	1	11/23/2022 14:42	WG1963742
Chloromethane	U		0.000772	0.00297	1	11/23/2022 14:42	WG1963742
1,2-Dibromoethane	U		0.000297	0.00119	1	11/23/2022 14:42	WG1963742
Dibromomethane	U		0.000416	0.00119	1	11/23/2022 14:42	WG1963742
1,2-Dibromo-3-Chloropropane	U		0.00226	0.00594	1	11/23/2022 14:42	WG1963742
1,2-Dichlorobenzene	U		0.000505	0.00119	1	11/23/2022 14:42	WG1963742
1,3-Dichlorobenzene	U		0.000712	0.00119	1	11/23/2022 14:42	WG1963742
1,4-Dichlorobenzene	U		0.000986	0.00119	1	11/23/2022 14:42	WG1963742
Dichlorodifluoromethane	U		0.000341	0.00594	1	11/23/2022 14:42	WG1963742
trans-1,4-Dichloro-2-butene	U		0.00113	0.00297	1	11/23/2022 14:42	WG1963742
1,1-Dichloroethane	U		0.000318	0.00119	1	11/23/2022 14:42	WG1963742
1,2-Dichloroethane	U		0.000534	0.00119	1	11/23/2022 14:42	WG1963742
1,1-Dichloroethene	U		0.000422	0.00119	1	11/23/2022 14:42	WG1963742
cis-1,2-Dichloroethene	U		0.000564	0.00119	1	11/23/2022 14:42	WG1963742
trans-1,2-Dichloroethene	U		0.000594	0.00119	1	11/23/2022 14:42	WG1963742
1,2-Dichloropropane	U		0.000195	0.00119	1	11/23/2022 14:42	WG1963742
cis-1,3-Dichloropropene	U		0.000505	0.00119	1	11/23/2022 14:42	WG1963742
trans-1,3-Dichloropropene	U		0.000802	0.00119	1	11/23/2022 14:42	WG1963742
Ethylbenzene	0.000555	J	0.000356	0.00119	1	11/23/2022 14:42	WG1963742
2-Hexanone	U		0.00213	0.0119	1	11/23/2022 14:42	WG1963742
Iodomethane	U		0.00144	0.0119	1	11/23/2022 14:42	WG1963742
2-Butanone (MEK)	0.0110	J	0.00556	0.0119	1	11/23/2022 14:42	WG1963742
Methylene Chloride	U		0.00119	0.00594	1	11/23/2022 14:42	WG1963742
4-Methyl-2-pentanone (MIBK)	U		0.00113	0.0119	1	11/23/2022 14:42	WG1963742
Pentachloroethane	U		0.00297	0.00594	1	11/23/2022 14:42	WG1963742
Styrene	U		0.000265	0.00119	1	11/23/2022 14:42	WG1963742
1,1,1,2-Tetrachloroethane	U		0.000351	0.00119	1	11/23/2022 14:42	WG1963742
1,1,2,2-Tetrachloroethane	U		0.000274	0.00119	1	11/23/2022 14:42	WG1963742
Tetrachloroethene	U		0.000386	0.00119	1	11/23/2022 14:42	WG1963742
Toluene	0.00293	J	0.00146	0.00594	1	11/23/2022 14:42	WG1963742
1,1,1-Trichloroethane	U		0.000439	0.00119	1	11/23/2022 14:42	WG1963742
1,1,2-Trichloroethane	U		0.000505	0.00119	1	11/23/2022 14:42	WG1963742
Trichloroethene	U		0.000237	0.00119	1	11/23/2022 14:42	WG1963742
Trichlorofluoromethane	U		0.000423	0.00594	1	11/23/2022 14:42	WG1963742
1,2,3-Trichloropropane	U		0.000290	0.00297	1	11/23/2022 14:42	WG1963742
Vinyl acetate	U	J4	0.00118	0.0119	1	11/23/2022 14:42	WG1963742
Vinyl chloride	U		0.000268	0.00119	1	11/23/2022 14:42	WG1963742
Xylenes, Total	0.00189	J	0.000594	0.00356	1	11/23/2022 14:42	WG1963742



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.0902	0.119	1	11/23/2022 14:42	WG1963742
(S) Toluene-d8	117			75.0-131		11/23/2022 14:42	WG1963742
(S) 4-Bromofluorobenzene	85.2			67.0-138		11/23/2022 14:42	WG1963742
(S) 1,2-Dichloroethane-d4	97.1			70.0-130		11/23/2022 14:42	WG1963742

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	85.2		1	11/15/2022 10:28	WG1959323

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	U		0.0211	0.0469	1	11/18/2022 13:01	WG1959360

Metals (ICP) by Method 6010B

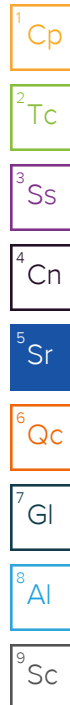
Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Arsenic	9.83		0.608	2.35	1	11/21/2022 00:27	WG1960669
Barium	205		0.100	0.587	1	11/21/2022 00:27	WG1960669
Cadmium	0.992		0.0553	0.587	1	11/21/2022 00:27	WG1960669
Chromium	49.3		0.156	1.17	1	11/21/2022 00:27	WG1960669
Lead	306		0.244	0.587	1	11/21/2022 00:27	WG1960669
Selenium	U		0.896	2.35	1	11/21/2022 00:27	WG1960669
Silver	0.793	J	0.149	1.17	1	11/21/2022 00:27	WG1960669

Polychlorinated Biphenyls (GC) by Method 8082

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
PCB 1016	U		0.0138	0.0399	1	11/18/2022 05:56	WG1961287
PCB 1221	U		0.0138	0.0399	1	11/18/2022 05:56	WG1961287
PCB 1232	U		0.0138	0.0399	1	11/18/2022 05:56	WG1961287
PCB 1242	U		0.0138	0.0399	1	11/18/2022 05:56	WG1961287
PCB 1248	U		0.00866	0.0199	1	11/18/2022 05:56	WG1961287
PCB 1254	U		0.00866	0.0199	1	11/18/2022 05:56	WG1961287
PCB 1260	U		0.00866	0.0199	1	11/18/2022 05:56	WG1961287
(S) Decachlorobiphenyl	59.0			10.0-135		11/18/2022 05:56	WG1961287
(S) Tetrachloro-m-xylene	61.7			10.0-139		11/18/2022 05:56	WG1961287

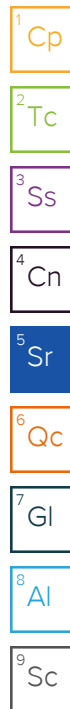
Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzidine	U		0.147	3.92	2	11/21/2022 09:45	WG1960984
Bis(2-chlorethoxy)methane	U		0.0235	0.781	2	11/21/2022 09:45	WG1960984
Bis(2-chloroethyl)ether	U		0.0258	0.781	2	11/21/2022 09:45	WG1960984
2,2-Oxybis(1-Chloropropane)	U		0.0338	0.781	2	11/21/2022 09:45	WG1960984
4-Bromophenyl-phenylether	U		0.0275	0.781	2	11/21/2022 09:45	WG1960984
4-Chlorophenyl-phenylether	U		0.0272	0.781	2	11/21/2022 09:45	WG1960984
1,2-Dichlorobenzene	U		0.0231	0.781	2	11/21/2022 09:45	WG1960984
1,3-Dichlorobenzene	U		0.0237	0.781	2	11/21/2022 09:45	WG1960984
1,4-Dichlorobenzene	U		0.0232	0.781	2	11/21/2022 09:45	WG1960984
3,3-Dichlorobenzidine	U		0.0289	0.781	2	11/21/2022 09:45	WG1960984
2,4-Dinitrotoluene	U		0.0224	0.781	2	11/21/2022 09:45	WG1960984
2,6-Dinitrotoluene	U		0.0256	0.781	2	11/21/2022 09:45	WG1960984
Hexachlorobenzene	U		0.0277	0.781	2	11/21/2022 09:45	WG1960984
Hexachloro-1,3-butadiene	U		0.0263	0.781	2	11/21/2022 09:45	WG1960984
Hexachlorocyclopentadiene	U		0.0411	0.781	2	11/21/2022 09:45	WG1960984
Hexachloroethane	U		0.0307	0.781	2	11/21/2022 09:45	WG1960984
Isophorone	U		0.0239	0.781	2	11/21/2022 09:45	WG1960984
Nitrobenzene	U		0.0272	0.781	2	11/21/2022 09:45	WG1960984
n-Nitrosodimethylamine	U		0.116	0.781	2	11/21/2022 09:45	WG1960984
n-Nitrosodiphenylamine	U		0.0591	0.781	2	11/21/2022 09:45	WG1960984



Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
n-Nitrosodi-n-propylamine	U		0.0260	0.781	2	11/21/2022 09:45	WG1960984
Benzylbutyl phthalate	0.0400	J	0.0244	0.781	2	11/21/2022 09:45	WG1960984
Bis(2-ethylhexyl)phthalate	U		0.0990	0.781	2	11/21/2022 09:45	WG1960984
Di-n-butyl phthalate	U		0.0267	0.781	2	11/21/2022 09:45	WG1960984
Diethyl phthalate	U		0.0258	0.781	2	11/21/2022 09:45	WG1960984
Dimethyl phthalate	U		0.165	0.781	2	11/21/2022 09:45	WG1960984
Di-n-octyl phthalate	U		0.0528	0.781	2	11/21/2022 09:45	WG1960984
1,2,4-Trichlorobenzene	U		0.0244	0.781	2	11/21/2022 09:45	WG1960984
4-Chloro-3-methylphenol	U		0.0253	0.781	2	11/21/2022 09:45	WG1960984
2-Chlorophenol	U		0.0258	0.781	2	11/21/2022 09:45	WG1960984
2,4-Dichlorophenol	U		0.0228	0.781	2	11/21/2022 09:45	WG1960984
2,4-Dimethylphenol	U		0.0204	0.781	2	11/21/2022 09:45	WG1960984
4,6-Dinitro-2-methylphenol	U		0.177	0.781	2	11/21/2022 09:45	WG1960984
2,4-Dinitrophenol	U		0.183	0.781	2	11/21/2022 09:45	WG1960984
2-Nitrophenol	U		0.0279	0.781	2	11/21/2022 09:45	WG1960984
4-Nitrophenol	U		0.0244	0.781	2	11/21/2022 09:45	WG1960984
Pentachlorophenol	U		0.0210	0.781	2	11/21/2022 09:45	WG1960984
Phenol	U		0.0314	0.781	2	11/21/2022 09:45	WG1960984
2,4,6-Trichlorophenol	U		0.0251	0.781	2	11/21/2022 09:45	WG1960984
(S) 2-Fluorophenol	40.2			12.0-120		11/21/2022 09:45	WG1960984
(S) Phenol-d5	36.6			10.0-120		11/21/2022 09:45	WG1960984
(S) Nitrobenzene-d5	40.9			10.0-122		11/21/2022 09:45	WG1960984
(S) 2-Fluorobiphenyl	40.9			15.0-120		11/21/2022 09:45	WG1960984
(S) 2,4,6-Tribromophenol	47.8			10.0-127		11/21/2022 09:45	WG1960984
(S) p-Terphenyl-d14	48.2			10.0-120		11/21/2022 09:45	WG1960984



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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.00697	J	0.00270	0.00704	1	11/18/2022 17:04	WG1961292
Acenaphthene	0.00251	J	0.00245	0.00704	1	11/18/2022 17:04	WG1961292
Acenaphthylene	0.00361	J	0.00253	0.00704	1	11/18/2022 17:04	WG1961292
Benzo(a)anthracene	0.0332		0.00203	0.00704	1	11/18/2022 17:04	WG1961292
Benzo(a)pyrene	0.0458		0.00210	0.00704	1	11/18/2022 17:04	WG1961292
Benzo(b)fluoranthene	0.0551		0.00179	0.00704	1	11/18/2022 17:04	WG1961292
Benzo(g,h,i)perylene	0.0646		0.00208	0.00704	1	11/18/2022 17:04	WG1961292
Benzo(k)fluoranthene	0.0181		0.00252	0.00704	1	11/18/2022 17:04	WG1961292
Chrysene	0.0348		0.00272	0.00704	1	11/18/2022 17:04	WG1961292
Dibenz(a,h)anthracene	0.0109		0.00202	0.00704	1	11/18/2022 17:04	WG1961292
Fluoranthene	0.0562		0.00266	0.00704	1	11/18/2022 17:04	WG1961292
Fluorene	0.00340	J	0.00240	0.00704	1	11/18/2022 17:04	WG1961292
Indeno(1,2,3-cd)pyrene	0.0386		0.00212	0.00704	1	11/18/2022 17:04	WG1961292
Naphthalene	0.00531	J	0.00479	0.0235	1	11/18/2022 17:04	WG1961292
Phenanthrene	0.0257		0.00271	0.00704	1	11/18/2022 17:04	WG1961292
Pyrene	0.0522		0.00235	0.00704	1	11/18/2022 17:04	WG1961292
1-Methylnaphthalene	U		0.00527	0.0235	1	11/18/2022 17:04	WG1961292
2-Methylnaphthalene	0.00522	J	0.00501	0.0235	1	11/18/2022 17:04	WG1961292
2-Chloronaphthalene	0.00812	J	0.00547	0.0235	1	11/18/2022 17:04	WG1961292
(S) Nitrobenzene-d5	45.4			14.0-149		11/18/2022 17:04	WG1961292
(S) 2-Fluorobiphenyl	50.7			34.0-125		11/18/2022 17:04	WG1961292
(S) p-Terphenyl-d14	74.1			23.0-120		11/18/2022 17:04	WG1961292

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.0		1	11/15/2022 10:28	WG1959323

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.115		0.0246	0.0595	1	11/23/2022 15:04	WG1963742
Acrylonitrile	U		0.00240	0.0119	1	11/23/2022 15:04	WG1963742
Allyl chloride	U		0.00476	0.00595	1	11/23/2022 15:04	WG1963742
Benzene	0.00293		0.000446	0.00119	1	11/23/2022 15:04	WG1963742
Bromodichloromethane	U		0.000863	0.00119	1	11/23/2022 15:04	WG1963742
Bromoform	U		0.000505	0.00119	1	11/23/2022 15:04	WG1963742
Bromomethane	U		0.00139	0.00595	1	11/23/2022 15:04	WG1963742
Carbon disulfide	0.00117	J	0.000833	0.00119	1	11/23/2022 15:04	WG1963742
Carbon tetrachloride	U		0.000295	0.00119	1	11/23/2022 15:04	WG1963742
Chlorobenzene	U		0.000229	0.00119	1	11/23/2022 15:04	WG1963742
Chlorodibromomethane	U		0.000267	0.00119	1	11/23/2022 15:04	WG1963742
Chloroethane	U		0.00119	0.00595	1	11/23/2022 15:04	WG1963742
Chloroform	U		0.00123	0.00595	1	11/23/2022 15:04	WG1963742
Chloromethane	U		0.000774	0.00298	1	11/23/2022 15:04	WG1963742
1,2-Dibromoethane	U		0.000298	0.00119	1	11/23/2022 15:04	WG1963742
Dibromomethane	U		0.000417	0.00119	1	11/23/2022 15:04	WG1963742
1,2-Dibromo-3-Chloropropane	U		0.00226	0.00595	1	11/23/2022 15:04	WG1963742
1,2-Dichlorobenzene	U		0.000506	0.00119	1	11/23/2022 15:04	WG1963742
1,3-Dichlorobenzene	U		0.000714	0.00119	1	11/23/2022 15:04	WG1963742
1,4-Dichlorobenzene	U		0.000988	0.00119	1	11/23/2022 15:04	WG1963742
Dichlorodifluoromethane	U		0.000342	0.00595	1	11/23/2022 15:04	WG1963742
trans-1,4-Dichloro-2-butene	U		0.00113	0.00298	1	11/23/2022 15:04	WG1963742
1,1-Dichloroethane	U		0.000319	0.00119	1	11/23/2022 15:04	WG1963742
1,2-Dichloroethane	U		0.000536	0.00119	1	11/23/2022 15:04	WG1963742
1,1-Dichloroethene	U		0.000423	0.00119	1	11/23/2022 15:04	WG1963742
cis-1,2-Dichloroethene	U		0.000565	0.00119	1	11/23/2022 15:04	WG1963742
trans-1,2-Dichloroethene	U		0.000595	0.00119	1	11/23/2022 15:04	WG1963742
1,2-Dichloropropane	U		0.000195	0.00119	1	11/23/2022 15:04	WG1963742
cis-1,3-Dichloropropene	U		0.000506	0.00119	1	11/23/2022 15:04	WG1963742
trans-1,3-Dichloropropene	U		0.000803	0.00119	1	11/23/2022 15:04	WG1963742
Ethylbenzene	0.000475	J	0.000357	0.00119	1	11/23/2022 15:04	WG1963742
2-Hexanone	U		0.00213	0.0119	1	11/23/2022 15:04	WG1963742
Iodomethane	U		0.00144	0.0119	1	11/23/2022 15:04	WG1963742
2-Butanone (MEK)	0.0225		0.00557	0.0119	1	11/23/2022 15:04	WG1963742
Methylene Chloride	U		0.00119	0.00595	1	11/23/2022 15:04	WG1963742
4-Methyl-2-pentanone (MIBK)	U		0.00113	0.0119	1	11/23/2022 15:04	WG1963742
Pentachloroethane	U		0.00298	0.00595	1	11/23/2022 15:04	WG1963742
Styrene	U		0.000265	0.00119	1	11/23/2022 15:04	WG1963742
1,1,1,2-Tetrachloroethane	U		0.000352	0.00119	1	11/23/2022 15:04	WG1963742
1,1,2,2-Tetrachloroethane	U		0.000275	0.00119	1	11/23/2022 15:04	WG1963742
Tetrachloroethene	U		0.000387	0.00119	1	11/23/2022 15:04	WG1963742
Toluene	0.00337	J	0.00146	0.00595	1	11/23/2022 15:04	WG1963742
1,1,1-Trichloroethane	U		0.000440	0.00119	1	11/23/2022 15:04	WG1963742
1,1,2-Trichloroethane	U		0.000506	0.00119	1	11/23/2022 15:04	WG1963742
Trichloroethene	U		0.000238	0.00119	1	11/23/2022 15:04	WG1963742
Trichlorofluoromethane	U		0.000424	0.00595	1	11/23/2022 15:04	WG1963742
1,2,3-Trichloropropane	U		0.000290	0.00298	1	11/23/2022 15:04	WG1963742
Vinyl acetate	U	J4	0.00118	0.0119	1	11/23/2022 15:04	WG1963742
Vinyl chloride	U		0.000269	0.00119	1	11/23/2022 15:04	WG1963742
Xylenes, Total	0.00196	J	0.000595	0.00357	1	11/23/2022 15:04	WG1963742



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.0905	0.119	1	11/23/2022 15:04	WG1963742
(S) Toluene-d8	108			75.0-131		11/23/2022 15:04	WG1963742
(S) 4-Bromofluorobenzene	95.9			67.0-138		11/23/2022 15:04	WG1963742
(S) 1,2-Dichloroethane-d4	92.1			70.0-130		11/23/2022 15:04	WG1963742

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

TRIP BLANK

Collected date/time: 11/10/22 00:00

SAMPLE RESULTS - 10

L1557295

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	1	11/16/2022 15:33	WG1960779
Acrolein	U		0.00254	0.0500	1	11/16/2022 15:33	WG1960779
Acrylonitrile	U		0.000671	0.0100	1	11/16/2022 15:33	WG1960779
Allyl chloride	U		0.000500	0.00500	1	11/16/2022 15:33	WG1960779
Benzene	U		0.0000941	0.00100	1	11/16/2022 15:33	WG1960779
Bromodichloromethane	U		0.000136	0.00100	1	11/16/2022 15:33	WG1960779
Bromoform	U	J4	0.000129	0.00100	1	11/16/2022 15:33	WG1960779
Bromomethane	U		0.000605	0.00500	1	11/16/2022 15:33	WG1960779
Carbon disulfide	U		0.0000962	0.00100	1	11/16/2022 15:33	WG1960779
Carbon tetrachloride	U		0.000128	0.00100	1	11/16/2022 15:33	WG1960779
Chlorobenzene	U		0.000116	0.00100	1	11/16/2022 15:33	WG1960779
Chlorodibromomethane	U	J4	0.000140	0.00100	1	11/16/2022 15:33	WG1960779
Chloroethane	U		0.000192	0.00500	1	11/16/2022 15:33	WG1960779
Chloroform	U		0.000111	0.00500	1	11/16/2022 15:33	WG1960779
Chloromethane	U		0.000960	0.00250	1	11/16/2022 15:33	WG1960779
1,2-Dibromoethane	U		0.000126	0.00100	1	11/16/2022 15:33	WG1960779
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	11/16/2022 15:33	WG1960779
Dibromomethane	U		0.000122	0.00100	1	11/16/2022 15:33	WG1960779
1,2-Dichlorobenzene	U		0.000107	0.00100	1	11/16/2022 15:33	WG1960779
1,3-Dichlorobenzene	U		0.000110	0.00100	1	11/16/2022 15:33	WG1960779
1,4-Dichlorobenzene	U		0.000120	0.00100	1	11/16/2022 15:33	WG1960779
Dichlorodifluoromethane	U		0.000374	0.00500	1	11/16/2022 15:33	WG1960779
trans-1,4-Dichloro-2-butene	U		0.000467	0.00500	1	11/16/2022 15:33	WG1960779
1,1-Dichloroethane	U		0.000100	0.00100	1	11/16/2022 15:33	WG1960779
1,2-Dichloroethane	U		0.0000819	0.00100	1	11/16/2022 15:33	WG1960779
1,1-Dichloroethene	U		0.000188	0.00100	1	11/16/2022 15:33	WG1960779
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	11/16/2022 15:33	WG1960779
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	11/16/2022 15:33	WG1960779
1,2-Dichloropropane	U		0.000149	0.00100	1	11/16/2022 15:33	WG1960779
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	11/16/2022 15:33	WG1960779
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	11/16/2022 15:33	WG1960779
Ethylbenzene	U		0.000137	0.00100	1	11/16/2022 15:33	WG1960779
2-Hexanone	U		0.000787	0.0100	1	11/16/2022 15:33	WG1960779
Iodomethane	U		0.00600	0.0100	1	11/16/2022 15:33	WG1960779
2-Butanone (MEK)	U		0.00119	0.0100	1	11/16/2022 15:33	WG1960779
Methylene Chloride	U		0.000430	0.00500	1	11/16/2022 15:33	WG1960779
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	11/16/2022 15:33	WG1960779
Pentachloroethane	U		0.00230	0.00500	1	11/16/2022 15:33	WG1960779
Styrene	U		0.000118	0.00100	1	11/16/2022 15:33	WG1960779
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	11/16/2022 15:33	WG1960779
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	11/16/2022 15:33	WG1960779
Tetrachloroethene	U		0.000300	0.00100	1	11/16/2022 15:33	WG1960779
Toluene	U		0.000278	0.00100	1	11/16/2022 15:33	WG1960779
1,1,1-Trichloroethane	U		0.000149	0.00100	1	11/16/2022 15:33	WG1960779
1,1,2-Trichloroethane	U		0.000158	0.00100	1	11/16/2022 15:33	WG1960779
Trichloroethene	U		0.000190	0.00100	1	11/16/2022 15:33	WG1960779
Trichlorofluoromethane	U		0.000160	0.00500	1	11/16/2022 15:33	WG1960779
1,2,3-Trichloropropane	U		0.000237	0.00250	1	11/16/2022 15:33	WG1960779
Vinyl acetate	U		0.000692	0.0100	1	11/16/2022 15:33	WG1960779
Vinyl chloride	U		0.000234	0.00100	1	11/16/2022 15:33	WG1960779
Xylenes, Total	U		0.000174	0.00300	1	11/16/2022 15:33	WG1960779
Acetonitrile	U		0.0240	0.0500	1	11/16/2022 15:33	WG1960779
Chloroprene	U		0.00145	0.0500	1	11/16/2022 15:33	WG1960779
Isobutanol	U		0.0421	0.100	1	11/16/2022 15:33	WG1960779
1,4-Dioxane	U		0.0360	0.100	1	11/16/2022 15:33	WG1960779
Methacrylonitrile	U		0.0142	0.0500	1	11/16/2022 15:33	WG1960779

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

ACCOUNT:

Terracon - Salt Lake City, UT

PROJECT:

61227342 Task 4.1

SDG:

L1557295

DATE/TIME:

12/05/22 10:40

PAGE:

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Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Methyl methacrylate	U		0.00152	0.00500	1	11/16/2022 15:33	WG1960779
Ethyl methacrylate	U		0.00148	0.00500	1	11/16/2022 15:33	WG1960779
Propionitrile	U		0.0162	0.0500	1	11/16/2022 15:33	WG1960779
(S) Toluene-d8	92.9			80.0-120		11/16/2022 15:33	WG1960779
(S) 4-Bromofluorobenzene	86.9			77.0-126		11/16/2022 15:33	WG1960779
(S) 1,2-Dichloroethane-d4	89.6			70.0-130		11/16/2022 15:33	WG1960779

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.5		1	11/15/2022 10:28	WG1959323

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.0535		0.0201	0.0447	1	11/18/2022 13:04	WG1959360

Metals (ICP) by Method 6010B

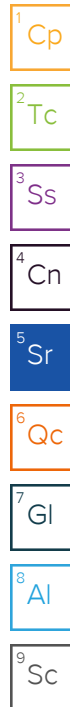
Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Arsenic	6.95		0.579	2.23	1	11/21/2022 00:30	WG1960669
Barium	186		0.0952	0.559	1	11/21/2022 00:30	WG1960669
Cadmium	0.889		0.0526	0.559	1	11/21/2022 00:30	WG1960669
Chromium	21.9		0.149	1.12	1	11/21/2022 00:30	WG1960669
Lead	125		0.232	0.559	1	11/21/2022 00:30	WG1960669
Selenium	0.924	J	0.853	2.23	1	11/21/2022 00:30	WG1960669
Silver	U		0.142	1.12	1	11/21/2022 00:30	WG1960669

Polychlorinated Biphenyls (GC) by Method 8082

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
PCB 1016	U		0.0132	0.0380	1	11/18/2022 06:55	WG1961287
PCB 1221	U		0.0132	0.0380	1	11/18/2022 06:55	WG1961287
PCB 1232	U		0.0132	0.0380	1	11/18/2022 06:55	WG1961287
PCB 1242	U		0.0132	0.0380	1	11/18/2022 06:55	WG1961287
PCB 1248	U		0.00824	0.0190	1	11/18/2022 06:55	WG1961287
PCB 1254	U		0.00824	0.0190	1	11/18/2022 06:55	WG1961287
PCB 1260	0.0361		0.00824	0.0190	1	11/18/2022 06:55	WG1961287
(S) Decachlorobiphenyl	61.6			10.0-135		11/18/2022 06:55	WG1961287
(S) Tetrachloro-m-xylene	57.5			10.0-139		11/18/2022 06:55	WG1961287

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzidine	U		0.699	18.7	10	11/21/2022 12:15	WG1960984
Bis(2-chlorethoxy)methane	U		0.112	3.72	10	11/21/2022 12:15	WG1960984
Bis(2-chloroethyl)ether	U		0.123	3.72	10	11/21/2022 12:15	WG1960984
2,2-Oxybis(1-Chloropropane)	U		0.161	3.72	10	11/21/2022 12:15	WG1960984
4-Bromophenyl-phenylether	U		0.131	3.72	10	11/21/2022 12:15	WG1960984
4-Chlorophenyl-phenylether	U		0.130	3.72	10	11/21/2022 12:15	WG1960984
1,2-Dichlorobenzene	U		0.110	3.72	10	11/21/2022 12:15	WG1960984
1,3-Dichlorobenzene	U		0.113	3.72	10	11/21/2022 12:15	WG1960984
1,4-Dichlorobenzene	U		0.111	3.72	10	11/21/2022 12:15	WG1960984
3,3-Dichlorobenzidine	U		0.137	3.72	10	11/21/2022 12:15	WG1960984
2,4-Dinitrotoluene	U		0.107	3.72	10	11/21/2022 12:15	WG1960984
2,6-Dinitrotoluene	U		0.122	3.72	10	11/21/2022 12:15	WG1960984
Hexachlorobenzene	U		0.132	3.72	10	11/21/2022 12:15	WG1960984
Hexachloro-1,3-butadiene	U		0.125	3.72	10	11/21/2022 12:15	WG1960984
Hexachlorocyclopentadiene	U		0.195	3.72	10	11/21/2022 12:15	WG1960984
Hexachloroethane	U		0.146	3.72	10	11/21/2022 12:15	WG1960984
Isophorone	U		0.114	3.72	10	11/21/2022 12:15	WG1960984
Nitrobenzene	U		0.130	3.72	10	11/21/2022 12:15	WG1960984
n-Nitrosodimethylamine	U		0.552	3.72	10	11/21/2022 12:15	WG1960984
n-Nitrosodiphenylamine	U		0.281	3.72	10	11/21/2022 12:15	WG1960984



Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
n-Nitrosodi-n-propylamine	U		0.124	3.72	10	11/21/2022 12:15	WG1960984
Benzylbutyl phthalate	U		0.116	3.72	10	11/21/2022 12:15	WG1960984
Bis(2-ethylhexyl)phthalate	0.936	J	0.471	3.72	10	11/21/2022 12:15	WG1960984
Di-n-butyl phthalate	U		0.127	3.72	10	11/21/2022 12:15	WG1960984
Diethyl phthalate	U		0.123	3.72	10	11/21/2022 12:15	WG1960984
Dimethyl phthalate	U		0.789	3.72	10	11/21/2022 12:15	WG1960984
Di-n-octyl phthalate	U		0.251	3.72	10	11/21/2022 12:15	WG1960984
1,2,4-Trichlorobenzene	U		0.116	3.72	10	11/21/2022 12:15	WG1960984
4-Chloro-3-methylphenol	U		0.121	3.72	10	11/21/2022 12:15	WG1960984
2-Chlorophenol	U		0.123	3.72	10	11/21/2022 12:15	WG1960984
2,4-Dichlorophenol	U		0.108	3.72	10	11/21/2022 12:15	WG1960984
2,4-Dimethylphenol	U		0.0972	3.72	10	11/21/2022 12:15	WG1960984
4,6-Dinitro-2-methylphenol	U		0.843	3.72	10	11/21/2022 12:15	WG1960984
2,4-Dinitrophenol	U		0.870	3.72	10	11/21/2022 12:15	WG1960984
2-Nitrophenol	U		0.133	3.72	10	11/21/2022 12:15	WG1960984
4-Nitrophenol	U		0.116	3.72	10	11/21/2022 12:15	WG1960984
Pentachlorophenol	U		0.100	3.72	10	11/21/2022 12:15	WG1960984
Phenol	U		0.150	3.72	10	11/21/2022 12:15	WG1960984
2,4,6-Trichlorophenol	U		0.120	3.72	10	11/21/2022 12:15	WG1960984
(S) 2-Fluorophenol	77.1			12.0-120		11/21/2022 12:15	WG1960984
(S) Phenol-d5	69.1			10.0-120		11/21/2022 12:15	WG1960984
(S) Nitrobenzene-d5	76.2			10.0-122		11/21/2022 12:15	WG1960984
(S) 2-Fluorobiphenyl	79.0			15.0-120		11/21/2022 12:15	WG1960984
(S) 2,4,6-Tribromophenol	88.2			10.0-127		11/21/2022 12:15	WG1960984
(S) p-Terphenyl-d14	93.7			10.0-120		11/21/2022 12:15	WG1960984

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.0257	0.0670	10	11/18/2022 17:39	WG1961292
Acenaphthene	U		0.0233	0.0670	10	11/18/2022 17:39	WG1961292
Acenaphthylene	U		0.0241	0.0670	10	11/18/2022 17:39	WG1961292
Benzo(a)anthracene	0.0427	J	0.0193	0.0670	10	11/18/2022 17:39	WG1961292
Benzo(a)pyrene	0.134		0.0200	0.0670	10	11/18/2022 17:39	WG1961292
Benzo(b)fluoranthene	0.126		0.0171	0.0670	10	11/18/2022 17:39	WG1961292
Benzo(g,h,i)perylene	0.149		0.0198	0.0670	10	11/18/2022 17:39	WG1961292
Benzo(k)fluoranthene	0.0394	J	0.0240	0.0670	10	11/18/2022 17:39	WG1961292
Chrysene	0.0452	J	0.0259	0.0670	10	11/18/2022 17:39	WG1961292
Dibenz(a,h)anthracene	0.0319	J	0.0192	0.0670	10	11/18/2022 17:39	WG1961292
Fluoranthene	0.0601	J	0.0254	0.0670	10	11/18/2022 17:39	WG1961292
Fluorene	U		0.0229	0.0670	10	11/18/2022 17:39	WG1961292
Indeno(1,2,3-cd)pyrene	0.115		0.0202	0.0670	10	11/18/2022 17:39	WG1961292
Naphthalene	U		0.0456	0.223	10	11/18/2022 17:39	WG1961292
Phenanthrene	0.0260	J	0.0258	0.0670	10	11/18/2022 17:39	WG1961292
Pyrene	0.0677		0.0223	0.0670	10	11/18/2022 17:39	WG1961292
1-Methylnaphthalene	U		0.0502	0.223	10	11/18/2022 17:39	WG1961292
2-Methylnaphthalene	U		0.0477	0.223	10	11/18/2022 17:39	WG1961292
2-Chloronaphthalene	U		0.0521	0.223	10	11/18/2022 17:39	WG1961292
(S) Nitrobenzene-d5	59.9			14.0-149		11/18/2022 17:39	WG1961292
(S) 2-Fluorobiphenyl	77.3			34.0-125		11/18/2022 17:39	WG1961292
(S) p-Terphenyl-d14	101			23.0-120		11/18/2022 17:39	WG1961292

Sample Narrative:

L1557295-11 WG1961292: Cannot run at lower dilution due to viscosity of extract

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.2		1	11/15/2022 10:28	WG1959323

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0581	<u>J</u>	0.0246	0.0594	1	11/23/2022 15:26	WG1963742
Acrylonitrile	U		0.00240	0.0119	1	11/23/2022 15:26	WG1963742
Allyl chloride	U		0.00475	0.00594	1	11/23/2022 15:26	WG1963742
Benzene	0.00364		0.000446	0.00119	1	11/23/2022 15:26	WG1963742
Bromodichloromethane	U		0.000861	0.00119	1	11/23/2022 15:26	WG1963742
Bromoform	U		0.000504	0.00119	1	11/23/2022 15:26	WG1963742
Bromomethane	U		0.00139	0.00594	1	11/23/2022 15:26	WG1963742
Carbon disulfide	0.00122		0.000832	0.00119	1	11/23/2022 15:26	WG1963742
Carbon tetrachloride	U		0.000295	0.00119	1	11/23/2022 15:26	WG1963742
Chlorobenzene	U		0.000228	0.00119	1	11/23/2022 15:26	WG1963742
Chlorodibromomethane	U		0.000266	0.00119	1	11/23/2022 15:26	WG1963742
Chloroethane	U		0.00119	0.00594	1	11/23/2022 15:26	WG1963742
Chloroform	U		0.00122	0.00594	1	11/23/2022 15:26	WG1963742
Chloromethane	U		0.000772	0.00297	1	11/23/2022 15:26	WG1963742
1,2-Dibromoethane	U		0.000297	0.00119	1	11/23/2022 15:26	WG1963742
Dibromomethane	U		0.000416	0.00119	1	11/23/2022 15:26	WG1963742
1,2-Dibromo-3-Chloropropane	U		0.00226	0.00594	1	11/23/2022 15:26	WG1963742
1,2-Dichlorobenzene	U		0.000505	0.00119	1	11/23/2022 15:26	WG1963742
1,3-Dichlorobenzene	U		0.000713	0.00119	1	11/23/2022 15:26	WG1963742
1,4-Dichlorobenzene	U		0.000986	0.00119	1	11/23/2022 15:26	WG1963742
Dichlorodifluoromethane	U		0.000341	0.00594	1	11/23/2022 15:26	WG1963742
trans-1,4-Dichloro-2-butene	U		0.00113	0.00297	1	11/23/2022 15:26	WG1963742
1,1-Dichloroethane	U		0.000318	0.00119	1	11/23/2022 15:26	WG1963742
1,2-Dichloroethane	U		0.000535	0.00119	1	11/23/2022 15:26	WG1963742
1,1-Dichloroethene	U		0.000422	0.00119	1	11/23/2022 15:26	WG1963742
cis-1,2-Dichloroethene	U		0.000564	0.00119	1	11/23/2022 15:26	WG1963742
trans-1,2-Dichloroethene	U		0.000594	0.00119	1	11/23/2022 15:26	WG1963742
1,2-Dichloropropane	U		0.000195	0.00119	1	11/23/2022 15:26	WG1963742
cis-1,3-Dichloropropene	U		0.000505	0.00119	1	11/23/2022 15:26	WG1963742
trans-1,3-Dichloropropene	U		0.000802	0.00119	1	11/23/2022 15:26	WG1963742
Ethylbenzene	0.000558	<u>J</u>	0.000356	0.00119	1	11/23/2022 15:26	WG1963742
2-Hexanone	U		0.00213	0.0119	1	11/23/2022 15:26	WG1963742
Iodomethane	U		0.00144	0.0119	1	11/23/2022 15:26	WG1963742
2-Butanone (MEK)	0.0122		0.00556	0.0119	1	11/23/2022 15:26	WG1963742
Methylene Chloride	U		0.00119	0.00594	1	11/23/2022 15:26	WG1963742
4-Methyl-2-pentanone (MIBK)	U		0.00113	0.0119	1	11/23/2022 15:26	WG1963742
Pentachloroethane	U		0.00297	0.00594	1	11/23/2022 15:26	WG1963742
Styrene	U		0.000265	0.00119	1	11/23/2022 15:26	WG1963742
1,1,1,2-Tetrachloroethane	U		0.000352	0.00119	1	11/23/2022 15:26	WG1963742
1,1,2,2-Tetrachloroethane	U		0.000274	0.00119	1	11/23/2022 15:26	WG1963742
Tetrachloroethene	U		0.000386	0.00119	1	11/23/2022 15:26	WG1963742
Toluene	0.00380	<u>J</u>	0.00146	0.00594	1	11/23/2022 15:26	WG1963742
1,1,1-Trichloroethane	U		0.000440	0.00119	1	11/23/2022 15:26	WG1963742
1,1,2-Trichloroethane	U		0.000505	0.00119	1	11/23/2022 15:26	WG1963742
Trichloroethene	U		0.000238	0.00119	1	11/23/2022 15:26	WG1963742
Trichlorofluoromethane	U		0.000423	0.00594	1	11/23/2022 15:26	WG1963742
1,2,3-Trichloropropane	U		0.000290	0.00297	1	11/23/2022 15:26	WG1963742
Vinyl acetate	U	<u>J4</u>	0.00118	0.0119	1	11/23/2022 15:26	WG1963742
Vinyl chloride	U		0.000269	0.00119	1	11/23/2022 15:26	WG1963742
Xylenes, Total	0.00217	<u>J</u>	0.000594	0.00356	1	11/23/2022 15:26	WG1963742

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.0903	0.119	1	11/23/2022 15:26	WG1963742
(S) Toluene-d8	107			75.0-131		11/23/2022 15:26	WG1963742
(S) 4-Bromofluorobenzene	94.3			67.0-138		11/23/2022 15:26	WG1963742
(S) 1,2-Dichloroethane-d4	94.6			70.0-130		11/23/2022 15:26	WG1963742

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.1		1	11/26/2022 11:57	WG1964943

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Anthracene	U		0.00280	0.00730	1	11/25/2022 07:46	WG1964751
Acenaphthene	U		0.00254	0.00730	1	11/25/2022 07:46	WG1964751
Acenaphthylene	U		0.00263	0.00730	1	11/25/2022 07:46	WG1964751
Benzo(a)anthracene	U		0.00211	0.00730	1	11/25/2022 07:46	WG1964751
Benzo(a)pyrene	U		0.00218	0.00730	1	11/25/2022 07:46	WG1964751
Benzo(b)fluoranthene	U		0.00186	0.00730	1	11/25/2022 07:46	WG1964751
Benzo(g,h,i)perylene	U		0.00215	0.00730	1	11/25/2022 07:46	WG1964751
Benzo(k)fluoranthene	U		0.00262	0.00730	1	11/25/2022 07:46	WG1964751
Chrysene	U		0.00282	0.00730	1	11/25/2022 07:46	WG1964751
Dibenz(a,h)anthracene	U		0.00209	0.00730	1	11/25/2022 07:46	WG1964751
Fluoranthene	U		0.00276	0.00730	1	11/25/2022 07:46	WG1964751
Fluorene	U		0.00250	0.00730	1	11/25/2022 07:46	WG1964751
Indeno(1,2,3-cd)pyrene	U		0.00220	0.00730	1	11/25/2022 07:46	WG1964751
Naphthalene	U		0.00497	0.0243	1	11/25/2022 07:46	WG1964751
Phenanthrene	U		0.00281	0.00730	1	11/25/2022 07:46	WG1964751
Pyrene	U		0.00243	0.00730	1	11/25/2022 07:46	WG1964751
1-Methylnaphthalene	U		0.00547	0.0243	1	11/25/2022 07:46	WG1964751
2-Methylnaphthalene	U		0.00520	0.0243	1	11/25/2022 07:46	WG1964751
2-Chloronaphthalene	U		0.00567	0.0243	1	11/25/2022 07:46	WG1964751
(S) Nitrobenzene-d5	72.8			14.0-149		11/25/2022 07:46	WG1964751
(S) 2-Fluorobiphenyl	57.1			34.0-125		11/25/2022 07:46	WG1964751
(S) p-Terphenyl-d14	60.9			23.0-120		11/25/2022 07:46	WG1964751

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.7		1	11/15/2022 10:28	WG1959323

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	U		0.0201	0.0446	1	11/18/2022 13:06	WG1959360

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Arsenic	6.02	<u>B</u>	0.577	2.23	1	11/21/2022 00:33	WG1960669
Barium	41.5		0.0950	0.557	1	11/21/2022 00:33	WG1960669
Cadmium	0.535	<u>J</u>	0.0525	0.557	1	11/21/2022 00:33	WG1960669
Chromium	9.04		0.148	1.11	1	11/21/2022 00:33	WG1960669
Lead	14.3		0.232	0.557	1	11/21/2022 00:33	WG1960669
Selenium	U		0.851	2.23	1	11/21/2022 00:33	WG1960669
Silver	U		0.142	1.11	1	11/21/2022 00:33	WG1960669

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.103		0.0231	0.0557	1	11/23/2022 15:48	WG1963742
Acrylonitrile	U		0.00225	0.0111	1	11/23/2022 15:48	WG1963742
Allyl chloride	U		0.00446	0.00557	1	11/23/2022 15:48	WG1963742
Benzene	0.00104	<u>J</u>	0.000418	0.00111	1	11/23/2022 15:48	WG1963742
Bromodichloromethane	U		0.000808	0.00111	1	11/23/2022 15:48	WG1963742
Bromoform	U		0.000473	0.00111	1	11/23/2022 15:48	WG1963742
Bromomethane	U		0.00130	0.00557	1	11/23/2022 15:48	WG1963742
Carbon disulfide	U		0.000780	0.00111	1	11/23/2022 15:48	WG1963742
Carbon tetrachloride	U		0.000276	0.00111	1	11/23/2022 15:48	WG1963742
Chlorobenzene	U		0.000214	0.00111	1	11/23/2022 15:48	WG1963742
Chlorodibromomethane	U		0.000250	0.00111	1	11/23/2022 15:48	WG1963742
Chloroethane	U		0.00111	0.00557	1	11/23/2022 15:48	WG1963742
Chloroform	U		0.00115	0.00557	1	11/23/2022 15:48	WG1963742
Chloromethane	U		0.000724	0.00279	1	11/23/2022 15:48	WG1963742
1,2-Dibromoethane	U		0.000279	0.00111	1	11/23/2022 15:48	WG1963742
Dibromomethane	U		0.000390	0.00111	1	11/23/2022 15:48	WG1963742
1,2-Dibromo-3-Chloropropane	U		0.00212	0.00557	1	11/23/2022 15:48	WG1963742
1,2-Dichlorobenzene	U		0.000474	0.00111	1	11/23/2022 15:48	WG1963742
1,3-Dichlorobenzene	U		0.000669	0.00111	1	11/23/2022 15:48	WG1963742
1,4-Dichlorobenzene	U		0.000925	0.00111	1	11/23/2022 15:48	WG1963742
Dichlorodifluoromethane	U		0.000320	0.00557	1	11/23/2022 15:48	WG1963742
trans-1,4-Dichloro-2-butene	U		0.00106	0.00279	1	11/23/2022 15:48	WG1963742
1,1-Dichloroethane	U		0.000299	0.00111	1	11/23/2022 15:48	WG1963742
1,2-Dichloroethane	U		0.000502	0.00111	1	11/23/2022 15:48	WG1963742
1,1-Dichloroethene	U		0.000396	0.00111	1	11/23/2022 15:48	WG1963742
cis-1,2-Dichloroethene	U		0.000529	0.00111	1	11/23/2022 15:48	WG1963742
trans-1,2-Dichloroethene	U		0.000557	0.00111	1	11/23/2022 15:48	WG1963742
1,2-Dichloropropane	U		0.000183	0.00111	1	11/23/2022 15:48	WG1963742
cis-1,3-Dichloropropene	U		0.000474	0.00111	1	11/23/2022 15:48	WG1963742
trans-1,3-Dichloropropene	U		0.000752	0.00111	1	11/23/2022 15:48	WG1963742
Ethylbenzene	U		0.000334	0.00111	1	11/23/2022 15:48	WG1963742
2-Hexanone	U		0.00199	0.0111	1	11/23/2022 15:48	WG1963742
Iodomethane	U		0.00135	0.0111	1	11/23/2022 15:48	WG1963742

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

TP-37 SHALLOW

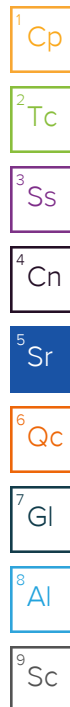
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SAMPLE RESULTS - 14

L1557295

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2-Butanone (MEK)	0.0244		0.00522	0.0111	1	11/23/2022 15:48	WG1963742
Methylene Chloride	U		0.00111	0.00557	1	11/23/2022 15:48	WG1963742
4-Methyl-2-pentanone (MIBK)	0.00186	J	0.00106	0.0111	1	11/23/2022 15:48	WG1963742
Pentachloroethane	U		0.00279	0.00557	1	11/23/2022 15:48	WG1963742
Styrene	U		0.000249	0.00111	1	11/23/2022 15:48	WG1963742
1,1,1,2-Tetrachloroethane	U		0.000330	0.00111	1	11/23/2022 15:48	WG1963742
1,1,2,2-Tetrachloroethane	U		0.000257	0.00111	1	11/23/2022 15:48	WG1963742
Tetrachloroethene	U		0.000362	0.00111	1	11/23/2022 15:48	WG1963742
Toluene	U		0.00137	0.00557	1	11/23/2022 15:48	WG1963742
1,1,1-Trichloroethane	U		0.000412	0.00111	1	11/23/2022 15:48	WG1963742
1,1,2-Trichloroethane	U		0.000474	0.00111	1	11/23/2022 15:48	WG1963742
Trichloroethene	U		0.000223	0.00111	1	11/23/2022 15:48	WG1963742
Trichlorofluoromethane	U		0.000397	0.00557	1	11/23/2022 15:48	WG1963742
1,2,3-Trichloropropane	U		0.000272	0.00279	1	11/23/2022 15:48	WG1963742
Vinyl acetate	U	J4	0.00110	0.0111	1	11/23/2022 15:48	WG1963742
Vinyl chloride	U		0.000252	0.00111	1	11/23/2022 15:48	WG1963742
Xylenes, Total	0.000664	J	0.000557	0.00334	1	11/23/2022 15:48	WG1963742
1,4-Dioxane	U		0.0847	0.111	1	11/23/2022 15:48	WG1963742
(S) Toluene-d8	108			75.0-131		11/23/2022 15:48	WG1963742
(S) 4-Bromofluorobenzene	96.4			67.0-138		11/23/2022 15:48	WG1963742
(S) 1,2-Dichloroethane-d4	91.6			70.0-130		11/23/2022 15:48	WG1963742



Polychlorinated Biphenyls (GC) by Method 8082

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
PCB 1016	U		0.0132	0.0379	1	11/18/2022 07:04	WG1961287
PCB 1221	U		0.0132	0.0379	1	11/18/2022 07:04	WG1961287
PCB 1232	U		0.0132	0.0379	1	11/18/2022 07:04	WG1961287
PCB 1242	U		0.0132	0.0379	1	11/18/2022 07:04	WG1961287
PCB 1248	U		0.00822	0.0189	1	11/18/2022 07:04	WG1961287
PCB 1254	U		0.00822	0.0189	1	11/18/2022 07:04	WG1961287
PCB 1260	U		0.00822	0.0189	1	11/18/2022 07:04	WG1961287
(S) Decachlorobiphenyl	45.0			10.0-135		11/18/2022 07:04	WG1961287
(S) Tetrachloro-m-xylene	45.8			10.0-139		11/18/2022 07:04	WG1961287

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzidine	U		0.698	18.6	10	11/21/2022 12:36	WG1960984
Bis(2-chloroethoxy)methane	U		0.111	3.71	10	11/21/2022 12:36	WG1960984
Bis(2-chloroethyl)ether	U		0.123	3.71	10	11/21/2022 12:36	WG1960984
2,2-Oxybis(1-Chloropropane)	U		0.160	3.71	10	11/21/2022 12:36	WG1960984
4-Bromophenyl-phenylether	U		0.130	3.71	10	11/21/2022 12:36	WG1960984
4-Chlorophenyl-phenylether	U		0.129	3.71	10	11/21/2022 12:36	WG1960984
1,2-Dichlorobenzene	U		0.110	3.71	10	11/21/2022 12:36	WG1960984
1,3-Dichlorobenzene	U		0.113	3.71	10	11/21/2022 12:36	WG1960984
1,4-Dichlorobenzene	U		0.110	3.71	10	11/21/2022 12:36	WG1960984
3,3-Dichlorobenzidine	U		0.137	3.71	10	11/21/2022 12:36	WG1960984
2,4-Dinitrotoluene	U		0.106	3.71	10	11/21/2022 12:36	WG1960984
2,6-Dinitrotoluene	U		0.121	3.71	10	11/21/2022 12:36	WG1960984
Hexachlorobenzene	U		0.132	3.71	10	11/21/2022 12:36	WG1960984
Hexachloro-1,3-butadiene	U		0.125	3.71	10	11/21/2022 12:36	WG1960984
Hexachlorocyclopentadiene	U		0.195	3.71	10	11/21/2022 12:36	WG1960984
Hexachloroethane	U		0.146	3.71	10	11/21/2022 12:36	WG1960984
Isophorone	U		0.114	3.71	10	11/21/2022 12:36	WG1960984

ACCOUNT:

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61227342 Task 4.1

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L1557295

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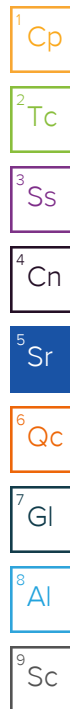
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SAMPLE RESULTS - 14

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Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Nitrobenzene	U		0.129	3.71	10	11/21/2022 12:36	WG1960984
n-Nitrosodimethylamine	U		0.551	3.71	10	11/21/2022 12:36	WG1960984
n-Nitrosodiphenylamine	U		0.281	3.71	10	11/21/2022 12:36	WG1960984
n-Nitrosodi-n-propylamine	U		0.124	3.71	10	11/21/2022 12:36	WG1960984
Benzylbutyl phthalate	U		0.116	3.71	10	11/21/2022 12:36	WG1960984
Bis(2-ethylhexyl)phthalate	U		0.470	3.71	10	11/21/2022 12:36	WG1960984
Di-n-butyl phthalate	U		0.127	3.71	10	11/21/2022 12:36	WG1960984
Diethyl phthalate	U		0.123	3.71	10	11/21/2022 12:36	WG1960984
Dimethyl phthalate	U		0.787	3.71	10	11/21/2022 12:36	WG1960984
Di-n-octyl phthalate	U		0.251	3.71	10	11/21/2022 12:36	WG1960984
1,2,4-Trichlorobenzene	U		0.116	3.71	10	11/21/2022 12:36	WG1960984
4-Chloro-3-methylphenol	U		0.120	3.71	10	11/21/2022 12:36	WG1960984
2-Chlorophenol	U		0.123	3.71	10	11/21/2022 12:36	WG1960984
2,4-Dichlorophenol	U		0.108	3.71	10	11/21/2022 12:36	WG1960984
2,4-Dimethylphenol	U		0.0970	3.71	10	11/21/2022 12:36	WG1960984
4,6-Dinitro-2-methylphenol	U		0.841	3.71	10	11/21/2022 12:36	WG1960984
2,4-Dinitrophenol	U		0.868	3.71	10	11/21/2022 12:36	WG1960984
2-Nitrophenol	U		0.133	3.71	10	11/21/2022 12:36	WG1960984
4-Nitrophenol	U		0.116	3.71	10	11/21/2022 12:36	WG1960984
Pentachlorophenol	U		0.0999	3.71	10	11/21/2022 12:36	WG1960984
Phenol	U		0.149	3.71	10	11/21/2022 12:36	WG1960984
2,4,6-Trichlorophenol	U		0.119	3.71	10	11/21/2022 12:36	WG1960984
(S) 2-Fluorophenol	71.1			12.0-120		11/21/2022 12:36	WG1960984
(S) Phenol-d5	64.0			10.0-120		11/21/2022 12:36	WG1960984
(S) Nitrobenzene-d5	73.9			10.0-122		11/21/2022 12:36	WG1960984
(S) 2-Fluorobiphenyl	68.4			15.0-120		11/21/2022 12:36	WG1960984
(S) 2,4,6-Tribromophenol	81.0			10.0-127		11/21/2022 12:36	WG1960984
(S) p-Terphenyl-d14	88.4			10.0-120		11/21/2022 12:36	WG1960984



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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.0513	0.134	20	11/18/2022 18:13	WG1961292
Acenaphthene	U		0.0466	0.134	20	11/18/2022 18:13	WG1961292
Acenaphthylene	U		0.0481	0.134	20	11/18/2022 18:13	WG1961292
Benzo(a)anthracene	0.0834	J	0.0386	0.134	20	11/18/2022 18:13	WG1961292
Benzo(a)pyrene	0.211		0.0399	0.134	20	11/18/2022 18:13	WG1961292
Benzo(b)fluoranthene	0.173		0.0341	0.134	20	11/18/2022 18:13	WG1961292
Benzo(g,h,i)perylene	0.279		0.0395	0.134	20	11/18/2022 18:13	WG1961292
Benzo(k)fluoranthene	U		0.0479	0.134	20	11/18/2022 18:13	WG1961292
Chrysene	0.267		0.0517	0.134	20	11/18/2022 18:13	WG1961292
Dibenz(a,h)anthracene	0.0630	J	0.0383	0.134	20	11/18/2022 18:13	WG1961292
Fluoranthene	0.0855	J	0.0506	0.134	20	11/18/2022 18:13	WG1961292
Fluorene	U		0.0457	0.134	20	11/18/2022 18:13	WG1961292
Indeno(1,2,3-cd)pyrene	0.129	J	0.0403	0.134	20	11/18/2022 18:13	WG1961292
Naphthalene	U		0.0909	0.446	20	11/18/2022 18:13	WG1961292
Phenanthrene	U		0.0515	0.134	20	11/18/2022 18:13	WG1961292
Pyrene	0.167		0.0446	0.134	20	11/18/2022 18:13	WG1961292
1-Methylnaphthalene	U		0.100	0.446	20	11/18/2022 18:13	WG1961292
2-Methylnaphthalene	U		0.0952	0.446	20	11/18/2022 18:13	WG1961292
2-Chloronaphthalene	U		0.104	0.446	20	11/18/2022 18:13	WG1961292
(S) Nitrobenzene-d5	69.5	J		14.0-149		11/18/2022 18:13	WG1961292
(S) 2-Fluorobiphenyl	66.0	J		34.0-125		11/18/2022 18:13	WG1961292
(S) p-Terphenyl-d14	97.3	J		23.0-120		11/18/2022 18:13	WG1961292

Sample Narrative:

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PROJECT:

61227342 Task 4.1

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

Analyte	Result (dry) mg/kg	<u>Qualifier</u>	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	<u>Batch</u>
L1557295-14 WG1961292: Cannot run at lower dilution due to viscosity of extract							

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.7		1	11/15/2022 10:28	WG1959323

Mercury by Method 7471A

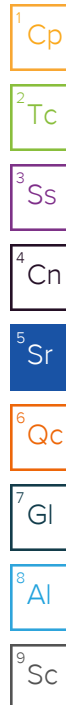
Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.0768		0.0218	0.0484	1	11/18/2022 13:09	WG1959360

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Arsenic	6.07	B	0.626	2.42	1	11/21/2022 00:35	WG1960669
Barium	116		0.103	0.604	1	11/21/2022 00:35	WG1960669
Cadmium	0.649		0.0569	0.604	1	11/21/2022 00:35	WG1960669
Chromium	21.5		0.161	1.21	1	11/21/2022 00:35	WG1960669
Lead	40.7		0.251	0.604	1	11/21/2022 00:35	WG1960669
Selenium	U		0.923	2.42	1	11/21/2022 00:35	WG1960669
Silver	U		0.154	1.21	1	11/21/2022 00:35	WG1960669

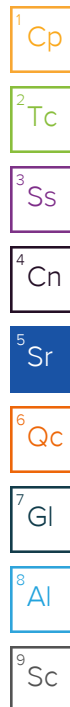
Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.132		0.0250	0.0604	1	11/23/2022 16:10	WG1963742
Acrylonitrile	U		0.00244	0.0121	1	11/23/2022 16:10	WG1963742
Allyl chloride	U		0.00484	0.00604	1	11/23/2022 16:10	WG1963742
Benzene	0.00196		0.000453	0.00121	1	11/23/2022 16:10	WG1963742
Bromodichloromethane	U		0.000876	0.00121	1	11/23/2022 16:10	WG1963742
Bromoform	U		0.000513	0.00121	1	11/23/2022 16:10	WG1963742
Bromomethane	U		0.00141	0.00604	1	11/23/2022 16:10	WG1963742
Carbon disulfide	0.00105	J	0.000846	0.00121	1	11/23/2022 16:10	WG1963742
Carbon tetrachloride	U		0.000300	0.00121	1	11/23/2022 16:10	WG1963742
Chlorobenzene	U		0.000232	0.00121	1	11/23/2022 16:10	WG1963742
Chlorodibromomethane	U		0.000271	0.00121	1	11/23/2022 16:10	WG1963742
Chloroethane	U		0.00121	0.00604	1	11/23/2022 16:10	WG1963742
Chloroform	U		0.00125	0.00604	1	11/23/2022 16:10	WG1963742
Chloromethane	U		0.000786	0.00302	1	11/23/2022 16:10	WG1963742
1,2-Dibromoethane	U		0.000302	0.00121	1	11/23/2022 16:10	WG1963742
Dibromomethane	U		0.000423	0.00121	1	11/23/2022 16:10	WG1963742
1,2-Dibromo-3-Chloropropane	U		0.00230	0.00604	1	11/23/2022 16:10	WG1963742
1,2-Dichlorobenzene	U		0.000514	0.00121	1	11/23/2022 16:10	WG1963742
1,3-Dichlorobenzene	U		0.000725	0.00121	1	11/23/2022 16:10	WG1963742
1,4-Dichlorobenzene	U		0.00100	0.00121	1	11/23/2022 16:10	WG1963742
Dichlorodifluoromethane	U		0.000347	0.00604	1	11/23/2022 16:10	WG1963742
trans-1,4-Dichloro-2-butene	U		0.00115	0.00302	1	11/23/2022 16:10	WG1963742
1,1-Dichloroethane	U		0.000324	0.00121	1	11/23/2022 16:10	WG1963742
1,2-Dichloroethane	U		0.000544	0.00121	1	11/23/2022 16:10	WG1963742
1,1-Dichloroethene	U		0.000429	0.00121	1	11/23/2022 16:10	WG1963742
cis-1,2-Dichloroethene	U		0.000574	0.00121	1	11/23/2022 16:10	WG1963742
trans-1,2-Dichloroethene	U		0.000604	0.00121	1	11/23/2022 16:10	WG1963742
1,2-Dichloropropane	U		0.000198	0.00121	1	11/23/2022 16:10	WG1963742
cis-1,3-Dichloropropene	U		0.000514	0.00121	1	11/23/2022 16:10	WG1963742
trans-1,3-Dichloropropene	U		0.000816	0.00121	1	11/23/2022 16:10	WG1963742
Ethylbenzene	U		0.000363	0.00121	1	11/23/2022 16:10	WG1963742
2-Hexanone	U		0.00216	0.0121	1	11/23/2022 16:10	WG1963742
Iodomethane	U		0.00146	0.0121	1	11/23/2022 16:10	WG1963742



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2-Butanone (MEK)	0.0261		0.00566	0.0121	1	11/23/2022 16:10	WG1963742
Methylene Chloride	U		0.00121	0.00604	1	11/23/2022 16:10	WG1963742
4-Methyl-2-pentanone (MIBK)	U		0.00115	0.0121	1	11/23/2022 16:10	WG1963742
Pentachloroethane	U		0.00302	0.00604	1	11/23/2022 16:10	WG1963742
Styrene	U		0.000270	0.00121	1	11/23/2022 16:10	WG1963742
1,1,1,2-Tetrachloroethane	U		0.000358	0.00121	1	11/23/2022 16:10	WG1963742
1,1,2,2-Tetrachloroethane	U		0.000279	0.00121	1	11/23/2022 16:10	WG1963742
Tetrachloroethene	U		0.000393	0.00121	1	11/23/2022 16:10	WG1963742
Toluene	0.00222	J	0.00149	0.00604	1	11/23/2022 16:10	WG1963742
1,1,1-Trichloroethane	U		0.000447	0.00121	1	11/23/2022 16:10	WG1963742
1,1,2-Trichloroethane	U		0.000514	0.00121	1	11/23/2022 16:10	WG1963742
Trichloroethene	U		0.000242	0.00121	1	11/23/2022 16:10	WG1963742
Trichlorofluoromethane	U		0.000430	0.00604	1	11/23/2022 16:10	WG1963742
1,2,3-Trichloropropane	U		0.000295	0.00302	1	11/23/2022 16:10	WG1963742
Vinyl acetate	U	J4	0.00120	0.0121	1	11/23/2022 16:10	WG1963742
Vinyl chloride	U		0.000273	0.00121	1	11/23/2022 16:10	WG1963742
Xylenes, Total	0.00164	J	0.000604	0.00363	1	11/23/2022 16:10	WG1963742
1,4-Dioxane	U		0.0919	0.121	1	11/23/2022 16:10	WG1963742
(S) Toluene-d8	104			75.0-131		11/23/2022 16:10	WG1963742
(S) 4-Bromofluorobenzene	95.1			67.0-138		11/23/2022 16:10	WG1963742
(S) 1,2-Dichloroethane-d4	93.8			70.0-130		11/23/2022 16:10	WG1963742



Polychlorinated Biphenyls (GC) by Method 8082

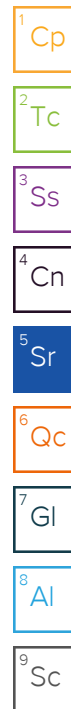
Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
PCB 1016	U		0.0143	0.0411	1	11/18/2022 06:06	WG1961287
PCB 1221	U		0.0143	0.0411	1	11/18/2022 06:06	WG1961287
PCB 1232	U		0.0143	0.0411	1	11/18/2022 06:06	WG1961287
PCB 1242	U		0.0143	0.0411	1	11/18/2022 06:06	WG1961287
PCB 1248	U		0.00892	0.0205	1	11/18/2022 06:06	WG1961287
PCB 1254	U		0.00892	0.0205	1	11/18/2022 06:06	WG1961287
PCB 1260	U		0.00892	0.0205	1	11/18/2022 06:06	WG1961287
(S) Decachlorobiphenyl	49.3			10.0-135		11/18/2022 06:06	WG1961287
(S) Tetrachloro-m-xylene	49.6			10.0-139		11/18/2022 06:06	WG1961287

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzidine	U		0.151	4.04	2	11/21/2022 10:07	WG1960984
Bis(2-chloroethoxy)methane	U		0.0242	0.805	2	11/21/2022 10:07	WG1960984
Bis(2-chloroethyl)ether	U		0.0266	0.805	2	11/21/2022 10:07	WG1960984
2,2-Oxybis(1-Chloropropane)	U		0.0348	0.805	2	11/21/2022 10:07	WG1960984
4-Bromophenyl-phenylether	U		0.0283	0.805	2	11/21/2022 10:07	WG1960984
4-Chlorophenyl-phenylether	U		0.0280	0.805	2	11/21/2022 10:07	WG1960984
1,2-Dichlorobenzene	U		0.0238	0.805	2	11/21/2022 10:07	WG1960984
1,3-Dichlorobenzene	U		0.0244	0.805	2	11/21/2022 10:07	WG1960984
1,4-Dichlorobenzene	U		0.0239	0.805	2	11/21/2022 10:07	WG1960984
3,3-Dichlorobenzidine	U		0.0297	0.805	2	11/21/2022 10:07	WG1960984
2,4-Dinitrotoluene	U		0.0231	0.805	2	11/21/2022 10:07	WG1960984
2,6-Dinitrotoluene	U		0.0264	0.805	2	11/21/2022 10:07	WG1960984
Hexachlorobenzene	U		0.0285	0.805	2	11/21/2022 10:07	WG1960984
Hexachloro-1,3-butadiene	U		0.0271	0.805	2	11/21/2022 10:07	WG1960984
Hexachlorocyclopentadiene	U		0.0423	0.805	2	11/21/2022 10:07	WG1960984
Hexachloroethane	U		0.0317	0.805	2	11/21/2022 10:07	WG1960984
Isophorone	U		0.0247	0.805	2	11/21/2022 10:07	WG1960984

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Nitrobenzene	U		0.0280	0.805	2	11/21/2022 10:07	WG1960984
n-Nitrosodimethylamine	U		0.119	0.805	2	11/21/2022 10:07	WG1960984
n-Nitrosodiphenylamine	U		0.0609	0.805	2	11/21/2022 10:07	WG1960984
n-Nitrosodi-n-propylamine	U		0.0268	0.805	2	11/21/2022 10:07	WG1960984
Benzylbutyl phthalate	U		0.0251	0.805	2	11/21/2022 10:07	WG1960984
Bis(2-ethylhexyl)phthalate	U		0.102	0.805	2	11/21/2022 10:07	WG1960984
Di-n-butyl phthalate	U		0.0276	0.805	2	11/21/2022 10:07	WG1960984
Diethyl phthalate	U		0.0266	0.805	2	11/21/2022 10:07	WG1960984
Dimethyl phthalate	U		0.170	0.805	2	11/21/2022 10:07	WG1960984
Di-n-octyl phthalate	U		0.0544	0.805	2	11/21/2022 10:07	WG1960984
1,2,4-Trichlorobenzene	U		0.0251	0.805	2	11/21/2022 10:07	WG1960984
4-Chloro-3-methylphenol	U		0.0261	0.805	2	11/21/2022 10:07	WG1960984
2-Chlorophenol	U		0.0266	0.805	2	11/21/2022 10:07	WG1960984
2,4-Dichlorophenol	U		0.0234	0.805	2	11/21/2022 10:07	WG1960984
2,4-Dimethylphenol	U		0.0210	0.805	2	11/21/2022 10:07	WG1960984
4,6-Dinitro-2-methylphenol	U		0.183	0.805	2	11/21/2022 10:07	WG1960984
2,4-Dinitrophenol	U		0.189	0.805	2	11/21/2022 10:07	WG1960984
2-Nitrophenol	U		0.0288	0.805	2	11/21/2022 10:07	WG1960984
4-Nitrophenol	U		0.0251	0.805	2	11/21/2022 10:07	WG1960984
Pentachlorophenol	U		0.0216	0.805	2	11/21/2022 10:07	WG1960984
Phenol	U		0.0324	0.805	2	11/21/2022 10:07	WG1960984
2,4,6-Trichlorophenol	U		0.0259	0.805	2	11/21/2022 10:07	WG1960984
(S) 2-Fluorophenol	60.6			12.0-120		11/21/2022 10:07	WG1960984
(S) Phenol-d5	57.5			10.0-120		11/21/2022 10:07	WG1960984
(S) Nitrobenzene-d5	63.8			10.0-122		11/21/2022 10:07	WG1960984
(S) 2-Fluorobiphenyl	61.3			15.0-120		11/21/2022 10:07	WG1960984
(S) 2,4,6-Tribromophenol	79.4			10.0-127		11/21/2022 10:07	WG1960984
(S) p-Terphenyl-d14	70.4			10.0-120		11/21/2022 10:07	WG1960984



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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.00290	J	0.00278	0.00725	1	11/18/2022 16:29	WG1961292
Acenaphthene	U		0.00253	0.00725	1	11/18/2022 16:29	WG1961292
Acenaphthylene	U		0.00261	0.00725	1	11/18/2022 16:29	WG1961292
Benzo(a)anthracene	0.0167		0.00209	0.00725	1	11/18/2022 16:29	WG1961292
Benzo(a)pyrene	0.0251		0.00216	0.00725	1	11/18/2022 16:29	WG1961292
Benzo(b)fluoranthene	0.0278		0.00185	0.00725	1	11/18/2022 16:29	WG1961292
Benzo(g,h,i)perylene	0.0297		0.00214	0.00725	1	11/18/2022 16:29	WG1961292
Benzo(k)fluoranthene	0.00828		0.00260	0.00725	1	11/18/2022 16:29	WG1961292
Chrysene	0.0176		0.00280	0.00725	1	11/18/2022 16:29	WG1961292
Dibenz(a,h)anthracene	0.00593	J	0.00208	0.00725	1	11/18/2022 16:29	WG1961292
Fluoranthene	0.0318		0.00274	0.00725	1	11/18/2022 16:29	WG1961292
Fluorene	0.00365	J	0.00248	0.00725	1	11/18/2022 16:29	WG1961292
Indeno(1,2,3-cd)pyrene	0.0191		0.00219	0.00725	1	11/18/2022 16:29	WG1961292
Naphthalene	U		0.00493	0.0242	1	11/18/2022 16:29	WG1961292
Phenanthrene	0.0162		0.00279	0.00725	1	11/18/2022 16:29	WG1961292
Pyrene	0.0348		0.00242	0.00725	1	11/18/2022 16:29	WG1961292
1-Methylnaphthalene	U		0.00543	0.0242	1	11/18/2022 16:29	WG1961292
2-Methylnaphthalene	0.00650	J	0.00516	0.0242	1	11/18/2022 16:29	WG1961292
2-Chloronaphthalene	U		0.00563	0.0242	1	11/18/2022 16:29	WG1961292
(S) Nitrobenzene-d5	54.4			14.0-149		11/18/2022 16:29	WG1961292
(S) 2-Fluorobiphenyl	62.0			34.0-125		11/18/2022 16:29	WG1961292
(S) p-Terphenyl-d14	84.4			23.0-120		11/18/2022 16:29	WG1961292

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	63.9		1	11/15/2022 10:28	WG1959323

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.927		0.0324	0.0782	1	11/23/2022 16:32	WG1963742
Acrylonitrile	U		0.00316	0.0156	1	11/23/2022 16:32	WG1963742
Allyl chloride	U		0.00626	0.00782	1	11/23/2022 16:32	WG1963742
Benzene	0.0104		0.000586	0.00156	1	11/23/2022 16:32	WG1963742
Bromodichloromethane	U		0.00113	0.00156	1	11/23/2022 16:32	WG1963742
Bromoform	U		0.000663	0.00156	1	11/23/2022 16:32	WG1963742
Bromomethane	U		0.00183	0.00782	1	11/23/2022 16:32	WG1963742
Carbon disulfide	0.00403		0.00109	0.00156	1	11/23/2022 16:32	WG1963742
Carbon tetrachloride	U		0.000388	0.00156	1	11/23/2022 16:32	WG1963742
Chlorobenzene	U		0.000300	0.00156	1	11/23/2022 16:32	WG1963742
Chlorodibromomethane	U		0.000350	0.00156	1	11/23/2022 16:32	WG1963742
Chloroethane	U		0.00156	0.00782	1	11/23/2022 16:32	WG1963742
Chloroform	U		0.00161	0.00782	1	11/23/2022 16:32	WG1963742
Chloromethane	U		0.00102	0.00391	1	11/23/2022 16:32	WG1963742
1,2-Dibromoethane	U		0.000391	0.00156	1	11/23/2022 16:32	WG1963742
Dibromomethane	U		0.000547	0.00156	1	11/23/2022 16:32	WG1963742
1,2-Dibromo-3-Chloropropane	U		0.00297	0.00782	1	11/23/2022 16:32	WG1963742
1,2-Dichlorobenzene	U		0.000665	0.00156	1	11/23/2022 16:32	WG1963742
1,3-Dichlorobenzene	U		0.000938	0.00156	1	11/23/2022 16:32	WG1963742
1,4-Dichlorobenzene	U		0.00130	0.00156	1	11/23/2022 16:32	WG1963742
Dichlorodifluoromethane	U		0.000449	0.00782	1	11/23/2022 16:32	WG1963742
trans-1,4-Dichloro-2-butene	U		0.00149	0.00391	1	11/23/2022 16:32	WG1963742
1,1-Dichloroethane	U		0.000419	0.00156	1	11/23/2022 16:32	WG1963742
1,2-Dichloroethane	U		0.000704	0.00156	1	11/23/2022 16:32	WG1963742
1,1-Dichloroethene	U		0.000555	0.00156	1	11/23/2022 16:32	WG1963742
cis-1,2-Dichloroethene	U		0.000743	0.00156	1	11/23/2022 16:32	WG1963742
trans-1,2-Dichloroethene	U		0.000782	0.00156	1	11/23/2022 16:32	WG1963742
1,2-Dichloropropane	U		0.000256	0.00156	1	11/23/2022 16:32	WG1963742
cis-1,3-Dichloropropene	U		0.000665	0.00156	1	11/23/2022 16:32	WG1963742
trans-1,3-Dichloropropene	U		0.00106	0.00156	1	11/23/2022 16:32	WG1963742
Ethylbenzene	0.00189		0.000469	0.00156	1	11/23/2022 16:32	WG1963742
2-Hexanone	U		0.00280	0.0156	1	11/23/2022 16:32	WG1963742
Iodomethane	U		0.00189	0.0156	1	11/23/2022 16:32	WG1963742
2-Butanone (MEK)	0.152		0.00732	0.0156	1	11/23/2022 16:32	WG1963742
Methylene Chloride	U		0.00156	0.00782	1	11/23/2022 16:32	WG1963742
4-Methyl-2-pentanone (MIBK)	U		0.00149	0.0156	1	11/23/2022 16:32	WG1963742
Pentachloroethane	U		0.00391	0.00782	1	11/23/2022 16:32	WG1963742
Styrene	U		0.000349	0.00156	1	11/23/2022 16:32	WG1963742
1,1,1,2-Tetrachloroethane	U		0.000463	0.00156	1	11/23/2022 16:32	WG1963742
1,1,2,2-Tetrachloroethane	U		0.000361	0.00156	1	11/23/2022 16:32	WG1963742
Tetrachloroethene	U		0.000508	0.00156	1	11/23/2022 16:32	WG1963742
Toluene	0.0107		0.00192	0.00782	1	11/23/2022 16:32	WG1963742
1,1,1-Trichloroethane	U		0.000579	0.00156	1	11/23/2022 16:32	WG1963742
1,1,2-Trichloroethane	U		0.000665	0.00156	1	11/23/2022 16:32	WG1963742
Trichloroethene	U		0.000313	0.00156	1	11/23/2022 16:32	WG1963742
Trichlorofluoromethane	U		0.000557	0.00782	1	11/23/2022 16:32	WG1963742
1,2,3-Trichloropropane	U		0.000382	0.00391	1	11/23/2022 16:32	WG1963742
Vinyl acetate	U	J4	0.00155	0.0156	1	11/23/2022 16:32	WG1963742
Vinyl chloride	U		0.000353	0.00156	1	11/23/2022 16:32	WG1963742
Xylenes, Total	0.00565		0.000782	0.00469	1	11/23/2022 16:32	WG1963742



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.119	0.156	1	11/23/2022 16:32	WG1963742
(S) Toluene-d8	112			75.0-131		11/23/2022 16:32	WG1963742
(S) 4-Bromofluorobenzene	91.8			67.0-138		11/23/2022 16:32	WG1963742
(S) 1,2-Dichloroethane-d4	95.8			70.0-130		11/23/2022 16:32	WG1963742

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	86.2		1	11/15/2022 10:28	WG1959323

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.125		0.0209	0.0464	1	11/18/2022 13:11	WG1959360

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Arsenic	7.33		0.601	2.32	1	11/21/2022 00:38	WG1960669
Barium	185		0.0989	0.580	1	11/21/2022 00:38	WG1960669
Cadmium	0.897		0.0547	0.580	1	11/21/2022 00:38	WG1960669
Chromium	16.9		0.154	1.16	1	11/21/2022 00:38	WG1960669
Lead	112		0.241	0.580	1	11/21/2022 00:38	WG1960669
Selenium	1.28	J	0.887	2.32	1	11/21/2022 00:38	WG1960669
Silver	0.162	J	0.147	1.16	1	11/21/2022 00:38	WG1960669

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0818		0.0240	0.0580	1	11/23/2022 16:54	WG1963742
Acrylonitrile	U		0.00234	0.0116	1	11/23/2022 16:54	WG1963742
Allyl chloride	U		0.00464	0.00580	1	11/23/2022 16:54	WG1963742
Benzene	0.00226		0.000435	0.00116	1	11/23/2022 16:54	WG1963742
Bromodichloromethane	U		0.000841	0.00116	1	11/23/2022 16:54	WG1963742
Bromoform	U		0.000492	0.00116	1	11/23/2022 16:54	WG1963742
Bromomethane	U		0.00136	0.00580	1	11/23/2022 16:54	WG1963742
Carbon disulfide	U		0.000812	0.00116	1	11/23/2022 16:54	WG1963742
Carbon tetrachloride	U		0.000288	0.00116	1	11/23/2022 16:54	WG1963742
Chlorobenzene	U		0.000223	0.00116	1	11/23/2022 16:54	WG1963742
Chlorodibromomethane	U		0.000260	0.00116	1	11/23/2022 16:54	WG1963742
Chloroethane	U		0.00116	0.00580	1	11/23/2022 16:54	WG1963742
Chloroform	U		0.00120	0.00580	1	11/23/2022 16:54	WG1963742
Chloromethane	U		0.000754	0.00290	1	11/23/2022 16:54	WG1963742
1,2-Dibromoethane	U		0.000290	0.00116	1	11/23/2022 16:54	WG1963742
Dibromomethane	U		0.000406	0.00116	1	11/23/2022 16:54	WG1963742
1,2-Dibromo-3-Chloropropane	U		0.00220	0.00580	1	11/23/2022 16:54	WG1963742
1,2-Dichlorobenzene	U		0.000493	0.00116	1	11/23/2022 16:54	WG1963742
1,3-Dichlorobenzene	U		0.000696	0.00116	1	11/23/2022 16:54	WG1963742
1,4-Dichlorobenzene	U		0.000963	0.00116	1	11/23/2022 16:54	WG1963742
Dichlorodifluoromethane	U		0.000333	0.00580	1	11/23/2022 16:54	WG1963742
trans-1,4-Dichloro-2-butene	U		0.00110	0.00290	1	11/23/2022 16:54	WG1963742
1,1-Dichloroethane	U		0.000311	0.00116	1	11/23/2022 16:54	WG1963742
1,2-Dichloroethane	U		0.000522	0.00116	1	11/23/2022 16:54	WG1963742
1,1-Dichloroethene	U		0.000412	0.00116	1	11/23/2022 16:54	WG1963742
cis-1,2-Dichloroethene	U		0.000551	0.00116	1	11/23/2022 16:54	WG1963742
trans-1,2-Dichloroethene	U		0.000580	0.00116	1	11/23/2022 16:54	WG1963742
1,2-Dichloropropane	U		0.000190	0.00116	1	11/23/2022 16:54	WG1963742
cis-1,3-Dichloropropene	U		0.000493	0.00116	1	11/23/2022 16:54	WG1963742
trans-1,3-Dichloropropene	U		0.000783	0.00116	1	11/23/2022 16:54	WG1963742
Ethylbenzene	0.000407	J	0.000348	0.00116	1	11/23/2022 16:54	WG1963742
2-Hexanone	U		0.00208	0.0116	1	11/23/2022 16:54	WG1963742
Iodomethane	U		0.00140	0.0116	1	11/23/2022 16:54	WG1963742

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

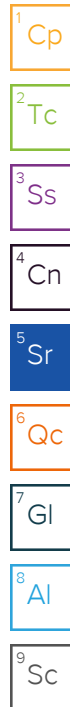
7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2-Butanone (MEK)	0.0193		0.00543	0.0116	1	11/23/2022 16:54	WG1963742
Methylene Chloride	U		0.00116	0.00580	1	11/23/2022 16:54	WG1963742
4-Methyl-2-pentanone (MIBK)	U		0.00110	0.0116	1	11/23/2022 16:54	WG1963742
Pentachloroethane	U		0.00290	0.00580	1	11/23/2022 16:54	WG1963742
Styrene	U		0.000259	0.00116	1	11/23/2022 16:54	WG1963742
1,1,1,2-Tetrachloroethane	U		0.000344	0.00116	1	11/23/2022 16:54	WG1963742
1,1,2,2-Tetrachloroethane	U		0.000268	0.00116	1	11/23/2022 16:54	WG1963742
Tetrachloroethene	U		0.000377	0.00116	1	11/23/2022 16:54	WG1963742
Toluene	0.00237	J	0.00143	0.00580	1	11/23/2022 16:54	WG1963742
1,1,1-Trichloroethane	U		0.000429	0.00116	1	11/23/2022 16:54	WG1963742
1,1,2-Trichloroethane	U		0.000493	0.00116	1	11/23/2022 16:54	WG1963742
Trichloroethene	U		0.000232	0.00116	1	11/23/2022 16:54	WG1963742
Trichlorofluoromethane	U		0.000413	0.00580	1	11/23/2022 16:54	WG1963742
1,2,3-Trichloropropane	U		0.000283	0.00290	1	11/23/2022 16:54	WG1963742
Vinyl acetate	U	J4	0.00115	0.0116	1	11/23/2022 16:54	WG1963742
Vinyl chloride	U		0.000262	0.00116	1	11/23/2022 16:54	WG1963742
Xylenes, Total	0.00129	J	0.000580	0.00348	1	11/23/2022 16:54	WG1963742
1,4-Dioxane	U		0.0882	0.116	1	11/23/2022 16:54	WG1963742
(S) Toluene-d8	105			75.0-131		11/23/2022 16:54	WG1963742
(S) 4-Bromofluorobenzene	96.7			67.0-138		11/23/2022 16:54	WG1963742
(S) 1,2-Dichloroethane-d4	95.1			70.0-130		11/23/2022 16:54	WG1963742



Polychlorinated Biphenyls (GC) by Method 8082

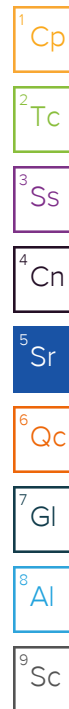
Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
PCB 1016	U		0.0137	0.0395	1	11/18/2022 06:16	WG1961287
PCB 1221	U		0.0137	0.0395	1	11/18/2022 06:16	WG1961287
PCB 1232	U		0.0137	0.0395	1	11/18/2022 06:16	WG1961287
PCB 1242	U		0.0137	0.0395	1	11/18/2022 06:16	WG1961287
PCB 1248	U		0.00856	0.0197	1	11/18/2022 06:16	WG1961287
PCB 1254	U		0.00856	0.0197	1	11/18/2022 06:16	WG1961287
PCB 1260	0.0149	J	0.00856	0.0197	1	11/18/2022 06:16	WG1961287
(S) Decachlorobiphenyl	59.6			10.0-135		11/18/2022 06:16	WG1961287
(S) Tetrachloro-m-xylene	62.8			10.0-139		11/18/2022 06:16	WG1961287

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzidine	U		0.726	19.4	10	11/21/2022 11:53	WG1960984
Bis(2-chlorethoxy)methane	U		0.116	3.86	10	11/21/2022 11:53	WG1960984
Bis(2-chloroethyl)ether	U		0.128	3.86	10	11/21/2022 11:53	WG1960984
2,2-Oxybis(1-Chloropropane)	U		0.167	3.86	10	11/21/2022 11:53	WG1960984
4-Bromophenyl-phenylether	U		0.136	3.86	10	11/21/2022 11:53	WG1960984
4-Chlorophenyl-phenylether	U		0.135	3.86	10	11/21/2022 11:53	WG1960984
1,2-Dichlorobenzene	U		0.115	3.86	10	11/21/2022 11:53	WG1960984
1,3-Dichlorobenzene	U		0.117	3.86	10	11/21/2022 11:53	WG1960984
1,4-Dichlorobenzene	U		0.115	3.86	10	11/21/2022 11:53	WG1960984
3,3-Dichlorobenzidine	U		0.143	3.86	10	11/21/2022 11:53	WG1960984
2,4-Dinitrotoluene	U		0.111	3.86	10	11/21/2022 11:53	WG1960984
2,6-Dinitrotoluene	U		0.126	3.86	10	11/21/2022 11:53	WG1960984
Hexachlorobenzene	U		0.137	3.86	10	11/21/2022 11:53	WG1960984
Hexachloro-1,3-butadiene	U		0.130	3.86	10	11/21/2022 11:53	WG1960984
Hexachlorocyclopentadiene	U		0.203	3.86	10	11/21/2022 11:53	WG1960984
Hexachloroethane	U		0.152	3.86	10	11/21/2022 11:53	WG1960984
Isophorone	U		0.118	3.86	10	11/21/2022 11:53	WG1960984

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Nitrobenzene	U		0.135	3.86	10	11/21/2022 11:53	WG1960984
n-Nitrosodimethylamine	U		0.573	3.86	10	11/21/2022 11:53	WG1960984
n-Nitrosodiphenylamine	U		0.292	3.86	10	11/21/2022 11:53	WG1960984
n-Nitrosodi-n-propylamine	U		0.129	3.86	10	11/21/2022 11:53	WG1960984
Benzylbutyl phthalate	U		0.121	3.86	10	11/21/2022 11:53	WG1960984
Bis(2-ethylhexyl)phthalate	U		0.490	3.86	10	11/21/2022 11:53	WG1960984
Di-n-butyl phthalate	U		0.132	3.86	10	11/21/2022 11:53	WG1960984
Diethyl phthalate	U		0.128	3.86	10	11/21/2022 11:53	WG1960984
Dimethyl phthalate	U		0.819	3.86	10	11/21/2022 11:53	WG1960984
Di-n-octyl phthalate	U		0.261	3.86	10	11/21/2022 11:53	WG1960984
1,2,4-Trichlorobenzene	U		0.121	3.86	10	11/21/2022 11:53	WG1960984
4-Chloro-3-methylphenol	U		0.125	3.86	10	11/21/2022 11:53	WG1960984
2-Chlorophenol	U		0.128	3.86	10	11/21/2022 11:53	WG1960984
2,4-Dichlorophenol	U		0.113	3.86	10	11/21/2022 11:53	WG1960984
2,4-Dimethylphenol	U		0.101	3.86	10	11/21/2022 11:53	WG1960984
4,6-Dinitro-2-methylphenol	U		0.876	3.86	10	11/21/2022 11:53	WG1960984
2,4-Dinitrophenol	U		0.904	3.86	10	11/21/2022 11:53	WG1960984
2-Nitrophenol	U		0.138	3.86	10	11/21/2022 11:53	WG1960984
4-Nitrophenol	U		0.121	3.86	10	11/21/2022 11:53	WG1960984
Pentachlorophenol	U		0.104	3.86	10	11/21/2022 11:53	WG1960984
Phenol	U		0.156	3.86	10	11/21/2022 11:53	WG1960984
2,4,6-Trichlorophenol	U		0.124	3.86	10	11/21/2022 11:53	WG1960984
(S) 2-Fluorophenol	71.5			12.0-120		11/21/2022 11:53	WG1960984
(S) Phenol-d5	66.0			10.0-120		11/21/2022 11:53	WG1960984
(S) Nitrobenzene-d5	77.9			10.0-122		11/21/2022 11:53	WG1960984
(S) 2-Fluorobiphenyl	76.4			15.0-120		11/21/2022 11:53	WG1960984
(S) 2,4,6-Tribromophenol	83.4			10.0-127		11/21/2022 11:53	WG1960984
(S) p-Terphenyl-d14	85.9			10.0-120		11/21/2022 11:53	WG1960984



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

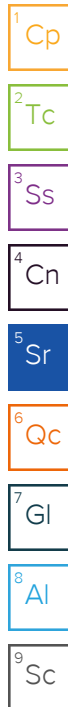
Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.0111		0.00267	0.00696	1	11/18/2022 16:46	WG1961292
Acenaphthene	0.0137		0.00243	0.00696	1	11/18/2022 16:46	WG1961292
Acenaphthylene	0.00390	J	0.00251	0.00696	1	11/18/2022 16:46	WG1961292
Benzo(a)anthracene	0.0327		0.00201	0.00696	1	11/18/2022 16:46	WG1961292
Benzo(a)pyrene	0.0403		0.00208	0.00696	1	11/18/2022 16:46	WG1961292
Benzo(b)fluoranthene	0.0478		0.00178	0.00696	1	11/18/2022 16:46	WG1961292
Benzo(g,h,i)perylene	0.0594		0.00205	0.00696	1	11/18/2022 16:46	WG1961292
Benzo(k)fluoranthene	0.0158		0.00250	0.00696	1	11/18/2022 16:46	WG1961292
Chrysene	0.0364		0.00269	0.00696	1	11/18/2022 16:46	WG1961292
Dibenz(a,h)anthracene	0.00901		0.00200	0.00696	1	11/18/2022 16:46	WG1961292
Fluoranthene	0.0773		0.00263	0.00696	1	11/18/2022 16:46	WG1961292
Fluorene	0.00914		0.00238	0.00696	1	11/18/2022 16:46	WG1961292
Indeno(1,2,3-cd)pyrene	0.0354		0.00210	0.00696	1	11/18/2022 16:46	WG1961292
Naphthalene	0.0159	J	0.00473	0.0232	1	11/18/2022 16:46	WG1961292
Phenanthrene	0.0501		0.00268	0.00696	1	11/18/2022 16:46	WG1961292
Pyrene	0.0659		0.00232	0.00696	1	11/18/2022 16:46	WG1961292
1-Methylnaphthalene	0.0139	J	0.00521	0.0232	1	11/18/2022 16:46	WG1961292
2-Methylnaphthalene	0.0189	J	0.00496	0.0232	1	11/18/2022 16:46	WG1961292
2-Chloronaphthalene	U		0.00541	0.0232	1	11/18/2022 16:46	WG1961292
(S) Nitrobenzene-d5	44.6			14.0-149		11/18/2022 16:46	WG1961292
(S) 2-Fluorobiphenyl	48.7			34.0-125		11/18/2022 16:46	WG1961292
(S) p-Terphenyl-d14	85.2			23.0-120		11/18/2022 16:46	WG1961292

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.4		1	11/15/2022 10:28	WG1959323

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0245	0.0593	1	11/23/2022 17:16	WG1963742
Acrylonitrile	U		0.00239	0.0119	1	11/23/2022 17:16	WG1963742
Allyl chloride	U		0.00474	0.00593	1	11/23/2022 17:16	WG1963742
Benzene	0.000790	J	0.000444	0.00119	1	11/23/2022 17:16	WG1963742
Bromodichloromethane	U		0.000859	0.00119	1	11/23/2022 17:16	WG1963742
Bromoform	U		0.000502	0.00119	1	11/23/2022 17:16	WG1963742
Bromomethane	U		0.00139	0.00593	1	11/23/2022 17:16	WG1963742
Carbon disulfide	U		0.000830	0.00119	1	11/23/2022 17:16	WG1963742
Carbon tetrachloride	U		0.000294	0.00119	1	11/23/2022 17:16	WG1963742
Chlorobenzene	U		0.000228	0.00119	1	11/23/2022 17:16	WG1963742
Chlorodibromomethane	U		0.000265	0.00119	1	11/23/2022 17:16	WG1963742
Chloroethane	U		0.00119	0.00593	1	11/23/2022 17:16	WG1963742
Chloroform	U		0.00122	0.00593	1	11/23/2022 17:16	WG1963742
Chloromethane	U		0.000770	0.00296	1	11/23/2022 17:16	WG1963742
1,2-Dibromoethane	U		0.000296	0.00119	1	11/23/2022 17:16	WG1963742
Dibromomethane	U		0.000415	0.00119	1	11/23/2022 17:16	WG1963742
1,2-Dibromo-3-Chloropropane	U		0.00225	0.00593	1	11/23/2022 17:16	WG1963742
1,2-Dichlorobenzene	U		0.000504	0.00119	1	11/23/2022 17:16	WG1963742
1,3-Dichlorobenzene	U		0.000711	0.00119	1	11/23/2022 17:16	WG1963742
1,4-Dichlorobenzene	U		0.000984	0.00119	1	11/23/2022 17:16	WG1963742
Dichlorodifluoromethane	U		0.000340	0.00593	1	11/23/2022 17:16	WG1963742
trans-1,4-Dichloro-2-butene	U		0.00113	0.00296	1	11/23/2022 17:16	WG1963742
1,1-Dichloroethane	U		0.000318	0.00119	1	11/23/2022 17:16	WG1963742
1,2-Dichloroethane	U		0.000533	0.00119	1	11/23/2022 17:16	WG1963742
1,1-Dichloroethene	U		0.000421	0.00119	1	11/23/2022 17:16	WG1963742
cis-1,2-Dichloroethene	U		0.000563	0.00119	1	11/23/2022 17:16	WG1963742
trans-1,2-Dichloroethene	U		0.000593	0.00119	1	11/23/2022 17:16	WG1963742
1,2-Dichloropropane	U		0.000194	0.00119	1	11/23/2022 17:16	WG1963742
cis-1,3-Dichloropropene	U		0.000504	0.00119	1	11/23/2022 17:16	WG1963742
trans-1,3-Dichloropropene	U		0.000800	0.00119	1	11/23/2022 17:16	WG1963742
Ethylbenzene	U		0.000356	0.00119	1	11/23/2022 17:16	WG1963742
2-Hexanone	U		0.00212	0.0119	1	11/23/2022 17:16	WG1963742
Iodomethane	U		0.00143	0.0119	1	11/23/2022 17:16	WG1963742
2-Butanone (MEK)	U		0.00555	0.0119	1	11/23/2022 17:16	WG1963742
Methylene Chloride	U		0.00119	0.00593	1	11/23/2022 17:16	WG1963742
4-Methyl-2-pentanone (MIBK)	U		0.00113	0.0119	1	11/23/2022 17:16	WG1963742
Pentachloroethane	U		0.00296	0.00593	1	11/23/2022 17:16	WG1963742
Styrene	U		0.000264	0.00119	1	11/23/2022 17:16	WG1963742
1,1,1,2-Tetrachloroethane	U		0.000351	0.00119	1	11/23/2022 17:16	WG1963742
1,1,2,2-Tetrachloroethane	U		0.000274	0.00119	1	11/23/2022 17:16	WG1963742
Tetrachloroethene	U		0.000385	0.00119	1	11/23/2022 17:16	WG1963742
Toluene	U		0.00146	0.00593	1	11/23/2022 17:16	WG1963742
1,1,1-Trichloroethane	U		0.000438	0.00119	1	11/23/2022 17:16	WG1963742
1,1,2-Trichloroethane	U		0.000504	0.00119	1	11/23/2022 17:16	WG1963742
Trichloroethene	U		0.000237	0.00119	1	11/23/2022 17:16	WG1963742
Trichlorofluoromethane	U		0.000422	0.00593	1	11/23/2022 17:16	WG1963742
1,2,3-Trichloropropane	U		0.000289	0.00296	1	11/23/2022 17:16	WG1963742
Vinyl acetate	U	J4	0.00117	0.0119	1	11/23/2022 17:16	WG1963742
Vinyl chloride	U		0.000268	0.00119	1	11/23/2022 17:16	WG1963742
Xylenes, Total	0.000678	J	0.000593	0.00356	1	11/23/2022 17:16	WG1963742



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.0901	0.119	1	11/23/2022 17:16	WG1963742
(S) Toluene-d8	103			75.0-131		11/23/2022 17:16	WG1963742
(S) 4-Bromofluorobenzene	96.8			67.0-138		11/23/2022 17:16	WG1963742
(S) 1,2-Dichloroethane-d4	94.0			70.0-130		11/23/2022 17:16	WG1963742

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.0		1	11/15/2022 10:19	WG1959326

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.0309	<u>J</u>	0.0217	0.0482	1	11/18/2022 12:33	WG1959360

Metals (ICP) by Method 6010B

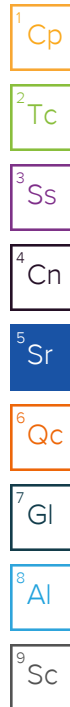
Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Arsenic	3.87		0.624	2.41	1	11/22/2022 23:16	WG1960670
Barium	142		0.103	0.603	1	11/22/2022 23:16	WG1960670
Cadmium	0.612		0.0568	0.603	1	11/22/2022 23:16	WG1960670
Chromium	15.0		0.160	1.21	1	11/22/2022 23:16	WG1960670
Lead	42.1		0.251	0.603	1	11/22/2022 23:16	WG1960670
Selenium	1.35	<u>J</u>	0.921	2.41	1	11/22/2022 23:16	WG1960670
Silver	U		0.153	1.21	1	11/22/2022 23:16	WG1960670

Polychlorinated Biphenyls (GC) by Method 8082

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
PCB 1016	U		0.0142	0.0410	1	11/18/2022 04:18	WG1961287
PCB 1221	U		0.0142	0.0410	1	11/18/2022 04:18	WG1961287
PCB 1232	U		0.0142	0.0410	1	11/18/2022 04:18	WG1961287
PCB 1242	U		0.0142	0.0410	1	11/18/2022 04:18	WG1961287
PCB 1248	U		0.00890	0.0205	1	11/18/2022 04:18	WG1961287
PCB 1254	U		0.00890	0.0205	1	11/18/2022 04:18	WG1961287
PCB 1260	U		0.00890	0.0205	1	11/18/2022 04:18	WG1961287
(S) Decachlorobiphenyl	64.0			10.0-135		11/18/2022 04:18	WG1961287
(S) Tetrachloro-m-xylene	62.1			10.0-139		11/18/2022 04:18	WG1961287

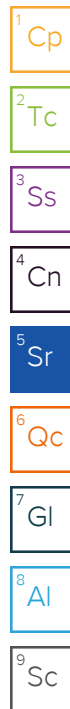
Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzidine	U	<u>J6</u>	0.0755	2.01	1	11/18/2022 15:35	WG1960984
Bis(2-chlorethoxy)methane	U		0.0121	0.401	1	11/18/2022 15:35	WG1960984
Bis(2-chloroethyl)ether	U		0.0133	0.401	1	11/18/2022 15:35	WG1960984
2,2-Oxybis(1-Chloropropane)	U		0.0174	0.401	1	11/18/2022 15:35	WG1960984
4-Bromophenyl-phenylether	U		0.0141	0.401	1	11/18/2022 15:35	WG1960984
4-Chlorophenyl-phenylether	U		0.0140	0.401	1	11/18/2022 15:35	WG1960984
1,2-Dichlorobenzene	U		0.0119	0.401	1	11/18/2022 15:35	WG1960984
1,3-Dichlorobenzene	U		0.0122	0.401	1	11/18/2022 15:35	WG1960984
1,4-Dichlorobenzene	U		0.0119	0.401	1	11/18/2022 15:35	WG1960984
3,3-Dichlorobenzidine	U		0.0148	0.401	1	11/18/2022 15:35	WG1960984
2,4-Dinitrotoluene	U		0.0115	0.401	1	11/18/2022 15:35	WG1960984
2,6-Dinitrotoluene	U		0.0131	0.401	1	11/18/2022 15:35	WG1960984
Hexachlorobenzene	U		0.0142	0.401	1	11/18/2022 15:35	WG1960984
Hexachloro-1,3-butadiene	U		0.0135	0.401	1	11/18/2022 15:35	WG1960984
Hexachlorocyclopentadiene	U	<u>J6</u>	0.0211	0.401	1	11/18/2022 15:35	WG1960984
Hexachloroethane	U		0.0158	0.401	1	11/18/2022 15:35	WG1960984
Isophorone	U		0.0123	0.401	1	11/18/2022 15:35	WG1960984
Nitrobenzene	U		0.0140	0.401	1	11/18/2022 15:35	WG1960984
n-Nitrosodimethylamine	U		0.0595	0.401	1	11/18/2022 15:35	WG1960984
n-Nitrosodiphenylamine	U		0.0304	0.401	1	11/18/2022 15:35	WG1960984



Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
n-Nitrosodi-n-propylamine	U		0.0134	0.401	1	11/18/2022 15:35	WG1960984
Benzylbutyl phthalate	U		0.0125	0.401	1	11/18/2022 15:35	WG1960984
Bis(2-ethylhexyl)phthalate	U		0.0509	0.401	1	11/18/2022 15:35	WG1960984
Di-n-butyl phthalate	U		0.0137	0.401	1	11/18/2022 15:35	WG1960984
Diethyl phthalate	U		0.0133	0.401	1	11/18/2022 15:35	WG1960984
Dimethyl phthalate	U		0.0851	0.401	1	11/18/2022 15:35	WG1960984
Di-n-octyl phthalate	U		0.0271	0.401	1	11/18/2022 15:35	WG1960984
1,2,4-Trichlorobenzene	U		0.0125	0.401	1	11/18/2022 15:35	WG1960984
4-Chloro-3-methylphenol	U		0.0130	0.401	1	11/18/2022 15:35	WG1960984
2-Chlorophenol	U		0.0133	0.401	1	11/18/2022 15:35	WG1960984
2,4-Dichlorophenol	U		0.0117	0.401	1	11/18/2022 15:35	WG1960984
2,4-Dimethylphenol	U		0.0105	0.401	1	11/18/2022 15:35	WG1960984
4,6-Dinitro-2-methylphenol	U		0.0910	0.401	1	11/18/2022 15:35	WG1960984
2,4-Dinitrophenol	U		0.0939	0.401	1	11/18/2022 15:35	WG1960984
2-Nitrophenol	U		0.0143	0.401	1	11/18/2022 15:35	WG1960984
4-Nitrophenol	U		0.0125	0.401	1	11/18/2022 15:35	WG1960984
Pentachlorophenol	U		0.0108	0.401	1	11/18/2022 15:35	WG1960984
Phenol	U		0.0162	0.401	1	11/18/2022 15:35	WG1960984
2,4,6-Trichlorophenol	U		0.0129	0.401	1	11/18/2022 15:35	WG1960984
(S) 2-Fluorophenol	54.7			12.0-120		11/18/2022 15:35	WG1960984
(S) Phenol-d5	53.0			10.0-120		11/18/2022 15:35	WG1960984
(S) Nitrobenzene-d5	53.3			10.0-122		11/18/2022 15:35	WG1960984
(S) 2-Fluorobiphenyl	56.1			15.0-120		11/18/2022 15:35	WG1960984
(S) 2,4,6-Tribromophenol	57.9			10.0-127		11/18/2022 15:35	WG1960984
(S) p-Terphenyl-d14	57.3			10.0-120		11/18/2022 15:35	WG1960984



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

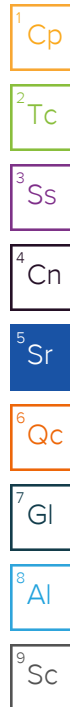
Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.00277	0.00723	1	11/18/2022 13:53	WG1961292
Acenaphthene	U		0.00252	0.00723	1	11/18/2022 13:53	WG1961292
Acenaphthylene	U		0.00260	0.00723	1	11/18/2022 13:53	WG1961292
Benzo(a)anthracene	0.00212	U	0.00209	0.00723	1	11/18/2022 13:53	WG1961292
Benzo(a)pyrene	0.00250	U	0.00216	0.00723	1	11/18/2022 13:53	WG1961292
Benzo(b)fluoranthene	0.00342	U	0.00184	0.00723	1	11/18/2022 13:53	WG1961292
Benzo(g,h,i)perylene	0.00262	U	0.00213	0.00723	1	11/18/2022 13:53	WG1961292
Benzo(k)fluoranthene	U		0.00259	0.00723	1	11/18/2022 13:53	WG1961292
Chrysene	U		0.00280	0.00723	1	11/18/2022 13:53	WG1961292
Dibenz(a,h)anthracene	U		0.00207	0.00723	1	11/18/2022 13:53	WG1961292
Fluoranthene	0.00473	U	0.00274	0.00723	1	11/18/2022 13:53	WG1961292
Fluorene	U		0.00247	0.00723	1	11/18/2022 13:53	WG1961292
Indeno(1,2,3-cd)pyrene	0.00236	U	0.00218	0.00723	1	11/18/2022 13:53	WG1961292
Naphthalene	U		0.00492	0.0241	1	11/18/2022 13:53	WG1961292
Phenanthrene	0.00282	U	0.00278	0.00723	1	11/18/2022 13:53	WG1961292
Pyrene	0.00506	U	0.00241	0.00723	1	11/18/2022 13:53	WG1961292
1-Methylnaphthalene	U		0.00541	0.0241	1	11/18/2022 13:53	WG1961292
2-Methylnaphthalene	U		0.00515	0.0241	1	11/18/2022 13:53	WG1961292
2-Chloronaphthalene	U		0.00562	0.0241	1	11/18/2022 13:53	WG1961292
(S) Nitrobenzene-d5	57.6			14.0-149		11/18/2022 13:53	WG1961292
(S) 2-Fluorobiphenyl	70.9			34.0-125		11/18/2022 13:53	WG1961292
(S) p-Terphenyl-d14	88.3			23.0-120		11/18/2022 13:53	WG1961292

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.6		1	11/15/2022 10:19	WG1959326

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0248	0.0598	1	11/23/2022 17:38	WG1963742
Acrylonitrile	U		0.00242	0.0120	1	11/23/2022 17:38	WG1963742
Allyl chloride	U		0.00479	0.00598	1	11/23/2022 17:38	WG1963742
Benzene	0.0160		0.000449	0.00120	1	11/23/2022 17:38	WG1963742
Bromodichloromethane	U		0.000867	0.00120	1	11/23/2022 17:38	WG1963742
Bromoform	U		0.000507	0.00120	1	11/23/2022 17:38	WG1963742
Bromomethane	U		0.00140	0.00598	1	11/23/2022 17:38	WG1963742
Carbon disulfide	U		0.000837	0.00120	1	11/23/2022 17:38	WG1963742
Carbon tetrachloride	U		0.000297	0.00120	1	11/23/2022 17:38	WG1963742
Chlorobenzene	U		0.000230	0.00120	1	11/23/2022 17:38	WG1963742
Chlorodibromomethane	U		0.000268	0.00120	1	11/23/2022 17:38	WG1963742
Chloroethane	U		0.00120	0.00598	1	11/23/2022 17:38	WG1963742
Chloroform	U		0.00123	0.00598	1	11/23/2022 17:38	WG1963742
Chloromethane	U		0.000778	0.00299	1	11/23/2022 17:38	WG1963742
1,2-Dibromoethane	U		0.000299	0.00120	1	11/23/2022 17:38	WG1963742
Dibromomethane	U		0.000419	0.00120	1	11/23/2022 17:38	WG1963742
1,2-Dibromo-3-Chloropropane	U		0.00227	0.00598	1	11/23/2022 17:38	WG1963742
1,2-Dichlorobenzene	U		0.000508	0.00120	1	11/23/2022 17:38	WG1963742
1,3-Dichlorobenzene	U		0.000718	0.00120	1	11/23/2022 17:38	WG1963742
1,4-Dichlorobenzene	U		0.000993	0.00120	1	11/23/2022 17:38	WG1963742
Dichlorodifluoromethane	U		0.000343	0.00598	1	11/23/2022 17:38	WG1963742
trans-1,4-Dichloro-2-butene	U		0.00114	0.00299	1	11/23/2022 17:38	WG1963742
1,1-Dichloroethane	U		0.000321	0.00120	1	11/23/2022 17:38	WG1963742
1,2-Dichloroethane	U		0.000538	0.00120	1	11/23/2022 17:38	WG1963742
1,1-Dichloroethene	U		0.000425	0.00120	1	11/23/2022 17:38	WG1963742
cis-1,2-Dichloroethene	U		0.000568	0.00120	1	11/23/2022 17:38	WG1963742
trans-1,2-Dichloroethene	U		0.000598	0.00120	1	11/23/2022 17:38	WG1963742
1,2-Dichloropropane	U		0.000196	0.00120	1	11/23/2022 17:38	WG1963742
cis-1,3-Dichloropropene	U		0.000508	0.00120	1	11/23/2022 17:38	WG1963742
trans-1,3-Dichloropropene	U		0.000808	0.00120	1	11/23/2022 17:38	WG1963742
Ethylbenzene	0.00114	J	0.000359	0.00120	1	11/23/2022 17:38	WG1963742
2-Hexanone	U		0.00214	0.0120	1	11/23/2022 17:38	WG1963742
Iodomethane	U		0.00145	0.0120	1	11/23/2022 17:38	WG1963742
2-Butanone (MEK)	U		0.00560	0.0120	1	11/23/2022 17:38	WG1963742
Methylene Chloride	U		0.00120	0.00598	1	11/23/2022 17:38	WG1963742
4-Methyl-2-pentanone (MIBK)	U		0.00114	0.0120	1	11/23/2022 17:38	WG1963742
Pentachloroethane	U		0.00299	0.00598	1	11/23/2022 17:38	WG1963742
Styrene	U		0.000267	0.00120	1	11/23/2022 17:38	WG1963742
1,1,1,2-Tetrachloroethane	U		0.000354	0.00120	1	11/23/2022 17:38	WG1963742
1,1,2,2-Tetrachloroethane	U		0.000276	0.00120	1	11/23/2022 17:38	WG1963742
Tetrachloroethene	U		0.000389	0.00120	1	11/23/2022 17:38	WG1963742
Toluene	0.00829		0.00147	0.00598	1	11/23/2022 17:38	WG1963742
1,1,1-Trichloroethane	U		0.000443	0.00120	1	11/23/2022 17:38	WG1963742
1,1,2-Trichloroethane	U		0.000508	0.00120	1	11/23/2022 17:38	WG1963742
Trichloroethene	U		0.000239	0.00120	1	11/23/2022 17:38	WG1963742
Trichlorofluoromethane	U		0.000426	0.00598	1	11/23/2022 17:38	WG1963742
1,2,3-Trichloropropane	U		0.000292	0.00299	1	11/23/2022 17:38	WG1963742
Vinyl acetate	U	J4	0.00118	0.0120	1	11/23/2022 17:38	WG1963742
Vinyl chloride	U		0.000270	0.00120	1	11/23/2022 17:38	WG1963742
Xylenes, Total	0.00231	J	0.000598	0.00359	1	11/23/2022 17:38	WG1963742



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.0909	0.120	1	11/23/2022 17:38	WG1963742
(S) Toluene-d8	105			75.0-131		11/23/2022 17:38	WG1963742
(S) 4-Bromofluorobenzene	102			67.0-138		11/23/2022 17:38	WG1963742
(S) 1,2-Dichloroethane-d4	94.6			70.0-130		11/23/2022 17:38	WG1963742

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	78.3		1	11/15/2022 10:19	WG1959326

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.195		0.0230	0.0511	1	11/18/2022 13:14	WG1959360

Metals (ICP) by Method 6010B

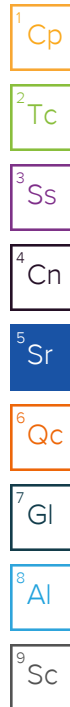
Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Arsenic	U		0.661	2.55	1	11/21/2022 00:41	WG1960669
Barium	184		0.109	0.638	1	11/21/2022 00:41	WG1960669
Cadmium	4.20		0.0601	0.638	1	11/21/2022 00:41	WG1960669
Chromium	936		0.170	1.28	1	11/21/2022 00:41	WG1960669
Lead	172		0.265	0.638	1	11/21/2022 00:41	WG1960669
Selenium	U		0.975	2.55	1	11/21/2022 00:41	WG1960669
Silver	0.557	J	0.162	1.28	1	11/21/2022 00:41	WG1960669

Polychlorinated Biphenyls (GC) by Method 8082

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
PCB 1016	U		0.0151	0.0434	1	11/18/2022 06:25	WG1961287
PCB 1221	U		0.0151	0.0434	1	11/18/2022 06:25	WG1961287
PCB 1232	U		0.0151	0.0434	1	11/18/2022 06:25	WG1961287
PCB 1242	U		0.0151	0.0434	1	11/18/2022 06:25	WG1961287
PCB 1248	U		0.00942	0.0217	1	11/18/2022 06:25	WG1961287
PCB 1254	0.0846		0.00942	0.0217	1	11/18/2022 06:25	WG1961287
PCB 1260	U		0.00942	0.0217	1	11/18/2022 06:25	WG1961287
(S) Decachlorobiphenyl	51.3			10.0-135		11/18/2022 06:25	WG1961287
(S) Tetrachloro-m-xylene	45.2			10.0-139		11/18/2022 06:25	WG1961287

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzidine	U		0.160	4.26	2	11/21/2022 10:28	WG1960984
Bis(2-chlorethoxy)methane	U		0.0255	0.850	2	11/21/2022 10:28	WG1960984
Bis(2-chloroethyl)ether	U		0.0281	0.850	2	11/21/2022 10:28	WG1960984
2,2-Oxybis(1-Chloropropane)	U		0.0368	0.850	2	11/21/2022 10:28	WG1960984
4-Bromophenyl-phenylether	U		0.0299	0.850	2	11/21/2022 10:28	WG1960984
4-Chlorophenyl-phenylether	U		0.0296	0.850	2	11/21/2022 10:28	WG1960984
1,2-Dichlorobenzene	U		0.0251	0.850	2	11/21/2022 10:28	WG1960984
1,3-Dichlorobenzene	U		0.0258	0.850	2	11/21/2022 10:28	WG1960984
1,4-Dichlorobenzene	U		0.0253	0.850	2	11/21/2022 10:28	WG1960984
3,3-Dichlorobenzidine	U		0.0314	0.850	2	11/21/2022 10:28	WG1960984
2,4-Dinitrotoluene	U		0.0244	0.850	2	11/21/2022 10:28	WG1960984
2,6-Dinitrotoluene	U		0.0278	0.850	2	11/21/2022 10:28	WG1960984
Hexachlorobenzene	U		0.0301	0.850	2	11/21/2022 10:28	WG1960984
Hexachloro-1,3-butadiene	U		0.0286	0.850	2	11/21/2022 10:28	WG1960984
Hexachlorocyclopentadiene	U		0.0447	0.850	2	11/21/2022 10:28	WG1960984
Hexachloroethane	U		0.0334	0.850	2	11/21/2022 10:28	WG1960984
Isophorone	U		0.0260	0.850	2	11/21/2022 10:28	WG1960984
Nitrobenzene	U		0.0296	0.850	2	11/21/2022 10:28	WG1960984
n-Nitrosodimethylamine	U		0.126	0.850	2	11/21/2022 10:28	WG1960984
n-Nitrosodiphenylamine	U		0.0643	0.850	2	11/21/2022 10:28	WG1960984



TP-40 FILL

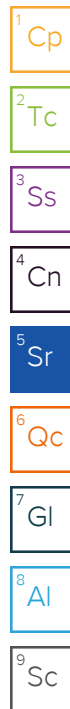
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SAMPLE RESULTS - 24

L1557295

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
n-Nitrosodi-n-propylamine	U		0.0283	0.850	2	11/21/2022 10:28	WG1960984
Benzylbutyl phthalate	U		0.0265	0.850	2	11/21/2022 10:28	WG1960984
Bis(2-ethylhexyl)phthalate	0.614	J	0.108	0.850	2	11/21/2022 10:28	WG1960984
Di-n-butyl phthalate	U		0.0291	0.850	2	11/21/2022 10:28	WG1960984
Diethyl phthalate	U		0.0281	0.850	2	11/21/2022 10:28	WG1960984
Dimethyl phthalate	U		0.180	0.850	2	11/21/2022 10:28	WG1960984
Di-n-octyl phthalate	U		0.0574	0.850	2	11/21/2022 10:28	WG1960984
1,2,4-Trichlorobenzene	U		0.0265	0.850	2	11/21/2022 10:28	WG1960984
4-Chloro-3-methylphenol	U		0.0276	0.850	2	11/21/2022 10:28	WG1960984
2-Chlorophenol	U		0.0281	0.850	2	11/21/2022 10:28	WG1960984
2,4-Dichlorophenol	U		0.0248	0.850	2	11/21/2022 10:28	WG1960984
2,4-Dimethylphenol	U		0.0222	0.850	2	11/21/2022 10:28	WG1960984
4,6-Dinitro-2-methylphenol	U		0.193	0.850	2	11/21/2022 10:28	WG1960984
2,4-Dinitrophenol	U		0.199	0.850	2	11/21/2022 10:28	WG1960984
2-Nitrophenol	U		0.0304	0.850	2	11/21/2022 10:28	WG1960984
4-Nitrophenol	U		0.0265	0.850	2	11/21/2022 10:28	WG1960984
Pentachlorophenol	U		0.0228	0.850	2	11/21/2022 10:28	WG1960984
Phenol	U		0.0342	0.850	2	11/21/2022 10:28	WG1960984
2,4,6-Trichlorophenol	U		0.0273	0.850	2	11/21/2022 10:28	WG1960984
(S) 2-Fluorophenol	51.2			12.0-120		11/21/2022 10:28	WG1960984
(S) Phenol-d5	47.4			10.0-120		11/21/2022 10:28	WG1960984
(S) Nitrobenzene-d5	50.5			10.0-122		11/21/2022 10:28	WG1960984
(S) 2-Fluorobiphenyl	50.2			15.0-120		11/21/2022 10:28	WG1960984
(S) 2,4,6-Tribromophenol	60.7			10.0-127		11/21/2022 10:28	WG1960984
(S) p-Terphenyl-d14	59.3			10.0-120		11/21/2022 10:28	WG1960984



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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.00730	J	0.00294	0.00766	1	11/18/2022 17:21	WG1961292
Acenaphthene	U		0.00267	0.00766	1	11/18/2022 17:21	WG1961292
Acenaphthylene	0.00892		0.00276	0.00766	1	11/18/2022 17:21	WG1961292
Benzo(a)anthracene	0.267		0.00221	0.00766	1	11/18/2022 17:21	WG1961292
Benzo(a)pyrene	0.470		0.00228	0.00766	1	11/18/2022 17:21	WG1961292
Benzo(b)fluoranthene	0.188		0.00195	0.00766	1	11/18/2022 17:21	WG1961292
Benzo(g,h,i)perylene	0.397		0.00226	0.00766	1	11/18/2022 17:21	WG1961292
Benzo(k)fluoranthene	0.0368		0.00274	0.00766	1	11/18/2022 17:21	WG1961292
Chrysene	0.348		0.00296	0.00766	1	11/18/2022 17:21	WG1961292
Dibenz(a,h)anthracene	0.0705		0.00220	0.00766	1	11/18/2022 17:21	WG1961292
Fluoranthene	0.0477		0.00290	0.00766	1	11/18/2022 17:21	WG1961292
Fluorene	0.00347	J	0.00262	0.00766	1	11/18/2022 17:21	WG1961292
Indeno(1,2,3-cd)pyrene	0.109		0.00231	0.00766	1	11/18/2022 17:21	WG1961292
Naphthalene	0.0214	J	0.00521	0.0255	1	11/18/2022 17:21	WG1961292
Phenanthrene	0.0379		0.00295	0.00766	1	11/18/2022 17:21	WG1961292
Pyrene	0.197		0.00255	0.00766	1	11/18/2022 17:21	WG1961292
1-Methylnaphthalene	0.00784	J	0.00573	0.0255	1	11/18/2022 17:21	WG1961292
2-Methylnaphthalene	0.0104	J	0.00545	0.0255	1	11/18/2022 17:21	WG1961292
2-Chloronaphthalene	U		0.00595	0.0255	1	11/18/2022 17:21	WG1961292
(S) Nitrobenzene-d5	47.1			14.0-149		11/18/2022 17:21	WG1961292
(S) 2-Fluorobiphenyl	50.0			34.0-125		11/18/2022 17:21	WG1961292
(S) p-Terphenyl-d14	75.5			23.0-120		11/18/2022 17:21	WG1961292

ACCOUNT:

Terracon - Salt Lake City, UT

PROJECT:

61227342 Task 4.1

SDG:

L1557295

DATE/TIME:

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TP-40 FILL

Collected date/time: 11/10/22 09:30

SAMPLE RESULTS - 25

L1557295

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.1		1	11/15/2022 10:19	WG1959326

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0595		0.0232	0.0561	1	11/23/2022 18:00	WG1963742
Acrylonitrile	U		0.00227	0.0112	1	11/23/2022 18:00	WG1963742
Allyl chloride	U		0.00449	0.00561	1	11/23/2022 18:00	WG1963742
Benzene	0.00131		0.000421	0.00112	1	11/23/2022 18:00	WG1963742
Bromodichloromethane	U		0.000814	0.00112	1	11/23/2022 18:00	WG1963742
Bromoform	U		0.000476	0.00112	1	11/23/2022 18:00	WG1963742
Bromomethane	U		0.00131	0.00561	1	11/23/2022 18:00	WG1963742
Carbon disulfide	U		0.000786	0.00112	1	11/23/2022 18:00	WG1963742
Carbon tetrachloride	U		0.000278	0.00112	1	11/23/2022 18:00	WG1963742
Chlorobenzene	U		0.000216	0.00112	1	11/23/2022 18:00	WG1963742
Chlorodibromomethane	U		0.000251	0.00112	1	11/23/2022 18:00	WG1963742
Chloroethane	U		0.00112	0.00561	1	11/23/2022 18:00	WG1963742
Chloroform	U		0.00116	0.00561	1	11/23/2022 18:00	WG1963742
Chloromethane	U		0.000730	0.00281	1	11/23/2022 18:00	WG1963742
1,2-Dibromoethane	U		0.000281	0.00112	1	11/23/2022 18:00	WG1963742
Dibromomethane	U		0.000393	0.00112	1	11/23/2022 18:00	WG1963742
1,2-Dibromo-3-Chloropropane	U		0.00213	0.00561	1	11/23/2022 18:00	WG1963742
1,2-Dichlorobenzene	U		0.000477	0.00112	1	11/23/2022 18:00	WG1963742
1,3-Dichlorobenzene	U		0.000674	0.00112	1	11/23/2022 18:00	WG1963742
1,4-Dichlorobenzene	U		0.000932	0.00112	1	11/23/2022 18:00	WG1963742
Dichlorodifluoromethane	U		0.000322	0.00561	1	11/23/2022 18:00	WG1963742
trans-1,4-Dichloro-2-butene	U		0.00107	0.00281	1	11/23/2022 18:00	WG1963742
1,1-Dichloroethane	U		0.000301	0.00112	1	11/23/2022 18:00	WG1963742
1,2-Dichloroethane	U		0.000505	0.00112	1	11/23/2022 18:00	WG1963742
1,1-Dichloroethene	U		0.000399	0.00112	1	11/23/2022 18:00	WG1963742
cis-1,2-Dichloroethene	U		0.000533	0.00112	1	11/23/2022 18:00	WG1963742
trans-1,2-Dichloroethene	U		0.000561	0.00112	1	11/23/2022 18:00	WG1963742
1,2-Dichloropropane	U		0.000184	0.00112	1	11/23/2022 18:00	WG1963742
cis-1,3-Dichloropropene	U		0.000477	0.00112	1	11/23/2022 18:00	WG1963742
trans-1,3-Dichloropropene	U		0.000758	0.00112	1	11/23/2022 18:00	WG1963742
Ethylbenzene	U		0.000337	0.00112	1	11/23/2022 18:00	WG1963742
2-Hexanone	U		0.00201	0.0112	1	11/23/2022 18:00	WG1963742
Iodomethane	U		0.00136	0.0112	1	11/23/2022 18:00	WG1963742
2-Butanone (MEK)	U		0.00525	0.0112	1	11/23/2022 18:00	WG1963742
Methylene Chloride	U		0.00112	0.00561	1	11/23/2022 18:00	WG1963742
4-Methyl-2-pentanone (MIBK)	U		0.00107	0.0112	1	11/23/2022 18:00	WG1963742
Pentachloroethane	U		0.00281	0.00561	1	11/23/2022 18:00	WG1963742
Styrene	U		0.000250	0.00112	1	11/23/2022 18:00	WG1963742
1,1,1,2-Tetrachloroethane	U		0.000332	0.00112	1	11/23/2022 18:00	WG1963742
1,1,2,2-Tetrachloroethane	U		0.000259	0.00112	1	11/23/2022 18:00	WG1963742
Tetrachloroethene	U		0.000365	0.00112	1	11/23/2022 18:00	WG1963742
Toluene	U		0.00138	0.00561	1	11/23/2022 18:00	WG1963742
1,1,1-Trichloroethane	U		0.000415	0.00112	1	11/23/2022 18:00	WG1963742
1,1,2-Trichloroethane	U		0.000477	0.00112	1	11/23/2022 18:00	WG1963742
Trichloroethene	U		0.000225	0.00112	1	11/23/2022 18:00	WG1963742
Trichlorofluoromethane	U		0.000400	0.00561	1	11/23/2022 18:00	WG1963742
1,2,3-Trichloropropane	U		0.000274	0.00281	1	11/23/2022 18:00	WG1963742
Vinyl acetate	U	J4	0.00111	0.0112	1	11/23/2022 18:00	WG1963742
Vinyl chloride	U		0.000254	0.00112	1	11/23/2022 18:00	WG1963742
Xylenes, Total	U		0.000561	0.00337	1	11/23/2022 18:00	WG1963742

ACCOUNT:

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61227342 Task 4.1

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1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.0853	0.112	1	11/23/2022 18:00	WG1963742
(S) Toluene-d8	112			75.0-131		11/23/2022 18:00	WG1963742
(S) 4-Bromofluorobenzene	91.3			67.0-138		11/23/2022 18:00	WG1963742
(S) 1,2-Dichloroethane-d4	90.8			70.0-130		11/23/2022 18:00	WG1963742

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	55.3		1	11/15/2022 10:19	WG1959326

Mercury by Method 7471A

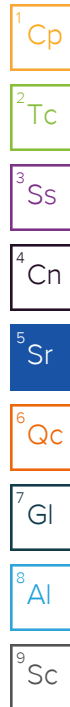
Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.173		0.0325	0.0723	1	11/18/2022 13:17	WG1959360

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Arsenic	20.9		0.937	3.62	1	11/21/2022 10:14	WG1960669
Barium	235		0.154	0.904	1	11/21/2022 10:14	WG1960669
Cadmium	4.67		0.0852	0.904	1	11/21/2022 10:14	WG1960669
Chromium	36.9		0.241	1.81	1	11/21/2022 10:14	WG1960669
Lead	181		0.376	0.904	1	11/21/2022 10:14	WG1960669
Selenium	3.22	J	1.38	3.62	1	11/21/2022 10:14	WG1960669
Silver	U		0.230	1.81	1	11/21/2022 10:14	WG1960669

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.146		0.0374	0.0904	1	11/23/2022 18:22	WG1963742
Acrylonitrile	U		0.00365	0.0181	1	11/23/2022 18:22	WG1963742
Allyl chloride	U		0.00723	0.00904	1	11/23/2022 18:22	WG1963742
Benzene	0.00295		0.000678	0.00181	1	11/23/2022 18:22	WG1963742
Bromodichloromethane	U		0.00131	0.00181	1	11/23/2022 18:22	WG1963742
Bromoform	U		0.000767	0.00181	1	11/23/2022 18:22	WG1963742
Bromomethane	U		0.00212	0.00904	1	11/23/2022 18:22	WG1963742
Carbon disulfide	U		0.00127	0.00181	1	11/23/2022 18:22	WG1963742
Carbon tetrachloride	U		0.000448	0.00181	1	11/23/2022 18:22	WG1963742
Chlorobenzene	U		0.000347	0.00181	1	11/23/2022 18:22	WG1963742
Chlorodibromomethane	U		0.000405	0.00181	1	11/23/2022 18:22	WG1963742
Chloroethane	U		0.00181	0.00904	1	11/23/2022 18:22	WG1963742
Chloroform	U		0.00186	0.00904	1	11/23/2022 18:22	WG1963742
Chloromethane	U		0.00118	0.00452	1	11/23/2022 18:22	WG1963742
1,2-Dibromoethane	U		0.000452	0.00181	1	11/23/2022 18:22	WG1963742
Dibromomethane	U		0.000633	0.00181	1	11/23/2022 18:22	WG1963742
1,2-Dibromo-3-Chloropropane	U		0.00344	0.00904	1	11/23/2022 18:22	WG1963742
1,2-Dichlorobenzene	U		0.000769	0.00181	1	11/23/2022 18:22	WG1963742
1,3-Dichlorobenzene	U		0.00108	0.00181	1	11/23/2022 18:22	WG1963742
1,4-Dichlorobenzene	U		0.00150	0.00181	1	11/23/2022 18:22	WG1963742
Dichlorodifluoromethane	U		0.000519	0.00904	1	11/23/2022 18:22	WG1963742
trans-1,4-Dichloro-2-butene	U		0.00172	0.00452	1	11/23/2022 18:22	WG1963742
1,1-Dichloroethane	U		0.000485	0.00181	1	11/23/2022 18:22	WG1963742
1,2-Dichloroethane	U		0.000814	0.00181	1	11/23/2022 18:22	WG1963742
1,1-Dichloroethene	U		0.000642	0.00181	1	11/23/2022 18:22	WG1963742
cis-1,2-Dichloroethene	U		0.000859	0.00181	1	11/23/2022 18:22	WG1963742
trans-1,2-Dichloroethene	U		0.000904	0.00181	1	11/23/2022 18:22	WG1963742
1,2-Dichloropropane	U		0.000297	0.00181	1	11/23/2022 18:22	WG1963742
cis-1,3-Dichloropropene	U		0.000769	0.00181	1	11/23/2022 18:22	WG1963742
trans-1,3-Dichloropropene	U		0.00122	0.00181	1	11/23/2022 18:22	WG1963742
Ethylbenzene	0.000573	J	0.000542	0.00181	1	11/23/2022 18:22	WG1963742
2-Hexanone	U		0.00324	0.0181	1	11/23/2022 18:22	WG1963742
Iodomethane	U		0.00219	0.0181	1	11/23/2022 18:22	WG1963742



TP-40 NATIVE

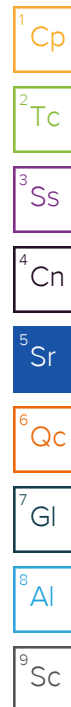
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SAMPLE RESULTS - 26

L1557295

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2-Butanone (MEK)	0.0149	J	0.00846	0.0181	1	11/23/2022 18:22	WG1963742
Methylene Chloride	U		0.00181	0.00904	1	11/23/2022 18:22	WG1963742
4-Methyl-2-pentanone (MIBK)	U		0.00172	0.0181	1	11/23/2022 18:22	WG1963742
Pentachloroethane	U		0.00452	0.00904	1	11/23/2022 18:22	WG1963742
Styrene	U		0.000403	0.00181	1	11/23/2022 18:22	WG1963742
1,1,1,2-Tetrachloroethane	U		0.000535	0.00181	1	11/23/2022 18:22	WG1963742
1,1,2,2-Tetrachloroethane	U		0.000418	0.00181	1	11/23/2022 18:22	WG1963742
Tetrachloroethene	U		0.000588	0.00181	1	11/23/2022 18:22	WG1963742
Toluene	0.00280	J	0.00222	0.00904	1	11/23/2022 18:22	WG1963742
1,1,1-Trichloroethane	U		0.000669	0.00181	1	11/23/2022 18:22	WG1963742
1,1,2-Trichloroethane	U		0.000769	0.00181	1	11/23/2022 18:22	WG1963742
Trichloroethene	U		0.000362	0.00181	1	11/23/2022 18:22	WG1963742
Trichlorofluoromethane	U		0.000644	0.00904	1	11/23/2022 18:22	WG1963742
1,2,3-Trichloropropane	U		0.000441	0.00452	1	11/23/2022 18:22	WG1963742
Vinyl acetate	U	J4	0.00179	0.0181	1	11/23/2022 18:22	WG1963742
Vinyl chloride	U		0.000409	0.00181	1	11/23/2022 18:22	WG1963742
Xylenes, Total	0.00141	J	0.000904	0.00542	1	11/23/2022 18:22	WG1963742
1,4-Dioxane	U		0.137	0.181	1	11/23/2022 18:22	WG1963742
(S) Toluene-d8	113			75.0-131		11/23/2022 18:22	WG1963742
(S) 4-Bromofluorobenzene	89.7			67.0-138		11/23/2022 18:22	WG1963742
(S) 1,2-Dichloroethane-d4	90.8			70.0-130		11/23/2022 18:22	WG1963742



Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzidine	U		0.113	3.02	1	11/18/2022 16:37	WG1960984
Bis(2-chlorethoxy)methane	U		0.0181	0.602	1	11/18/2022 16:37	WG1960984
Bis(2-chloroethyl)ether	U		0.0199	0.602	1	11/18/2022 16:37	WG1960984
2,2-Oxybis(1-Chloropropane)	U		0.0260	0.602	1	11/18/2022 16:37	WG1960984
4-Bromophenyl-phenylether	U		0.0212	0.602	1	11/18/2022 16:37	WG1960984
4-Chlorophenyl-phenylether	U		0.0210	0.602	1	11/18/2022 16:37	WG1960984
1,2-Dichlorobenzene	U		0.0178	0.602	1	11/18/2022 16:37	WG1960984
1,3-Dichlorobenzene	U		0.0183	0.602	1	11/18/2022 16:37	WG1960984
1,4-Dichlorobenzene	U		0.0179	0.602	1	11/18/2022 16:37	WG1960984
3,3-Dichlorobenzidine	U		0.0222	0.602	1	11/18/2022 16:37	WG1960984
2,4-Dinitrotoluene	U		0.0173	0.602	1	11/18/2022 16:37	WG1960984
2,6-Dinitrotoluene	U		0.0197	0.602	1	11/18/2022 16:37	WG1960984
Hexachlorobenzene	U		0.0213	0.602	1	11/18/2022 16:37	WG1960984
Hexachloro-1,3-butadiene	U		0.0203	0.602	1	11/18/2022 16:37	WG1960984
Hexachlorocyclopentadiene	U		0.0316	0.602	1	11/18/2022 16:37	WG1960984
Hexachloroethane	U		0.0237	0.602	1	11/18/2022 16:37	WG1960984
Isophorone	U		0.0184	0.602	1	11/18/2022 16:37	WG1960984
Nitrobenzene	U		0.0210	0.602	1	11/18/2022 16:37	WG1960984
n-Nitrosodimethylamine	U		0.0893	0.602	1	11/18/2022 16:37	WG1960984
n-Nitrosodiphenylamine	U		0.0456	0.602	1	11/18/2022 16:37	WG1960984
n-Nitrosodi-n-propylamine	U		0.0201	0.602	1	11/18/2022 16:37	WG1960984
Benzylbutyl phthalate	U		0.0188	0.602	1	11/18/2022 16:37	WG1960984
Bis(2-ethylhexyl)phthalate	U		0.0763	0.602	1	11/18/2022 16:37	WG1960984
Di-n-butyl phthalate	U		0.0206	0.602	1	11/18/2022 16:37	WG1960984
Diethyl phthalate	U		0.0199	0.602	1	11/18/2022 16:37	WG1960984
Dimethyl phthalate	U		0.128	0.602	1	11/18/2022 16:37	WG1960984
Di-n-octyl phthalate	U		0.0407	0.602	1	11/18/2022 16:37	WG1960984
1,2,4-Trichlorobenzene	U		0.0188	0.602	1	11/18/2022 16:37	WG1960984
4-Chloro-3-methylphenol	U		0.0195	0.602	1	11/18/2022 16:37	WG1960984
2-Chlorophenol	U		0.0199	0.602	1	11/18/2022 16:37	WG1960984
2,4-Dichlorophenol	U		0.0175	0.602	1	11/18/2022 16:37	WG1960984

ACCOUNT:

Terracon - Salt Lake City, UT

PROJECT:

61227342 Task 4.1

SDG:

L1557295

DATE/TIME:

12/05/22 10:40

PAGE:

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Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2,4-Dimethylphenol	U		0.0157	0.602	1	11/18/2022 16:37	WG1960984
4,6-Dinitro-2-methylphenol	U		0.137	0.602	1	11/18/2022 16:37	WG1960984
2,4-Dinitrophenol	U		0.141	0.602	1	11/18/2022 16:37	WG1960984
2-Nitrophenol	U		0.0215	0.602	1	11/18/2022 16:37	WG1960984
4-Nitrophenol	U		0.0188	0.602	1	11/18/2022 16:37	WG1960984
Pentachlorophenol	U		0.0162	0.602	1	11/18/2022 16:37	WG1960984
Phenol	U		0.0242	0.602	1	11/18/2022 16:37	WG1960984
2,4,6-Trichlorophenol	U		0.0193	0.602	1	11/18/2022 16:37	WG1960984
(S) 2-Fluorophenol	37.0			12.0-120		11/18/2022 16:37	WG1960984
(S) Phenol-d5	35.7			10.0-120		11/18/2022 16:37	WG1960984
(S) Nitrobenzene-d5	35.6			10.0-122		11/18/2022 16:37	WG1960984
(S) 2-Fluorobiphenyl	37.5			15.0-120		11/18/2022 16:37	WG1960984
(S) 2,4,6-Tribromophenol	37.9			10.0-127		11/18/2022 16:37	WG1960984
(S) p-Terphenyl-d14	38.4			10.0-120		11/18/2022 16:37	WG1960984

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.00416	0.0108	1	11/18/2022 15:02	WG1961292
Acenaphthene	U		0.00378	0.0108	1	11/18/2022 15:02	WG1961292
Acenaphthylene	U		0.00391	0.0108	1	11/18/2022 15:02	WG1961292
Benzo(a)anthracene	0.00940	J	0.00313	0.0108	1	11/18/2022 15:02	WG1961292
Benzo(a)pyrene	0.0141		0.00324	0.0108	1	11/18/2022 15:02	WG1961292
Benzo(b)fluoranthene	0.00978	J	0.00277	0.0108	1	11/18/2022 15:02	WG1961292
Benzo(g,h,i)perylene	0.0199		0.00320	0.0108	1	11/18/2022 15:02	WG1961292
Benzo(k)fluoranthene	U		0.00389	0.0108	1	11/18/2022 15:02	WG1961292
Chrysene	0.0121		0.00420	0.0108	1	11/18/2022 15:02	WG1961292
Dibenz(a,h)anthracene	U		0.00311	0.0108	1	11/18/2022 15:02	WG1961292
Fluoranthene	0.00740	J	0.00410	0.0108	1	11/18/2022 15:02	WG1961292
Fluorene	U		0.00371	0.0108	1	11/18/2022 15:02	WG1961292
Indeno(1,2,3-cd)pyrene	0.00729	J	0.00327	0.0108	1	11/18/2022 15:02	WG1961292
Naphthalene	U		0.00738	0.0362	1	11/18/2022 15:02	WG1961292
Phenanthrene	0.00436	J	0.00418	0.0108	1	11/18/2022 15:02	WG1961292
Pyrene	0.0123		0.00362	0.0108	1	11/18/2022 15:02	WG1961292
1-Methylnaphthalene	U		0.00812	0.0362	1	11/18/2022 15:02	WG1961292
2-Methylnaphthalene	U		0.00772	0.0362	1	11/18/2022 15:02	WG1961292
2-Chloronaphthalene	U		0.00843	0.0362	1	11/18/2022 15:02	WG1961292
(S) Nitrobenzene-d5	67.3			14.0-149		11/18/2022 15:02	WG1961292
(S) 2-Fluorobiphenyl	50.1			34.0-125		11/18/2022 15:02	WG1961292
(S) p-Terphenyl-d14	69.1			23.0-120		11/18/2022 15:02	WG1961292

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	77.4		1	11/15/2022 10:19	WG1959326

Mercury by Method 7471A

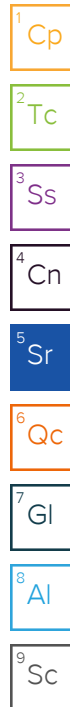
Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.0694		0.0233	0.0517	1	11/18/2022 13:24	WG1959360

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Arsenic	8.19		0.669	2.58	1	11/20/2022 23:25	WG1960669
Barium	174		0.110	0.646	1	11/20/2022 23:25	WG1960669
Cadmium	1.36		0.0609	0.646	1	11/20/2022 23:25	WG1960669
Chromium	13.3		0.172	1.29	1	11/20/2022 23:25	WG1960669
Lead	168		0.269	0.646	1	11/20/2022 23:25	WG1960669
Selenium	U		0.987	2.58	1	11/20/2022 23:25	WG1960669
Silver	U		0.164	1.29	1	11/20/2022 23:25	WG1960669

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzidine	U		0.162	4.32	2	11/21/2022 10:49	WG1960984
Bis(2-chlorethoxy)methane	U		0.0258	0.861	2	11/21/2022 10:49	WG1960984
Bis(2-chloroethyl)ether	U		0.0284	0.861	2	11/21/2022 10:49	WG1960984
2,2-Oxybis(1-Chloropropane)	U		0.0372	0.861	2	11/21/2022 10:49	WG1960984
4-Bromophenyl-phenylether	U		0.0302	0.861	2	11/21/2022 10:49	WG1960984
4-Chlorophenyl-phenylether	U		0.0300	0.861	2	11/21/2022 10:49	WG1960984
1,2-Dichlorobenzene	U		0.0255	0.861	2	11/21/2022 10:49	WG1960984
1,3-Dichlorobenzene	U		0.0261	0.861	2	11/21/2022 10:49	WG1960984
1,4-Dichlorobenzene	U		0.0256	0.861	2	11/21/2022 10:49	WG1960984
3,3-Dichlorobenzidine	U		0.0318	0.861	2	11/21/2022 10:49	WG1960984
2,4-Dinitrotoluene	U		0.0247	0.861	2	11/21/2022 10:49	WG1960984
2,6-Dinitrotoluene	U		0.0282	0.861	2	11/21/2022 10:49	WG1960984
Hexachlorobenzene	U		0.0305	0.861	2	11/21/2022 10:49	WG1960984
Hexachloro-1,3-butadiene	U		0.0289	0.861	2	11/21/2022 10:49	WG1960984
Hexachlorocyclopentadiene	U		0.0452	0.861	2	11/21/2022 10:49	WG1960984
Hexachloroethane	U		0.0339	0.861	2	11/21/2022 10:49	WG1960984
Isophorone	U		0.0264	0.861	2	11/21/2022 10:49	WG1960984
Nitrobenzene	U		0.0300	0.861	2	11/21/2022 10:49	WG1960984
n-Nitrosodimethylamine	U		0.128	0.861	2	11/21/2022 10:49	WG1960984
n-Nitrosodiphenylamine	U		0.0651	0.861	2	11/21/2022 10:49	WG1960984
n-Nitrosodi-n-propylamine	U		0.0287	0.861	2	11/21/2022 10:49	WG1960984
Benzylbutyl phthalate	U		0.0269	0.861	2	11/21/2022 10:49	WG1960984
Bis(2-ethylhexyl)phthalate	U		0.109	0.861	2	11/21/2022 10:49	WG1960984
Di-n-butyl phthalate	U		0.0295	0.861	2	11/21/2022 10:49	WG1960984
Diethyl phthalate	U		0.0284	0.861	2	11/21/2022 10:49	WG1960984
Dimethyl phthalate	U		0.182	0.861	2	11/21/2022 10:49	WG1960984
Di-n-octyl phthalate	U		0.0581	0.861	2	11/21/2022 10:49	WG1960984
1,2,4-Trichlorobenzene	U		0.0269	0.861	2	11/21/2022 10:49	WG1960984
4-Chloro-3-methylphenol	U		0.0279	0.861	2	11/21/2022 10:49	WG1960984
2-Chlorophenol	U		0.0284	0.861	2	11/21/2022 10:49	WG1960984
2,4-Dichlorophenol	U		0.0251	0.861	2	11/21/2022 10:49	WG1960984
2,4-Dimethylphenol	U		0.0225	0.861	2	11/21/2022 10:49	WG1960984
4,6-Dinitro-2-methylphenol	U		0.195	0.861	2	11/21/2022 10:49	WG1960984



Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2,4-Dinitrophenol	U		0.202	0.861	2	11/21/2022 10:49	WG1960984
2-Nitrophenol	U		0.0308	0.861	2	11/21/2022 10:49	WG1960984
4-Nitrophenol	U		0.0269	0.861	2	11/21/2022 10:49	WG1960984
Pentachlorophenol	U		0.0231	0.861	2	11/21/2022 10:49	WG1960984
Phenol	U		0.0346	0.861	2	11/21/2022 10:49	WG1960984
2,4,6-Trichlorophenol	U		0.0277	0.861	2	11/21/2022 10:49	WG1960984
(S) 2-Fluorophenol	45.0			12.0-120		11/21/2022 10:49	WG1960984
(S) Phenol-d5	40.3			10.0-120		11/21/2022 10:49	WG1960984
(S) Nitrobenzene-d5	46.7			10.0-122		11/21/2022 10:49	WG1960984
(S) 2-Fluorobiphenyl	47.3			15.0-120		11/21/2022 10:49	WG1960984
(S) 2,4,6-Tribromophenol	52.7			10.0-127		11/21/2022 10:49	WG1960984
(S) p-Terphenyl-d14	53.6			10.0-120		11/21/2022 10:49	WG1960984

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.0109		0.00297	0.00775	1	11/18/2022 15:20	WG1961292
Acenaphthene	U		0.00270	0.00775	1	11/18/2022 15:20	WG1961292
Acenaphthylene	0.00664	J	0.00279	0.00775	1	11/18/2022 15:20	WG1961292
Benzo(a)anthracene	0.0478		0.00224	0.00775	1	11/18/2022 15:20	WG1961292
Benzo(a)pyrene	0.0539		0.00231	0.00775	1	11/18/2022 15:20	WG1961292
Benzo(b)fluoranthene	0.0760		0.00198	0.00775	1	11/18/2022 15:20	WG1961292
Benzo(g,h,i)perylene	0.0464		0.00229	0.00775	1	11/18/2022 15:20	WG1961292
Benzo(k)fluoranthene	0.0262		0.00278	0.00775	1	11/18/2022 15:20	WG1961292
Chrysene	0.0686		0.00300	0.00775	1	11/18/2022 15:20	WG1961292
Dibenz(a,h)anthracene	0.0101		0.00222	0.00775	1	11/18/2022 15:20	WG1961292
Fluoranthene	0.0845		0.00293	0.00775	1	11/18/2022 15:20	WG1961292
Fluorene	U		0.00265	0.00775	1	11/18/2022 15:20	WG1961292
Indeno(1,2,3-cd)pyrene	0.0461		0.00234	0.00775	1	11/18/2022 15:20	WG1961292
Naphthalene	U		0.00527	0.0258	1	11/18/2022 15:20	WG1961292
Phenanthrene	0.0455		0.00298	0.00775	1	11/18/2022 15:20	WG1961292
Pyrene	0.0791		0.00258	0.00775	1	11/18/2022 15:20	WG1961292
1-Methylnaphthalene	U		0.00580	0.0258	1	11/18/2022 15:20	WG1961292
2-Methylnaphthalene	U		0.00552	0.0258	1	11/18/2022 15:20	WG1961292
2-Chloronaphthalene	U		0.00602	0.0258	1	11/18/2022 15:20	WG1961292
(S) Nitrobenzene-d5	51.5			14.0-149		11/18/2022 15:20	WG1961292
(S) 2-Fluorobiphenyl	60.0			34.0-125		11/18/2022 15:20	WG1961292
(S) p-Terphenyl-d14	90.6			23.0-120		11/18/2022 15:20	WG1961292

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

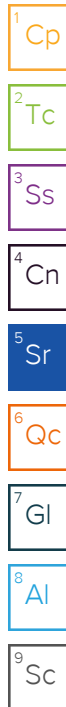
9 Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	75.7		1	11/15/2022 10:19	WG1959326

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0311	J	0.0274	0.0661	1	11/23/2022 18:44	WG1963742
Acrylonitrile	U		0.00267	0.0132	1	11/23/2022 18:44	WG1963742
Allyl chloride	U		0.00529	0.00661	1	11/23/2022 18:44	WG1963742
Benzene	0.00341		0.000496	0.00132	1	11/23/2022 18:44	WG1963742
Bromodichloromethane	U		0.000958	0.00132	1	11/23/2022 18:44	WG1963742
Bromoform	U		0.000560	0.00132	1	11/23/2022 18:44	WG1963742
Bromomethane	U		0.00155	0.00661	1	11/23/2022 18:44	WG1963742
Carbon disulfide	0.00153		0.000925	0.00132	1	11/23/2022 18:44	WG1963742
Carbon tetrachloride	U		0.000328	0.00132	1	11/23/2022 18:44	WG1963742
Chlorobenzene	U		0.000254	0.00132	1	11/23/2022 18:44	WG1963742
Chlorodibromomethane	U		0.000296	0.00132	1	11/23/2022 18:44	WG1963742
Chloroethane	U		0.00132	0.00661	1	11/23/2022 18:44	WG1963742
Chloroform	U		0.00136	0.00661	1	11/23/2022 18:44	WG1963742
Chloromethane	U		0.000859	0.00330	1	11/23/2022 18:44	WG1963742
1,2-Dibromoethane	U		0.000330	0.00132	1	11/23/2022 18:44	WG1963742
Dibromomethane	U		0.000463	0.00132	1	11/23/2022 18:44	WG1963742
1,2-Dibromo-3-Chloropropane	U		0.00251	0.00661	1	11/23/2022 18:44	WG1963742
1,2-Dichlorobenzene	U		0.000562	0.00132	1	11/23/2022 18:44	WG1963742
1,3-Dichlorobenzene	U		0.000793	0.00132	1	11/23/2022 18:44	WG1963742
1,4-Dichlorobenzene	U		0.00110	0.00132	1	11/23/2022 18:44	WG1963742
Dichlorodifluoromethane	U		0.000379	0.00661	1	11/23/2022 18:44	WG1963742
trans-1,4-Dichloro-2-butene	U		0.00126	0.00330	1	11/23/2022 18:44	WG1963742
1,1-Dichloroethane	U		0.000354	0.00132	1	11/23/2022 18:44	WG1963742
1,2-Dichloroethane	U		0.000595	0.00132	1	11/23/2022 18:44	WG1963742
1,1-Dichloroethene	U		0.000469	0.00132	1	11/23/2022 18:44	WG1963742
cis-1,2-Dichloroethene	U		0.000628	0.00132	1	11/23/2022 18:44	WG1963742
trans-1,2-Dichloroethene	U		0.000661	0.00132	1	11/23/2022 18:44	WG1963742
1,2-Dichloropropane	U		0.000217	0.00132	1	11/23/2022 18:44	WG1963742
cis-1,3-Dichloropropene	U		0.000562	0.00132	1	11/23/2022 18:44	WG1963742
trans-1,3-Dichloropropene	U		0.000892	0.00132	1	11/23/2022 18:44	WG1963742
Ethylbenzene	U		0.000396	0.00132	1	11/23/2022 18:44	WG1963742
2-Hexanone	U		0.00237	0.0132	1	11/23/2022 18:44	WG1963742
Iodomethane	U		0.00160	0.0132	1	11/23/2022 18:44	WG1963742
2-Butanone (MEK)	U		0.00618	0.0132	1	11/23/2022 18:44	WG1963742
Methylene Chloride	U		0.00132	0.00661	1	11/23/2022 18:44	WG1963742
4-Methyl-2-pentanone (MIBK)	U		0.00126	0.0132	1	11/23/2022 18:44	WG1963742
Pentachloroethane	U		0.00330	0.00661	1	11/23/2022 18:44	WG1963742
Styrene	U		0.000295	0.00132	1	11/23/2022 18:44	WG1963742
1,1,1,2-Tetrachloroethane	U		0.000391	0.00132	1	11/23/2022 18:44	WG1963742
1,1,2,2-Tetrachloroethane	U		0.000305	0.00132	1	11/23/2022 18:44	WG1963742
Tetrachloroethene	U		0.000429	0.00132	1	11/23/2022 18:44	WG1963742
Toluene	0.00211	J	0.00163	0.00661	1	11/23/2022 18:44	WG1963742
1,1,1-Trichloroethane	U		0.000489	0.00132	1	11/23/2022 18:44	WG1963742
1,1,2-Trichloroethane	U		0.000562	0.00132	1	11/23/2022 18:44	WG1963742
Trichloroethene	U		0.000264	0.00132	1	11/23/2022 18:44	WG1963742
Trichlorofluoromethane	U		0.000470	0.00661	1	11/23/2022 18:44	WG1963742
1,2,3-Trichloropropane	U		0.000322	0.00330	1	11/23/2022 18:44	WG1963742
Vinyl acetate	U	J4	0.00131	0.0132	1	11/23/2022 18:44	WG1963742
Vinyl chloride	U		0.000299	0.00132	1	11/23/2022 18:44	WG1963742
Xylenes, Total	U		0.000661	0.00396	1	11/23/2022 18:44	WG1963742



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.100	0.132	1	11/23/2022 18:44	WG1963742
(S) Toluene-d8	106			75.0-131		11/23/2022 18:44	WG1963742
(S) 4-Bromofluorobenzene	96.5			67.0-138		11/23/2022 18:44	WG1963742
(S) 1,2-Dichloroethane-d4	96.6			70.0-130		11/23/2022 18:44	WG1963742

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	79.9		1	11/15/2022 10:19	WG1959326

Mercury by Method 7471A

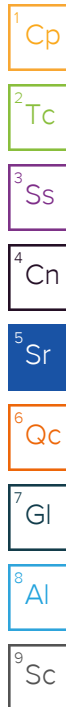
Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	U		0.0225	0.0501	1	11/18/2022 13:27	WG1959360

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Arsenic	3.58		0.648	2.50	1	11/23/2022 00:04	WG1960670
Barium	95.9		0.107	0.626	1	11/23/2022 00:04	WG1960670
Cadmium	0.368	J	0.0590	0.626	1	11/23/2022 00:04	WG1960670
Chromium	16.4		0.166	1.25	1	11/23/2022 00:04	WG1960670
Lead	20.8		0.260	0.626	1	11/23/2022 00:04	WG1960670
Selenium	U		0.956	2.50	1	11/23/2022 00:04	WG1960670
Silver	U		0.159	1.25	1	11/23/2022 00:04	WG1960670

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0259	0.0626	1	11/23/2022 19:05	WG1963742
Acrylonitrile	U		0.00253	0.0125	1	11/23/2022 19:05	WG1963742
Allyl chloride	U		0.00501	0.00626	1	11/23/2022 19:05	WG1963742
Benzene	0.000738	J	0.000469	0.00125	1	11/23/2022 19:05	WG1963742
Bromodichloromethane	U		0.000907	0.00125	1	11/23/2022 19:05	WG1963742
Bromoform	U		0.000531	0.00125	1	11/23/2022 19:05	WG1963742
Bromomethane	U		0.00146	0.00626	1	11/23/2022 19:05	WG1963742
Carbon disulfide	U		0.000876	0.00125	1	11/23/2022 19:05	WG1963742
Carbon tetrachloride	U		0.000310	0.00125	1	11/23/2022 19:05	WG1963742
Chlorobenzene	U		0.000240	0.00125	1	11/23/2022 19:05	WG1963742
Chlorodibromomethane	U		0.000280	0.00125	1	11/23/2022 19:05	WG1963742
Chloroethane	U		0.00125	0.00626	1	11/23/2022 19:05	WG1963742
Chloroform	U		0.00129	0.00626	1	11/23/2022 19:05	WG1963742
Chloromethane	U		0.000814	0.00313	1	11/23/2022 19:05	WG1963742
1,2-Dibromoethane	U		0.000313	0.00125	1	11/23/2022 19:05	WG1963742
Dibromomethane	U		0.000438	0.00125	1	11/23/2022 19:05	WG1963742
1,2-Dibromo-3-Chloropropane	U		0.00238	0.00626	1	11/23/2022 19:05	WG1963742
1,2-Dichlorobenzene	U		0.000532	0.00125	1	11/23/2022 19:05	WG1963742
1,3-Dichlorobenzene	U		0.000751	0.00125	1	11/23/2022 19:05	WG1963742
1,4-Dichlorobenzene	U		0.00104	0.00125	1	11/23/2022 19:05	WG1963742
Dichlorodifluoromethane	U		0.000359	0.00626	1	11/23/2022 19:05	WG1963742
trans-1,4-Dichloro-2-butene	U		0.00119	0.00313	1	11/23/2022 19:05	WG1963742
1,1-Dichloroethane	U		0.000335	0.00125	1	11/23/2022 19:05	WG1963742
1,2-Dichloroethane	U		0.000563	0.00125	1	11/23/2022 19:05	WG1963742
1,1-Dichloroethene	U		0.000444	0.00125	1	11/23/2022 19:05	WG1963742
cis-1,2-Dichloroethene	U		0.000595	0.00125	1	11/23/2022 19:05	WG1963742
trans-1,2-Dichloroethene	U		0.000626	0.00125	1	11/23/2022 19:05	WG1963742
1,2-Dichloropropane	U		0.000205	0.00125	1	11/23/2022 19:05	WG1963742
cis-1,3-Dichloropropene	U		0.000532	0.00125	1	11/23/2022 19:05	WG1963742
trans-1,3-Dichloropropene	U		0.000845	0.00125	1	11/23/2022 19:05	WG1963742
Ethylbenzene	U		0.000375	0.00125	1	11/23/2022 19:05	WG1963742
2-Hexanone	U		0.00224	0.0125	1	11/23/2022 19:05	WG1963742
Iodomethane	U		0.00151	0.0125	1	11/23/2022 19:05	WG1963742



TP-41 NATIVE

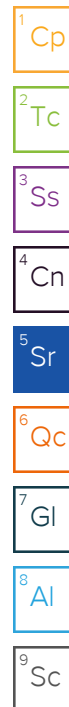
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SAMPLE RESULTS - 29

L1557295

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2-Butanone (MEK)	U		0.00586	0.0125	1	11/23/2022 19:05	WG1963742
Methylene Chloride	U		0.00125	0.00626	1	11/23/2022 19:05	WG1963742
4-Methyl-2-pentanone (MIBK)	U		0.00119	0.0125	1	11/23/2022 19:05	WG1963742
Pentachloroethane	U		0.00313	0.00626	1	11/23/2022 19:05	WG1963742
Styrene	U		0.000279	0.00125	1	11/23/2022 19:05	WG1963742
1,1,1,2-Tetrachloroethane	U		0.000370	0.00125	1	11/23/2022 19:05	WG1963742
1,1,2,2-Tetrachloroethane	U		0.000289	0.00125	1	11/23/2022 19:05	WG1963742
Tetrachloroethene	U		0.000407	0.00125	1	11/23/2022 19:05	WG1963742
Toluene	U		0.00154	0.00626	1	11/23/2022 19:05	WG1963742
1,1,1-Trichloroethane	U		0.000463	0.00125	1	11/23/2022 19:05	WG1963742
1,1,2-Trichloroethane	U		0.000532	0.00125	1	11/23/2022 19:05	WG1963742
Trichloroethene	U		0.000250	0.00125	1	11/23/2022 19:05	WG1963742
Trichlorofluoromethane	U		0.000446	0.00626	1	11/23/2022 19:05	WG1963742
1,2,3-Trichloropropane	U		0.000305	0.00313	1	11/23/2022 19:05	WG1963742
Vinyl acetate	U	J4	0.00124	0.0125	1	11/23/2022 19:05	WG1963742
Vinyl chloride	U		0.000283	0.00125	1	11/23/2022 19:05	WG1963742
Xylenes, Total	U		0.000626	0.00375	1	11/23/2022 19:05	WG1963742
1,4-Dioxane	U		0.0951	0.125	1	11/23/2022 19:05	WG1963742
(S) Toluene-d8	104			75.0-131		11/23/2022 19:05	WG1963742
(S) 4-Bromofluorobenzene	100			67.0-138		11/23/2022 19:05	WG1963742
(S) 1,2-Dichloroethane-d4	93.3			70.0-130		11/23/2022 19:05	WG1963742



Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzidine	U		0.0784	2.09	1	11/18/2022 13:53	WG1960984
Bis(2-chloroethoxy)methane	U		0.0125	0.417	1	11/18/2022 13:53	WG1960984
Bis(2-chloroethyl)ether	U		0.0138	0.417	1	11/18/2022 13:53	WG1960984
2,2-Oxybis(1-Chloropropane)	U		0.0180	0.417	1	11/18/2022 13:53	WG1960984
4-Bromophenyl-phenylether	U		0.0146	0.417	1	11/18/2022 13:53	WG1960984
4-Chlorophenyl-phenylether	U		0.0145	0.417	1	11/18/2022 13:53	WG1960984
1,2-Dichlorobenzene	U		0.0124	0.417	1	11/18/2022 13:53	WG1960984
1,3-Dichlorobenzene	U		0.0126	0.417	1	11/18/2022 13:53	WG1960984
1,4-Dichlorobenzene	U		0.0124	0.417	1	11/18/2022 13:53	WG1960984
3,3-Dichlorobenzidine	U		0.0154	0.417	1	11/18/2022 13:53	WG1960984
2,4-Dinitrotoluene	U		0.0120	0.417	1	11/18/2022 13:53	WG1960984
2,6-Dinitrotoluene	U		0.0136	0.417	1	11/18/2022 13:53	WG1960984
Hexachlorobenzene	U		0.0148	0.417	1	11/18/2022 13:53	WG1960984
Hexachloro-1,3-butadiene	U		0.0140	0.417	1	11/18/2022 13:53	WG1960984
Hexachlorocyclopentadiene	U		0.0219	0.417	1	11/18/2022 13:53	WG1960984
Hexachloroethane	U		0.0164	0.417	1	11/18/2022 13:53	WG1960984
Isophorone	U		0.0128	0.417	1	11/18/2022 13:53	WG1960984
Nitrobenzene	U		0.0145	0.417	1	11/18/2022 13:53	WG1960984
n-Nitrosodimethylamine	U		0.0618	0.417	1	11/18/2022 13:53	WG1960984
n-Nitrosodiphenylamine	U		0.0315	0.417	1	11/18/2022 13:53	WG1960984
n-Nitrosodi-n-propylamine	U		0.0139	0.417	1	11/18/2022 13:53	WG1960984
Benzylbutyl phthalate	U		0.0130	0.417	1	11/18/2022 13:53	WG1960984
Bis(2-ethylhexyl)phthalate	U		0.0528	0.417	1	11/18/2022 13:53	WG1960984
Di-n-butyl phthalate	U		0.0143	0.417	1	11/18/2022 13:53	WG1960984
Diethyl phthalate	U		0.0138	0.417	1	11/18/2022 13:53	WG1960984
Dimethyl phthalate	U		0.0884	0.417	1	11/18/2022 13:53	WG1960984
Di-n-octyl phthalate	U		0.0282	0.417	1	11/18/2022 13:53	WG1960984
1,2,4-Trichlorobenzene	U		0.0130	0.417	1	11/18/2022 13:53	WG1960984
4-Chloro-3-methylphenol	U		0.0135	0.417	1	11/18/2022 13:53	WG1960984
2-Chlorophenol	U		0.0138	0.417	1	11/18/2022 13:53	WG1960984
2,4-Dichlorophenol	U		0.0121	0.417	1	11/18/2022 13:53	WG1960984

ACCOUNT:

Terracon - Salt Lake City, UT

PROJECT:

61227342 Task 4.1

SDG:

L1557295

DATE/TIME:

12/05/22 10:40

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Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2,4-Dimethylphenol	U		0.0109	0.417	1	11/18/2022 13:53	WG1960984
4,6-Dinitro-2-methylphenol	U		0.0945	0.417	1	11/18/2022 13:53	WG1960984
2,4-Dinitrophenol	U		0.0975	0.417	1	11/18/2022 13:53	WG1960984
2-Nitrophenol	U		0.0149	0.417	1	11/18/2022 13:53	WG1960984
4-Nitrophenol	U		0.0130	0.417	1	11/18/2022 13:53	WG1960984
Pentachlorophenol	U		0.0112	0.417	1	11/18/2022 13:53	WG1960984
Phenol	U		0.0168	0.417	1	11/18/2022 13:53	WG1960984
2,4,6-Trichlorophenol	U		0.0134	0.417	1	11/18/2022 13:53	WG1960984
(S) 2-Fluorophenol	50.9			12.0-120		11/18/2022 13:53	WG1960984
(S) Phenol-d5	48.3			10.0-120		11/18/2022 13:53	WG1960984
(S) Nitrobenzene-d5	47.8			10.0-122		11/18/2022 13:53	WG1960984
(S) 2-Fluorobiphenyl	51.6			15.0-120		11/18/2022 13:53	WG1960984
(S) 2,4,6-Tribromophenol	50.0			10.0-127		11/18/2022 13:53	WG1960984
(S) p-Terphenyl-d14	52.8			10.0-120		11/18/2022 13:53	WG1960984

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.00288	0.00751	1	11/18/2022 04:49	WG1961298
Acenaphthene	U		0.00262	0.00751	1	11/18/2022 04:49	WG1961298
Acenaphthylene	U		0.00270	0.00751	1	11/18/2022 04:49	WG1961298
Benzo(a)anthracene	U		0.00217	0.00751	1	11/18/2022 04:49	WG1961298
Benzo(a)pyrene	U		0.00224	0.00751	1	11/18/2022 04:49	WG1961298
Benzo(b)fluoranthene	U		0.00192	0.00751	1	11/18/2022 04:49	WG1961298
Benzo(g,h,i)perylene	U		0.00222	0.00751	1	11/18/2022 04:49	WG1961298
Benzo(k)fluoranthene	U		0.00269	0.00751	1	11/18/2022 04:49	WG1961298
Chrysene	U		0.00290	0.00751	1	11/18/2022 04:49	WG1961298
Dibenz(a,h)anthracene	U		0.00215	0.00751	1	11/18/2022 04:49	WG1961298
Fluoranthene	U		0.00284	0.00751	1	11/18/2022 04:49	WG1961298
Fluorene	U		0.00257	0.00751	1	11/18/2022 04:49	WG1961298
Indeno(1,2,3-cd)pyrene	U		0.00227	0.00751	1	11/18/2022 04:49	WG1961298
Naphthalene	U		0.00511	0.0250	1	11/18/2022 04:49	WG1961298
Phenanthrene	U		0.00289	0.00751	1	11/18/2022 04:49	WG1961298
Pyrene	U		0.00250	0.00751	1	11/18/2022 04:49	WG1961298
1-Methylnaphthalene	U		0.00562	0.0250	1	11/18/2022 04:49	WG1961298
2-Methylnaphthalene	U		0.00534	0.0250	1	11/18/2022 04:49	WG1961298
2-Chloronaphthalene	U		0.00583	0.0250	1	11/18/2022 04:49	WG1961298
(S) Nitrobenzene-d5	68.5			14.0-149		11/18/2022 04:49	WG1961298
(S) 2-Fluorobiphenyl	70.4			34.0-125		11/18/2022 04:49	WG1961298
(S) p-Terphenyl-d14	82.1			23.0-120		11/18/2022 04:49	WG1961298

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	79.1		1	11/15/2022 10:19	WG1959326

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.300		0.0227	0.0505	1	11/18/2022 13:29	WG1959360

Metals (ICP) by Method 6010B

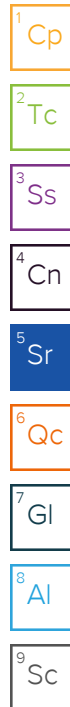
Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Arsenic	15.1		0.655	2.53	1	11/23/2022 00:07	WG1960670
Barium	212		0.108	0.632	1	11/23/2022 00:07	WG1960670
Cadmium	2.94		0.0595	0.632	1	11/23/2022 00:07	WG1960670
Chromium	18.6		0.168	1.26	1	11/23/2022 00:07	WG1960670
Lead	341		0.263	0.632	1	11/23/2022 00:07	WG1960670
Selenium	1.16	J	0.965	2.53	1	11/23/2022 00:07	WG1960670
Silver	0.323	J	0.160	1.26	1	11/23/2022 00:07	WG1960670

Polychlorinated Biphenyls (GC) by Method 8082

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
PCB 1016	U		0.0149	0.0430	1	11/18/2022 04:48	WG1961287
PCB 1221	U		0.0149	0.0430	1	11/18/2022 04:48	WG1961287
PCB 1232	U		0.0149	0.0430	1	11/18/2022 04:48	WG1961287
PCB 1242	U		0.0149	0.0430	1	11/18/2022 04:48	WG1961287
PCB 1248	U		0.00933	0.0215	1	11/18/2022 04:48	WG1961287
PCB 1254	U		0.00933	0.0215	1	11/18/2022 04:48	WG1961287
PCB 1260	0.0269		0.00933	0.0215	1	11/18/2022 04:48	WG1961287
(S) Decachlorobiphenyl	61.7			10.0-135		11/18/2022 04:48	WG1961287
(S) Tetrachloro-m-xylene	60.5			10.0-139		11/18/2022 04:48	WG1961287

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzidine	U		0.791	21.1	10	11/18/2022 18:41	WG1960984
Bis(2-chlorethoxy)methane	U		0.126	4.21	10	11/18/2022 18:41	WG1960984
Bis(2-chloroethyl)ether	U		0.139	4.21	10	11/18/2022 18:41	WG1960984
2,2-Oxybis(1-Chloropropane)	U		0.182	4.21	10	11/18/2022 18:41	WG1960984
4-Bromophenyl-phenylether	U		0.148	4.21	10	11/18/2022 18:41	WG1960984
4-Chlorophenyl-phenylether	U		0.147	4.21	10	11/18/2022 18:41	WG1960984
1,2-Dichlorobenzene	U		0.125	4.21	10	11/18/2022 18:41	WG1960984
1,3-Dichlorobenzene	U		0.128	4.21	10	11/18/2022 18:41	WG1960984
1,4-Dichlorobenzene	U		0.125	4.21	10	11/18/2022 18:41	WG1960984
3,3-Dichlorobenzidine	U		0.155	4.21	10	11/18/2022 18:41	WG1960984
2,4-Dinitrotoluene	U		0.121	4.21	10	11/18/2022 18:41	WG1960984
2,6-Dinitrotoluene	U		0.138	4.21	10	11/18/2022 18:41	WG1960984
Hexachlorobenzene	U		0.149	4.21	10	11/18/2022 18:41	WG1960984
Hexachloro-1,3-butadiene	U		0.142	4.21	10	11/18/2022 18:41	WG1960984
Hexachlorocyclopentadiene	U		0.221	4.21	10	11/18/2022 18:41	WG1960984
Hexachloroethane	U		0.166	4.21	10	11/18/2022 18:41	WG1960984
Isophorone	U		0.129	4.21	10	11/18/2022 18:41	WG1960984
Nitrobenzene	U		0.147	4.21	10	11/18/2022 18:41	WG1960984
n-Nitrosodimethylamine	U		0.624	4.21	10	11/18/2022 18:41	WG1960984
n-Nitrosodiphenylamine	U		0.318	4.21	10	11/18/2022 18:41	WG1960984



Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
n-Nitrosodi-n-propylamine	U		0.140	4.21	10	11/18/2022 18:41	WG1960984
Benzylbutyl phthalate	U		0.131	4.21	10	11/18/2022 18:41	WG1960984
Bis(2-ethylhexyl)phthalate	U		0.533	4.21	10	11/18/2022 18:41	WG1960984
Di-n-butyl phthalate	U		0.144	4.21	10	11/18/2022 18:41	WG1960984
Diethyl phthalate	U		0.139	4.21	10	11/18/2022 18:41	WG1960984
Dimethyl phthalate	U		0.892	4.21	10	11/18/2022 18:41	WG1960984
Di-n-octyl phthalate	U		0.284	4.21	10	11/18/2022 18:41	WG1960984
1,2,4-Trichlorobenzene	U		0.131	4.21	10	11/18/2022 18:41	WG1960984
4-Chloro-3-methylphenol	U		0.136	4.21	10	11/18/2022 18:41	WG1960984
2-Chlorophenol	U		0.139	4.21	10	11/18/2022 18:41	WG1960984
2,4-Dichlorophenol	U		0.123	4.21	10	11/18/2022 18:41	WG1960984
2,4-Dimethylphenol	U		0.110	4.21	10	11/18/2022 18:41	WG1960984
4,6-Dinitro-2-methylphenol	U		0.954	4.21	10	11/18/2022 18:41	WG1960984
2,4-Dinitrophenol	U		0.984	4.21	10	11/18/2022 18:41	WG1960984
2-Nitrophenol	U		0.150	4.21	10	11/18/2022 18:41	WG1960984
4-Nitrophenol	U		0.131	4.21	10	11/18/2022 18:41	WG1960984
Pentachlorophenol	U		0.113	4.21	10	11/18/2022 18:41	WG1960984
Phenol	U		0.169	4.21	10	11/18/2022 18:41	WG1960984
2,4,6-Trichlorophenol	U		0.135	4.21	10	11/18/2022 18:41	WG1960984
(S) 2-Fluorophenol	51.8			12.0-120		11/18/2022 18:41	WG1960984
(S) Phenol-d5	50.2			10.0-120		11/18/2022 18:41	WG1960984
(S) Nitrobenzene-d5	53.3			10.0-122		11/18/2022 18:41	WG1960984
(S) 2-Fluorobiphenyl	53.3			15.0-120		11/18/2022 18:41	WG1960984
(S) 2,4,6-Tribromophenol	47.4			10.0-127		11/18/2022 18:41	WG1960984
(S) p-Terphenyl-d14	50.8			10.0-120		11/18/2022 18:41	WG1960984

Sample Narrative:

L1557295-30 WG1960984: Cannot run at lower dilution due to viscosity of extract

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.0136		0.00291	0.00758	1	11/18/2022 11:04	WG1961298
Acenaphthene	U		0.00264	0.00758	1	11/18/2022 11:04	WG1961298
Acenaphthylene	0.00791		0.00273	0.00758	1	11/18/2022 11:04	WG1961298
Benzo(a)anthracene	0.0766		0.00219	0.00758	1	11/18/2022 11:04	WG1961298
Benzo(a)pyrene	0.0776		0.00226	0.00758	1	11/18/2022 11:04	WG1961298
Benzo(b)fluoranthene	0.0732		0.00193	0.00758	1	11/18/2022 11:04	WG1961298
Benzo(g,h,i)perylene	0.0556		0.00224	0.00758	1	11/18/2022 11:04	WG1961298
Benzo(k)fluoranthene	0.0253		0.00272	0.00758	1	11/18/2022 11:04	WG1961298
Chrysene	0.0772		0.00293	0.00758	1	11/18/2022 11:04	WG1961298
Dibenz(a,h)anthracene	0.0118		0.00217	0.00758	1	11/18/2022 11:04	WG1961298
Fluoranthene	0.102		0.00287	0.00758	1	11/18/2022 11:04	WG1961298
Fluorene	U		0.00259	0.00758	1	11/18/2022 11:04	WG1961298
Indeno(1,2,3-cd)pyrene	0.0507		0.00229	0.00758	1	11/18/2022 11:04	WG1961298
Naphthalene	0.0100	J	0.00516	0.0253	1	11/18/2022 11:04	WG1961298
Phenanthrene	0.0487		0.00292	0.00758	1	11/18/2022 11:04	WG1961298
Pyrene	0.105		0.00253	0.00758	1	11/18/2022 11:04	WG1961298
1-Methylnaphthalene	0.0110	J	0.00567	0.0253	1	11/18/2022 11:04	WG1961298
2-Methylnaphthalene	0.0136	J	0.00540	0.0253	1	11/18/2022 11:04	WG1961298
2-Chloronaphthalene	U		0.00589	0.0253	1	11/18/2022 11:04	WG1961298
(S) Nitrobenzene-d5	78.9			14.0-149		11/18/2022 11:04	WG1961298
(S) 2-Fluorobiphenyl	68.2			34.0-125		11/18/2022 11:04	WG1961298
(S) p-Terphenyl-d14	65.9			23.0-120		11/18/2022 11:04	WG1961298

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

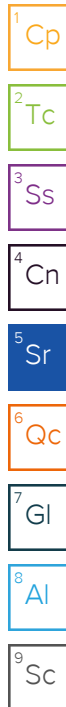
9Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	78.2		1	11/15/2022 10:19	WG1959326

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0681		0.0265	0.0639	1	11/23/2022 19:27	WG1963742
Acrylonitrile	U		0.00258	0.0128	1	11/23/2022 19:27	WG1963742
Allyl chloride	U		0.00511	0.00639	1	11/23/2022 19:27	WG1963742
Benzene	0.00529		0.000479	0.00128	1	11/23/2022 19:27	WG1963742
Bromodichloromethane	U		0.000927	0.00128	1	11/23/2022 19:27	WG1963742
Bromoform	U		0.000542	0.00128	1	11/23/2022 19:27	WG1963742
Bromomethane	U		0.00150	0.00639	1	11/23/2022 19:27	WG1963742
Carbon disulfide	U		0.000895	0.00128	1	11/23/2022 19:27	WG1963742
Carbon tetrachloride	U		0.000317	0.00128	1	11/23/2022 19:27	WG1963742
Chlorobenzene	U		0.000245	0.00128	1	11/23/2022 19:27	WG1963742
Chlorodibromomethane	U		0.000286	0.00128	1	11/23/2022 19:27	WG1963742
Chloroethane	U		0.00128	0.00639	1	11/23/2022 19:27	WG1963742
Chloroform	U		0.00132	0.00639	1	11/23/2022 19:27	WG1963742
Chloromethane	U		0.000831	0.00320	1	11/23/2022 19:27	WG1963742
1,2-Dibromoethane	U		0.000320	0.00128	1	11/23/2022 19:27	WG1963742
Dibromomethane	U		0.000447	0.00128	1	11/23/2022 19:27	WG1963742
1,2-Dibromo-3-Chloropropane	U		0.00243	0.00639	1	11/23/2022 19:27	WG1963742
1,2-Dichlorobenzene	U		0.000543	0.00128	1	11/23/2022 19:27	WG1963742
1,3-Dichlorobenzene	U		0.000767	0.00128	1	11/23/2022 19:27	WG1963742
1,4-Dichlorobenzene	U		0.00106	0.00128	1	11/23/2022 19:27	WG1963742
Dichlorodifluoromethane	U		0.000367	0.00639	1	11/23/2022 19:27	WG1963742
trans-1,4-Dichloro-2-butene	U		0.00121	0.00320	1	11/23/2022 19:27	WG1963742
1,1-Dichloroethane	U		0.000343	0.00128	1	11/23/2022 19:27	WG1963742
1,2-Dichloroethane	U		0.000575	0.00128	1	11/23/2022 19:27	WG1963742
1,1-Dichloroethene	U		0.000454	0.00128	1	11/23/2022 19:27	WG1963742
cis-1,2-Dichloroethene	U		0.000607	0.00128	1	11/23/2022 19:27	WG1963742
trans-1,2-Dichloroethene	U		0.000639	0.00128	1	11/23/2022 19:27	WG1963742
1,2-Dichloropropane	U		0.000210	0.00128	1	11/23/2022 19:27	WG1963742
cis-1,3-Dichloropropene	U		0.000543	0.00128	1	11/23/2022 19:27	WG1963742
trans-1,3-Dichloropropene	U		0.000863	0.00128	1	11/23/2022 19:27	WG1963742
Ethylbenzene	0.000918	J	0.000384	0.00128	1	11/23/2022 19:27	WG1963742
2-Hexanone	U		0.00229	0.0128	1	11/23/2022 19:27	WG1963742
Iodomethane	U		0.00155	0.0128	1	11/23/2022 19:27	WG1963742
2-Butanone (MEK)	0.00927	J	0.00598	0.0128	1	11/23/2022 19:27	WG1963742
Methylene Chloride	U		0.00128	0.00639	1	11/23/2022 19:27	WG1963742
4-Methyl-2-pentanone (MIBK)	U		0.00121	0.0128	1	11/23/2022 19:27	WG1963742
Pentachloroethane	U		0.00320	0.00639	1	11/23/2022 19:27	WG1963742
Styrene	U		0.000285	0.00128	1	11/23/2022 19:27	WG1963742
1,1,1,2-Tetrachloroethane	U		0.000378	0.00128	1	11/23/2022 19:27	WG1963742
1,1,2,2-Tetrachloroethane	U		0.000295	0.00128	1	11/23/2022 19:27	WG1963742
Tetrachloroethene	U		0.000415	0.00128	1	11/23/2022 19:27	WG1963742
Toluene	0.00453	J	0.00157	0.00639	1	11/23/2022 19:27	WG1963742
1,1,1-Trichloroethane	U		0.000473	0.00128	1	11/23/2022 19:27	WG1963742
1,1,2-Trichloroethane	U		0.000543	0.00128	1	11/23/2022 19:27	WG1963742
Trichloroethene	U		0.000256	0.00128	1	11/23/2022 19:27	WG1963742
Trichlorofluoromethane	U		0.000455	0.00639	1	11/23/2022 19:27	WG1963742
1,2,3-Trichloropropane	U		0.000312	0.00320	1	11/23/2022 19:27	WG1963742
Vinyl acetate	U	J4	0.00127	0.0128	1	11/23/2022 19:27	WG1963742
Vinyl chloride	U		0.000289	0.00128	1	11/23/2022 19:27	WG1963742
Xylenes, Total	0.00252	J	0.000639	0.00384	1	11/23/2022 19:27	WG1963742



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.0972	0.128	1	11/23/2022 19:27	WG1963742
(S) Toluene-d8	110			75.0-131		11/23/2022 19:27	WG1963742
(S) 4-Bromofluorobenzene	89.9			67.0-138		11/23/2022 19:27	WG1963742
(S) 1,2-Dichloroethane-d4	94.2			70.0-130		11/23/2022 19:27	WG1963742

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.4		1	11/15/2022 13:19	WG1959327

Mercury by Method 7471A

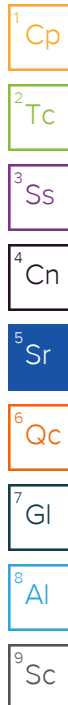
Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.0226	<u>J</u>	0.0218	0.0485	1	11/18/2022 13:32	WG1959360

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Arsenic	4.65		0.629	2.43	1	11/23/2022 00:10	WG1960670
Barium	151		0.103	0.607	1	11/23/2022 00:10	WG1960670
Cadmium	0.457	<u>J</u>	0.0572	0.607	1	11/23/2022 00:10	WG1960670
Chromium	14.4		0.161	1.21	1	11/23/2022 00:10	WG1960670
Lead	25.9		0.252	0.607	1	11/23/2022 00:10	WG1960670
Selenium	U		0.927	2.43	1	11/23/2022 00:10	WG1960670
Silver	U		0.154	1.21	1	11/23/2022 00:10	WG1960670

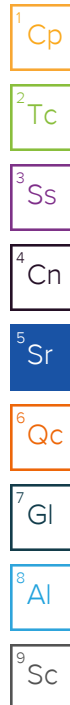
Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0251	0.0607	1	11/23/2022 19:48	WG1963742
Acrylonitrile	U		0.00245	0.0121	1	11/23/2022 19:48	WG1963742
Allyl chloride	U		0.00485	0.00607	1	11/23/2022 19:48	WG1963742
Benzene	0.00352		0.000455	0.00121	1	11/23/2022 19:48	WG1963742
Bromodichloromethane	U		0.000880	0.00121	1	11/23/2022 19:48	WG1963742
Bromoform	U		0.000515	0.00121	1	11/23/2022 19:48	WG1963742
Bromomethane	U		0.00142	0.00607	1	11/23/2022 19:48	WG1963742
Carbon disulfide	U		0.000849	0.00121	1	11/23/2022 19:48	WG1963742
Carbon tetrachloride	U		0.000301	0.00121	1	11/23/2022 19:48	WG1963742
Chlorobenzene	U		0.000233	0.00121	1	11/23/2022 19:48	WG1963742
Chlorodibromomethane	U		0.000272	0.00121	1	11/23/2022 19:48	WG1963742
Chloroethane	U		0.00121	0.00607	1	11/23/2022 19:48	WG1963742
Chloroform	U		0.00125	0.00607	1	11/23/2022 19:48	WG1963742
Chloromethane	U		0.000789	0.00303	1	11/23/2022 19:48	WG1963742
1,2-Dibromoethane	U		0.000303	0.00121	1	11/23/2022 19:48	WG1963742
Dibromomethane	U		0.000425	0.00121	1	11/23/2022 19:48	WG1963742
1,2-Dibromo-3-Chloropropane	U		0.00231	0.00607	1	11/23/2022 19:48	WG1963742
1,2-Dichlorobenzene	U		0.000516	0.00121	1	11/23/2022 19:48	WG1963742
1,3-Dichlorobenzene	U		0.000728	0.00121	1	11/23/2022 19:48	WG1963742
1,4-Dichlorobenzene	U		0.00101	0.00121	1	11/23/2022 19:48	WG1963742
Dichlorodifluoromethane	U		0.000348	0.00607	1	11/23/2022 19:48	WG1963742
trans-1,4-Dichloro-2-butene	U		0.00115	0.00303	1	11/23/2022 19:48	WG1963742
1,1-Dichloroethane	U		0.000325	0.00121	1	11/23/2022 19:48	WG1963742
1,2-Dichloroethane	U		0.000546	0.00121	1	11/23/2022 19:48	WG1963742
1,1-Dichloroethene	U		0.000431	0.00121	1	11/23/2022 19:48	WG1963742
cis-1,2-Dichloroethene	U		0.000576	0.00121	1	11/23/2022 19:48	WG1963742
trans-1,2-Dichloroethene	U		0.000607	0.00121	1	11/23/2022 19:48	WG1963742
1,2-Dichloropropane	U		0.000199	0.00121	1	11/23/2022 19:48	WG1963742
cis-1,3-Dichloropropene	U		0.000516	0.00121	1	11/23/2022 19:48	WG1963742
trans-1,3-Dichloropropene	U		0.000819	0.00121	1	11/23/2022 19:48	WG1963742
Ethylbenzene	0.000431	<u>J</u>	0.000364	0.00121	1	11/23/2022 19:48	WG1963742
2-Hexanone	U		0.00217	0.0121	1	11/23/2022 19:48	WG1963742
Iodomethane	U		0.00147	0.0121	1	11/23/2022 19:48	WG1963742



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2-Butanone (MEK)	U		0.00568	0.0121	1	11/23/2022 19:48	WG1963742
Methylene Chloride	U		0.00121	0.00607	1	11/23/2022 19:48	WG1963742
4-Methyl-2-pentanone (MIBK)	U		0.00115	0.0121	1	11/23/2022 19:48	WG1963742
Pentachloroethane	U		0.00303	0.00607	1	11/23/2022 19:48	WG1963742
Styrene	U		0.000271	0.00121	1	11/23/2022 19:48	WG1963742
1,1,1,2-Tetrachloroethane	U		0.000359	0.00121	1	11/23/2022 19:48	WG1963742
1,1,2,2-Tetrachloroethane	U		0.000280	0.00121	1	11/23/2022 19:48	WG1963742
Tetrachloroethene	U		0.000394	0.00121	1	11/23/2022 19:48	WG1963742
Toluene	0.00249	J	0.00149	0.00607	1	11/23/2022 19:48	WG1963742
1,1,1-Trichloroethane	U		0.000449	0.00121	1	11/23/2022 19:48	WG1963742
1,1,2-Trichloroethane	U		0.000516	0.00121	1	11/23/2022 19:48	WG1963742
Trichloroethene	U		0.000243	0.00121	1	11/23/2022 19:48	WG1963742
Trichlorofluoromethane	U		0.000432	0.00607	1	11/23/2022 19:48	WG1963742
1,2,3-Trichloropropane	U		0.000296	0.00303	1	11/23/2022 19:48	WG1963742
Vinyl acetate	U	J4	0.00120	0.0121	1	11/23/2022 19:48	WG1963742
Vinyl chloride	U		0.000274	0.00121	1	11/23/2022 19:48	WG1963742
Xylenes, Total	0.000745	J	0.000607	0.00364	1	11/23/2022 19:48	WG1963742
1,4-Dioxane	U		0.0922	0.121	1	11/23/2022 19:48	WG1963742
(S) Toluene-d8	103			75.0-131		11/23/2022 19:48	WG1963742
(S) 4-Bromofluorobenzene	101			67.0-138		11/23/2022 19:48	WG1963742
(S) 1,2-Dichloroethane-d4	96.4			70.0-130		11/23/2022 19:48	WG1963742



Polychlorinated Biphenyls (GC) by Method 8082

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
PCB 1016	U		0.0143	0.0413	1	11/18/2022 04:58	WG1961287
PCB 1221	U		0.0143	0.0413	1	11/18/2022 04:58	WG1961287
PCB 1232	U		0.0143	0.0413	1	11/18/2022 04:58	WG1961287
PCB 1242	U		0.0143	0.0413	1	11/18/2022 04:58	WG1961287
PCB 1248	U		0.00896	0.0206	1	11/18/2022 04:58	WG1961287
PCB 1254	U		0.00896	0.0206	1	11/18/2022 04:58	WG1961287
PCB 1260	U		0.00896	0.0206	1	11/18/2022 04:58	WG1961287
(S) Decachlorobiphenyl	82.9			10.0-135		11/18/2022 04:58	WG1961287
(S) Tetrachloro-m-xylene	66.4			10.0-139		11/18/2022 04:58	WG1961287

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

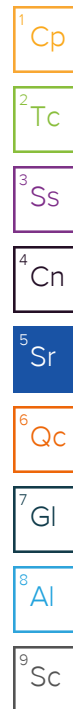
Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzidine	U		0.0760	2.03	1	11/18/2022 15:15	WG1960984
Bis(2-chlorethoxy)methane	U		0.0121	0.404	1	11/18/2022 15:15	WG1960984
Bis(2-chloroethyl)ether	U		0.0133	0.404	1	11/18/2022 15:15	WG1960984
2,2-Oxybis(1-Chloropropane)	U		0.0175	0.404	1	11/18/2022 15:15	WG1960984
4-Bromophenyl-phenylether	U		0.0142	0.404	1	11/18/2022 15:15	WG1960984
4-Chlorophenyl-phenylether	U		0.0141	0.404	1	11/18/2022 15:15	WG1960984
1,2-Dichlorobenzene	U		0.0120	0.404	1	11/18/2022 15:15	WG1960984
1,3-Dichlorobenzene	U		0.0123	0.404	1	11/18/2022 15:15	WG1960984
1,4-Dichlorobenzene	U		0.0120	0.404	1	11/18/2022 15:15	WG1960984
3,3-Dichlorobenzidine	U		0.0149	0.404	1	11/18/2022 15:15	WG1960984
2,4-Dinitrotoluene	U		0.0116	0.404	1	11/18/2022 15:15	WG1960984
2,6-Dinitrotoluene	U		0.0132	0.404	1	11/18/2022 15:15	WG1960984
Hexachlorobenzene	U		0.0143	0.404	1	11/18/2022 15:15	WG1960984
Hexachloro-1,3-butadiene	U		0.0136	0.404	1	11/18/2022 15:15	WG1960984
Hexachlorocyclopentadiene	U		0.0212	0.404	1	11/18/2022 15:15	WG1960984
Hexachloroethane	U		0.0159	0.404	1	11/18/2022 15:15	WG1960984
Isophorone	U		0.0124	0.404	1	11/18/2022 15:15	WG1960984

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Nitrobenzene	U		0.0141	0.404	1	11/18/2022 15:15	WG1960984
n-Nitrosodimethylamine	U		0.0599	0.404	1	11/18/2022 15:15	WG1960984
n-Nitrosodiphenylamine	U		0.0306	0.404	1	11/18/2022 15:15	WG1960984
n-Nitrosodi-n-propylamine	U		0.0135	0.404	1	11/18/2022 15:15	WG1960984
Benzylbutyl phthalate	U		0.0126	0.404	1	11/18/2022 15:15	WG1960984
Bis(2-ethylhexyl)phthalate	U		0.0512	0.404	1	11/18/2022 15:15	WG1960984
Di-n-butyl phthalate	U		0.0138	0.404	1	11/18/2022 15:15	WG1960984
Diethyl phthalate	U		0.0133	0.404	1	11/18/2022 15:15	WG1960984
Dimethyl phthalate	U		0.0857	0.404	1	11/18/2022 15:15	WG1960984
Di-n-octyl phthalate	U		0.0273	0.404	1	11/18/2022 15:15	WG1960984
1,2,4-Trichlorobenzene	U		0.0126	0.404	1	11/18/2022 15:15	WG1960984
4-Chloro-3-methylphenol	U		0.0131	0.404	1	11/18/2022 15:15	WG1960984
2-Chlorophenol	U		0.0133	0.404	1	11/18/2022 15:15	WG1960984
2,4-Dichlorophenol	U		0.0118	0.404	1	11/18/2022 15:15	WG1960984
2,4-Dimethylphenol	U		0.0106	0.404	1	11/18/2022 15:15	WG1960984
4,6-Dinitro-2-methylphenol	U		0.0916	0.404	1	11/18/2022 15:15	WG1960984
2,4-Dinitrophenol	U		0.0945	0.404	1	11/18/2022 15:15	WG1960984
2-Nitrophenol	U		0.0144	0.404	1	11/18/2022 15:15	WG1960984
4-Nitrophenol	U		0.0126	0.404	1	11/18/2022 15:15	WG1960984
Pentachlorophenol	U		0.0109	0.404	1	11/18/2022 15:15	WG1960984
Phenol	U		0.0163	0.404	1	11/18/2022 15:15	WG1960984
2,4,6-Trichlorophenol	U		0.0130	0.404	1	11/18/2022 15:15	WG1960984
(S) 2-Fluorophenol	50.2			12.0-120		11/18/2022 15:15	WG1960984
(S) Phenol-d5	47.6			10.0-120		11/18/2022 15:15	WG1960984
(S) Nitrobenzene-d5	48.8			10.0-122		11/18/2022 15:15	WG1960984
(S) 2-Fluorobiphenyl	51.8			15.0-120		11/18/2022 15:15	WG1960984
(S) 2,4,6-Tribromophenol	53.2			10.0-127		11/18/2022 15:15	WG1960984
(S) p-Terphenyl-d14	53.0			10.0-120		11/18/2022 15:15	WG1960984

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.00279	0.00728	1	11/18/2022 05:09	WG1961298
Acenaphthene	U		0.00254	0.00728	1	11/18/2022 05:09	WG1961298
Acenaphthylene	U		0.00262	0.00728	1	11/18/2022 05:09	WG1961298
Benzo(a)anthracene	U		0.00210	0.00728	1	11/18/2022 05:09	WG1961298
Benzo(a)pyrene	U		0.00217	0.00728	1	11/18/2022 05:09	WG1961298
Benzo(b)fluoranthene	U		0.00186	0.00728	1	11/18/2022 05:09	WG1961298
Benzo(g,h,i)perylene	U		0.00215	0.00728	1	11/18/2022 05:09	WG1961298
Benzo(k)fluoranthene	U		0.00261	0.00728	1	11/18/2022 05:09	WG1961298
Chrysene	U		0.00282	0.00728	1	11/18/2022 05:09	WG1961298
Dibenz(a,h)anthracene	U		0.00209	0.00728	1	11/18/2022 05:09	WG1961298
Fluoranthene	U		0.00275	0.00728	1	11/18/2022 05:09	WG1961298
Fluorene	U		0.00249	0.00728	1	11/18/2022 05:09	WG1961298
Indeno(1,2,3-cd)pyrene	U		0.00220	0.00728	1	11/18/2022 05:09	WG1961298
Naphthalene	0.0388		0.00495	0.0243	1	11/18/2022 05:09	WG1961298
Phenanthrene	0.00320	L	0.00280	0.00728	1	11/18/2022 05:09	WG1961298
Pyrene	0.00243	L	0.00243	0.00728	1	11/18/2022 05:09	WG1961298
1-Methylnaphthalene	0.0240	L	0.00545	0.0243	1	11/18/2022 05:09	WG1961298
2-Methylnaphthalene	0.0792		0.00518	0.0243	1	11/18/2022 05:09	WG1961298
2-Chloronaphthalene	U		0.00566	0.0243	1	11/18/2022 05:09	WG1961298
(S) Nitrobenzene-d5	68.3			14.0-149		11/18/2022 05:09	WG1961298
(S) 2-Fluorobiphenyl	69.7			34.0-125		11/18/2022 05:09	WG1961298
(S) p-Terphenyl-d14	78.6			23.0-120		11/18/2022 05:09	WG1961298



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.7		1	11/15/2022 13:19	WG1959327

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.0862		0.0192	0.0427	1	11/18/2022 13:34	WG1959360

Metals (ICP) by Method 6010B

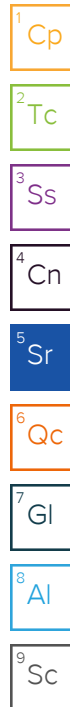
Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Arsenic	15.9		0.553	2.13	1	11/23/2022 00:18	WG1960670
Barium	184		0.0909	0.534	1	11/23/2022 00:18	WG1960670
Cadmium	13.6		0.0503	0.534	1	11/23/2022 00:18	WG1960670
Chromium	18.2		0.142	1.07	1	11/23/2022 00:18	WG1960670
Lead	137		0.222	0.534	1	11/23/2022 00:18	WG1960670
Selenium	1.33	J	0.816	2.13	1	11/23/2022 00:18	WG1960670
Silver	0.178	J	0.136	1.07	1	11/23/2022 00:18	WG1960670

Polychlorinated Biphenyls (GC) by Method 8082

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
PCB 1016	U		0.0126	0.0363	1	11/18/2022 06:35	WG1961287
PCB 1221	U		0.0126	0.0363	1	11/18/2022 06:35	WG1961287
PCB 1232	U		0.0126	0.0363	1	11/18/2022 06:35	WG1961287
PCB 1242	U		0.0126	0.0363	1	11/18/2022 06:35	WG1961287
PCB 1248	U		0.00788	0.0181	1	11/18/2022 06:35	WG1961287
PCB 1254	U		0.00788	0.0181	1	11/18/2022 06:35	WG1961287
PCB 1260	0.0209		0.00788	0.0181	1	11/18/2022 06:35	WG1961287
(S) Decachlorobiphenyl	60.9			10.0-135		11/18/2022 06:35	WG1961287
(S) Tetrachloro-m-xylene	57.6			10.0-139		11/18/2022 06:35	WG1961287

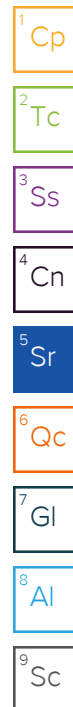
Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzidine	U		0.668	17.8	10	11/21/2022 11:32	WG1960984
Bis(2-chlorethoxy)methane	U		0.107	3.55	10	11/21/2022 11:32	WG1960984
Bis(2-chloroethyl)ether	U		0.117	3.55	10	11/21/2022 11:32	WG1960984
2,2-Oxybis(1-Chloropropane)	U		0.154	3.55	10	11/21/2022 11:32	WG1960984
4-Bromophenyl-phenylether	U		0.125	3.55	10	11/21/2022 11:32	WG1960984
4-Chlorophenyl-phenylether	U		0.124	3.55	10	11/21/2022 11:32	WG1960984
1,2-Dichlorobenzene	U		0.105	3.55	10	11/21/2022 11:32	WG1960984
1,3-Dichlorobenzene	U		0.108	3.55	10	11/21/2022 11:32	WG1960984
1,4-Dichlorobenzene	U		0.106	3.55	10	11/21/2022 11:32	WG1960984
3,3-Dichlorobenzidine	U		0.131	3.55	10	11/21/2022 11:32	WG1960984
2,4-Dinitrotoluene	U		0.102	3.55	10	11/21/2022 11:32	WG1960984
2,6-Dinitrotoluene	U		0.116	3.55	10	11/21/2022 11:32	WG1960984
Hexachlorobenzene	U		0.126	3.55	10	11/21/2022 11:32	WG1960984
Hexachloro-1,3-butadiene	U		0.120	3.55	10	11/21/2022 11:32	WG1960984
Hexachlorocyclopentadiene	U		0.187	3.55	10	11/21/2022 11:32	WG1960984
Hexachloroethane	U		0.140	3.55	10	11/21/2022 11:32	WG1960984
Isophorone	U		0.109	3.55	10	11/21/2022 11:32	WG1960984
Nitrobenzene	U		0.124	3.55	10	11/21/2022 11:32	WG1960984
n-Nitrosodimethylamine	U		0.527	3.55	10	11/21/2022 11:32	WG1960984
n-Nitrosodiphenylamine	U		0.269	3.55	10	11/21/2022 11:32	WG1960984



Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
n-Nitrosodi-n-propylamine	U		0.118	3.55	10	11/21/2022 11:32	WG1960984
Benzylbutyl phthalate	U		0.111	3.55	10	11/21/2022 11:32	WG1960984
Bis(2-ethylhexyl)phthalate	U		0.450	3.55	10	11/21/2022 11:32	WG1960984
Di-n-butyl phthalate	U		0.122	3.55	10	11/21/2022 11:32	WG1960984
Diethyl phthalate	U		0.117	3.55	10	11/21/2022 11:32	WG1960984
Dimethyl phthalate	U		0.754	3.55	10	11/21/2022 11:32	WG1960984
Di-n-octyl phthalate	U		0.240	3.55	10	11/21/2022 11:32	WG1960984
1,2,4-Trichlorobenzene	U		0.111	3.55	10	11/21/2022 11:32	WG1960984
4-Chloro-3-methylphenol	U		0.115	3.55	10	11/21/2022 11:32	WG1960984
2-Chlorophenol	U		0.117	3.55	10	11/21/2022 11:32	WG1960984
2,4-Dichlorophenol	U		0.104	3.55	10	11/21/2022 11:32	WG1960984
2,4-Dimethylphenol	U		0.0929	3.55	10	11/21/2022 11:32	WG1960984
4,6-Dinitro-2-methylphenol	U		0.806	3.55	10	11/21/2022 11:32	WG1960984
2,4-Dinitrophenol	U		0.832	3.55	10	11/21/2022 11:32	WG1960984
2-Nitrophenol	U		0.127	3.55	10	11/21/2022 11:32	WG1960984
4-Nitrophenol	U		0.111	3.55	10	11/21/2022 11:32	WG1960984
Pentachlorophenol	U		0.0956	3.55	10	11/21/2022 11:32	WG1960984
Phenol	U		0.143	3.55	10	11/21/2022 11:32	WG1960984
2,4,6-Trichlorophenol	U		0.114	3.55	10	11/21/2022 11:32	WG1960984
(S) 2-Fluorophenol	85.2			12.0-120		11/21/2022 11:32	WG1960984
(S) Phenol-d5	78.0			10.0-120		11/21/2022 11:32	WG1960984
(S) Nitrobenzene-d5	80.0			10.0-122		11/21/2022 11:32	WG1960984
(S) 2-Fluorobiphenyl	87.6			15.0-120		11/21/2022 11:32	WG1960984
(S) 2,4,6-Tribromophenol	99.7			10.0-127		11/21/2022 11:32	WG1960984
(S) p-Terphenyl-d14	100			10.0-120		11/21/2022 11:32	WG1960984



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

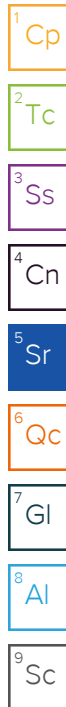
Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.0123	0.0320	5	11/18/2022 11:24	WG1961298
Acenaphthene	U		0.0112	0.0320	5	11/18/2022 11:24	WG1961298
Acenaphthylene	U		0.0115	0.0320	5	11/18/2022 11:24	WG1961298
Benzo(a)anthracene	0.0282	J	0.00923	0.0320	5	11/18/2022 11:24	WG1961298
Benzo(a)pyrene	0.0342		0.00955	0.0320	5	11/18/2022 11:24	WG1961298
Benzo(b)fluoranthene	0.0382		0.00817	0.0320	5	11/18/2022 11:24	WG1961298
Benzo(g,h,i)perylene	0.0550		0.00945	0.0320	5	11/18/2022 11:24	WG1961298
Benzo(k)fluoranthene	0.0124	J	0.0114	0.0320	5	11/18/2022 11:24	WG1961298
Chrysene	0.0251	J	0.0124	0.0320	5	11/18/2022 11:24	WG1961298
Dibenz(a,h)anthracene	U		0.00918	0.0320	5	11/18/2022 11:24	WG1961298
Fluoranthene	0.0411		0.0121	0.0320	5	11/18/2022 11:24	WG1961298
Fluorene	U		0.0110	0.0320	5	11/18/2022 11:24	WG1961298
Indeno(1,2,3-cd)pyrene	0.0344		0.00966	0.0320	5	11/18/2022 11:24	WG1961298
Naphthalene	U		0.0218	0.107	5	11/18/2022 11:24	WG1961298
Phenanthrene	0.0259	J	0.0123	0.0320	5	11/18/2022 11:24	WG1961298
Pyrene	0.0373		0.0107	0.0320	5	11/18/2022 11:24	WG1961298
1-Methylnaphthalene	U		0.0240	0.107	5	11/18/2022 11:24	WG1961298
2-Methylnaphthalene	U		0.0228	0.107	5	11/18/2022 11:24	WG1961298
2-Chloronaphthalene	U		0.0249	0.107	5	11/18/2022 11:24	WG1961298
(S) Nitrobenzene-d5	58.1			14.0-149		11/18/2022 11:24	WG1961298
(S) 2-Fluorobiphenyl	57.2			34.0-125		11/18/2022 11:24	WG1961298
(S) p-Terphenyl-d14	60.3			23.0-120		11/18/2022 11:24	WG1961298

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.7		1	11/15/2022 13:19	WG1959327

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0247	0.0598	1	11/23/2022 20:11	WG1963742
Acrylonitrile	U		0.00241	0.0120	1	11/23/2022 20:11	WG1963742
Allyl chloride	U		0.00478	0.00598	1	11/23/2022 20:11	WG1963742
Benzene	0.000905	J	0.000448	0.00120	1	11/23/2022 20:11	WG1963742
Bromodichloromethane	U		0.000866	0.00120	1	11/23/2022 20:11	WG1963742
Bromoform	U		0.000507	0.00120	1	11/23/2022 20:11	WG1963742
Bromomethane	U		0.00140	0.00598	1	11/23/2022 20:11	WG1963742
Carbon disulfide	U		0.000837	0.00120	1	11/23/2022 20:11	WG1963742
Carbon tetrachloride	U		0.000296	0.00120	1	11/23/2022 20:11	WG1963742
Chlorobenzene	U		0.000229	0.00120	1	11/23/2022 20:11	WG1963742
Chlorodibromomethane	U		0.000268	0.00120	1	11/23/2022 20:11	WG1963742
Chloroethane	U		0.00120	0.00598	1	11/23/2022 20:11	WG1963742
Chloroform	U		0.00123	0.00598	1	11/23/2022 20:11	WG1963742
Chloromethane	U		0.000777	0.00299	1	11/23/2022 20:11	WG1963742
1,2-Dibromoethane	U		0.000299	0.00120	1	11/23/2022 20:11	WG1963742
Dibromomethane	U		0.000418	0.00120	1	11/23/2022 20:11	WG1963742
1,2-Dibromo-3-Chloropropane	U		0.00227	0.00598	1	11/23/2022 20:11	WG1963742
1,2-Dichlorobenzene	U		0.000508	0.00120	1	11/23/2022 20:11	WG1963742
1,3-Dichlorobenzene	U		0.000717	0.00120	1	11/23/2022 20:11	WG1963742
1,4-Dichlorobenzene	U		0.000992	0.00120	1	11/23/2022 20:11	WG1963742
Dichlorodifluoromethane	U		0.000343	0.00598	1	11/23/2022 20:11	WG1963742
trans-1,4-Dichloro-2-butene	U		0.00114	0.00299	1	11/23/2022 20:11	WG1963742
1,1-Dichloroethane	U		0.000320	0.00120	1	11/23/2022 20:11	WG1963742
1,2-Dichloroethane	U		0.000538	0.00120	1	11/23/2022 20:11	WG1963742
1,1-Dichloroethene	U		0.000424	0.00120	1	11/23/2022 20:11	WG1963742
cis-1,2-Dichloroethene	U		0.000568	0.00120	1	11/23/2022 20:11	WG1963742
trans-1,2-Dichloroethene	U		0.000598	0.00120	1	11/23/2022 20:11	WG1963742
1,2-Dichloropropane	U		0.000196	0.00120	1	11/23/2022 20:11	WG1963742
cis-1,3-Dichloropropene	U		0.000508	0.00120	1	11/23/2022 20:11	WG1963742
trans-1,3-Dichloropropene	U		0.000807	0.00120	1	11/23/2022 20:11	WG1963742
Ethylbenzene	U		0.000359	0.00120	1	11/23/2022 20:11	WG1963742
2-Hexanone	U		0.00214	0.0120	1	11/23/2022 20:11	WG1963742
Iodomethane	U		0.00145	0.0120	1	11/23/2022 20:11	WG1963742
2-Butanone (MEK)	U		0.00559	0.0120	1	11/23/2022 20:11	WG1963742
Methylene Chloride	U		0.00120	0.00598	1	11/23/2022 20:11	WG1963742
4-Methyl-2-pentanone (MIBK)	U		0.00114	0.0120	1	11/23/2022 20:11	WG1963742
Pentachloroethane	U		0.00299	0.00598	1	11/23/2022 20:11	WG1963742
Styrene	U		0.000266	0.00120	1	11/23/2022 20:11	WG1963742
1,1,1,2-Tetrachloroethane	U		0.000354	0.00120	1	11/23/2022 20:11	WG1963742
1,1,2,2-Tetrachloroethane	U		0.000276	0.00120	1	11/23/2022 20:11	WG1963742
Tetrachloroethene	U		0.000388	0.00120	1	11/23/2022 20:11	WG1963742
Toluene	U		0.00147	0.00598	1	11/23/2022 20:11	WG1963742
1,1,1-Trichloroethane	U		0.000442	0.00120	1	11/23/2022 20:11	WG1963742
1,1,2-Trichloroethane	U		0.000508	0.00120	1	11/23/2022 20:11	WG1963742
Trichloroethene	U		0.000239	0.00120	1	11/23/2022 20:11	WG1963742
Trichlorofluoromethane	U		0.000425	0.00598	1	11/23/2022 20:11	WG1963742
1,2,3-Trichloropropane	U		0.000292	0.00299	1	11/23/2022 20:11	WG1963742
Vinyl acetate	U	J4	0.00118	0.0120	1	11/23/2022 20:11	WG1963742
Vinyl chloride	U		0.000270	0.00120	1	11/23/2022 20:11	WG1963742
Xylenes, Total	U		0.000598	0.00359	1	11/23/2022 20:11	WG1963742



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.0908	0.120	1	11/23/2022 20:11	WG1963742
(S) Toluene-d8	103			75.0-131		11/23/2022 20:11	WG1963742
(S) 4-Bromofluorobenzene	99.2			67.0-138		11/23/2022 20:11	WG1963742
(S) 1,2-Dichloroethane-d4	92.9			70.0-130		11/23/2022 20:11	WG1963742

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	65.3		1	11/15/2022 13:19	WG1959327

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.306		0.0276	0.0613	1	11/18/2022 13:37	WG1959360

Metals (ICP) by Method 6010B

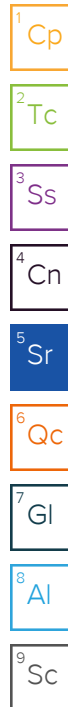
Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Arsenic	12.2		0.794	3.06	1	11/23/2022 00:21	WG1960670
Barium	247		0.131	0.766	1	11/23/2022 00:21	WG1960670
Cadmium	8.42		0.0722	0.766	1	11/23/2022 00:21	WG1960670
Chromium	52.4		0.204	1.53	1	11/23/2022 00:21	WG1960670
Lead	271		0.319	0.766	1	11/23/2022 00:21	WG1960670
Selenium	U		1.17	3.06	1	11/23/2022 00:21	WG1960670
Silver	0.485	J	0.195	1.53	1	11/23/2022 00:21	WG1960670

Polychlorinated Biphenyls (GC) by Method 8082

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
PCB 1016	U		0.0181	0.0521	1	11/18/2022 06:45	WG1961287
PCB 1221	U		0.0181	0.0521	1	11/18/2022 06:45	WG1961287
PCB 1232	U		0.0181	0.0521	1	11/18/2022 06:45	WG1961287
PCB 1242	U		0.0181	0.0521	1	11/18/2022 06:45	WG1961287
PCB 1248	U		0.0113	0.0260	1	11/18/2022 06:45	WG1961287
PCB 1254	0.0801		0.0113	0.0260	1	11/18/2022 06:45	WG1961287
PCB 1260	U		0.0113	0.0260	1	11/18/2022 06:45	WG1961287
(S) Decachlorobiphenyl	51.3			10.0-135		11/18/2022 06:45	WG1961287
(S) Tetrachloro-m-xylene	48.4			10.0-139		11/18/2022 06:45	WG1961287

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzidine	U		0.192	5.12	2	11/21/2022 11:11	WG1960984
Bis(2-chlorethoxy)methane	U		0.0306	1.02	2	11/21/2022 11:11	WG1960984
Bis(2-chloroethyl)ether	U		0.0337	1.02	2	11/21/2022 11:11	WG1960984
2,2-Oxybis(1-Chloropropane)	U		0.0441	1.02	2	11/21/2022 11:11	WG1960984
4-Bromophenyl-phenylether	U		0.0359	1.02	2	11/21/2022 11:11	WG1960984
4-Chlorophenyl-phenylether	U		0.0355	1.02	2	11/21/2022 11:11	WG1960984
1,2-Dichlorobenzene	U		0.0302	1.02	2	11/21/2022 11:11	WG1960984
1,3-Dichlorobenzene	U		0.0309	1.02	2	11/21/2022 11:11	WG1960984
1,4-Dichlorobenzene	U		0.0303	1.02	2	11/21/2022 11:11	WG1960984
3,3-Dichlorobenzidine	U		0.0377	1.02	2	11/21/2022 11:11	WG1960984
2,4-Dinitrotoluene	U		0.0293	1.02	2	11/21/2022 11:11	WG1960984
2,6-Dinitrotoluene	U		0.0334	1.02	2	11/21/2022 11:11	WG1960984
Hexachlorobenzene	U		0.0362	1.02	2	11/21/2022 11:11	WG1960984
Hexachloro-1,3-butadiene	U		0.0343	1.02	2	11/21/2022 11:11	WG1960984
Hexachlorocyclopentadiene	U		0.0536	1.02	2	11/21/2022 11:11	WG1960984
Hexachloroethane	U		0.0401	1.02	2	11/21/2022 11:11	WG1960984
Isophorone	U		0.0313	1.02	2	11/21/2022 11:11	WG1960984
Nitrobenzene	U		0.0355	1.02	2	11/21/2022 11:11	WG1960984
n-Nitrosodimethylamine	U		0.151	1.02	2	11/21/2022 11:11	WG1960984
n-Nitrosodiphenylamine	U		0.0772	1.02	2	11/21/2022 11:11	WG1960984

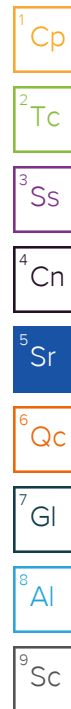


Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
n-Nitrosodi-n-propylamine	U		0.0340	1.02	2	11/21/2022 11:11	WG1960984
Benzylbutyl phthalate	U		0.0319	1.02	2	11/21/2022 11:11	WG1960984
Bis(2-ethylhexyl)phthalate	0.159	J	0.129	1.02	2	11/21/2022 11:11	WG1960984
Di-n-butyl phthalate	U		0.0349	1.02	2	11/21/2022 11:11	WG1960984
Diethyl phthalate	U		0.0337	1.02	2	11/21/2022 11:11	WG1960984
Dimethyl phthalate	U		0.216	1.02	2	11/21/2022 11:11	WG1960984
Di-n-octyl phthalate	U		0.0689	1.02	2	11/21/2022 11:11	WG1960984
1,2,4-Trichlorobenzene	U		0.0319	1.02	2	11/21/2022 11:11	WG1960984
4-Chloro-3-methylphenol	U		0.0331	1.02	2	11/21/2022 11:11	WG1960984
2-Chlorophenol	U		0.0337	1.02	2	11/21/2022 11:11	WG1960984
2,4-Dichlorophenol	U		0.0297	1.02	2	11/21/2022 11:11	WG1960984
2,4-Dimethylphenol	U		0.0267	1.02	2	11/21/2022 11:11	WG1960984
4,6-Dinitro-2-methylphenol	U		0.231	1.02	2	11/21/2022 11:11	WG1960984
2,4-Dinitrophenol	U		0.239	1.02	2	11/21/2022 11:11	WG1960984
2-Nitrophenol	U		0.0365	1.02	2	11/21/2022 11:11	WG1960984
4-Nitrophenol	U		0.0319	1.02	2	11/21/2022 11:11	WG1960984
Pentachlorophenol	U		0.0274	1.02	2	11/21/2022 11:11	WG1960984
Phenol	U		0.0411	1.02	2	11/21/2022 11:11	WG1960984
2,4,6-Trichlorophenol	U		0.0328	1.02	2	11/21/2022 11:11	WG1960984
(S) 2-Fluorophenol	47.2			12.0-120		11/21/2022 11:11	WG1960984
(S) Phenol-d5	41.8			10.0-120		11/21/2022 11:11	WG1960984
(S) Nitrobenzene-d5	48.1			10.0-122		11/21/2022 11:11	WG1960984
(S) 2-Fluorobiphenyl	47.2			15.0-120		11/21/2022 11:11	WG1960984
(S) 2,4,6-Tribromophenol	55.8			10.0-127		11/21/2022 11:11	WG1960984
(S) p-Terphenyl-d14	56.3			10.0-120		11/21/2022 11:11	WG1960984

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.0176	0.0460	5	11/21/2022 15:12	WG1961298
Acenaphthene	U		0.0161	0.0460	5	11/21/2022 15:12	WG1961298
Acenaphthylene	U		0.0165	0.0460	5	11/21/2022 15:12	WG1961298
Benzo(a)anthracene	0.196		0.0133	0.0460	5	11/21/2022 15:12	WG1961298
Benzo(a)pyrene	0.369		0.0137	0.0460	5	11/21/2022 15:12	WG1961298
Benzo(b)fluoranthene	0.144		0.0117	0.0460	5	11/21/2022 15:12	WG1961298
Benzo(g,h,i)perylene	0.476		0.0136	0.0460	5	11/21/2022 15:12	WG1961298
Benzo(k)fluoranthene	0.0279	J	0.0164	0.0460	5	11/21/2022 15:12	WG1961298
Chrysene	0.239		0.0178	0.0460	5	11/21/2022 15:12	WG1961298
Dibenz(a,h)anthracene	0.0631		0.0132	0.0460	5	11/21/2022 15:12	WG1961298
Fluoranthene	0.0316	J	0.0173	0.0460	5	11/21/2022 15:12	WG1961298
Fluorene	U		0.0158	0.0460	5	11/21/2022 15:12	WG1961298
Indeno(1,2,3-cd)pyrene	0.110		0.0139	0.0460	5	11/21/2022 15:12	WG1961298
Naphthalene	U		0.0313	0.153	5	11/21/2022 15:12	WG1961298
Phenanthrene	0.0250	J	0.0176	0.0460	5	11/21/2022 15:12	WG1961298
Pyrene	0.132		0.0153	0.0460	5	11/21/2022 15:12	WG1961298
1-Methylnaphthalene	U		0.0345	0.153	5	11/21/2022 15:12	WG1961298
2-Methylnaphthalene	U		0.0328	0.153	5	11/21/2022 15:12	WG1961298
2-Chloronaphthalene	U		0.0357	0.153	5	11/21/2022 15:12	WG1961298
(S) Nitrobenzene-d5	58.8			14.0-149		11/21/2022 15:12	WG1961298
(S) 2-Fluorobiphenyl	56.7			34.0-125		11/21/2022 15:12	WG1961298
(S) p-Terphenyl-d14	58.8			23.0-120		11/21/2022 15:12	WG1961298

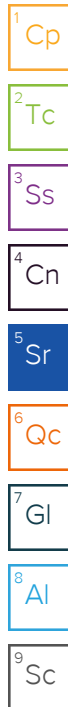


Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	79.3		1	11/15/2022 13:19	WG1959327

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0755		0.0261	0.0630	1	11/23/2022 20:32	WG1963742
Acrylonitrile	U		0.00255	0.0126	1	11/23/2022 20:32	WG1963742
Allyl chloride	U		0.00504	0.00630	1	11/23/2022 20:32	WG1963742
Benzene	0.00180		0.000473	0.00126	1	11/23/2022 20:32	WG1963742
Bromodichloromethane	U		0.000914	0.00126	1	11/23/2022 20:32	WG1963742
Bromoform	U		0.000534	0.00126	1	11/23/2022 20:32	WG1963742
Bromomethane	U		0.00147	0.00630	1	11/23/2022 20:32	WG1963742
Carbon disulfide	U		0.000882	0.00126	1	11/23/2022 20:32	WG1963742
Carbon tetrachloride	U		0.000313	0.00126	1	11/23/2022 20:32	WG1963742
Chlorobenzene	U		0.000242	0.00126	1	11/23/2022 20:32	WG1963742
Chlorodibromomethane	U		0.000282	0.00126	1	11/23/2022 20:32	WG1963742
Chloroethane	U		0.00126	0.00630	1	11/23/2022 20:32	WG1963742
Chloroform	U		0.00130	0.00630	1	11/23/2022 20:32	WG1963742
Chloromethane	U		0.000819	0.00315	1	11/23/2022 20:32	WG1963742
1,2-Dibromoethane	U		0.000315	0.00126	1	11/23/2022 20:32	WG1963742
Dibromomethane	U		0.000441	0.00126	1	11/23/2022 20:32	WG1963742
1,2-Dibromo-3-Chloropropane	U		0.00239	0.00630	1	11/23/2022 20:32	WG1963742
1,2-Dichlorobenzene	U		0.000536	0.00126	1	11/23/2022 20:32	WG1963742
1,3-Dichlorobenzene	U		0.000756	0.00126	1	11/23/2022 20:32	WG1963742
1,4-Dichlorobenzene	U		0.00105	0.00126	1	11/23/2022 20:32	WG1963742
Dichlorodifluoromethane	U		0.000362	0.00630	1	11/23/2022 20:32	WG1963742
trans-1,4-Dichloro-2-butene	U		0.00120	0.00315	1	11/23/2022 20:32	WG1963742
1,1-Dichloroethane	U		0.000338	0.00126	1	11/23/2022 20:32	WG1963742
1,2-Dichloroethane	U		0.000567	0.00126	1	11/23/2022 20:32	WG1963742
1,1-Dichloroethene	U		0.000447	0.00126	1	11/23/2022 20:32	WG1963742
cis-1,2-Dichloroethene	U		0.000599	0.00126	1	11/23/2022 20:32	WG1963742
trans-1,2-Dichloroethene	U		0.000630	0.00126	1	11/23/2022 20:32	WG1963742
1,2-Dichloropropane	U		0.000207	0.00126	1	11/23/2022 20:32	WG1963742
cis-1,3-Dichloropropene	U		0.000536	0.00126	1	11/23/2022 20:32	WG1963742
trans-1,3-Dichloropropene	U		0.000851	0.00126	1	11/23/2022 20:32	WG1963742
Ethylbenzene	U		0.000378	0.00126	1	11/23/2022 20:32	WG1963742
2-Hexanone	U		0.00226	0.0126	1	11/23/2022 20:32	WG1963742
Iodomethane	U		0.00153	0.0126	1	11/23/2022 20:32	WG1963742
2-Butanone (MEK)	U		0.00590	0.0126	1	11/23/2022 20:32	WG1963742
Methylene Chloride	U		0.00126	0.00630	1	11/23/2022 20:32	WG1963742
4-Methyl-2-pentanone (MIBK)	U		0.00120	0.0126	1	11/23/2022 20:32	WG1963742
Pentachloroethane	U		0.00315	0.00630	1	11/23/2022 20:32	WG1963742
Styrene	U		0.000281	0.00126	1	11/23/2022 20:32	WG1963742
1,1,1,2-Tetrachloroethane	U		0.000373	0.00126	1	11/23/2022 20:32	WG1963742
1,1,2,2-Tetrachloroethane	U		0.000291	0.00126	1	11/23/2022 20:32	WG1963742
Tetrachloroethene	U		0.000410	0.00126	1	11/23/2022 20:32	WG1963742
Toluene	U		0.00155	0.00630	1	11/23/2022 20:32	WG1963742
1,1,1-Trichloroethane	U		0.000466	0.00126	1	11/23/2022 20:32	WG1963742
1,1,2-Trichloroethane	U		0.000536	0.00126	1	11/23/2022 20:32	WG1963742
Trichloroethene	U		0.000252	0.00126	1	11/23/2022 20:32	WG1963742
Trichlorofluoromethane	U		0.000449	0.00630	1	11/23/2022 20:32	WG1963742
1,2,3-Trichloropropane	U		0.000308	0.00315	1	11/23/2022 20:32	WG1963742
Vinyl acetate	U	J4	0.00125	0.0126	1	11/23/2022 20:32	WG1963742
Vinyl chloride	U		0.000285	0.00126	1	11/23/2022 20:32	WG1963742
Xylenes, Total	U		0.000630	0.00378	1	11/23/2022 20:32	WG1963742



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.0958	0.126	1	11/23/2022 20:32	WG1963742
(S) Toluene-d8	123			75.0-131		11/23/2022 20:32	WG1963742
(S) 4-Bromofluorobenzene	81.3			67.0-138		11/23/2022 20:32	WG1963742
(S) 1,2-Dichloroethane-d4	97.2			70.0-130		11/23/2022 20:32	WG1963742

Sample Narrative:

L1557295-36 WG1963742: Previous run also had low IS/SURR recovery. Matrix effect.

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	35.5		1	11/15/2022 13:19	WG1959327

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.152		0.0507	0.113	1	11/18/2022 13:39	WG1959360

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Arsenic	18.1		1.46	5.64	1	11/23/2022 00:24	WG1960670
Barium	336		0.240	1.41	1	11/23/2022 00:24	WG1960670
Cadmium	5.67		0.133	1.41	1	11/23/2022 00:24	WG1960670
Chromium	36.8		0.375	2.82	1	11/23/2022 00:24	WG1960670
Lead	241		0.586	1.41	1	11/23/2022 00:24	WG1960670
Selenium	3.23	J	2.15	5.64	1	11/23/2022 00:24	WG1960670
Silver	0.786	J	0.358	2.82	1	11/23/2022 00:24	WG1960670

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.164		0.0583	0.141	1	11/25/2022 19:48	WG1964463
Acrylonitrile	U		0.00569	0.0282	1	11/25/2022 19:48	WG1964463
Allyl chloride	U		0.0113	0.0141	1	11/25/2022 19:48	WG1964463
Benzene	0.00783		0.00106	0.00282	1	11/25/2022 19:48	WG1964463
Bromodichloromethane	U		0.00204	0.00282	1	11/25/2022 19:48	WG1964463
Bromoform	U		0.00119	0.00282	1	11/25/2022 19:48	WG1964463
Bromomethane	U		0.00330	0.0141	1	11/25/2022 19:48	WG1964463
Carbon disulfide	U		0.00197	0.00282	1	11/25/2022 19:48	WG1964463
Carbon tetrachloride	U		0.000699	0.00282	1	11/25/2022 19:48	WG1964463
Chlorobenzene	U		0.000541	0.00282	1	11/25/2022 19:48	WG1964463
Chlorodibromomethane	U		0.000631	0.00282	1	11/25/2022 19:48	WG1964463
Chloroethane	U		0.00282	0.0141	1	11/25/2022 19:48	WG1964463
Chloroform	U		0.00290	0.0141	1	11/25/2022 19:48	WG1964463
Chloromethane	U		0.00183	0.00704	1	11/25/2022 19:48	WG1964463
1,2-Dibromoethane	U		0.000704	0.00282	1	11/25/2022 19:48	WG1964463
Dibromomethane	U		0.000986	0.00282	1	11/25/2022 19:48	WG1964463
1,2-Dibromo-3-Chloropropane	U		0.00535	0.0141	1	11/25/2022 19:48	WG1964463
1,2-Dichlorobenzene	U		0.00120	0.00282	1	11/25/2022 19:48	WG1964463
1,3-Dichlorobenzene	U		0.00169	0.00282	1	11/25/2022 19:48	WG1964463
1,4-Dichlorobenzene	U		0.00234	0.00282	1	11/25/2022 19:48	WG1964463
Dichlorodifluoromethane	U		0.000809	0.0141	1	11/25/2022 19:48	WG1964463
trans-1,4-Dichloro-2-butene	U		0.00268	0.00704	1	11/25/2022 19:48	WG1964463
1,1-Dichloroethane	U		0.000755	0.00282	1	11/25/2022 19:48	WG1964463
1,2-Dichloroethane	U		0.00127	0.00282	1	11/25/2022 19:48	WG1964463
1,1-Dichloroethene	U		0.00100	0.00282	1	11/25/2022 19:48	WG1964463
cis-1,2-Dichloroethene	U		0.00134	0.00282	1	11/25/2022 19:48	WG1964463
trans-1,2-Dichloroethene	U		0.00141	0.00282	1	11/25/2022 19:48	WG1964463
1,2-Dichloropropane	U		0.000462	0.00282	1	11/25/2022 19:48	WG1964463
cis-1,3-Dichloropropene	U		0.00120	0.00282	1	11/25/2022 19:48	WG1964463
trans-1,3-Dichloropropene	U		0.00190	0.00282	1	11/25/2022 19:48	WG1964463
Ethylbenzene	0.00125	J	0.000845	0.00282	1	11/25/2022 19:48	WG1964463
2-Hexanone	U		0.00504	0.0282	1	11/25/2022 19:48	WG1964463
Iodomethane	U		0.00341	0.0282	1	11/25/2022 19:48	WG1964463

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

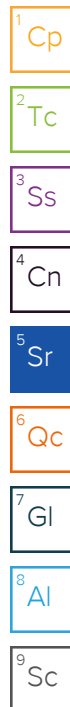
7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2-Butanone (MEK)	0.0330		0.0132	0.0282	1	11/25/2022 19:48	WG1964463
Methylene Chloride	0.00287	BJ	0.00282	0.0141	1	11/25/2022 19:48	WG1964463
4-Methyl-2-pentanone (MIBK)	U		0.00268	0.0282	1	11/25/2022 19:48	WG1964463
Pentachloroethane	U		0.00704	0.0141	1	11/25/2022 19:48	WG1964463
Styrene	U		0.000628	0.00282	1	11/25/2022 19:48	WG1964463
1,1,1,2-Tetrachloroethane	U		0.000834	0.00282	1	11/25/2022 19:48	WG1964463
1,1,2,2-Tetrachloroethane	U		0.000651	0.00282	1	11/25/2022 19:48	WG1964463
Tetrachloroethene	U		0.000916	0.00282	1	11/25/2022 19:48	WG1964463
Toluene	0.00820	J	0.00347	0.0141	1	11/25/2022 19:48	WG1964463
1,1,1-Trichloroethane	U		0.00104	0.00282	1	11/25/2022 19:48	WG1964463
1,1,2-Trichloroethane	U		0.00120	0.00282	1	11/25/2022 19:48	WG1964463
Trichloroethene	U		0.000564	0.00282	1	11/25/2022 19:48	WG1964463
Trichlorofluoromethane	U		0.00100	0.0141	1	11/25/2022 19:48	WG1964463
1,2,3-Trichloropropane	U		0.000687	0.00704	1	11/25/2022 19:48	WG1964463
Vinyl acetate	U	J4	0.00279	0.0282	1	11/25/2022 19:48	WG1964463
Vinyl chloride	U		0.000637	0.00282	1	11/25/2022 19:48	WG1964463
Xylenes, Total	0.00327	J	0.00141	0.00845	1	11/25/2022 19:48	WG1964463
1,4-Dioxane	U		0.214	0.282	1	11/25/2022 19:48	WG1964463
(S) Toluene-d8	116			75.0-131		11/25/2022 19:48	WG1964463
(S) 4-Bromofluorobenzene	101			67.0-138		11/25/2022 19:48	WG1964463
(S) 1,2-Dichloroethane-d4	98.3			70.0-130		11/25/2022 19:48	WG1964463



Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzidine	U		0.176	4.71	1	11/18/2022 14:54	WG1960984
Bis(2-chlorethoxy)methane	U		0.0282	0.938	1	11/18/2022 14:54	WG1960984
Bis(2-chloroethyl)ether	U		0.0310	0.938	1	11/18/2022 14:54	WG1960984
2,2-Oxybis(1-Chloropropane)	U		0.0406	0.938	1	11/18/2022 14:54	WG1960984
4-Bromophenyl-phenylether	U		0.0330	0.938	1	11/18/2022 14:54	WG1960984
4-Chlorophenyl-phenylether	U		0.0327	0.938	1	11/18/2022 14:54	WG1960984
1,2-Dichlorobenzene	U		0.0278	0.938	1	11/18/2022 14:54	WG1960984
1,3-Dichlorobenzene	U		0.0285	0.938	1	11/18/2022 14:54	WG1960984
1,4-Dichlorobenzene	U		0.0279	0.938	1	11/18/2022 14:54	WG1960984
3,3-Dichlorobenzidine	U		0.0347	0.938	1	11/18/2022 14:54	WG1960984
2,4-Dinitrotoluene	U		0.0269	0.938	1	11/18/2022 14:54	WG1960984
2,6-Dinitrotoluene	U		0.0307	0.938	1	11/18/2022 14:54	WG1960984
Hexachlorobenzene	U		0.0332	0.938	1	11/18/2022 14:54	WG1960984
Hexachloro-1,3-butadiene	U		0.0316	0.938	1	11/18/2022 14:54	WG1960984
Hexachlorocyclopentadiene	U		0.0493	0.938	1	11/18/2022 14:54	WG1960984
Hexachloroethane	U		0.0369	0.938	1	11/18/2022 14:54	WG1960984
Isophorone	U		0.0287	0.938	1	11/18/2022 14:54	WG1960984
Nitrobenzene	U		0.0327	0.938	1	11/18/2022 14:54	WG1960984
n-Nitrosodimethylamine	U		0.139	0.938	1	11/18/2022 14:54	WG1960984
n-Nitrosodiphenylamine	U		0.0710	0.938	1	11/18/2022 14:54	WG1960984
n-Nitrosodi-n-propylamine	U		0.0313	0.938	1	11/18/2022 14:54	WG1960984
Benzylbutyl phthalate	U		0.0293	0.938	1	11/18/2022 14:54	WG1960984
Bis(2-ethylhexyl)phthalate	U		0.119	0.938	1	11/18/2022 14:54	WG1960984
Di-n-butyl phthalate	U		0.0321	0.938	1	11/18/2022 14:54	WG1960984
Diethyl phthalate	U		0.0310	0.938	1	11/18/2022 14:54	WG1960984
Dimethyl phthalate	U		0.199	0.938	1	11/18/2022 14:54	WG1960984
Di-n-octyl phthalate	U		0.0634	0.938	1	11/18/2022 14:54	WG1960984
1,2,4-Trichlorobenzene	U		0.0293	0.938	1	11/18/2022 14:54	WG1960984
4-Chloro-3-methylphenol	U		0.0304	0.938	1	11/18/2022 14:54	WG1960984
2-Chlorophenol	U		0.0310	0.938	1	11/18/2022 14:54	WG1960984
2,4-Dichlorophenol	U		0.0273	0.938	1	11/18/2022 14:54	WG1960984

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2,4-Dimethylphenol	U		0.0245	0.938	1	11/18/2022 14:54	WG1960984
4,6-Dinitro-2-methylphenol	U		0.213	0.938	1	11/18/2022 14:54	WG1960984
2,4-Dinitrophenol	U		0.219	0.938	1	11/18/2022 14:54	WG1960984
2-Nitrophenol	U		0.0335	0.938	1	11/18/2022 14:54	WG1960984
4-Nitrophenol	U		0.0293	0.938	1	11/18/2022 14:54	WG1960984
Pentachlorophenol	U		0.0252	0.938	1	11/18/2022 14:54	WG1960984
Phenol	U		0.0378	0.938	1	11/18/2022 14:54	WG1960984
2,4,6-Trichlorophenol	U		0.0301	0.938	1	11/18/2022 14:54	WG1960984
(S) 2-Fluorophenol	54.9			12.0-120		11/18/2022 14:54	WG1960984
(S) Phenol-d5	51.8			10.0-120		11/18/2022 14:54	WG1960984
(S) Nitrobenzene-d5	52.0			10.0-122		11/18/2022 14:54	WG1960984
(S) 2-Fluorobiphenyl	57.1			15.0-120		11/18/2022 14:54	WG1960984
(S) 2,4,6-Tribromophenol	59.9			10.0-127		11/18/2022 14:54	WG1960984
(S) p-Terphenyl-d14	56.5			10.0-120		11/18/2022 14:54	WG1960984

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.00648	0.0169	1	11/18/2022 05:28	WG1961298
Acenaphthene	U		0.00589	0.0169	1	11/18/2022 05:28	WG1961298
Acenaphthylene	U		0.00609	0.0169	1	11/18/2022 05:28	WG1961298
Benzo(a)anthracene	U		0.00487	0.0169	1	11/18/2022 05:28	WG1961298
Benzo(a)pyrene	U		0.00504	0.0169	1	11/18/2022 05:28	WG1961298
Benzo(b)fluoranthene	U		0.00431	0.0169	1	11/18/2022 05:28	WG1961298
Benzo(g,h,i)perylene	U		0.00499	0.0169	1	11/18/2022 05:28	WG1961298
Benzo(k)fluoranthene	U		0.00606	0.0169	1	11/18/2022 05:28	WG1961298
Chrysene	U		0.00654	0.0169	1	11/18/2022 05:28	WG1961298
Dibenz(a,h)anthracene	U		0.00485	0.0169	1	11/18/2022 05:28	WG1961298
Fluoranthene	U		0.00640	0.0169	1	11/18/2022 05:28	WG1961298
Fluorene	U		0.00578	0.0169	1	11/18/2022 05:28	WG1961298
Indeno(1,2,3-cd)pyrene	U		0.00510	0.0169	1	11/18/2022 05:28	WG1961298
Naphthalene	U		0.0115	0.0564	1	11/18/2022 05:28	WG1961298
Phenanthrene	U		0.00651	0.0169	1	11/18/2022 05:28	WG1961298
Pyrene	U		0.00564	0.0169	1	11/18/2022 05:28	WG1961298
1-Methylnaphthalene	U		0.0127	0.0564	1	11/18/2022 05:28	WG1961298
2-Methylnaphthalene	U		0.0120	0.0564	1	11/18/2022 05:28	WG1961298
2-Chloronaphthalene	U		0.0131	0.0564	1	11/18/2022 05:28	WG1961298
(S) Nitrobenzene-d5	82.7			14.0-149		11/18/2022 05:28	WG1961298
(S) 2-Fluorobiphenyl	76.0			34.0-125		11/18/2022 05:28	WG1961298
(S) p-Terphenyl-d14	76.3			23.0-120		11/18/2022 05:28	WG1961298

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	58.6		1	11/15/2022 13:19	WG1959327

Mercury by Method 7471A

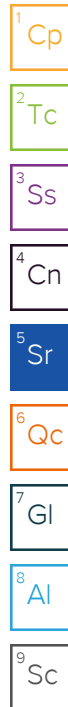
Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.138		0.0307	0.0683	1	11/18/2022 13:42	WG1959360

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Arsenic	13.3		0.884	3.41	1	11/23/2022 00:27	WG1960670
Barium	203		0.145	0.854	1	11/23/2022 00:27	WG1960670
Cadmium	3.86		0.0804	0.854	1	11/23/2022 00:27	WG1960670
Chromium	26.8		0.227	1.71	1	11/23/2022 00:27	WG1960670
Lead	167		0.355	0.854	1	11/23/2022 00:27	WG1960670
Selenium	1.44	J	1.30	3.41	1	11/23/2022 00:27	WG1960670
Silver	0.536	J	0.217	1.71	1	11/23/2022 00:27	WG1960670

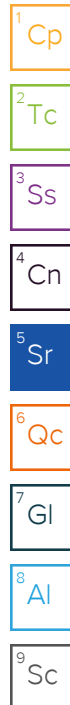
Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.174		0.0353	0.0854	1	11/25/2022 20:12	WG1964463
Acrylonitrile	U		0.00345	0.0171	1	11/25/2022 20:12	WG1964463
Allyl chloride	U		0.00683	0.00854	1	11/25/2022 20:12	WG1964463
Benzene	0.00492		0.000640	0.00171	1	11/25/2022 20:12	WG1964463
Bromodichloromethane	U		0.00124	0.00171	1	11/25/2022 20:12	WG1964463
Bromoform	U		0.000724	0.00171	1	11/25/2022 20:12	WG1964463
Bromomethane	U		0.00200	0.00854	1	11/25/2022 20:12	WG1964463
Carbon disulfide	U		0.00119	0.00171	1	11/25/2022 20:12	WG1964463
Carbon tetrachloride	U		0.000423	0.00171	1	11/25/2022 20:12	WG1964463
Chlorobenzene	U		0.000328	0.00171	1	11/25/2022 20:12	WG1964463
Chlorodibromomethane	U		0.000382	0.00171	1	11/25/2022 20:12	WG1964463
Chloroethane	U		0.00171	0.00854	1	11/25/2022 20:12	WG1964463
Chloroform	U		0.00176	0.00854	1	11/25/2022 20:12	WG1964463
Chloromethane	U		0.00111	0.00427	1	11/25/2022 20:12	WG1964463
1,2-Dibromoethane	U		0.000427	0.00171	1	11/25/2022 20:12	WG1964463
Dibromomethane	U		0.000597	0.00171	1	11/25/2022 20:12	WG1964463
1,2-Dibromo-3-Chloropropane	U		0.00324	0.00854	1	11/25/2022 20:12	WG1964463
1,2-Dichlorobenzene	U		0.000725	0.00171	1	11/25/2022 20:12	WG1964463
1,3-Dichlorobenzene	U		0.00102	0.00171	1	11/25/2022 20:12	WG1964463
1,4-Dichlorobenzene	U		0.00142	0.00171	1	11/25/2022 20:12	WG1964463
Dichlorodifluoromethane	U		0.000490	0.00854	1	11/25/2022 20:12	WG1964463
trans-1,4-Dichloro-2-butene	U		0.00162	0.00427	1	11/25/2022 20:12	WG1964463
1,1-Dichloroethane	U		0.000457	0.00171	1	11/25/2022 20:12	WG1964463
1,2-Dichloroethane	U		0.000768	0.00171	1	11/25/2022 20:12	WG1964463
1,1-Dichloroethene	U		0.000606	0.00171	1	11/25/2022 20:12	WG1964463
cis-1,2-Dichloroethene	U		0.000811	0.00171	1	11/25/2022 20:12	WG1964463
trans-1,2-Dichloroethene	U		0.000854	0.00171	1	11/25/2022 20:12	WG1964463
1,2-Dichloropropane	U		0.000280	0.00171	1	11/25/2022 20:12	WG1964463
cis-1,3-Dichloropropene	U		0.000725	0.00171	1	11/25/2022 20:12	WG1964463
trans-1,3-Dichloropropene	U		0.00115	0.00171	1	11/25/2022 20:12	WG1964463
Ethylbenzene	0.000714	J	0.000512	0.00171	1	11/25/2022 20:12	WG1964463
2-Hexanone	U		0.00306	0.0171	1	11/25/2022 20:12	WG1964463
Iodomethane	U		0.00207	0.0171	1	11/25/2022 20:12	WG1964463



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2-Butanone (MEK)	0.0132	J	0.00799	0.0171	1	11/25/2022 20:12	WG1964463
Methylene Chloride	0.00176	B J	0.00171	0.00854	1	11/25/2022 20:12	WG1964463
4-Methyl-2-pentanone (MIBK)	U		0.00162	0.0171	1	11/25/2022 20:12	WG1964463
Pentachloroethane	U		0.00427	0.00854	1	11/25/2022 20:12	WG1964463
Styrene	U		0.000381	0.00171	1	11/25/2022 20:12	WG1964463
1,1,1,2-Tetrachloroethane	U		0.000505	0.00171	1	11/25/2022 20:12	WG1964463
1,1,2,2-Tetrachloroethane	U		0.000394	0.00171	1	11/25/2022 20:12	WG1964463
Tetrachloroethene	U		0.000555	0.00171	1	11/25/2022 20:12	WG1964463
Toluene	0.00466	J	0.00210	0.00854	1	11/25/2022 20:12	WG1964463
1,1,1-Trichloroethane	U		0.000632	0.00171	1	11/25/2022 20:12	WG1964463
1,1,2-Trichloroethane	U		0.000725	0.00171	1	11/25/2022 20:12	WG1964463
Trichloroethene	U		0.000341	0.00171	1	11/25/2022 20:12	WG1964463
Trichlorofluoromethane	U		0.000608	0.00854	1	11/25/2022 20:12	WG1964463
1,2,3-Trichloropropane	U		0.000417	0.00427	1	11/25/2022 20:12	WG1964463
Vinyl acetate	U	J4	0.00169	0.0171	1	11/25/2022 20:12	WG1964463
Vinyl chloride	U		0.000386	0.00171	1	11/25/2022 20:12	WG1964463
Xylenes, Total	0.00171	J	0.000854	0.00512	1	11/25/2022 20:12	WG1964463
1,4-Dioxane	U		0.130	0.171	1	11/25/2022 20:12	WG1964463
(S) Toluene-d8	114			75.0-131		11/25/2022 20:12	WG1964463
(S) 4-Bromofluorobenzene	96.4			67.0-138		11/25/2022 20:12	WG1964463
(S) 1,2-Dichloroethane-d4	97.8			70.0-130		11/25/2022 20:12	WG1964463



Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzidine	U		0.107	2.85	1	11/18/2022 17:18	WG1960984
Bis(2-chlorethoxy)methane	U		0.0171	0.568	1	11/18/2022 17:18	WG1960984
Bis(2-chloroethyl)ether	U		0.0188	0.568	1	11/18/2022 17:18	WG1960984
2,2-Oxybis(1-Chloropropane)	U		0.0246	0.568	1	11/18/2022 17:18	WG1960984
4-Bromophenyl-phenylether	U		0.0200	0.568	1	11/18/2022 17:18	WG1960984
4-Chlorophenyl-phenylether	U		0.0198	0.568	1	11/18/2022 17:18	WG1960984
1,2-Dichlorobenzene	U		0.0168	0.568	1	11/18/2022 17:18	WG1960984
1,3-Dichlorobenzene	U		0.0172	0.568	1	11/18/2022 17:18	WG1960984
1,4-Dichlorobenzene	U		0.0169	0.568	1	11/18/2022 17:18	WG1960984
3,3-Dichlorobenzidine	U		0.0210	0.568	1	11/18/2022 17:18	WG1960984
2,4-Dinitrotoluene	U		0.0163	0.568	1	11/18/2022 17:18	WG1960984
2,6-Dinitrotoluene	U		0.0186	0.568	1	11/18/2022 17:18	WG1960984
Hexachlorobenzene	U		0.0201	0.568	1	11/18/2022 17:18	WG1960984
Hexachloro-1,3-butadiene	U		0.0191	0.568	1	11/18/2022 17:18	WG1960984
Hexachlorocyclopentadiene	U		0.0299	0.568	1	11/18/2022 17:18	WG1960984
Hexachloroethane	U		0.0224	0.568	1	11/18/2022 17:18	WG1960984
Isophorone	U		0.0174	0.568	1	11/18/2022 17:18	WG1960984
Nitrobenzene	U		0.0198	0.568	1	11/18/2022 17:18	WG1960984
n-Nitrosodimethylamine	U		0.0843	0.568	1	11/18/2022 17:18	WG1960984
n-Nitrosodiphenylamine	U		0.0430	0.568	1	11/18/2022 17:18	WG1960984
n-Nitrosodi-n-propylamine	U		0.0189	0.568	1	11/18/2022 17:18	WG1960984
Benzylbutyl phthalate	U		0.0178	0.568	1	11/18/2022 17:18	WG1960984
Bis(2-ethylhexyl)phthalate	U		0.0720	0.568	1	11/18/2022 17:18	WG1960984
Di-n-butyl phthalate	U		0.0195	0.568	1	11/18/2022 17:18	WG1960984
Diethyl phthalate	U		0.0188	0.568	1	11/18/2022 17:18	WG1960984
Dimethyl phthalate	U		0.121	0.568	1	11/18/2022 17:18	WG1960984
Di-n-octyl phthalate	U		0.0384	0.568	1	11/18/2022 17:18	WG1960984
1,2,4-Trichlorobenzene	U		0.0178	0.568	1	11/18/2022 17:18	WG1960984
4-Chloro-3-methylphenol	U		0.0184	0.568	1	11/18/2022 17:18	WG1960984
2-Chlorophenol	U		0.0188	0.568	1	11/18/2022 17:18	WG1960984
2,4-Dichlorophenol	U		0.0166	0.568	1	11/18/2022 17:18	WG1960984

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2,4-Dimethylphenol	U		0.0149	0.568	1	11/18/2022 17:18	WG1960984
4,6-Dinitro-2-methylphenol	U		0.129	0.568	1	11/18/2022 17:18	WG1960984
2,4-Dinitrophenol	U		0.133	0.568	1	11/18/2022 17:18	WG1960984
2-Nitrophenol	U		0.0203	0.568	1	11/18/2022 17:18	WG1960984
4-Nitrophenol	U		0.0178	0.568	1	11/18/2022 17:18	WG1960984
Pentachlorophenol	U		0.0153	0.568	1	11/18/2022 17:18	WG1960984
Phenol	U		0.0229	0.568	1	11/18/2022 17:18	WG1960984
2,4,6-Trichlorophenol	U		0.0183	0.568	1	11/18/2022 17:18	WG1960984
(S) 2-Fluorophenol	43.3			12.0-120		11/18/2022 17:18	WG1960984
(S) Phenol-d5	41.8			10.0-120		11/18/2022 17:18	WG1960984
(S) Nitrobenzene-d5	42.2			10.0-122		11/18/2022 17:18	WG1960984
(S) 2-Fluorobiphenyl	44.1			15.0-120		11/18/2022 17:18	WG1960984
(S) 2,4,6-Tribromophenol	46.5			10.0-127		11/18/2022 17:18	WG1960984
(S) p-Terphenyl-d14	44.7			10.0-120		11/18/2022 17:18	WG1960984

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.00393	0.0102	1	11/18/2022 05:48	WG1961298
Acenaphthene	U		0.00357	0.0102	1	11/18/2022 05:48	WG1961298
Acenaphthylene	U		0.00369	0.0102	1	11/18/2022 05:48	WG1961298
Benzo(a)anthracene	U		0.00295	0.0102	1	11/18/2022 05:48	WG1961298
Benzo(a)pyrene	U		0.00306	0.0102	1	11/18/2022 05:48	WG1961298
Benzo(b)fluoranthene	U		0.00261	0.0102	1	11/18/2022 05:48	WG1961298
Benzo(g,h,i)perylene	U		0.00302	0.0102	1	11/18/2022 05:48	WG1961298
Benzo(k)fluoranthene	U		0.00367	0.0102	1	11/18/2022 05:48	WG1961298
Chrysene	U		0.00396	0.0102	1	11/18/2022 05:48	WG1961298
Dibenz(a,h)anthracene	U		0.00294	0.0102	1	11/18/2022 05:48	WG1961298
Fluoranthene	U		0.00387	0.0102	1	11/18/2022 05:48	WG1961298
Fluorene	U		0.00350	0.0102	1	11/18/2022 05:48	WG1961298
Indeno(1,2,3-cd)pyrene	U		0.00309	0.0102	1	11/18/2022 05:48	WG1961298
Naphthalene	U		0.00696	0.0341	1	11/18/2022 05:48	WG1961298
Phenanthrene	U		0.00394	0.0102	1	11/18/2022 05:48	WG1961298
Pyrene	0.00372	J	0.00341	0.0102	1	11/18/2022 05:48	WG1961298
1-Methylnaphthalene	U		0.00766	0.0341	1	11/18/2022 05:48	WG1961298
2-Methylnaphthalene	U		0.00729	0.0341	1	11/18/2022 05:48	WG1961298
2-Chloronaphthalene	U		0.00795	0.0341	1	11/18/2022 05:48	WG1961298
(S) Nitrobenzene-d5	72.9			14.0-149		11/18/2022 05:48	WG1961298
(S) 2-Fluorobiphenyl	70.5			34.0-125		11/18/2022 05:48	WG1961298
(S) p-Terphenyl-d14	70.9			23.0-120		11/18/2022 05:48	WG1961298

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	47.7		1	11/15/2022 13:19	WG1959327

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.158		0.0377	0.0838	1	11/18/2022 13:44	WG1959360

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Arsenic	13.6		1.09	4.19	1	11/23/2022 00:30	WG1960670
Barium	242		0.179	1.05	1	11/23/2022 00:30	WG1960670
Cadmium	4.25		0.0987	1.05	1	11/23/2022 00:30	WG1960670
Chromium	28.3		0.279	2.10	1	11/23/2022 00:30	WG1960670
Lead	155		0.436	1.05	1	11/23/2022 00:30	WG1960670
Selenium	4.36		1.60	4.19	1	11/23/2022 00:30	WG1960670
Silver	0.700	J	0.266	2.10	1	11/23/2022 00:30	WG1960670

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0434	0.105	1	11/25/2022 20:37	WG1964463
Acrylonitrile	U		0.00423	0.0210	1	11/25/2022 20:37	WG1964463
Allyl chloride	U		0.00838	0.0105	1	11/25/2022 20:37	WG1964463
Benzene	0.00310		0.000786	0.00210	1	11/25/2022 20:37	WG1964463
Bromodichloromethane	U		0.00152	0.00210	1	11/25/2022 20:37	WG1964463
Bromoform	U		0.000889	0.00210	1	11/25/2022 20:37	WG1964463
Bromomethane	U		0.00245	0.0105	1	11/25/2022 20:37	WG1964463
Carbon disulfide	U		0.00147	0.00210	1	11/25/2022 20:37	WG1964463
Carbon tetrachloride	U		0.000520	0.00210	1	11/25/2022 20:37	WG1964463
Chlorobenzene	U		0.000402	0.00210	1	11/25/2022 20:37	WG1964463
Chlorodibromomethane	U		0.000469	0.00210	1	11/25/2022 20:37	WG1964463
Chloroethane	U		0.00210	0.0105	1	11/25/2022 20:37	WG1964463
Chloroform	U		0.00216	0.0105	1	11/25/2022 20:37	WG1964463
Chloromethane	U		0.00136	0.00524	1	11/25/2022 20:37	WG1964463
1,2-Dibromoethane	U		0.000524	0.00210	1	11/25/2022 20:37	WG1964463
Dibromomethane	U		0.000733	0.00210	1	11/25/2022 20:37	WG1964463
1,2-Dibromo-3-Chloropropane	U		0.00398	0.0105	1	11/25/2022 20:37	WG1964463
1,2-Dichlorobenzene	U		0.000891	0.00210	1	11/25/2022 20:37	WG1964463
1,3-Dichlorobenzene	U		0.00126	0.00210	1	11/25/2022 20:37	WG1964463
1,4-Dichlorobenzene	U		0.00174	0.00210	1	11/25/2022 20:37	WG1964463
Dichlorodifluoromethane	U		0.000601	0.0105	1	11/25/2022 20:37	WG1964463
trans-1,4-Dichloro-2-butene	U		0.00199	0.00524	1	11/25/2022 20:37	WG1964463
1,1-Dichloroethane	U		0.000562	0.00210	1	11/25/2022 20:37	WG1964463
1,2-Dichloroethane	U		0.000943	0.00210	1	11/25/2022 20:37	WG1964463
1,1-Dichloroethene	U		0.000744	0.00210	1	11/25/2022 20:37	WG1964463
cis-1,2-Dichloroethene	U		0.000995	0.00210	1	11/25/2022 20:37	WG1964463
trans-1,2-Dichloroethene	U		0.00105	0.00210	1	11/25/2022 20:37	WG1964463
1,2-Dichloropropane	U		0.000344	0.00210	1	11/25/2022 20:37	WG1964463
cis-1,3-Dichloropropene	U		0.000891	0.00210	1	11/25/2022 20:37	WG1964463
trans-1,3-Dichloropropene	U		0.00141	0.00210	1	11/25/2022 20:37	WG1964463
Ethylbenzene	0.000639	J	0.000629	0.00210	1	11/25/2022 20:37	WG1964463
2-Hexanone	U		0.00375	0.0210	1	11/25/2022 20:37	WG1964463
Iodomethane	U		0.00254	0.0210	1	11/25/2022 20:37	WG1964463

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

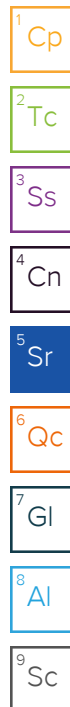
7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2-Butanone (MEK)	U		0.00981	0.0210	1	11/25/2022 20:37	WG1964463
Methylene Chloride	0.00228	BJ	0.00210	0.0105	1	11/25/2022 20:37	WG1964463
4-Methyl-2-pentanone (MIBK)	U		0.00199	0.0210	1	11/25/2022 20:37	WG1964463
Pentachloroethane	U		0.00524	0.0105	1	11/25/2022 20:37	WG1964463
Styrene	U		0.000467	0.00210	1	11/25/2022 20:37	WG1964463
1,1,1,2-Tetrachloroethane	U		0.000620	0.00210	1	11/25/2022 20:37	WG1964463
1,1,2,2-Tetrachloroethane	U		0.000484	0.00210	1	11/25/2022 20:37	WG1964463
Tetrachloroethene	U		0.000681	0.00210	1	11/25/2022 20:37	WG1964463
Toluene	0.00323	J	0.00258	0.0105	1	11/25/2022 20:37	WG1964463
1,1,1-Trichloroethane	U		0.000775	0.00210	1	11/25/2022 20:37	WG1964463
1,1,2-Trichloroethane	U		0.000891	0.00210	1	11/25/2022 20:37	WG1964463
Trichloroethene	U		0.000419	0.00210	1	11/25/2022 20:37	WG1964463
Trichlorofluoromethane	U		0.000746	0.0105	1	11/25/2022 20:37	WG1964463
1,2,3-Trichloropropane	U		0.000511	0.00524	1	11/25/2022 20:37	WG1964463
Vinyl acetate	U	J4	0.00207	0.0210	1	11/25/2022 20:37	WG1964463
Vinyl chloride	U		0.000474	0.00210	1	11/25/2022 20:37	WG1964463
Xylenes, Total	0.00167	J	0.00105	0.00629	1	11/25/2022 20:37	WG1964463
1,4-Dioxane	U		0.159	0.210	1	11/25/2022 20:37	WG1964463
(S) Toluene-d8	111			75.0-131		11/25/2022 20:37	WG1964463
(S) 4-Bromofluorobenzene	98.8			67.0-138		11/25/2022 20:37	WG1964463
(S) 1,2-Dichloroethane-d4	98.4			70.0-130		11/25/2022 20:37	WG1964463



Semi Volatile Organic Compounds (GC/MS) by Method 8270C

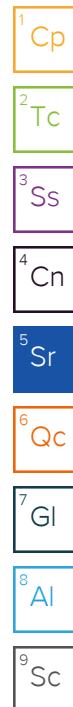
Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzidine	U		0.131	3.50	1	11/18/2022 14:13	WG1960984
Bis(2-chlorethoxy)methane	U		0.0210	0.698	1	11/18/2022 14:13	WG1960984
Bis(2-chloroethyl)ether	U		0.0231	0.698	1	11/18/2022 14:13	WG1960984
2,2-Oxybis(1-Chloropropane)	U		0.0302	0.698	1	11/18/2022 14:13	WG1960984
4-Bromophenyl-phenylether	U		0.0245	0.698	1	11/18/2022 14:13	WG1960984
4-Chlorophenyl-phenylether	U		0.0243	0.698	1	11/18/2022 14:13	WG1960984
1,2-Dichlorobenzene	U		0.0207	0.698	1	11/18/2022 14:13	WG1960984
1,3-Dichlorobenzene	U		0.0212	0.698	1	11/18/2022 14:13	WG1960984
1,4-Dichlorobenzene	U		0.0208	0.698	1	11/18/2022 14:13	WG1960984
3,3-Dichlorobenzidine	U		0.0258	0.698	1	11/18/2022 14:13	WG1960984
2,4-Dinitrotoluene	U		0.0200	0.698	1	11/18/2022 14:13	WG1960984
2,6-Dinitrotoluene	U		0.0228	0.698	1	11/18/2022 14:13	WG1960984
Hexachlorobenzene	U		0.0247	0.698	1	11/18/2022 14:13	WG1960984
Hexachloro-1,3-butadiene	U		0.0235	0.698	1	11/18/2022 14:13	WG1960984
Hexachlorocyclopentadiene	U		0.0367	0.698	1	11/18/2022 14:13	WG1960984
Hexachloroethane	U		0.0275	0.698	1	11/18/2022 14:13	WG1960984
Isophorone	U		0.0214	0.698	1	11/18/2022 14:13	WG1960984
Nitrobenzene	U		0.0243	0.698	1	11/18/2022 14:13	WG1960984
n-Nitrosodimethylamine	U		0.104	0.698	1	11/18/2022 14:13	WG1960984
n-Nitrosodiphenylamine	U		0.0528	0.698	1	11/18/2022 14:13	WG1960984
n-Nitrosodi-n-propylamine	U		0.0233	0.698	1	11/18/2022 14:13	WG1960984
Benzylbutyl phthalate	U		0.0218	0.698	1	11/18/2022 14:13	WG1960984
Bis(2-ethylhexyl)phthalate	U		0.0884	0.698	1	11/18/2022 14:13	WG1960984
Di-n-butyl phthalate	U		0.0239	0.698	1	11/18/2022 14:13	WG1960984
Diethyl phthalate	U		0.0231	0.698	1	11/18/2022 14:13	WG1960984
Dimethyl phthalate	U		0.148	0.698	1	11/18/2022 14:13	WG1960984
Di-n-octyl phthalate	U		0.0472	0.698	1	11/18/2022 14:13	WG1960984
1,2,4-Trichlorobenzene	U		0.0218	0.698	1	11/18/2022 14:13	WG1960984
4-Chloro-3-methylphenol	U		0.0226	0.698	1	11/18/2022 14:13	WG1960984
2-Chlorophenol	U		0.0231	0.698	1	11/18/2022 14:13	WG1960984
2,4-Dichlorophenol	U		0.0203	0.698	1	11/18/2022 14:13	WG1960984

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
2,4-Dimethylphenol	U		0.0182	0.698	1	11/18/2022 14:13	WG1960984
4,6-Dinitro-2-methylphenol	U		0.158	0.698	1	11/18/2022 14:13	WG1960984
2,4-Dinitrophenol	U		0.163	0.698	1	11/18/2022 14:13	WG1960984
2-Nitrophenol	U		0.0249	0.698	1	11/18/2022 14:13	WG1960984
4-Nitrophenol	U		0.0218	0.698	1	11/18/2022 14:13	WG1960984
Pentachlorophenol	U		0.0188	0.698	1	11/18/2022 14:13	WG1960984
Phenol	U		0.0281	0.698	1	11/18/2022 14:13	WG1960984
2,4,6-Trichlorophenol	U		0.0224	0.698	1	11/18/2022 14:13	WG1960984
(S) 2-Fluorophenol	59.5			12.0-120		11/18/2022 14:13	WG1960984
(S) Phenol-d5	56.0			10.0-120		11/18/2022 14:13	WG1960984
(S) Nitrobenzene-d5	55.7			10.0-122		11/18/2022 14:13	WG1960984
(S) 2-Fluorobiphenyl	61.8			15.0-120		11/18/2022 14:13	WG1960984
(S) 2,4,6-Tribromophenol	62.1			10.0-127		11/18/2022 14:13	WG1960984
(S) p-Terphenyl-d14	65.4			10.0-120		11/18/2022 14:13	WG1960984

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.00482	0.0126	1	11/18/2022 06:08	WG1961298
Acenaphthene	U		0.00438	0.0126	1	11/18/2022 06:08	WG1961298
Acenaphthylene	U		0.00453	0.0126	1	11/18/2022 06:08	WG1961298
Benzo(a)anthracene	U		0.00363	0.0126	1	11/18/2022 06:08	WG1961298
Benzo(a)pyrene	U		0.00375	0.0126	1	11/18/2022 06:08	WG1961298
Benzo(b)fluoranthene	U		0.00321	0.0126	1	11/18/2022 06:08	WG1961298
Benzo(g,h,i)perylene	U		0.00371	0.0126	1	11/18/2022 06:08	WG1961298
Benzo(k)fluoranthene	U		0.00451	0.0126	1	11/18/2022 06:08	WG1961298
Chrysene	U		0.00486	0.0126	1	11/18/2022 06:08	WG1961298
Dibenz(a,h)anthracene	U		0.00360	0.0126	1	11/18/2022 06:08	WG1961298
Fluoranthene	U		0.00476	0.0126	1	11/18/2022 06:08	WG1961298
Fluorene	U		0.00430	0.0126	1	11/18/2022 06:08	WG1961298
Indeno(1,2,3-cd)pyrene	U		0.00379	0.0126	1	11/18/2022 06:08	WG1961298
Naphthalene	U		0.00855	0.0419	1	11/18/2022 06:08	WG1961298
Phenanthrene	U		0.00484	0.0126	1	11/18/2022 06:08	WG1961298
Pyrene	U		0.00419	0.0126	1	11/18/2022 06:08	WG1961298
1-Methylnaphthalene	U		0.00941	0.0419	1	11/18/2022 06:08	WG1961298
2-Methylnaphthalene	U		0.00895	0.0419	1	11/18/2022 06:08	WG1961298
2-Chloronaphthalene	U		0.00977	0.0419	1	11/18/2022 06:08	WG1961298
(S) Nitrobenzene-d5	81.1			14.0-149		11/18/2022 06:08	WG1961298
(S) 2-Fluorobiphenyl	48.9			34.0-125		11/18/2022 06:08	WG1961298
(S) p-Terphenyl-d14	63.8			23.0-120		11/18/2022 06:08	WG1961298



Method Blank (MB)

(MB) R3861468-1 11/15/22 10:38

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.00100			

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

L1557290-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1557290-06 11/15/22 10:38 • (DUP) R3861468-3 11/15/22 10:38

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	77.4	78.8	1	1.81		10

⁷Gl

⁸Al

Laboratory Control Sample (LCS)

(LCS) R3861468-2 11/15/22 10:38

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

⁹Sc

Method Blank (MB)

(MB) R3861467-1 11/15/22 10:28

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.00100			

¹Cp

²Tc

³Ss

L1557295-19 Original Sample (OS) • Duplicate (DUP)

(OS) L1557295-19 11/15/22 10:28 • (DUP) R3861467-3 11/15/22 10:28

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	84.4	83.3	1	1.26		10

⁴Cn

⁵Sr

⁶Qc

Laboratory Control Sample (LCS)

(LCS) R3861467-2 11/15/22 10:28

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3861337-1 11/15/22 10:19

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.00100			

L1557295-21 Original Sample (OS) • Duplicate (DUP)

(OS) L1557295-21 11/15/22 10:19 • (DUP) R3861337-3 11/15/22 10:19

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	83.0	83.1	1	0.169		10

Laboratory Control Sample (LCS)

(LCS) R3861337-2 11/15/22 10:19

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3861512-1 11/15/22 13:19

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.00200			

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

L1557295-38 Original Sample (OS) • Duplicate (DUP)

(OS) L1557295-38 11/15/22 13:19 • (DUP) R3861512-3 11/15/22 13:19

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	58.6	56.1	1	4.38		10

Laboratory Control Sample (LCS)

(LCS) R3861512-2 11/15/22 13:19

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3865428-1 11/26/22 11:57

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.00200			

L1560039-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1560039-09 11/26/22 11:57 • (DUP) R3865428-3 11/26/22 11:57

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	84.7	85.9	1	1.42		10

Laboratory Control Sample (LCS)

(LCS) R3865428-2 11/26/22 11:57

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Method Blank (MB)

(MB) R3862759-1 11/18/22 12:28

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

Laboratory Control Sample (LCS)

(LCS) R3862759-2 11/18/22 12:30

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Mercury	0.500	0.480	96.0	80.0-120	

L1557295-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1557295-21 11/18/22 12:33 • (MS) R3862759-3 11/18/22 12:35 • (MSD) R3862759-4 11/18/22 12:38

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Mercury	0.603	0.0309	0.720	0.653	114	103	1	75.0-125			9.75	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3861944-1 11/16/22 11:22

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

Laboratory Control Sample (LCS)

(LCS) R3861944-2 11/16/22 11:24

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Mercury	0.500	0.482	96.3	80.0-120	

L1557295-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1557295-04 11/16/22 11:27 • (MS) R3861944-3 11/16/22 11:29 • (MSD) R3861944-4 11/16/22 11:31

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Mercury	0.614	0.0584	0.233	0.528	28.5	76.5	1	75.0-125	J6	J3	77.5	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3863483-1 11/21/22 10:00

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	0.548	⌋	0.518	2.00
Barium	U		0.0852	0.500
Cadmium	U		0.0471	0.500
Chromium	U		0.133	1.00
Lead	U		0.208	0.500
Selenium	U		0.764	2.00
Silver	U		0.127	1.00

Laboratory Control Sample (LCS)

(LCS) R3863483-2 11/21/22 10:05

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	98.9	98.9	80.0-120	
Barium	100	105	105	80.0-120	
Cadmium	100	99.0	99.0	80.0-120	
Chromium	100	99.9	99.9	80.0-120	
Lead	100	98.9	98.9	80.0-120	
Selenium	100	102	102	80.0-120	
Silver	20.0	18.8	94.1	80.0-120	

L1557295-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1557295-04 11/20/22 23:49 • (MS) R3863497-4 11/20/22 23:57 • (MSD) R3863497-5 11/20/22 23:59

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	123	7.45	123	127	94.3	97.7	1	75.0-125			3.32	20
Barium	123	143	274	259	106	93.8	1	75.0-125			5.67	20
Cadmium	123	1.00	119	123	96.0	99.6	1	75.0-125			3.64	20
Chromium	123	14.6	128	130	92.7	94.2	1	75.0-125			1.41	20
Lead	123	77.7	205	194	104	94.8	1	75.0-125			5.44	20
Selenium	123	U	121	127	98.3	103	1	75.0-125			4.70	20
Silver	24.6	U	23.2	24.2	94.5	98.5	1	75.0-125			4.15	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3864252-1 11/22/22 23:11

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
Lead	U		0.208	0.500
Selenium	U		0.764	2.00
Silver	U		0.127	1.00

Laboratory Control Sample (LCS)

(LCS) R3864252-2 11/22/22 23:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	89.2	89.2	80.0-120	
Barium	100	96.8	96.8	80.0-120	
Cadmium	100	92.4	92.4	80.0-120	
Chromium	100	91.2	91.2	80.0-120	
Lead	100	89.1	89.1	80.0-120	
Selenium	100	92.4	92.4	80.0-120	
Silver	20.0	17.4	87.0	80.0-120	

L1557295-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1557295-21 11/22/22 23:16 • (MS) R3864252-5 11/22/22 23:24 • (MSD) R3864252-6 11/22/22 23:27

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	121	3.87	109	121	87.5	96.9	1	75.0-125			9.92	20
Barium	121	142	256	265	94.6	102	1	75.0-125			3.50	20
Cadmium	121	0.612	110	120	90.6	99.4	1	75.0-125			9.25	20
Chromium	121	15.0	114	125	82.1	91.1	1	75.0-125			9.05	20
Lead	121	42.1	160	166	97.9	103	1	75.0-125			3.86	20
Selenium	121	1.35	109	121	89.1	99.0	1	75.0-125			10.4	20
Silver	24.1	U	21.2	23.1	87.8	96.0	1	75.0-125			8.89	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3862932-3 11/16/22 13:45

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0113	0.0500
Acrolein	U		0.00254	0.0500
Acrylonitrile	U		0.000671	0.0100
Allyl Chloride	U		0.000500	0.00500
Benzene	U		0.0000941	0.00100
Bromodichloromethane	U		0.000136	0.00100
Bromoform	U		0.000129	0.00100
Bromomethane	U		0.000605	0.00500
Carbon disulfide	U		0.0000962	0.00100
Carbon tetrachloride	U		0.000128	0.00100
Chlorobenzene	U		0.000116	0.00100
Chlorodibromomethane	U		0.000140	0.00100
Chloroethane	U		0.000192	0.00500
Chloroform	U		0.000111	0.00500
Chloromethane	U		0.000960	0.00250
1,2-Dibromoethane	U		0.000126	0.00100
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500
Dibromomethane	U		0.000122	0.00100
1,2-Dichlorobenzene	U		0.000107	0.00100
1,3-Dichlorobenzene	U		0.000110	0.00100
1,4-Dichlorobenzene	U		0.000120	0.00100
Dichlorodifluoromethane	U		0.000374	0.00500
trans-1,4-Dichloro-2-butene	U		0.000467	0.00500
1,1-Dichloroethane	U		0.000100	0.00100
1,2-Dichloroethane	U		0.0000819	0.00100
1,1-Dichloroethene	U		0.000188	0.00100
cis-1,2-Dichloroethene	U		0.000126	0.00100
trans-1,2-Dichloroethene	U		0.000149	0.00100
1,2-Dichloropropane	U		0.000149	0.00100
cis-1,3-Dichloropropene	U		0.000111	0.00100
trans-1,3-Dichloropropene	U		0.000118	0.00100
Ethylbenzene	U		0.000137	0.00100
2-Hexanone	U		0.000787	0.0100
Iodomethane	U		0.00600	0.0100
2-Butanone (MEK)	U		0.00119	0.0100
Methylene Chloride	U		0.000430	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100
Pentachloroethane	U		0.00230	0.00500
Styrene	U		0.000118	0.00100
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3862932-3 11/16/22 13:45

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100
Tetrachloroethene	U		0.000300	0.00100
Toluene	U		0.000278	0.00100
1,1,1-Trichloroethane	U		0.000149	0.00100
1,1,2-Trichloroethane	U		0.000158	0.00100
Trichloroethene	U		0.000190	0.00100
Trichlorofluoromethane	U		0.000160	0.00500
1,2,3-Trichloropropane	U		0.000237	0.00250
Vinyl acetate	U		0.000692	0.0100
Vinyl chloride	U		0.000234	0.00100
Xylenes, Total	U		0.000174	0.00300
Acetonitrile	U		0.0240	0.0500
Chloroprene	U		0.00145	0.0500
Isobutanol	U		0.0421	0.100
1,4-Dioxane	U		0.0360	0.100
Methacrylonitrile	U		0.0142	0.0500
Methyl methacrylate	U		0.00152	0.00500
Ethyl methacrylate	U		0.00148	0.00500
Propionitrile	U		0.0162	0.0500
(S) Toluene-d8	93.8			80.0-120
(S) 4-Bromofluorobenzene	87.3			77.0-126
(S) 1,2-Dichloroethane-d4	90.9			70.0-130

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3862932-1 11/16/22 12:43

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.0250	0.0278	111	19.0-160	
Acrolein	0.0250	0.0153	61.2	10.0-160	
Acrylonitrile	0.0250	0.0258	103	55.0-149	
Allyl chloride	0.0250	0.0217	86.8	72.0-128	
Benzene	0.00500	0.00468	93.6	70.0-123	
Bromodichloromethane	0.00500	0.00459	91.8	75.0-120	
Bromoform	0.00500	0.00335	67.0	68.0-132	J4
Bromomethane	0.00500	0.00517	103	10.0-160	
Carbon disulfide	0.00500	0.00454	90.8	61.0-128	
Carbon tetrachloride	0.00500	0.00471	94.2	68.0-126	
Chlorobenzene	0.00500	0.00421	84.2	80.0-121	

Laboratory Control Sample (LCS)

(LCS) R3862932-1 11/16/22 12:43

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chlorodibromomethane	0.00500	0.00366	73.2	77.0-125	J4
Chloroethane	0.00500	0.00467	93.4	47.0-150	
Chloroform	0.00500	0.00431	86.2	73.0-120	
Chloromethane	0.00500	0.00485	97.0	41.0-142	
1,2-Dibromoethane	0.00500	0.00410	82.0	80.0-122	
1,2-Dibromo-3-Chloropropane	0.00500	0.00379	75.8	58.0-134	
Dibromomethane	0.00500	0.00455	91.0	80.0-120	
1,2-Dichlorobenzene	0.00500	0.00444	88.8	79.0-121	
1,3-Dichlorobenzene	0.00500	0.00456	91.2	79.0-120	
1,4-Dichlorobenzene	0.00500	0.00410	82.0	79.0-120	
Dichlorodifluoromethane	0.00500	0.00491	98.2	51.0-149	
trans-1,4-Dichloro-2-butene	0.00500	0.00202	40.4	33.0-144	
1,1-Dichloroethane	0.00500	0.00477	95.4	70.0-126	
1,2-Dichloroethane	0.00500	0.00440	88.0	70.0-128	
1,1-Dichloroethene	0.00500	0.00430	86.0	71.0-124	
cis-1,2-Dichloroethene	0.00500	0.00427	85.4	73.0-120	
trans-1,2-Dichloroethene	0.00500	0.00494	98.8	73.0-120	
1,2-Dichloropropane	0.00500	0.00508	102	77.0-125	
cis-1,3-Dichloropropene	0.00500	0.00451	90.2	80.0-123	
trans-1,3-Dichloropropene	0.00500	0.00413	82.6	78.0-124	
Ethylbenzene	0.00500	0.00418	83.6	79.0-123	
2-Hexanone	0.0250	0.0236	94.4	67.0-149	
Iodomethane	0.0250	0.0222	88.8	33.0-147	
2-Butanone (MEK)	0.0250	0.0286	114	44.0-160	
Methylene Chloride	0.00500	0.00443	88.6	67.0-120	
4-Methyl-2-pentanone (MIBK)	0.0250	0.0247	98.8	68.0-142	
Styrene	0.00500	0.00374	74.8	73.0-130	
1,1,2,2-Tetrachloroethane	0.00500	0.00483	96.6	65.0-130	
1,1,1,2-Tetrachloroethane	0.00500	0.00433	86.6	75.0-125	
Tetrachloroethene	0.00500	0.00438	87.6	72.0-132	
Toluene	0.00500	0.00416	83.2	79.0-120	
1,1,1-Trichloroethane	0.00500	0.00503	101	73.0-124	
1,1,2-Trichloroethane	0.00500	0.00406	81.2	80.0-120	
Trichloroethene	0.00500	0.00464	92.8	78.0-124	
Trichlorofluoromethane	0.00500	0.00489	97.8	59.0-147	
1,2,3-Trichloropropane	0.00500	0.00440	88.0	73.0-130	
Vinyl acetate	0.0250	0.0305	122	11.0-160	
Vinyl chloride	0.00500	0.00458	91.6	67.0-131	
Xylenes, Total	0.0150	0.0127	84.7	79.0-123	
(S) Toluene-d8			92.4	80.0-120	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3862932-1 11/16/22 12:43

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
(S) 4-Bromofluorobenzene			88.0	77.0-126	
(S) 1,2-Dichloroethane-d4			88.6	70.0-130	

Laboratory Control Sample (LCS)

(LCS) R3862932-2 11/16/22 13:04

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Pentachloroethane	0.0500	0.0404	80.8	10.0-160	
Acetonitrile	0.500	0.614	123	40.0-160	
Chloroprene	0.0500	0.0354	70.8	60.0-143	
Isobutanol	1.00	1.08	108	40.0-160	
1,4-Dioxane	1.00	0.904	90.4	13.0-160	
Methacrylonitrile	0.500	0.528	106	61.0-145	
Methyl methacrylate	0.0500	0.0612	122	63.0-149	
Ethyl methacrylate	0.0500	0.0441	88.2	72.0-129	
Propionitrile	0.500	0.540	108	49.0-160	
(S) Toluene-d8			87.9	80.0-120	
(S) 4-Bromofluorobenzene			86.6	77.0-126	
(S) 1,2-Dichloroethane-d4			89.1	70.0-130	

L1557297-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1557297-03 11/16/22 23:29 • (MS) R3862932-4 11/17/22 00:11 • (MSD) R3862932-5 11/17/22 00:31

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Acetone	0.500	U	0.506	0.517	101	103	20	10.0-160			2.15	35
Acrolein	0.500	U	0.397	0.382	79.4	76.4	20	10.0-160			3.85	39
Acrylonitrile	0.500	U	0.503	0.502	101	100	20	21.0-160			0.199	32
Allyl chloride	2.50	U	0.432	0.417	17.3	16.7	20	39.0-145	J6	J6	3.53	30
Benzene	0.100	U	0.0994	0.0964	99.4	96.4	20	17.0-158			3.06	27
Bromodichloromethane	0.100	U	0.0960	0.0926	96.0	92.6	20	31.0-150			3.61	27
Bromoform	0.100	U	0.0655	0.0630	65.5	63.0	20	29.0-150			3.89	29
Bromomethane	0.100	U	0.0852	0.0870	85.2	87.0	20	10.0-160			2.09	38
Carbon disulfide	0.100	U	0.0748	0.0732	74.8	73.2	20	10.0-156			2.16	28
Carbon tetrachloride	0.100	U	0.103	0.0987	103	98.7	20	23.0-159			4.26	28
Chlorobenzene	0.100	U	0.0867	0.0865	86.7	86.5	20	33.0-152			0.231	27
Chlorodibromomethane	0.100	U	0.0730	0.0725	73.0	72.5	20	37.0-149			0.687	27
Chloroethane	0.100	U	0.106	0.106	106	106	20	10.0-160			0.000	30

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1557297-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1557297-03 11/16/22 23:29 • (MS) R3862932-4 11/17/22 00:11 • (MSD) R3862932-5 11/17/22 00:31

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloroform	0.100	U	0.0917	0.0905	91.7	90.5	20	29.0-154			1.32	28
Chloromethane	0.100	U	0.111	0.103	111	103	20	10.0-160			7.48	29
1,2-Dibromoethane	0.100	U	0.0716	0.0845	71.6	84.5	20	34.0-147			16.5	27
1,2-Dibromo-3-Chloropropane	0.100	U	0.0709	0.0737	70.9	73.7	20	22.0-151			3.87	34
Dibromomethane	0.100	U	0.0818	0.0860	81.8	86.0	20	30.0-151			5.01	27
1,2-Dichlorobenzene	0.100	U	0.0832	0.0896	83.2	89.6	20	34.0-149			7.41	28
1,3-Dichlorobenzene	0.100	U	0.0875	0.0960	87.5	96.0	20	36.0-146			9.26	27
1,4-Dichlorobenzene	0.100	U	0.0833	0.0833	83.3	83.3	20	35.0-142			0.000	27
Dichlorodifluoromethane	0.100	U	0.122	0.121	122	121	20	10.0-160			0.823	29
trans-1,4-Dichloro-2-butene	0.100	U	0.0409	0.0448	40.9	44.8	20	10.0-157			9.10	37
1,1-Dichloroethane	0.100	U	0.100	0.0983	100	98.3	20	25.0-158			1.71	27
1,2-Dichloroethane	0.100	U	0.0907	0.0879	90.7	87.9	20	29.0-151			3.14	27
1,1-Dichloroethene	0.100	U	0.0920	0.0901	92.0	90.1	20	11.0-160			2.09	29
cis-1,2-Dichloroethene	0.100	U	0.0909	0.0835	90.9	83.5	20	10.0-160			8.49	27
trans-1,2-Dichloroethene	0.100	U	0.0946	0.0892	94.6	89.2	20	17.0-153			5.88	27
1,2-Dichloropropane	0.100	U	0.102	0.0979	102	97.9	20	30.0-156			4.10	27
cis-1,3-Dichloropropene	0.100	U	0.0906	0.0847	90.6	84.7	20	34.0-149			6.73	28
trans-1,3-Dichloropropene	0.100	U	0.0806	0.0840	80.6	84.0	20	32.0-149			4.13	28
Ethylbenzene	0.100	U	0.0883	0.0831	88.3	83.1	20	30.0-155			6.07	27
2-Hexanone	0.500	U	0.460	0.449	92.0	89.8	20	21.0-160			2.42	29
Iodomethane	0.500	U	0.429	0.417	85.8	83.4	20	10.0-160			2.84	40
2-Butanone (MEK)	0.500	U	0.548	0.551	110	110	20	10.0-160			0.546	32
Methylene Chloride	0.100	U	0.0909	0.0865	90.9	86.5	20	23.0-144			4.96	28
4-Methyl-2-pentanone (MIBK)	0.500	U	0.478	0.473	95.6	94.6	20	29.0-160			1.05	29
Styrene	0.100	U	0.0795	0.0772	79.5	77.2	20	33.0-155			2.94	28
1,1,2,2-Tetrachloroethane	0.100	U	0.0904	0.0974	90.4	97.4	20	33.0-150			7.45	28
1,1,1,2-Tetrachloroethane	0.100	U	0.0832	0.0832	83.2	83.2	20	36.0-151			0.000	29
Tetrachloroethene	0.100	U	0.0850	0.0850	85.0	85.0	20	10.0-160			0.000	27
Toluene	0.100	U	0.0845	0.0847	84.5	84.7	20	26.0-154			0.236	28
1,1,1-Trichloroethane	0.100	U	0.107	0.104	107	104	20	23.0-160			2.84	28
1,1,2-Trichloroethane	0.100	U	0.0845	0.0810	84.5	81.0	20	35.0-147			4.23	27
Trichloroethene	0.100	U	0.0966	0.0959	96.6	95.9	20	10.0-160			0.727	25
Trichlorofluoromethane	0.100	U	0.102	0.100	102	100	20	17.0-160			1.98	31
1,2,3-Trichloropropane	0.100	U	0.0893	0.0910	89.3	91.0	20	34.0-151			1.89	29
Vinyl acetate	0.500	U	0.666	0.657	133	131	20	12.0-160			1.36	31
Vinyl chloride	0.100	U	0.102	0.107	102	107	20	10.0-160			4.78	27
Xylenes, Total	0.300	U	0.257	0.251	85.7	83.7	20	29.0-154			2.36	28
(S) Toluene-d8					90.0	90.9	80.0-120					
(S) 4-Bromofluorobenzene					88.8	84.7	77.0-126					
(S) 1,2-Dichloroethane-d4					95.3	96.8	70.0-130					

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Method Blank (MB)

(MB) R3865000-4 11/23/22 12:46

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0207	0.0500
Acrylonitrile	U		0.00202	0.0100
Allyl Chloride	U		0.00400	0.00500
Benzene	U		0.000375	0.00100
Bromodichloromethane	U		0.000725	0.00100
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00117	0.00500
Carbon disulfide	U		0.000700	0.00100
Carbon tetrachloride	U		0.000248	0.00100
Chlorobenzene	U		0.000192	0.00100
Chlorodibromomethane	U		0.000224	0.00100
Chloroethane	U		0.00100	0.00500
Chloroform	U		0.00103	0.00500
Chloromethane	U		0.000650	0.00250
1,2-Dibromoethane	U		0.000250	0.00100
Dibromomethane	U		0.000350	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00190	0.00500
1,2-Dichlorobenzene	U		0.000425	0.00100
1,3-Dichlorobenzene	U		0.000600	0.00100
1,4-Dichlorobenzene	U		0.000830	0.00100
Dichlorodifluoromethane	U		0.000287	0.00500
trans-1,4-Dichloro-2-butene	U		0.000950	0.00250
1,1-Dichloroethane	U		0.000268	0.00100
1,2-Dichloroethane	U		0.000450	0.00100
1,1-Dichloroethene	U		0.000355	0.00100
cis-1,2-Dichloroethene	U		0.000475	0.00100
trans-1,2-Dichloroethene	U		0.000500	0.00100
1,2-Dichloropropane	U		0.000164	0.00100
cis-1,3-Dichloropropene	U		0.000425	0.00100
trans-1,3-Dichloropropene	U		0.000675	0.00100
Ethylbenzene	U		0.000300	0.00100
2-Hexanone	U		0.00179	0.0100
Iodomethane	U		0.00121	0.0100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.000950	0.0100
Pentachloroethane	U		0.00250	0.00500
Styrene	U		0.000223	0.00100
1,1,1,2-Tetrachloroethane	U		0.000296	0.00100
1,1,2,2-Tetrachloroethane	U		0.000231	0.00100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3865000-4 11/23/22 12:46

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Tetrachloroethene	U		0.000325	0.00100
Toluene	U		0.00123	0.00500
1,1,1-Trichloroethane	U		0.000370	0.00100
1,1,2-Trichloroethane	U		0.000425	0.00100
Trichloroethene	U		0.000200	0.00100
Trichlorofluoromethane	U		0.000356	0.00500
1,2,3-Trichloropropane	U		0.000244	0.00250
Vinyl acetate	U		0.000990	0.0100
Vinyl chloride	U		0.000226	0.00100
Xylenes, Total	U		0.000500	0.00300
1,4-Dioxane	U		0.0760	0.100
(S) Toluene-d8	106			75.0-131
(S) 4-Bromofluorobenzene	98.8			67.0-138
(S) 1,2-Dichloroethane-d4	90.4			70.0-130

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3865000-1 11/23/22 11:18 • (LCSD) R3865000-2 11/23/22 11:40

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0984	0.116	78.7	92.8	10.0-160			16.4	31
Acrylonitrile	0.125	0.113	0.128	90.4	102	45.0-153			12.4	22
Allyl Chloride	0.125	0.122	0.122	97.6	97.6	70.0-131			0.000	20
Benzene	0.0250	0.0241	0.0247	96.4	98.8	70.0-123			2.46	20
Bromodichloromethane	0.0250	0.0235	0.0247	94.0	98.8	73.0-121			4.98	20
Bromoform	0.0250	0.0254	0.0292	102	117	64.0-132			13.9	20
Bromomethane	0.0250	0.0205	0.0212	82.0	84.8	56.0-147			3.36	20
Carbon disulfide	0.0250	0.0229	0.0228	91.6	91.2	56.0-133			0.438	20
Carbon tetrachloride	0.0250	0.0234	0.0234	93.6	93.6	66.0-128			0.000	20
Chlorobenzene	0.0250	0.0267	0.0276	107	110	76.0-128			3.31	20
Chlorodibromomethane	0.0250	0.0259	0.0285	104	114	74.0-127			9.56	20
Chloroethane	0.0250	0.0184	0.0190	73.6	76.0	61.0-134			3.21	20
Chloroform	0.0250	0.0230	0.0239	92.0	95.6	72.0-123			3.84	20
Chloromethane	0.0250	0.0235	0.0239	94.0	95.6	51.0-138			1.69	20
1,2-Dibromoethane	0.0250	0.0253	0.0288	101	115	74.0-128			12.9	20
Dibromomethane	0.0250	0.0228	0.0253	91.2	101	75.0-122			10.4	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0243	0.0281	97.2	112	59.0-130			14.5	20
1,2-Dichlorobenzene	0.0250	0.0269	0.0287	108	115	76.0-124			6.47	20
1,3-Dichlorobenzene	0.0250	0.0272	0.0285	109	114	76.0-125			4.67	20

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3865000-1 11/23/22 11:18 • (LCSD) R3865000-2 11/23/22 11:40

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,4-Dichlorobenzene	0.0250	0.0263	0.0275	105	110	77.0-121			4.46	20
Dichlorodifluoromethane	0.0250	0.0224	0.0226	89.6	90.4	43.0-156			0.889	20
trans-1,4-Dichloro-2-butene	0.0250	0.0212	0.0250	84.8	100	45.0-143			16.5	20
1,1-Dichloroethane	0.0250	0.0239	0.0247	95.6	98.8	70.0-127			3.29	20
1,2-Dichloroethane	0.0250	0.0213	0.0229	85.2	91.6	65.0-131			7.24	20
1,1-Dichloroethene	0.0250	0.0255	0.0254	102	102	65.0-131			0.393	20
cis-1,2-Dichloroethene	0.0250	0.0240	0.0248	96.0	99.2	73.0-125			3.28	20
trans-1,2-Dichloroethene	0.0250	0.0249	0.0254	99.6	102	71.0-125			1.99	20
1,2-Dichloropropane	0.0250	0.0252	0.0260	101	104	74.0-125			3.13	20
cis-1,3-Dichloropropene	0.0250	0.0245	0.0263	98.0	105	76.0-127			7.09	20
trans-1,3-Dichloropropene	0.0250	0.0251	0.0281	100	112	73.0-127			11.3	20
Ethylbenzene	0.0250	0.0266	0.0277	106	111	74.0-126			4.05	20
2-Hexanone	0.125	0.123	0.147	98.4	118	54.0-147			17.8	20
Iodomethane	0.125	0.129	0.133	103	106	39.0-158			3.05	20
2-Butanone (MEK)	0.125	0.104	0.122	83.2	97.6	30.0-160			15.9	24
Methylene Chloride	0.0250	0.0207	0.0218	82.8	87.2	68.0-123			5.18	20
4-Methyl-2-pentanone (MIBK)	0.125	0.116	0.138	92.8	110	56.0-143			17.3	20
Styrene	0.0250	0.0267	0.0283	107	113	72.0-127			5.82	20
1,1,1,2-Tetrachloroethane	0.0250	0.0269	0.0281	108	112	74.0-129			4.36	20
1,1,2,2-Tetrachloroethane	0.0250	0.0236	0.0266	94.4	106	68.0-128			12.0	20
Tetrachloroethene	0.0250	0.0270	0.0275	108	110	70.0-136			1.83	20
Toluene	0.0250	0.0259	0.0267	104	107	75.0-121			3.04	20
1,1,1-Trichloroethane	0.0250	0.0230	0.0230	92.0	92.0	69.0-126			0.000	20
1,1,2-Trichloroethane	0.0250	0.0256	0.0280	102	112	78.0-123			8.96	20
Trichloroethene	0.0250	0.0248	0.0251	99.2	100	76.0-126			1.20	20
Trichlorofluoromethane	0.0250	0.0228	0.0225	91.2	90.0	61.0-142			1.32	20
1,2,3-Trichloropropane	0.0250	0.0222	0.0254	88.8	102	67.0-129			13.4	20
Vinyl acetate	0.125	0.212	0.227	170	182	43.0-159	J4	J4	6.83	20
Vinyl chloride	0.0250	0.0203	0.0200	81.2	80.0	63.0-134			1.49	20
Xylenes, Total	0.0750	0.0798	0.0823	106	110	72.0-127			3.08	20
(S) Toluene-d8				106	106	75.0-131				
(S) 4-Bromofluorobenzene				101	104	67.0-138				
(S) 1,2-Dichloroethane-d4				90.2	88.3	70.0-130				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS)

(LCS) R3865000-3 11/23/22 12:02

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Pentachloroethane	0.0500	0.0453	90.6	59.0-145	
1,4-Dioxane	1.00	0.744	74.4	18.0-160	
(S) Toluene-d8			107	75.0-131	
(S) 4-Bromofluorobenzene			102	67.0-138	
(S) 1,2-Dichloroethane-d4			90.9	70.0-130	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3865156-4 11/25/22 15:50

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0207	0.0500
Acrylonitrile	U		0.00202	0.0100
Allyl Chloride	U		0.00400	0.00500
Benzene	U		0.000375	0.00100
Bromodichloromethane	U		0.000725	0.00100
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00117	0.00500
Carbon disulfide	U		0.000700	0.00100
Carbon tetrachloride	U		0.000248	0.00100
Chlorobenzene	U		0.000192	0.00100
Chlorodibromomethane	U		0.000224	0.00100
Chloroethane	U		0.00100	0.00500
Chloroform	U		0.00103	0.00500
Chloromethane	U		0.000650	0.00250
1,2-Dibromoethane	U		0.000250	0.00100
Dibromomethane	U		0.000350	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00190	0.00500
1,2-Dichlorobenzene	U		0.000425	0.00100
1,3-Dichlorobenzene	U		0.000600	0.00100
1,4-Dichlorobenzene	U		0.000830	0.00100
Dichlorodifluoromethane	U		0.000287	0.00500
trans-1,4-Dichloro-2-butene	U		0.000950	0.00250
1,1-Dichloroethane	U		0.000268	0.00100
1,2-Dichloroethane	U		0.000450	0.00100
1,1-Dichloroethene	U		0.000355	0.00100
cis-1,2-Dichloroethene	U		0.000475	0.00100
trans-1,2-Dichloroethene	U		0.000500	0.00100
1,2-Dichloropropane	U		0.000164	0.00100
cis-1,3-Dichloropropene	U		0.000425	0.00100
trans-1,3-Dichloropropene	U		0.000675	0.00100
Ethylbenzene	U		0.000300	0.00100
2-Hexanone	U		0.00179	0.0100
Iodomethane	0.0108		0.00121	0.0100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	0.00134	U	0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.000950	0.0100
Pentachloroethane	U		0.00250	0.00500
Styrene	U		0.000223	0.00100
1,1,1,2-Tetrachloroethane	U		0.000296	0.00100
1,1,2,2-Tetrachloroethane	U		0.000231	0.00100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3865156-4 11/25/22 15:50

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Tetrachloroethene	U		0.000325	0.00100
Toluene	U		0.00123	0.00500
1,1,1-Trichloroethane	U		0.000370	0.00100
1,1,2-Trichloroethane	U		0.000425	0.00100
Trichloroethene	U		0.000200	0.00100
Trichlorofluoromethane	U		0.000356	0.00500
1,2,3-Trichloropropane	U		0.000244	0.00250
Vinyl acetate	U		0.000990	0.0100
Vinyl chloride	U		0.000226	0.00100
Xylenes, Total	U		0.000500	0.00300
1,4-Dioxane	U		0.0760	0.100
(S) Toluene-d8	113			75.0-131
(S) 4-Bromofluorobenzene	102			67.0-138
(S) 1,2-Dichloroethane-d4	95.4			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3865156-1 11/25/22 14:13

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.125	0.0932	74.6	10.0-160	
Acrylonitrile	0.125	0.145	116	45.0-153	
Allyl Chloride	0.125	0.107	85.6	70.0-131	
Benzene	0.0250	0.0267	107	70.0-123	
Bromodichloromethane	0.0250	0.0250	100	73.0-121	
Bromoform	0.0250	0.0238	95.2	64.0-132	
Bromomethane	0.0250	0.0184	73.6	56.0-147	
Carbon disulfide	0.0250	0.0228	91.2	56.0-133	
Carbon tetrachloride	0.0250	0.0250	100	66.0-128	
Chlorobenzene	0.0250	0.0266	106	76.0-128	
Chlorodibromomethane	0.0250	0.0264	106	74.0-127	
Chloroethane	0.0250	0.0235	94.0	61.0-134	
Chloroform	0.0250	0.0245	98.0	72.0-123	
Chloromethane	0.0250	0.0333	133	51.0-138	
1,2-Dibromoethane	0.0250	0.0254	102	74.0-128	
Dibromomethane	0.0250	0.0235	94.0	75.0-122	
1,2-Dibromo-3-Chloropropane	0.0250	0.0273	109	59.0-130	
1,2-Dichlorobenzene	0.0250	0.0275	110	76.0-124	
1,3-Dichlorobenzene	0.0250	0.0285	114	76.0-125	

1Cp

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8Al

9Sc

Laboratory Control Sample (LCS)

(LCS) R3865156-1 11/25/22 14:13

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
1,4-Dichlorobenzene	0.0250	0.0270	108	77.0-121	
Dichlorodifluoromethane	0.0250	0.0342	137	43.0-156	
trans-1,4-Dichloro-2-butene	0.0250	0.0259	104	45.0-143	
1,1-Dichloroethane	0.0250	0.0290	116	70.0-127	
1,2-Dichloroethane	0.0250	0.0236	94.4	65.0-131	
1,1-Dichloroethene	0.0250	0.0228	91.2	65.0-131	
cis-1,2-Dichloroethene	0.0250	0.0279	112	73.0-125	
trans-1,2-Dichloroethene	0.0250	0.0237	94.8	71.0-125	
1,2-Dichloropropane	0.0250	0.0284	114	74.0-125	
cis-1,3-Dichloropropene	0.0250	0.0259	104	76.0-127	
trans-1,3-Dichloropropene	0.0250	0.0253	101	73.0-127	
Ethylbenzene	0.0250	0.0280	112	74.0-126	
2-Hexanone	0.125	0.151	121	54.0-147	
Iodomethane	0.125	0.100	80.0	39.0-158	
2-Butanone (MEK)	0.125	0.122	97.6	30.0-160	
Methylene Chloride	0.0250	0.0205	82.0	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.125	0.132	106	56.0-143	
Styrene	0.0250	0.0289	116	72.0-127	
1,1,1,2-Tetrachloroethane	0.0250	0.0263	105	74.0-129	
1,1,2,2-Tetrachloroethane	0.0250	0.0243	97.2	68.0-128	
Tetrachloroethene	0.0250	0.0288	115	70.0-136	
Toluene	0.0250	0.0267	107	75.0-121	
1,1,1-Trichloroethane	0.0250	0.0260	104	69.0-126	
1,1,2-Trichloroethane	0.0250	0.0255	102	78.0-123	
Trichloroethene	0.0250	0.0284	114	76.0-126	
Trichlorofluoromethane	0.0250	0.0211	84.4	61.0-142	
1,2,3-Trichloropropane	0.0250	0.0249	99.6	67.0-129	
Vinyl acetate	0.125	0.250	200	43.0-159	J4
Vinyl chloride	0.0250	0.0296	118	63.0-134	
Xylenes, Total	0.0750	0.0868	116	72.0-127	
(S) Toluene-d8			105	75.0-131	
(S) 4-Bromofluorobenzene			103	67.0-138	
(S) 1,2-Dichloroethane-d4			97.5	70.0-130	

¹Cp

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⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3865156-3 11/25/22 15:01

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Pentachloroethane	0.0500	0.0376	75.2	59.0-145	
1,4-Dioxane	1.00	0.513	51.3	18.0-160	
(S) Toluene-d8			108	75.0-131	
(S) 4-Bromofluorobenzene			109	67.0-138	
(S) 1,2-Dichloroethane-d4			91.9	70.0-130	

¹Cp

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Method Blank (MB)

(MB) R3862641-1 11/18/22 03:00

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
PCB 1016	U		0.0118	0.0340
PCB 1221	U		0.0118	0.0340
PCB 1232	U		0.0118	0.0340
PCB 1242	U		0.0118	0.0340
PCB 1248	U		0.00738	0.0170
PCB 1254	U		0.00738	0.0170
PCB 1260	U		0.00738	0.0170
(S) Decachlorobiphenyl	78.1			10.0-135
(S) Tetrachloro-m-xylene	71.0			10.0-139

Laboratory Control Sample (LCS)

(LCS) R3862641-2 11/18/22 03:10

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
PCB 1016	0.167	0.114	68.3	36.0-141	
PCB 1260	0.167	0.115	68.9	37.0-145	
(S) Decachlorobiphenyl			86.5	10.0-135	
(S) Tetrachloro-m-xylene			74.2	10.0-139	

L1557295-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1557295-21 11/18/22 04:18 • (MS) R3862641-3 11/18/22 04:28 • (MSD) R3862641-4 11/18/22 04:38

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 %
PCB 1016	0.201	U	0.162	0.145	80.2	71.9	1	10.0-160			11.0	37
PCB 1260	0.201	U	0.137	0.125	68.3	62.3	1	10.0-160			9.17	38
(S) Decachlorobiphenyl					72.1	70.7		10.0-135				
(S) Tetrachloro-m-xylene					65.3	65.0		10.0-139				

L1557295-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1557295-04 11/18/22 05:27 • (MS) R3862641-5 11/18/22 05:36 • (MSD) R3862641-6 11/18/22 05:46

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 %
PCB 1016	0.205	U	0.169	0.210	82.6	102	1	10.0-160			21.4	37
PCB 1260	0.205	U	0.126	0.131	61.7	64.1	1	10.0-160			3.81	38

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Cp

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Tc

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Cn

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Sr

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Qc

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Gl

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Al

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Sc

L1557295-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1557295-04 11/18/22 05:27 • (MS) R3862641-5 11/18/22 05:36 • (MSD) R3862641-6 11/18/22 05:46

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
(S) Decachlorobiphenyl					55.1	59.5		10.0-135				
(S) Tetrachloro-m-xylene					54.4	59.8		10.0-139				

¹Cp

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⁶Qc

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Method Blank (MB)

(MB) R3862551-2 11/17/22 17:51

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzidine	U		0.0626	1.67
Bis(2-chlorethoxy)methane	U		0.0100	0.333
Bis(2-chloroethyl)ether	U		0.0110	0.333
2,2-Oxybis(1-Chloropropane)	U		0.0144	0.333
4-Bromophenyl-phenylether	U		0.0117	0.333
4-Chlorophenyl-phenylether	U		0.0116	0.333
1,2-Dichlorobenzene	U		0.00987	0.333
1,3-Dichlorobenzene	U		0.0101	0.333
1,4-Dichlorobenzene	U		0.00991	0.333
3,3-Dichlorobenzidine	U		0.0123	0.333
2,4-Dinitrotoluene	U		0.00955	0.333
2,6-Dinitrotoluene	U		0.0109	0.333
Hexachlorobenzene	U		0.0118	0.333
Hexachloro-1,3-butadiene	U		0.0112	0.333
Hexachlorocyclopentadiene	U		0.0175	0.333
Hexachloroethane	U		0.0131	0.333
Isophorone	U		0.0102	0.333
Nitrobenzene	U		0.0116	0.333
n-Nitrosodimethylamine	U		0.0494	0.333
n-Nitrosodiphenylamine	U		0.0252	0.333
n-Nitrosodi-n-propylamine	U		0.0111	0.333
Benzylbutyl phthalate	U		0.0104	0.333
Bis(2-ethylhexyl)phthalate	U		0.0422	0.333
Di-n-butyl phthalate	U		0.0114	0.333
Diethyl phthalate	U		0.0110	0.333
Dimethyl phthalate	U		0.0706	0.333
Di-n-octyl phthalate	U		0.0225	0.333
1,2,4-Trichlorobenzene	U		0.0104	0.333
4-Chloro-3-methylphenol	U		0.0108	0.333
2-Chlorophenol	U		0.0110	0.333
2,4-Dichlorophenol	U		0.00970	0.333
2,4-Dimethylphenol	U		0.00870	0.333
4,6-Dinitro-2-methylphenol	U		0.0755	0.333
2,4-Dinitrophenol	U		0.0779	0.333
2-Nitrophenol	U		0.0119	0.333
4-Nitrophenol	U		0.0104	0.333
Pentachlorophenol	U		0.00896	0.333
Phenol	U		0.0134	0.333
2,4,6-Trichlorophenol	U		0.0107	0.333
(S) 2-Fluorophenol	68.3			12.0-120

¹Cp

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Method Blank (MB)

(MB) R3862551-2 11/17/22 17:51

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
(S) Phenol-d5	63.2			10.0-120
(S) Nitrobenzene-d5	67.3			10.0-122
(S) 2-Fluorobiphenyl	76.3			15.0-120
(S) 2,4,6-Tribromophenol	67.3			10.0-127
(S) p-Terphenyl-d14	82.6			10.0-120

Laboratory Control Sample (LCS)

(LCS) R3862551-1 11/17/22 17:29

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzidine	1.33	0.167	12.6	10.0-120	
Bis(2-chlorethoxy)methane	0.666	0.422	63.4	20.0-120	
Bis(2-chloroethyl)ether	0.666	0.442	66.4	16.0-120	
2,2-Oxybis(1-Chloropropane)	0.666	0.488	73.3	23.0-120	
4-Bromophenyl-phenylether	0.666	0.596	89.5	40.0-120	
4-Chlorophenyl-phenylether	0.666	0.569	85.4	40.0-120	
1,2-Dichlorobenzene	0.666	0.473	71.0	32.0-120	
1,3-Dichlorobenzene	0.666	0.458	68.8	30.0-120	
1,4-Dichlorobenzene	0.666	0.464	69.7	31.0-120	
3,3-Dichlorobenzidine	1.33	0.916	68.9	28.0-120	
2,4-Dinitrotoluene	0.666	0.615	92.3	45.0-120	
2,6-Dinitrotoluene	0.666	0.599	89.9	42.0-120	
Hexachlorobenzene	0.666	0.547	82.1	39.0-120	
Hexachloro-1,3-butadiene	0.666	0.459	68.9	15.0-120	
Hexachlorocyclopentadiene	0.666	0.575	86.3	15.0-120	
Hexachloroethane	0.666	0.462	69.4	17.0-120	
Isophorone	0.666	0.396	59.5	23.0-120	
Nitrobenzene	0.666	0.406	61.0	17.0-120	
n-Nitrosodimethylamine	0.666	0.368	55.3	10.0-125	
n-Nitrosodiphenylamine	0.666	0.439	65.9	40.0-120	
n-Nitrosodi-n-propylamine	0.666	0.461	69.2	26.0-120	
Benzylbutyl phthalate	0.666	0.543	81.5	40.0-120	
Bis(2-ethylhexyl)phthalate	0.666	0.539	80.9	41.0-120	
Di-n-butyl phthalate	0.666	0.601	90.2	43.0-120	
Diethyl phthalate	0.666	0.551	82.7	43.0-120	
Dimethyl phthalate	0.666	0.565	84.8	43.0-120	
Di-n-octyl phthalate	0.666	0.526	79.0	40.0-120	
1,2,4-Trichlorobenzene	0.666	0.454	68.2	17.0-120	

¹Cp

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Laboratory Control Sample (LCS)

(LCS) R3862551-1 11/17/22 17:29

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
4-Chloro-3-methylphenol	0.666	0.430	64.6	28.0-120	
2-Chlorophenol	0.666	0.475	71.3	28.0-120	
2,4-Dichlorophenol	0.666	0.444	66.7	25.0-120	
2,4-Dimethylphenol	0.666	0.395	59.3	15.0-120	
4,6-Dinitro-2-methylphenol	0.666	0.569	85.4	16.0-120	
2,4-Dinitrophenol	0.666	0.447	67.1	10.0-120	
2-Nitrophenol	0.666	0.483	72.5	20.0-120	
4-Nitrophenol	0.666	0.559	83.9	27.0-120	
Pentachlorophenol	0.666	0.532	79.9	29.0-120	
Phenol	0.666	0.451	67.7	28.0-120	
2,4,6-Trichlorophenol	0.666	0.556	83.5	37.0-120	
(S) 2-Fluorophenol			76.1	12.0-120	
(S) Phenol-d5			69.2	10.0-120	
(S) Nitrobenzene-d5			61.0	10.0-122	
(S) 2-Fluorobiphenyl			79.3	15.0-120	
(S) 2,4,6-Tribromophenol			92.3	10.0-127	
(S) p-Terphenyl-d14			88.3	10.0-120	

¹Cp

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L1557295-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1557295-04 11/18/22 00:12 • (MS) R3862551-3 11/18/22 00:33 • (MSD) R3862551-4 11/18/22 00:55

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 %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Benzidine	1.62	U	U	U	0.000	0.000	10	10.0-120	J6	J6	0.000	40
Bis(2-chlorethoxy)methane	0.808	U	0.420	0.507	52.0	62.8	10	10.0-120			18.8	34
Bis(2-chloroethyl)ether	0.808	U	0.456	0.481	56.4	59.6	10	10.0-120			5.50	40
2,2-Oxybis(1-Chloropropane)	0.808	U	0.435	0.527	53.8	65.2	10	10.0-120			19.2	40
4-Bromophenyl-phenylether	0.808	U	0.486	0.569	60.2	70.4	10	27.0-120			15.6	30
4-Chlorophenyl-phenylether	0.808	U	0.481	0.564	59.6	69.8	10	24.0-120			15.7	29
1,2-Dichlorobenzene	0.808	U	0.422	0.469	52.3	58.1	10	10.0-120			10.5	38
1,3-Dichlorobenzene	0.808	U	0.408	0.449	50.5	55.6	10	10.0-120			9.74	40
1,4-Dichlorobenzene	0.808	U	0.409	0.462	50.6	57.1	10	10.0-120			12.1	39
3,3-Dichlorobenzidine	1.62	U	0.679	0.819	41.9	50.5	10	10.0-120			18.7	34
2,4-Dinitrotoluene	0.808	U	0.492	0.551	60.9	68.2	10	30.0-120			11.3	31
2,6-Dinitrotoluene	0.808	U	0.489	0.538	35.7	41.8	10	25.0-120			9.57	31
Hexachlorobenzene	0.808	U	0.420	0.512	52.0	63.4	10	27.0-120			19.8	28
Hexachloro-1,3-butadiene	0.808	U	0.481	0.571	59.6	70.7	10	10.0-120			17.0	38
Hexachlorocyclopentadiene	0.808	U	U	U	0.000	0.000	10	10.0-120	J6	J6	0.000	40
Hexachloroethane	0.808	U	0.226	0.244	28.0	30.2	10	10.0-120			7.83	40

L1557295-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1557295-04 11/18/22 00:12 • (MS) R3862551-3 11/18/22 00:33 • (MSD) R3862551-4 11/18/22 00:55

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 %
Isophorone	0.808	U	0.404	0.476	50.0	59.0	10	13.0-120			16.5	34
Nitrobenzene	0.808	U	0.416	0.511	51.5	63.2	10	10.0-120			20.4	36
n-Nitrosodimethylamine	0.808	U	U	U	0.000	0.000	10	10.0-127	J6	J6	0.000	40
n-Nitrosodiphenylamine	0.808	U	0.370	0.443	45.7	54.9	10	17.0-120			18.1	29
n-Nitrosodi-n-propylamine	0.808	U	0.404	0.485	50.0	60.0	10	10.0-120			18.2	37
Benzylbutyl phthalate	0.808	U	0.441	0.518	0.000	0.000	10	23.0-120	J6	J6	16.1	30
Bis(2-ethylhexyl)phthalate	0.808	U	U	0.526	0.000	65.0	10	17.0-126	J6	J3	200	30
Di-n-butyl phthalate	0.808	U	0.416	0.532	51.5	65.8	10	30.0-120			24.4	29
Diethyl phthalate	0.808	U	0.468	0.554	57.9	68.5	10	26.0-120			16.8	28
Dimethyl phthalate	0.658	U	U	U	0.000	0.000	10	25.0-120	J6	J6	0.000	29
Di-n-octyl phthalate	0.808	U	0.448	0.550	55.5	68.1	10	21.0-123			20.4	29
1,2,4-Trichlorobenzene	0.808	U	0.478	0.539	59.1	66.7	10	12.0-120			12.1	37
4-Chloro-3-methylphenol	0.808	U	0.495	0.532	61.2	65.8	10	15.0-120			7.18	30
2-Chlorophenol	0.808	U	0.431	0.481	53.3	59.6	10	15.0-120			11.0	37
2,4-Dichlorophenol	0.808	U	0.492	0.555	60.9	68.7	10	20.0-120			12.0	31
2,4-Dimethylphenol	0.808	U	0.443	0.492	54.9	60.9	10	10.0-120			10.5	33
4,6-Dinitro-2-methylphenol	0.658	U	U	U	0.000	0.000	10	10.0-120	J6	J6	0.000	39
2,4-Dinitrophenol	0.658	U	U	U	0.000	0.000	10	10.0-121	J6	J6	0.000	40
2-Nitrophenol	0.808	U	0.507	0.573	62.8	71.0	10	12.0-120			12.3	39
4-Nitrophenol	0.808	U	0.478	0.533	59.1	66.0	10	10.0-137			10.9	32
Pentachlorophenol	0.808	U	0.430	0.518	53.2	64.1	10	10.0-160			18.7	31
Phenol	0.808	U	0.415	0.468	51.4	57.9	10	12.0-120			12.0	38
2,4,6-Trichlorophenol	0.808	U	0.502	0.598	62.2	74.0	10	19.0-120			17.4	32
(S) 2-Fluorophenol					55.0	62.8		12.0-120				
(S) Phenol-d5					50.5	58.1		10.0-120				
(S) Nitrobenzene-d5					52.0	59.0		10.0-122				
(S) 2-Fluorobiphenyl					55.0	66.0		15.0-120				
(S) 2,4,6-Tribromophenol					57.6	68.7		10.0-127				
(S) p-Terphenyl-d14					56.5	67.8		10.0-120				

1

Cp

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Tc

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Ss

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Cn

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Sr

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Qc

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Gl

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Al

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Sc

Method Blank (MB)

(MB) R3863275-2 11/18/22 13:32

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzidine	U		0.0626	1.67
Bis(2-chlorethoxy)methane	U		0.0100	0.333
Bis(2-chloroethyl)ether	U		0.0110	0.333
2,2-oxybis(1-chloropropane)	U		0.0144	0.333
4-Bromophenyl-phenylether	U		0.0117	0.333
4-Chlorophenyl-phenylether	U		0.0116	0.333
1,2-Dichlorobenzene	U		0.00987	0.333
1,3-Dichlorobenzene	U		0.0101	0.333
1,4-Dichlorobenzene	U		0.00991	0.333
3,3-Dichlorobenzidine	U		0.0123	0.333
2,4-Dinitrotoluene	U		0.00955	0.333
2,6-Dinitrotoluene	U		0.0109	0.333
Hexachlorobenzene	U		0.0118	0.333
Hexachloro-1,3-butadiene	U		0.0112	0.333
Hexachlorocyclopentadiene	U		0.0175	0.333
Hexachloroethane	U		0.0131	0.333
Isophorone	U		0.0102	0.333
Nitrobenzene	U		0.0116	0.333
n-Nitrosodimethylamine	U		0.0494	0.333
n-Nitrosodiphenylamine	U		0.0252	0.333
n-Nitrosodi-n-propylamine	U		0.0111	0.333
Benzylbutyl phthalate	U		0.0104	0.333
Bis(2-ethylhexyl)phthalate	U		0.0422	0.333
Di-n-butyl phthalate	U		0.0114	0.333
Diethyl phthalate	U		0.0110	0.333
Dimethyl phthalate	U		0.0706	0.333
Di-n-octyl phthalate	U		0.0225	0.333
1,2,4-Trichlorobenzene	U		0.0104	0.333
4-Chloro-3-methylphenol	U		0.0108	0.333
2-Chlorophenol	U		0.0110	0.333
2,4-Dichlorophenol	U		0.00970	0.333
2,4-Dimethylphenol	U		0.00870	0.333
4,6-Dinitro-2-methylphenol	U		0.0755	0.333
2,4-Dinitrophenol	U		0.0779	0.333
2-Nitrophenol	U		0.0119	0.333
4-Nitrophenol	U		0.0104	0.333
Pentachlorophenol	U		0.00896	0.333
Phenol	U		0.0134	0.333
2,4,6-Trichlorophenol	U		0.0107	0.333
(S) 2-Fluorophenol	46.7			12.0-120

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3863275-2 11/18/22 13:32

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
(S) Phenol-d5	43.8			10.0-120
(S) Nitrobenzene-d5	44.7			10.0-122
(S) 2-Fluorobiphenyl	48.9			15.0-120
(S) 2,4,6-Tribromophenol	41.6			10.0-127
(S) p-Terphenyl-d14	51.4			10.0-120

Laboratory Control Sample (LCS)

(LCS) R3863275-1 11/18/22 13:12

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzidine	1.33	0.194	14.6	10.0-120	
Bis(2-chlorethoxy)methane	0.666	0.298	44.7	20.0-120	
Bis(2-chloroethyl)ether	0.666	0.404	60.7	16.0-120	
2,2-Oxybis(1-Chloropropane)	0.666	0.335	50.3	23.0-120	
4-Bromophenyl-phenylether	0.666	0.392	58.9	40.0-120	
4-Chlorophenyl-phenylether	0.666	0.387	58.1	40.0-120	
1,2-Dichlorobenzene	0.666	0.335	50.3	32.0-120	
1,3-Dichlorobenzene	0.666	0.331	49.7	30.0-120	
1,4-Dichlorobenzene	0.666	0.331	49.7	31.0-120	
3,3-Dichlorobenzidine	1.33	0.675	50.8	28.0-120	
2,4-Dinitrotoluene	0.666	0.432	64.9	45.0-120	
2,6-Dinitrotoluene	0.666	0.404	60.7	42.0-120	
Hexachlorobenzene	0.666	0.339	50.9	39.0-120	
Hexachloro-1,3-butadiene	0.666	0.317	47.6	15.0-120	
Hexachlorocyclopentadiene	0.666	0.316	47.4	15.0-120	
Hexachloroethane	0.666	0.306	45.9	17.0-120	
Isophorone	0.666	0.295	44.3	23.0-120	
Nitrobenzene	0.666	0.288	43.2	17.0-120	
n-Nitrosodimethylamine	0.666	0.281	42.2	10.0-125	
n-Nitrosodiphenylamine	0.666	0.316	47.4	40.0-120	
n-Nitrosodi-n-propylamine	0.666	0.332	49.8	26.0-120	
Benzylbutyl phthalate	0.666	0.372	55.9	40.0-120	
Bis(2-ethylhexyl)phthalate	0.666	0.368	55.3	41.0-120	
Di-n-butyl phthalate	0.666	0.347	52.1	43.0-120	
Diethyl phthalate	0.666	0.382	57.4	43.0-120	
Dimethyl phthalate	0.666	0.372	55.9	43.0-120	
Di-n-octyl phthalate	0.666	0.369	55.4	40.0-120	
1,2,4-Trichlorobenzene	0.666	0.318	47.7	17.0-120	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS)

(LCS) R3863275-1 11/18/22 13:12

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
4-Chloro-3-methylphenol	0.666	0.295	44.3	28.0-120	
2-Chlorophenol	0.666	0.334	50.2	28.0-120	
2,4-Dichlorophenol	0.666	0.321	48.2	25.0-120	
2,4-Dimethylphenol	0.666	0.289	43.4	15.0-120	
4,6-Dinitro-2-methylphenol	0.666	0.367	55.1	16.0-120	
2,4-Dinitrophenol	0.666	0.194	29.1	10.0-120	
2-Nitrophenol	0.666	0.328	49.2	20.0-120	
4-Nitrophenol	0.666	0.423	63.5	27.0-120	
Pentachlorophenol	0.666	0.378	56.8	29.0-120	
Phenol	0.666	0.331	49.7	28.0-120	
2,4,6-Trichlorophenol	0.666	0.366	55.0	37.0-120	
(S) 2-Fluorophenol			52.7	12.0-120	
(S) Phenol-d5			50.5	10.0-120	
(S) Nitrobenzene-d5			42.6	10.0-122	
(S) 2-Fluorobiphenyl			55.9	15.0-120	
(S) 2,4,6-Tribromophenol			56.0	10.0-127	
(S) p-Terphenyl-d14			58.3	10.0-120	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1557295-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1557295-21 11/18/22 15:35 • (MS) R3863275-3 11/18/22 15:56 • (MSD) R3863275-4 11/18/22 16:17

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 %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Benzidine	1.60	U	U	U	0.000	0.000	1	10.0-120	J6	J6	0.000	40
Bis(2-chlorethoxy)methane	0.803	U	0.315	0.292	39.2	36.4	1	10.0-120			7.55	34
Bis(2-chloroethyl)ether	0.803	U	0.415	0.388	51.7	48.5	1	10.0-120			6.61	40
2,2-Oxybis(1-Chloropropane)	0.803	U	0.350	0.316	43.5	39.5	1	10.0-120			10.1	40
4-Bromophenyl-phenylether	0.803	U	0.393	0.357	48.9	44.6	1	27.0-120			9.65	30
4-Chlorophenyl-phenylether	0.803	U	0.392	0.360	48.8	45.0	1	24.0-120			8.33	29
1,2-Dichlorobenzene	0.803	U	0.356	0.324	44.3	40.5	1	10.0-120			9.22	38
1,3-Dichlorobenzene	0.803	U	0.341	0.313	42.5	39.2	1	10.0-120			8.47	40
1,4-Dichlorobenzene	0.803	U	0.344	0.316	42.8	39.5	1	10.0-120			8.41	39
3,3-Dichlorobenzidine	1.60	U	0.505	0.444	31.5	27.7	1	10.0-120			13.0	34
2,4-Dinitrotoluene	0.803	U	0.445	0.399	55.4	49.8	1	30.0-120			10.9	31
2,6-Dinitrotoluene	0.803	U	0.412	0.381	51.4	47.6	1	25.0-120			7.90	31
Hexachlorobenzene	0.803	U	0.342	0.309	42.6	38.6	1	27.0-120			10.4	28
Hexachloro-1,3-butadiene	0.803	U	0.340	0.316	42.3	39.5	1	10.0-120			7.35	38
Hexachlorocyclopentadiene	0.803	U	0.0771	0.0800	9.61	10.0	1	10.0-120	J6		3.68	40
Hexachloroethane	0.803	U	0.286	0.266	35.6	33.3	1	10.0-120			6.99	40

L1557295-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1557295-21 11/18/22 15:35 • (MS) R3863275-3 11/18/22 15:56 • (MSD) R3863275-4 11/18/22 16:17

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 %
Isophorone	0.803	U	0.310	0.286	38.6	35.7	1	13.0-120			8.10	34
Nitrobenzene	0.803	U	0.304	0.282	37.8	35.2	1	10.0-120			7.41	36
n-Nitrosodimethylamine	0.803	U	0.276	0.263	34.4	32.8	1	10.0-127			4.92	40
n-Nitrosodiphenylamine	0.803	U	0.321	0.289	39.9	36.1	1	17.0-120			10.3	29
n-Nitrosodi-n-propylamine	0.803	U	0.348	0.322	43.4	40.2	1	10.0-120			7.91	37
Benzylbutyl phthalate	0.803	U	0.366	0.338	45.6	42.2	1	23.0-120			8.22	30
Bis(2-ethylhexyl)phthalate	0.803	U	0.369	0.334	45.9	41.7	1	17.0-126			9.95	30
Di-n-butyl phthalate	0.803	U	0.348	0.318	43.4	39.8	1	30.0-120			9.04	29
Diethyl phthalate	0.803	U	0.393	0.359	48.9	44.9	1	26.0-120			8.97	28
Dimethyl phthalate	0.803	U	0.383	0.344	47.7	42.9	1	25.0-120			10.9	29
Di-n-octyl phthalate	0.803	U	0.377	0.350	47.0	43.7	1	21.0-123			7.63	29
1,2,4-Trichlorobenzene	0.803	U	0.335	0.313	41.7	39.2	1	12.0-120			6.69	37
4-Chloro-3-methylphenol	0.803	U	0.319	0.289	39.8	36.1	1	15.0-120			9.90	30
2-Chlorophenol	0.803	U	0.353	0.327	44.0	40.8	1	15.0-120			7.80	37
2,4-Dichlorophenol	0.803	U	0.352	0.321	43.8	40.1	1	20.0-120			9.32	31
2,4-Dimethylphenol	0.803	U	0.318	0.291	39.6	36.3	1	10.0-120			9.11	33
4,6-Dinitro-2-methylphenol	0.803	U	0.470	0.416	58.6	52.0	1	10.0-120			12.2	39
2,4-Dinitrophenol	0.803	U	0.407	0.354	50.8	44.3	1	10.0-121			13.9	40
2-Nitrophenol	0.803	U	0.364	0.338	45.3	42.2	1	12.0-120			7.56	39
4-Nitrophenol	0.803	U	0.442	0.392	55.1	48.9	1	10.0-137			12.1	32
Pentachlorophenol	0.803	U	0.404	0.369	50.3	46.1	1	10.0-160			9.05	31
Phenol	0.803	U	0.347	0.316	43.2	39.5	1	12.0-120			9.45	38
2,4,6-Trichlorophenol	0.803	U	0.378	0.336	47.1	42.0	1	19.0-120			11.8	32
(S) 2-Fluorophenol					45.6	42.2		12.0-120				
(S) Phenol-d5					43.7	40.7		10.0-120				
(S) Nitrobenzene-d5					37.5	35.2		10.0-122				
(S) 2-Fluorobiphenyl					48.3	43.7		15.0-120				
(S) 2,4,6-Tribromophenol					49.4	44.3		10.0-127				
(S) p-Terphenyl-d14					46.8	43.1		10.0-120				

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Cp

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Tc

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Ss

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Cn

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Sr

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Qc

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Gl

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Al

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Sc

Method Blank (MB)

(MB) R3863427-2 11/18/22 11:17

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) Nitrobenzene-d5	73.5			14.0-149
(S) 2-Fluorobiphenyl	84.5			34.0-125
(S) p-Terphenyl-d14	100			23.0-120

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS)

(LCS) R3863427-1 11/18/22 11:00

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0632	79.0	50.0-126	
Acenaphthene	0.0800	0.0572	71.5	50.0-120	
Acenaphthylene	0.0800	0.0568	71.0	50.0-120	
Benzo(a)anthracene	0.0800	0.0674	84.3	45.0-120	
Benzo(a)pyrene	0.0800	0.0567	70.9	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0660	82.5	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0633	79.1	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0629	78.6	49.0-125	
Chrysene	0.0800	0.0692	86.5	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0619	77.4	47.0-125	
Fluoranthene	0.0800	0.0715	89.4	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3863427-1 11/18/22 11:00

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0631	78.9	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0667	83.4	46.0-125	
Naphthalene	0.0800	0.0573	71.6	50.0-120	
Phenanthrene	0.0800	0.0653	81.6	47.0-120	
Pyrene	0.0800	0.0682	85.3	43.0-123	
1-Methylnaphthalene	0.0800	0.0571	71.4	51.0-121	
2-Methylnaphthalene	0.0800	0.0583	72.9	50.0-120	
2-Chloronaphthalene	0.0800	0.0543	67.9	50.0-120	
(S) Nitrobenzene-d5			60.7	14.0-149	
(S) 2-Fluorobiphenyl			66.2	34.0-125	
(S) p-Terphenyl-d14			94.6	23.0-120	

L1557295-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1557295-21 11/18/22 13:53 • (MS) R3863427-3 11/18/22 14:10 • (MSD) R3863427-4 11/18/22 14:28

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	0.0916	U	0.0655	0.0651	71.4	69.9	1	10.0-145			0.554	30
Acenaphthene	0.0916	U	0.0662	0.0662	72.2	71.1	1	14.0-127			0.000	27
Acenaphthylene	0.0916	U	0.0647	0.0647	70.7	69.6	1	21.0-124			0.000	25
Benzo(a)anthracene	0.0916	0.00212	0.0703	0.0680	74.4	70.8	1	10.0-139			3.31	30
Benzo(a)pyrene	0.0916	0.00250	0.0746	0.0715	78.7	74.1	1	10.0-141			4.29	31
Benzo(b)fluoranthene	0.0916	0.00342	0.0730	0.0710	76.0	72.6	1	10.0-140			2.85	36
Benzo(g,h,i)perylene	0.0916	0.00262	0.0715	0.0685	75.2	70.8	1	10.0-140			4.31	33
Benzo(k)fluoranthene	0.0916	U	0.0683	0.0657	74.6	70.6	1	10.0-137			3.96	31
Chrysene	0.0916	U	0.0768	0.0740	83.8	79.5	1	10.0-145			3.68	30
Dibenz(a,h)anthracene	0.0916	U	0.0652	0.0627	71.2	67.4	1	10.0-132			3.96	31
Fluoranthene	0.0916	0.00473	0.0800	0.0765	82.2	77.2	1	10.0-153			4.46	33
Fluorene	0.0916	U	0.0708	0.0704	77.2	75.6	1	11.0-130			0.512	29
Indeno(1,2,3-cd)pyrene	0.0916	0.00236	0.0708	0.0677	74.7	70.3	1	10.0-137			4.35	32
Naphthalene	0.0916	U	0.0663	0.0645	72.4	69.3	1	10.0-135			2.76	27
Phenanthrene	0.0916	0.00282	0.0717	0.0702	75.2	72.4	1	10.0-144			2.21	31
Pyrene	0.0916	0.00506	0.0794	0.0761	81.2	76.3	1	10.0-148			4.34	35
1-Methylnaphthalene	0.0916	U	0.0670	0.0641	73.2	68.9	1	10.0-142			4.41	28
2-Methylnaphthalene	0.0916	U	0.0712	0.0655	77.8	70.3	1	10.0-137			8.47	28
2-Chloronaphthalene	0.0916	U	0.0635	0.0634	69.3	68.1	1	29.0-120			0.190	24
(S) Nitrobenzene-d5					78.9	56.0		14.0-149				
(S) 2-Fluorobiphenyl					81.4	67.8		34.0-125				
(S) p-Terphenyl-d14					91.4	85.5		23.0-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1557295-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1557295-04 11/18/22 15:37 • (MS) R3863427-5 11/18/22 15:54 • (MSD) R3863427-6 11/18/22 16:12

	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Anthracene	0.0933	0.00667	0.0650	0.0736	62.5	70.6	1	10.0-145			12.4	30
Acenaphthene	0.0933	U	0.0615	0.0637	65.9	67.2	1	14.0-127			3.53	27
Acenaphthylene	0.0933	0.00451	0.0640	0.0680	63.7	67.0	1	21.0-124			6.14	25
Benzo(a)anthracene	0.0933	0.0142	0.0769	0.0857	67.1	75.4	1	10.0-139			10.9	30
Benzo(a)pyrene	0.0933	0.0239	0.0797	0.0938	59.7	73.7	1	10.0-141			16.3	31
Benzo(b)fluoranthene	0.0933	0.0318	0.0869	0.0936	59.1	65.2	1	10.0-140			7.35	36
Benzo(g,h,i)perylene	0.0933	0.0381	0.0911	0.103	56.8	68.4	1	10.0-140			12.2	33
Benzo(k)fluoranthene	0.0933	0.00872	0.0656	0.0710	60.9	65.7	1	10.0-137			7.91	31
Chrysene	0.0933	0.0163	0.0901	0.102	79.1	90.2	1	10.0-145			12.2	30
Dibenz(a,h)anthracene	0.0933	0.00604	0.0621	0.0656	60.1	62.8	1	10.0-132			5.38	31
Fluoranthene	0.0933	0.0233	0.0817	0.0958	62.5	76.4	1	10.0-153			15.9	33
Fluorene	0.0933	U	0.0652	0.0710	69.9	74.9	1	11.0-130			8.48	29
Indeno(1,2,3-cd)pyrene	0.0933	0.0241	0.0787	0.0898	58.6	69.3	1	10.0-137			13.1	32
Naphthalene	0.0933	U	0.0610	0.0605	65.4	63.9	1	10.0-135			0.808	27
Phenanthrene	0.0933	0.00966	0.0673	0.0770	61.8	71.0	1	10.0-144			13.4	31
Pyrene	0.0933	0.0238	0.0765	0.0914	56.4	71.2	1	10.0-148			17.7	35
1-Methylnaphthalene	0.0933	U	0.0609	0.0620	65.3	65.4	1	10.0-142			1.80	28
2-Methylnaphthalene	0.0933	U	0.0623	0.0645	66.7	68.0	1	10.0-137			3.49	28
2-Chloronaphthalene	0.0933	U	0.0571	0.0589	61.2	62.2	1	29.0-120			3.17	24
(S) Nitrobenzene-d5					64.5	68.9		14.0-149				
(S) 2-Fluorobiphenyl					64.0	67.1		34.0-125				
(S) p-Terphenyl-d14					67.6	72.8		23.0-120				

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Method Blank (MB)

(MB) R3863532-2 11/18/22 04:29

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) Nitrobenzene-d5	71.3			14.0-149
(S) 2-Fluorobiphenyl	73.7			34.0-125
(S) p-Terphenyl-d14	81.4			23.0-120

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS)

(LCS) R3863532-1 11/18/22 04:09

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0514	64.3	50.0-126	
Acenaphthene	0.0800	0.0530	66.3	50.0-120	
Acenaphthylene	0.0800	0.0535	66.9	50.0-120	
Benzo(a)anthracene	0.0800	0.0575	71.9	45.0-120	
Benzo(a)pyrene	0.0800	0.0554	69.3	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0574	71.8	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0523	65.4	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0545	68.1	49.0-125	
Chrysene	0.0800	0.0604	75.5	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0550	68.8	47.0-125	
Fluoranthene	0.0800	0.0537	67.1	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3863532-1 11/18/22 04:09

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Fluorene	0.0800	0.0557	69.6	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0552	69.0	46.0-125	
Naphthalene	0.0800	0.0554	69.3	50.0-120	
Phenanthrene	0.0800	0.0548	68.5	47.0-120	
Pyrene	0.0800	0.0554	69.3	43.0-123	
1-Methylnaphthalene	0.0800	0.0548	68.5	51.0-121	
2-Methylnaphthalene	0.0800	0.0560	70.0	50.0-120	
2-Chloronaphthalene	0.0800	0.0541	67.6	50.0-120	
(S) Nitrobenzene-d5			61.9	14.0-149	
(S) 2-Fluorobiphenyl			62.2	34.0-125	
(S) p-Terphenyl-d14			64.9	23.0-120	

L1557434-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1557434-01 11/18/22 10:05 • (MS) R3863532-3 11/18/22 10:24 • (MSD) R3863532-4 11/18/22 10:44

Analyte	Spike Amount (dry) mg/kg	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Anthracene	0.0915	U	0.0705	0.0714	77.0	78.0	1	10.0-145			1.30	30
Acenaphthene	0.0915	U	0.0698	0.0703	76.3	76.8	1	14.0-127			0.660	27
Acenaphthylene	0.0915	U	0.0728	0.0735	79.5	80.3	1	21.0-124			0.948	25
Benzo(a)anthracene	0.0915	0.00789	0.0823	0.0987	81.3	99.2	1	10.0-139			18.1	30
Benzo(a)pyrene	0.0915	0.0105	0.0826	0.0986	78.8	96.2	1	10.0-141			17.6	31
Benzo(b)fluoranthene	0.0915	0.0164	0.0783	0.0957	67.7	86.6	1	10.0-140			19.9	36
Benzo(g,h,i)perylene	0.0915	0.0127	0.0700	0.0830	62.6	76.8	1	10.0-140			16.9	33
Benzo(k)fluoranthene	0.0915	0.00482	0.0714	0.0797	72.8	81.9	1	10.0-137			11.0	31
Chrysene	0.0915	0.00991	0.0842	0.101	81.2	99.4	1	10.0-145			18.0	30
Dibenz(a,h)anthracene	0.0915	0.00218	0.0722	0.0748	76.5	79.3	1	10.0-132			3.46	31
Fluoranthene	0.0915	0.0164	0.0832	0.120	73.0	113	1	10.0-153		J3	36.4	33
Fluorene	0.0915	U	0.0734	0.0741	80.2	80.9	1	11.0-130			0.940	29
Indeno(1,2,3-cd)pyrene	0.0915	0.00975	0.0796	0.0938	76.3	91.9	1	10.0-137			16.4	32
Naphthalene	0.0915	U	0.0740	0.0733	80.8	80.1	1	10.0-135			0.942	27
Phenanthrene	0.0915	0.00548	0.0743	0.0931	75.2	95.8	1	10.0-144			22.5	31
Pyrene	0.0915	0.0129	0.0770	0.105	69.9	101	1	10.0-148			30.7	35
1-Methylnaphthalene	0.0915	U	0.0728	0.0730	79.5	79.8	1	10.0-142			0.317	28
2-Methylnaphthalene	0.0915	U	0.0746	0.0750	81.6	81.9	1	10.0-137			0.463	28
2-Chloronaphthalene	0.0915	U	0.0704	0.0706	76.9	77.1	1	29.0-120			0.328	24
(S) Nitrobenzene-d5					84.6	85.1		14.0-149				
(S) 2-Fluorobiphenyl					73.2	81.7		34.0-125				
(S) p-Terphenyl-d14					65.1	81.0		23.0-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3866170-2 11/25/22 07:06

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	0.0101	U	0.00408	0.0200
Phenanthrene	U		0.00231	0.00600
Pyrene	U		0.00200	0.00600
1-Methylnaphthalene	0.00493	U	0.00449	0.0200
2-Methylnaphthalene	0.0191	U	0.00427	0.0200
2-Chloronaphthalene	U		0.00466	0.0200
(S) Nitrobenzene-d5	82.5			14.0-149
(S) 2-Fluorobiphenyl	88.6			34.0-125
(S) p-Terphenyl-d14	96.6			23.0-120

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS)

(LCS) R3866170-1 11/25/22 06:46

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0762	95.3	50.0-126	
Acenaphthene	0.0800	0.0714	89.3	50.0-120	
Acenaphthylene	0.0800	0.0757	94.6	50.0-120	
Benzo(a)anthracene	0.0800	0.0874	109	45.0-120	
Benzo(a)pyrene	0.0800	0.0697	87.1	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0765	95.6	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0682	85.3	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0748	93.5	49.0-125	
Chrysene	0.0800	0.0830	104	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0772	96.5	47.0-125	
Fluoranthene	0.0800	0.0777	97.1	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3866170-1 11/25/22 06:46

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0760	95.0	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0830	104	46.0-125	
Naphthalene	0.0800	0.0732	91.5	50.0-120	
Phenanthrene	0.0800	0.0743	92.9	47.0-120	
Pyrene	0.0800	0.0758	94.8	43.0-123	
1-Methylnaphthalene	0.0800	0.0734	91.8	51.0-121	
2-Methylnaphthalene	0.0800	0.0764	95.5	50.0-120	
2-Chloronaphthalene	0.0800	0.0709	88.6	50.0-120	
(S) Nitrobenzene-d5			86.9	14.0-149	
(S) 2-Fluorobiphenyl			87.1	34.0-125	
(S) p-Terphenyl-d14			91.4	23.0-120	

L1560015-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1560015-09 11/25/22 13:24 • (MS) R3866170-3 11/25/22 13:44 • (MSD) R3866170-4 11/25/22 14:04

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	0.0821	U	0.0985	0.0808	120	99.0	1	10.0-145			19.7	30
Acenaphthene	0.0821	U	0.0786	0.0685	95.7	83.9	1	14.0-127			13.7	27
Acenaphthylene	0.0821	U	0.0822	0.0782	100	95.7	1	21.0-124			5.04	25
Benzo(a)anthracene	0.0821	0.00922	0.168	0.100	193	111	1	10.0-139	J5	J3	50.8	30
Benzo(a)pyrene	0.0821	0.00985	0.133	0.0870	150	94.5	1	10.0-141	J5	J3	41.8	31
Benzo(b)fluoranthene	0.0821	0.0162	0.129	0.0771	137	74.6	1	10.0-140		J3	50.1	36
Benzo(g,h,i)perylene	0.0821	0.0169	0.0797	0.0599	76.4	52.6	1	10.0-140			28.4	33
Benzo(k)fluoranthene	0.0821	0.00419	0.0939	0.0679	109	77.9	1	10.0-137		J3	32.2	31
Chrysene	0.0821	0.00908	0.140	0.0914	160	101	1	10.0-145	J5	J3	42.3	30
Dibenz(a,h)anthracene	0.0821	0.00318	0.0692	0.0607	80.5	70.5	1	10.0-132			13.1	31
Fluoranthene	0.0821	0.0165	0.237	0.0892	269	89.1	1	10.0-153	J5	J3	90.6	33
Fluorene	0.0821	U	0.0833	0.0762	101	93.2	1	11.0-130			8.94	29
Indeno(1,2,3-cd)pyrene	0.0821	0.0132	0.107	0.0745	115	75.0	1	10.0-137		J3	36.3	32
Naphthalene	0.0821	U	0.0728	0.0709	88.6	86.8	1	10.0-135			2.52	27
Phenanthrene	0.0821	0.00609	0.149	0.0742	174	83.4	1	10.0-144	J5	J3	66.9	31
Pyrene	0.0821	0.0156	0.170	0.0799	188	78.6	1	10.0-148	J5	J3	72.2	35
1-Methylnaphthalene	0.0821	U	0.0750	0.0718	91.3	87.9	1	10.0-142			4.35	28
2-Methylnaphthalene	0.0821	U	0.0782	0.0759	95.2	93.0	1	10.0-137			2.90	28
2-Chloronaphthalene	0.0821	U	0.0686	0.0659	83.5	80.7	1	29.0-120			3.95	24
(S) Nitrobenzene-d5					95.7	92.6		14.0-149				
(S) 2-Fluorobiphenyl					82.9	78.7		34.0-125				
(S) p-Terphenyl-d14					83.5	79.4		23.0-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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.

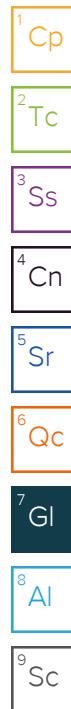
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Abbreviations and Definitions

(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

B	The same analyte is found in the associated blank.
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.
J4	The associated batch QC was outside the established quality control range for accuracy.
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

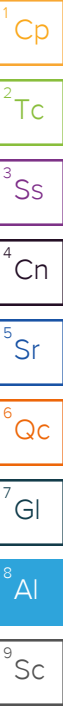
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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	LA000356
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.



NCF // OK

Company Name/Address:
Terracon - Salt Lake City, UT

6949 South High Tech Drive
Midvale, UT 84047

Report to:
Nancy Saunders

Project Description:

Phone:

Collected by (print):
STEVE MALISZESKI

Collected by (signature):

Immediately Packed on Ice N ☐ Y ☒

Billing Information:
Accounts Payable
6949 South High Tech Drive
Midvale, UT 84047

Email To: **nancy.saunders@terracon.com**

Please Circle:
PT MT CT ET

Client Project #
61227342 TASK 4.1

Lab Project #
TERRDUT-61227342

Site/Facility ID #

Rush? (Lab MUST Be Notified)

☐ Same Day

☐ Five Day

☐ Next Day

☐ 5 Day (Rad Only)

☐ Two Day

☐ 10 Day (Rad Only)

☐ Three Day

Date Results Needed

No. of Cntrs

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

No. of Cntrs

TP-36 FILL

COMP

SS

0-4.5'

11/10/2022

12:05

2

X

X

X

TP-36 FILL

GRAB

SS

2-5'

12:08

1

X

TP-36 NATIVE

GRAB

SS

4-7.5'

12:15

3

X

X

X

X

TP-37 SHALLOW

GRAB

SS

0-0.5'

13:00

4

X

X

X

X

TP-37 FILL

COMP

SS

0-6.5'

13:15

3

X

X

X

X

TP-37 FILL

GRAB

SS

6.5-13'

13:18

1

X

TP-37 NATIVE

COMP

SS

6-7.5'

13:20

4

X

X

X

X

TP-38 FILL

COMP

SS

0-4.5'

14:06

3

X

X

X

X

TP-38 FILL

GRAB

SS

2'

14:10

1

X

TP-38 NATIVE

GRAB

SS

4-7.5'

✓

14:15

4

X

X

X

X

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other

Remarks:MS/MSD Parent Sample: _____
LEVEL III QA/QC; include case narrative

Samples returned via:
_ UPS _ FedEx _ Courier

Tracking #

pH _____ Temp _____
Flow _____ Other _____

Relinquished by : (Signature)
[Signature]

Date:
11/11/22

Time:
1100

Received by: (Signature)
[Signature]

Trip Blank Received: Yes / No
4 HCL MeoH TBR

Relinquished by : (Signature)
[Signature]

Date:
11/11/22

Time:
1700

Received by: (Signature)
[Signature]

Temp: 4.6 to 4.6 °C
Bottles Received: 97

Relinquished by : (Signature)
[Signature]

Date:

Time:

Received for Lab by: (Signature)
[Signature]

Date:
11/12/22

Time:
2800

Hold:

Condition:
NCF / OK

Analysis / Container / Preservative

MRCRA8 4ozClr-NoPres

SV8082 4ozClr-NoPres

SV8270,SV8270PAHSIM, 4ozClr-NoPres

SV8290 4ozClr-NoPres

V8260AP9,TS 2ozClr-NoPres

Chain of Custody

Page 2 of 4

MT JULIET, TN

1206S 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 # **1957298**

Table #

Acctnum: **TERRDUT**
Template: **T219262**
Prelogin: **P961704**
PM: **824 - Chris Ward**
PB:

Shipped Via: **FedEX Ground**

Remarks

Sample # (lab only)

HOLD

-11

-12

-13

-14

-15

-16

-17

-18

-19

-20

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>

Table #

Template: T219262

PM: 824 - Chris Ward

PB:

Shipped Via: **FedEX Ground**

Remarks	Sample # (lab only)

Condition:
NCF / OK

Company Name/Address:

Terracon - Salt Lake City, UT

6949 South High Tech Drive
Midvale, UT 84047

Billing Information:

Accounts Payable
6949 South High Tech Drive
Midvale, UT 84047Pres
Chk

Analysis / Container / Preservative

Chain of Custody Page 4 of 4



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/hubs/pas-standard-terms.pdf>

Report to:

Nancy Saunders

Email To: nancy.saunders@terracon.com

Project Description:

City/State
Collected:Please Circle:
PT MT CT ET

Phone:

Client Project #
61227342 TASK 4.1Lab Project #
TERRDUT-61227342

Collected by (print):

Site/Facility ID #

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)

Quote #

Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day

Date Results Needed

No.
of
Cntrs

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

TP-42 FILL

COMP

SS

0-3.5'

11/10/2022

10:15

3

TP-42 FILL

GRAB

SS

2'

10:15

1

TP-42 NATIVE

GRAB

SS

3.5-4' 3.75'

10:20

4

TP-138 FILL

COMP

SS

0-4.5'

10:00

4

TP-138 FILL

GRAB

SS

2'

20:01

1

TP-140 FILL

COMP

SS

0-2.5'

20:30

3

TP-140 FILL

GRAB

SS

1.5'

20:30

1

ND-4

GRAB

SS

0-0.5'

10:20

3

ND-5

GRAB

SS

0-0.5'

10:00

3

ND-105 104

GRAB

SS

0-0.5'

10:25

3

* Matrix:

SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other

Remarks:MS/MSD Parent Sample:

Put all Native Samples on HOLD NS

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

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: 4.6°C Bottles Received: 97

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: 11/12/22 Time: 0800

Hold:

Condition:
NCF / 08

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

Terracon - Salt Lake City, UT

Sample Delivery Group: L1555639
Samples Received: 11/09/2022
Project Number: 61227342 TASK 4.1
Description:

Report To: Nancy Saunders
6949 South High Tech Drive
Midvale, UT 84047

Entire Report Reviewed By:



Chris Ward
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 National12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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SAMPLE SUMMARY

TOSAMW-01 L1555639-01 GW

				Collected by	Collected date/time	Received date/time
					11/07/22 15:50	11/09/22 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1958875	1	11/14/22 13:39	11/14/22 16:18	DTM	Mt. Juliet, TN
Mercury by Method 7470A	WG1957941	1	11/11/22 10:01	11/14/22 09:37	SRT	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1959088	1	11/16/22 09:27	11/16/22 16:17	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1958593	1	11/12/22 10:58	11/12/22 10:58	JAH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1957253	1	11/12/22 05:18	11/15/22 17:15	AGW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1957258	1	11/10/22 16:51	11/11/22 07:50	DSH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1957888	1	11/13/22 18:47	11/14/22 10:50	AMG	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

TOSAMW-02 L1555639-02 GW

				Collected by	Collected date/time	Received date/time
					11/07/22 12:10	11/09/22 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1958875	1	11/14/22 13:39	11/14/22 16:18	DTM	Mt. Juliet, TN
Mercury by Method 7470A	WG1957941	1	11/11/22 10:01	11/14/22 09:31	SRT	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1959088	1	11/16/22 09:27	11/16/22 15:01	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1958563	5	11/12/22 05:37	11/12/22 05:37	ACG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1957253	1	11/12/22 05:18	11/15/22 17:36	AGW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1957258	1	11/10/22 16:51	11/11/22 07:15	DSH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1959007	1	11/14/22 06:16	11/15/22 13:03	AGW	Mt. Juliet, TN

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

TOSAMW-03 L1555639-03 GW

				Collected by	Collected date/time	Received date/time
					11/07/22 17:05	11/09/22 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1958875	1	11/14/22 13:39	11/14/22 16:18	DTM	Mt. Juliet, TN
Mercury by Method 7470A	WG1957941	1	11/11/22 10:01	11/14/22 09:39	SRT	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1959088	1	11/16/22 09:27	11/16/22 16:27	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1958563	1	11/12/22 04:35	11/12/22 04:35	ACG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1957253	1	11/12/22 05:18	11/15/22 17:58	AGW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1957258	1	11/10/22 16:51	11/11/22 08:08	DSH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1957256	1	11/11/22 06:40	11/11/22 22:29	AMG	Mt. Juliet, TN

TOSAMW-04 L1555639-04 GW

				Collected by	Collected date/time	Received date/time
					11/07/22 10:00	11/09/22 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1959964	1	11/15/22 13:20	11/15/22 14:27	SLP	Mt. Juliet, TN
Mercury by Method 7470A	WG1957941	1	11/11/22 10:01	11/14/22 09:41	SRT	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1959088	1	11/16/22 09:27	11/16/22 16:31	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1958563	1	11/12/22 04:56	11/12/22 04:56	ACG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1957253	1	11/12/22 05:18	11/15/22 18:19	AMG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1957258	1	11/10/22 16:51	11/11/22 03:46	DSH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1957256	1	11/11/22 06:40	11/11/22 22:48	AMG	Mt. Juliet, TN

TOSAMW-05 L1555639-05 GW

				Collected by	Collected date/time	Received date/time
					11/07/22 14:25	11/09/22 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1958875	1	11/14/22 13:39	11/14/22 16:18	DTM	Mt. Juliet, TN
Mercury by Method 7470A	WG1957941	1	11/11/22 10:01	11/14/22 09:47	SRT	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1959088	1	11/16/22 09:27	11/16/22 16:34	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1958563	1	11/12/22 05:16	11/12/22 05:16	ACG	Mt. Juliet, TN

SAMPLE SUMMARY

TOSAMW-05 L1555639-05 GW

Collected by

Collected date/time

Received date/time

11/07/22 14:25

11/09/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1957253	1	11/12/22 05:18	11/15/22 18:41	AGW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1957258	1	11/10/22 16:51	11/11/22 04:04	DSH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1957256	1	11/11/22 06:40	11/11/22 23:07	AMG	Mt. Juliet, TN

¹Cp

²Tc

³Ss

⁴Cn

TOSAMW-400 L1555639-06 GW

Collected by

Collected date/time

Received date/time

11/07/22 10:15

11/09/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1958875	1	11/14/22 13:39	11/14/22 16:18	DTM	Mt. Juliet, TN
Mercury by Method 7470A	WG1957941	1	11/11/22 10:01	11/14/22 09:49	SRT	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1959088	1	11/16/22 09:27	11/16/22 16:37	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1958593	1	11/12/22 11:17	11/12/22 11:17	JAH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1957253	1.18	11/12/22 05:18	11/15/22 19:02	AMG	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1957258	1	11/10/22 16:51	11/11/22 04:21	DSH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1957256	1.11	11/11/22 06:40	11/11/22 23:26	AMG	Mt. Juliet, TN

⁵Sr

⁶Qc

⁷Gl

⁸Al

TRIP BLANK L1555639-07 GW

Collected by

Collected date/time

Received date/time

11/07/22 00:00

11/09/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1958593	1	11/12/22 09:02	11/12/22 09:02	JAH	Mt. Juliet, TN

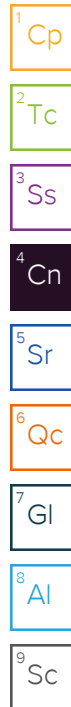
⁹Sc

CASE NARRATIVE

Unless qualified or notated within the narrative below, all sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. 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.



Chris Ward
Project Manager



Gravimetric Analysis by Method 2540 C-2011

The associated batch QC was outside the established quality control range for precision.

Batch	Lab Sample ID	Analytes
WG1958875	(DUP) R3861913-3	Dissolved Solids
WG1959964	(DUP) R3862644-4, (DUP) R3862644-3	Dissolved Solids

Mercury by Method 7470A

The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Batch	Lab Sample ID	Analytes
WG1957941	(MS) R3860658-3, (MSD) R3860658-4, L1555639-02	Mercury, Dissolved

Volatile Organic Compounds (GC/MS) by Method 8260B

The associated batch QC was below the established quality control range for accuracy.

Batch	Lab Sample ID	Analytes
WG1958563	(LCS) R3861689-1, (LCSD) R3861689-2, L1555639-02, 03, 04, 05	1,1,1,2-Tetrachloroethane, 1,2-Dibromoethane, Bromoform and Chlorodibromomethane

The associated batch QC was outside the established quality control range for precision.

Batch	Lab Sample ID	Analytes
WG1958563	(LCSD) R3861689-2, L1555639-02, 03, 04, 05	1,1-Dichloroethene and Chloroethane

The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Batch	Lab Sample ID	Analytes
WG1958563	(MS) R3861689-5, (MSD) R3861689-6	2-Chloroethyl vinyl ether

The associated batch QC was outside the established quality control range for precision.

Batch	Lab Sample ID	Analytes
WG1958563	(MSD) R3861689-8, (MSD) R3861689-6, L1555639-02	25 analytes

CASE NARRATIVE

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Surrogate recovery limits have been exceeded; values are outside lower control limits.

Batch	Analyte	Lab Sample ID
WG1957253	2,4,6-Tribromophenol	L1555639-04, 06
WG1957253	2-Fluorophenol	L1555639-04, 06
WG1957253	Phenol-d5	L1555639-04, 06

The associated batch QC was below the established quality control range for accuracy.

Batch	Lab Sample ID	Analytes
WG1957253	(LCS) R3861739-1, L1555639-01, 02, 03, 04, 05, 06	2,4-Dimethylphenol, 3,3-Dichlorobenzidine and Benzidine

The sample matrix interfered with the ability to make any accurate determination; spike value is low.

Batch	Lab Sample ID	Analytes
WG1957253	(MS) R3861739-3, (MSD) R3861739-4	3,3-Dichlorobenzidine and Benzidine

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

Surrogate recovery limits have been exceeded; values are outside lower control limits.

Batch	Analyte	Lab Sample ID
WG1957258	2-Fluorobiphenyl	L1555639-03

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	2000		50.0	1	11/14/2022 16:18	WG1958875

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury,Dissolved	U		0.000100	0.000200	1	11/14/2022 09:37	WG1957941

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Arsenic,Dissolved	0.00254		0.000180	0.00200	1	11/16/2022 16:17	WG1959088
Barium,Dissolved	0.0403		0.000381	0.00200	1	11/16/2022 16:17	WG1959088
Cadmium,Dissolved	U		0.000150	0.00100	1	11/16/2022 16:17	WG1959088
Chromium,Dissolved	0.00332		0.00124	0.00200	1	11/16/2022 16:17	WG1959088
Lead,Dissolved	0.00102	J	0.000849	0.00200	1	11/16/2022 16:17	WG1959088
Selenium,Dissolved	0.000394	J	0.000300	0.00200	1	11/16/2022 16:17	WG1959088
Silver,Dissolved	U		0.0000700	0.00200	1	11/16/2022 16:17	WG1959088

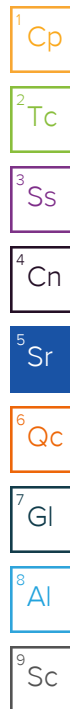
Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	1	11/12/2022 10:58	WG1958593
Acrolein	U		0.00254	0.0500	1	11/12/2022 10:58	WG1958593
Acrylonitrile	U		0.000671	0.0100	1	11/12/2022 10:58	WG1958593
Benzene	U		0.0000941	0.00100	1	11/12/2022 10:58	WG1958593
Bromobenzene	U		0.000118	0.00100	1	11/12/2022 10:58	WG1958593
Bromodichloromethane	U		0.000136	0.00100	1	11/12/2022 10:58	WG1958593
Bromoform	U		0.000129	0.00100	1	11/12/2022 10:58	WG1958593
Bromomethane	U		0.000605	0.00500	1	11/12/2022 10:58	WG1958593
n-Butylbenzene	U		0.000157	0.00100	1	11/12/2022 10:58	WG1958593
sec-Butylbenzene	U		0.000125	0.00100	1	11/12/2022 10:58	WG1958593
tert-Butylbenzene	U		0.000127	0.00100	1	11/12/2022 10:58	WG1958593
Carbon tetrachloride	U		0.000128	0.00100	1	11/12/2022 10:58	WG1958593
Chlorobenzene	U		0.000116	0.00100	1	11/12/2022 10:58	WG1958593
Chlorodibromomethane	U		0.000140	0.00100	1	11/12/2022 10:58	WG1958593
Chloroethane	U		0.000192	0.00500	1	11/12/2022 10:58	WG1958593
2-Chloroethyl vinyl ether	U		0.000575	0.0500	1	11/12/2022 10:58	WG1958593
Chloroform	U		0.000111	0.00500	1	11/12/2022 10:58	WG1958593
Chloromethane	U		0.000960	0.00250	1	11/12/2022 10:58	WG1958593
2-Chlorotoluene	U		0.000106	0.00100	1	11/12/2022 10:58	WG1958593
4-Chlorotoluene	U		0.000114	0.00100	1	11/12/2022 10:58	WG1958593
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	11/12/2022 10:58	WG1958593
1,2-Dibromoethane	U		0.000126	0.00100	1	11/12/2022 10:58	WG1958593
Dibromomethane	U		0.000122	0.00100	1	11/12/2022 10:58	WG1958593
1,2-Dichlorobenzene	U		0.000107	0.00100	1	11/12/2022 10:58	WG1958593
1,3-Dichlorobenzene	U		0.000110	0.00100	1	11/12/2022 10:58	WG1958593
1,4-Dichlorobenzene	U		0.000120	0.00100	1	11/12/2022 10:58	WG1958593
Dichlorodifluoromethane	U		0.000374	0.00500	1	11/12/2022 10:58	WG1958593
1,1-Dichloroethane	U		0.000100	0.00100	1	11/12/2022 10:58	WG1958593
1,2-Dichloroethane	U		0.0000819	0.00100	1	11/12/2022 10:58	WG1958593
1,1-Dichloroethene	U		0.000188	0.00100	1	11/12/2022 10:58	WG1958593
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	11/12/2022 10:58	WG1958593
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	11/12/2022 10:58	WG1958593
1,2-Dichloropropane	U		0.000149	0.00100	1	11/12/2022 10:58	WG1958593

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.000142	0.00100	1	11/12/2022 10:58	WG1958593
1,3-Dichloropropane	U		0.000110	0.00100	1	11/12/2022 10:58	WG1958593
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	11/12/2022 10:58	WG1958593
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	11/12/2022 10:58	WG1958593
2,2-Dichloropropane	U		0.000161	0.00100	1	11/12/2022 10:58	WG1958593
Di-isopropyl ether	U		0.000105	0.00100	1	11/12/2022 10:58	WG1958593
Ethylbenzene	U		0.000137	0.00100	1	11/12/2022 10:58	WG1958593
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	11/12/2022 10:58	WG1958593
Isopropylbenzene	U		0.000105	0.00100	1	11/12/2022 10:58	WG1958593
p-Isopropyltoluene	U		0.000120	0.00100	1	11/12/2022 10:58	WG1958593
2-Butanone (MEK)	U		0.00119	0.0100	1	11/12/2022 10:58	WG1958593
Methylene Chloride	U		0.000430	0.00500	1	11/12/2022 10:58	WG1958593
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	11/12/2022 10:58	WG1958593
Methyl tert-butyl ether	U		0.000101	0.00100	1	11/12/2022 10:58	WG1958593
Naphthalene	U		0.00100	0.00500	1	11/12/2022 10:58	WG1958593
n-Propylbenzene	U		0.0000993	0.00100	1	11/12/2022 10:58	WG1958593
Styrene	U		0.000118	0.00100	1	11/12/2022 10:58	WG1958593
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	11/12/2022 10:58	WG1958593
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	11/12/2022 10:58	WG1958593
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100	1	11/12/2022 10:58	WG1958593
Tetrachloroethene	U		0.000300	0.00100	1	11/12/2022 10:58	WG1958593
Toluene	U		0.000278	0.00100	1	11/12/2022 10:58	WG1958593
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	11/12/2022 10:58	WG1958593
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	11/12/2022 10:58	WG1958593
1,1,1-Trichloroethane	U		0.000149	0.00100	1	11/12/2022 10:58	WG1958593
1,1,2-Trichloroethane	U		0.000158	0.00100	1	11/12/2022 10:58	WG1958593
Trichloroethene	U		0.000190	0.00100	1	11/12/2022 10:58	WG1958593
Trichlorofluoromethane	U		0.000160	0.00500	1	11/12/2022 10:58	WG1958593
1,2,3-Trichloropropane	U		0.000237	0.00250	1	11/12/2022 10:58	WG1958593
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	11/12/2022 10:58	WG1958593
1,2,3-Trimethylbenzene	U		0.000104	0.00100	1	11/12/2022 10:58	WG1958593
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	11/12/2022 10:58	WG1958593
Vinyl chloride	U		0.000234	0.00100	1	11/12/2022 10:58	WG1958593
Xylenes, Total	U		0.000174	0.00300	1	11/12/2022 10:58	WG1958593
(S) Toluene-d8	110			80.0-120		11/12/2022 10:58	WG1958593
(S) 4-Bromofluorobenzene	107			77.0-126		11/12/2022 10:58	WG1958593
(S) 1,2-Dichloroethane-d4	93.4			70.0-130		11/12/2022 10:58	WG1958593

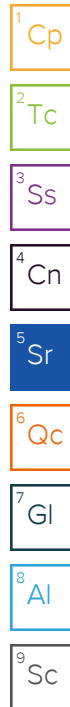


Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzidine	U	J4	0.00374	0.0100	1	11/15/2022 17:15	WG1957253
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	11/15/2022 17:15	WG1957253
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	11/15/2022 17:15	WG1957253
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	11/15/2022 17:15	WG1957253
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	11/15/2022 17:15	WG1957253
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	11/15/2022 17:15	WG1957253
1,2-Dichlorobenzene	U		0.0000713	0.0100	1	11/15/2022 17:15	WG1957253
1,3-Dichlorobenzene	U		0.000132	0.0100	1	11/15/2022 17:15	WG1957253
1,4-Dichlorobenzene	U		0.0000942	0.0100	1	11/15/2022 17:15	WG1957253
3,3-Dichlorobenzidine	U	J4	0.000212	0.0100	1	11/15/2022 17:15	WG1957253
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	11/15/2022 17:15	WG1957253
2,6-Dinitrotoluene	U		0.000250	0.0100	1	11/15/2022 17:15	WG1957253
Hexachlorobenzene	U		0.0000755	0.00100	1	11/15/2022 17:15	WG1957253
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	11/15/2022 17:15	WG1957253
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	11/15/2022 17:15	WG1957253

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hexachloroethane	U		0.000127	0.0100	1	11/15/2022 17:15	WG1957253
Isophorone	U		0.000143	0.0100	1	11/15/2022 17:15	WG1957253
Nitrobenzene	U		0.000297	0.0100	1	11/15/2022 17:15	WG1957253
n-Nitrosodimethylamine	U		0.000998	0.0100	1	11/15/2022 17:15	WG1957253
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	11/15/2022 17:15	WG1957253
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	11/15/2022 17:15	WG1957253
Benzylbutyl phthalate	U		0.000765	0.00300	1	11/15/2022 17:15	WG1957253
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	11/15/2022 17:15	WG1957253
Di-n-butyl phthalate	U		0.000453	0.00300	1	11/15/2022 17:15	WG1957253
Diethyl phthalate	U		0.000287	0.00300	1	11/15/2022 17:15	WG1957253
Dimethyl phthalate	U		0.000260	0.00300	1	11/15/2022 17:15	WG1957253
Di-n-octyl phthalate	U		0.000932	0.00300	1	11/15/2022 17:15	WG1957253
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	11/15/2022 17:15	WG1957253
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	11/15/2022 17:15	WG1957253
2-Chlorophenol	U		0.000133	0.0100	1	11/15/2022 17:15	WG1957253
2,4-Dichlorophenol	U		0.000102	0.0100	1	11/15/2022 17:15	WG1957253
2,4-Dimethylphenol	U	J4	0.0000636	0.0100	1	11/15/2022 17:15	WG1957253
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	11/15/2022 17:15	WG1957253
2,4-Dinitrophenol	U		0.00593	0.0100	1	11/15/2022 17:15	WG1957253
2-Nitrophenol	U		0.000117	0.0100	1	11/15/2022 17:15	WG1957253
4-Nitrophenol	U		0.000143	0.0100	1	11/15/2022 17:15	WG1957253
Pentachlorophenol	U		0.000313	0.0100	1	11/15/2022 17:15	WG1957253
Phenol	U		0.00433	0.0100	1	11/15/2022 17:15	WG1957253
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	11/15/2022 17:15	WG1957253
(S) 2-Fluorophenol	22.8			10.0-120		11/15/2022 17:15	WG1957253
(S) Phenol-d5	14.8			10.0-120		11/15/2022 17:15	WG1957253
(S) Nitrobenzene-d5	49.1			10.0-127		11/15/2022 17:15	WG1957253
(S) 2-Fluorobiphenyl	42.9			10.0-130		11/15/2022 17:15	WG1957253
(S) 2,4,6-Tribromophenol	44.5			10.0-155		11/15/2022 17:15	WG1957253
(S) p-Terphenyl-d14	56.9			10.0-128		11/15/2022 17:15	WG1957253



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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	U		0.0000190	0.0000500	1	11/11/2022 07:50	WG1957258
Acenaphthene	U		0.0000190	0.0000500	1	11/11/2022 07:50	WG1957258
Acenaphthylene	U		0.0000171	0.0000500	1	11/11/2022 07:50	WG1957258
Benzo(a)anthracene	U		0.0000203	0.0000500	1	11/11/2022 07:50	WG1957258
Benzo(a)pyrene	U		0.0000184	0.0000500	1	11/11/2022 07:50	WG1957258
Benzo(b)fluoranthene	U		0.0000168	0.0000500	1	11/11/2022 07:50	WG1957258
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	11/11/2022 07:50	WG1957258
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	11/11/2022 07:50	WG1957258
Chrysene	U		0.0000179	0.0000500	1	11/11/2022 07:50	WG1957258
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	11/11/2022 07:50	WG1957258
Fluoranthene	U		0.0000270	0.000100	1	11/11/2022 07:50	WG1957258
Fluorene	U		0.0000169	0.0000500	1	11/11/2022 07:50	WG1957258
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	11/11/2022 07:50	WG1957258
Naphthalene	U		0.0000917	0.000250	1	11/11/2022 07:50	WG1957258
Phenanthrene	U		0.0000180	0.0000500	1	11/11/2022 07:50	WG1957258
Pyrene	U		0.0000169	0.0000500	1	11/11/2022 07:50	WG1957258
1-Methylnaphthalene	U		0.0000687	0.000250	1	11/11/2022 07:50	WG1957258
2-Methylnaphthalene	U		0.0000674	0.000250	1	11/11/2022 07:50	WG1957258
2-Chloronaphthalene	U		0.0000682	0.000250	1	11/11/2022 07:50	WG1957258
(S) Nitrobenzene-d5	89.0			31.0-160		11/11/2022 07:50	WG1957258
(S) 2-Fluorobiphenyl	60.0			48.0-148		11/11/2022 07:50	WG1957258
(S) p-Terphenyl-d14	78.0			37.0-146		11/11/2022 07:50	WG1957258

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	0.00198		0.0000447	0.000400	1	11/14/2022 10:50	WG1957888
(S) Nitrobenzene-d5	69.7			10.0-120		11/14/2022 10:50	WG1957888

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	2790		100	1	11/14/2022 16:18	WG1958875

Mercury by Method 7470A

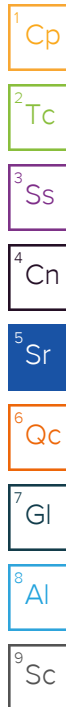
Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury,Dissolved	U	J6	0.000100	0.000200	1	11/14/2022 09:31	WG1957941

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Arsenic,Dissolved	0.132		0.000180	0.00200	1	11/16/2022 15:01	WG1959088
Barium,Dissolved	0.0496		0.000381	0.00200	1	11/16/2022 15:01	WG1959088
Cadmium,Dissolved	U		0.000150	0.00100	1	11/16/2022 15:01	WG1959088
Chromium,Dissolved	U		0.00124	0.00200	1	11/16/2022 15:01	WG1959088
Lead,Dissolved	U		0.000849	0.00200	1	11/16/2022 15:01	WG1959088
Selenium,Dissolved	0.000705	J	0.000300	0.00200	1	11/16/2022 15:01	WG1959088
Silver,Dissolved	U		0.0000700	0.00200	1	11/16/2022 15:01	WG1959088

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0565	0.250	5	11/12/2022 05:37	WG1958563
Acrolein	U		0.0127	0.250	5	11/12/2022 05:37	WG1958563
Acrylonitrile	U		0.00336	0.0500	5	11/12/2022 05:37	WG1958563
Benzene	U		0.000471	0.00500	5	11/12/2022 05:37	WG1958563
Bromobenzene	U		0.000590	0.00500	5	11/12/2022 05:37	WG1958563
Bromodichloromethane	U		0.000680	0.00500	5	11/12/2022 05:37	WG1958563
Bromoform	U	J4	0.000645	0.00500	5	11/12/2022 05:37	WG1958563
Bromomethane	U		0.00303	0.0250	5	11/12/2022 05:37	WG1958563
n-Butylbenzene	U		0.000785	0.00500	5	11/12/2022 05:37	WG1958563
sec-Butylbenzene	U		0.000625	0.00500	5	11/12/2022 05:37	WG1958563
tert-Butylbenzene	U		0.000635	0.00500	5	11/12/2022 05:37	WG1958563
Carbon tetrachloride	U	J3	0.000640	0.00500	5	11/12/2022 05:37	WG1958563
Chlorobenzene	U		0.000580	0.00500	5	11/12/2022 05:37	WG1958563
Chlorodibromomethane	U	J4	0.000700	0.00500	5	11/12/2022 05:37	WG1958563
Chloroethane	U		0.000960	0.0250	5	11/12/2022 05:37	WG1958563
2-Chloroethyl vinyl ether	U		0.00288	0.250	5	11/12/2022 05:37	WG1958563
Chloroform	U		0.000555	0.0250	5	11/12/2022 05:37	WG1958563
Chloromethane	U		0.00480	0.0125	5	11/12/2022 05:37	WG1958563
2-Chlorotoluene	U		0.000530	0.00500	5	11/12/2022 05:37	WG1958563
4-Chlorotoluene	U		0.000570	0.00500	5	11/12/2022 05:37	WG1958563
1,2-Dibromo-3-Chloropropane	U		0.00138	0.0250	5	11/12/2022 05:37	WG1958563
1,2-Dibromoethane	U	J4	0.000630	0.00500	5	11/12/2022 05:37	WG1958563
Dibromomethane	U		0.000610	0.00500	5	11/12/2022 05:37	WG1958563
1,2-Dichlorobenzene	U		0.000535	0.00500	5	11/12/2022 05:37	WG1958563
1,3-Dichlorobenzene	U		0.000550	0.00500	5	11/12/2022 05:37	WG1958563
1,4-Dichlorobenzene	U		0.000600	0.00500	5	11/12/2022 05:37	WG1958563
Dichlorodifluoromethane	U	J3	0.00187	0.0250	5	11/12/2022 05:37	WG1958563
1,1-Dichloroethane	U		0.000500	0.00500	5	11/12/2022 05:37	WG1958563
1,2-Dichloroethane	U		0.000409	0.00500	5	11/12/2022 05:37	WG1958563
1,1-Dichloroethene	U	J3	0.000940	0.00500	5	11/12/2022 05:37	WG1958563
cis-1,2-Dichloroethene	U		0.000630	0.00500	5	11/12/2022 05:37	WG1958563
trans-1,2-Dichloroethene	U		0.000745	0.00500	5	11/12/2022 05:37	WG1958563
1,2-Dichloropropane	U		0.000745	0.00500	5	11/12/2022 05:37	WG1958563



Volatile Organic Compounds (GC/MS) by Method 8260B

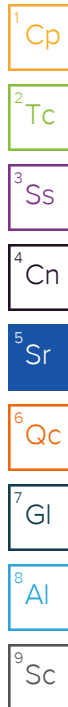
Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U	J3	0.000710	0.00500	5	11/12/2022 05:37	WG1958563
1,3-Dichloropropane	U		0.000550	0.00500	5	11/12/2022 05:37	WG1958563
cis-1,3-Dichloropropene	U		0.000555	0.00500	5	11/12/2022 05:37	WG1958563
trans-1,3-Dichloropropene	U		0.000590	0.00500	5	11/12/2022 05:37	WG1958563
2,2-Dichloropropane	U	J3	0.000805	0.00500	5	11/12/2022 05:37	WG1958563
Di-isopropyl ether	U		0.000525	0.00500	5	11/12/2022 05:37	WG1958563
Ethylbenzene	U		0.000685	0.00500	5	11/12/2022 05:37	WG1958563
Hexachloro-1,3-butadiene	U		0.00169	0.00500	5	11/12/2022 05:37	WG1958563
Isopropylbenzene	U		0.000525	0.00500	5	11/12/2022 05:37	WG1958563
p-Isopropyltoluene	U		0.000600	0.00500	5	11/12/2022 05:37	WG1958563
2-Butanone (MEK)	0.0792		0.00595	0.0500	5	11/12/2022 05:37	WG1958563
Methylene Chloride	U		0.00215	0.0250	5	11/12/2022 05:37	WG1958563
4-Methyl-2-pentanone (MIBK)	U		0.00239	0.0500	5	11/12/2022 05:37	WG1958563
Methyl tert-butyl ether	U		0.000505	0.00500	5	11/12/2022 05:37	WG1958563
Naphthalene	U		0.00500	0.0250	5	11/12/2022 05:37	WG1958563
n-Propylbenzene	U		0.000497	0.00500	5	11/12/2022 05:37	WG1958563
Styrene	U		0.000590	0.00500	5	11/12/2022 05:37	WG1958563
1,1,1,2-Tetrachloroethane	U	J4	0.000735	0.00500	5	11/12/2022 05:37	WG1958563
1,1,2,2-Tetrachloroethane	U		0.000665	0.00500	5	11/12/2022 05:37	WG1958563
1,1,2-Trichlorotrifluoroethane	U	J3	0.000900	0.00500	5	11/12/2022 05:37	WG1958563
Tetrachloroethene	U	J3	0.00150	0.00500	5	11/12/2022 05:37	WG1958563
Toluene	U		0.00139	0.00500	5	11/12/2022 05:37	WG1958563
1,2,3-Trichlorobenzene	U		0.00115	0.00500	5	11/12/2022 05:37	WG1958563
1,2,4-Trichlorobenzene	U		0.00241	0.00500	5	11/12/2022 05:37	WG1958563
1,1,1-Trichloroethane	U	J3	0.000745	0.00500	5	11/12/2022 05:37	WG1958563
1,1,2-Trichloroethane	U		0.000790	0.00500	5	11/12/2022 05:37	WG1958563
Trichloroethene	U	J3	0.000950	0.00500	5	11/12/2022 05:37	WG1958563
Trichlorofluoromethane	U	J3	0.000800	0.0250	5	11/12/2022 05:37	WG1958563
1,2,3-Trichloropropane	U		0.00119	0.0125	5	11/12/2022 05:37	WG1958563
1,2,4-Trimethylbenzene	U		0.00161	0.00500	5	11/12/2022 05:37	WG1958563
1,2,3-Trimethylbenzene	U		0.000520	0.00500	5	11/12/2022 05:37	WG1958563
1,3,5-Trimethylbenzene	U		0.000520	0.00500	5	11/12/2022 05:37	WG1958563
Vinyl chloride	U	J3	0.00117	0.00500	5	11/12/2022 05:37	WG1958563
Xylenes, Total	U		0.000870	0.0150	5	11/12/2022 05:37	WG1958563
(S) Toluene-d8	95.5			80.0-120		11/12/2022 05:37	WG1958563
(S) 4-Bromofluorobenzene	86.8			77.0-126		11/12/2022 05:37	WG1958563
(S) 1,2-Dichloroethane-d4	89.1			70.0-130		11/12/2022 05:37	WG1958563

Sample Narrative:

L1555639-02 WG1958563: Non-target compounds too high to run at a lower dilution.

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzidine	U	J4	0.00374	0.0100	1	11/15/2022 17:36	WG1957253
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	11/15/2022 17:36	WG1957253
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	11/15/2022 17:36	WG1957253
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	11/15/2022 17:36	WG1957253
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	11/15/2022 17:36	WG1957253
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	11/15/2022 17:36	WG1957253
1,2-Dichlorobenzene	U		0.0000713	0.0100	1	11/15/2022 17:36	WG1957253
1,3-Dichlorobenzene	U		0.000132	0.0100	1	11/15/2022 17:36	WG1957253
1,4-Dichlorobenzene	U		0.0000942	0.0100	1	11/15/2022 17:36	WG1957253
3,3-Dichlorobenzidine	U	J4	0.000212	0.0100	1	11/15/2022 17:36	WG1957253
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	11/15/2022 17:36	WG1957253
2,6-Dinitrotoluene	U		0.000250	0.0100	1	11/15/2022 17:36	WG1957253



Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hexachlorobenzene	U		0.0000755	0.00100	1	11/15/2022 17:36	WG1957253
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	11/15/2022 17:36	WG1957253
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	11/15/2022 17:36	WG1957253
Hexachloroethane	U		0.000127	0.0100	1	11/15/2022 17:36	WG1957253
Isophorone	U		0.000143	0.0100	1	11/15/2022 17:36	WG1957253
Nitrobenzene	U		0.000297	0.0100	1	11/15/2022 17:36	WG1957253
n-Nitrosodimethylamine	U		0.000998	0.0100	1	11/15/2022 17:36	WG1957253
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	11/15/2022 17:36	WG1957253
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	11/15/2022 17:36	WG1957253
Benzylbutyl phthalate	U		0.000765	0.00300	1	11/15/2022 17:36	WG1957253
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	11/15/2022 17:36	WG1957253
Di-n-butyl phthalate	U		0.000453	0.00300	1	11/15/2022 17:36	WG1957253
Diethyl phthalate	U		0.000287	0.00300	1	11/15/2022 17:36	WG1957253
Dimethyl phthalate	U		0.000260	0.00300	1	11/15/2022 17:36	WG1957253
Di-n-octyl phthalate	U		0.000932	0.00300	1	11/15/2022 17:36	WG1957253
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	11/15/2022 17:36	WG1957253
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	11/15/2022 17:36	WG1957253
2-Chlorophenol	U		0.000133	0.0100	1	11/15/2022 17:36	WG1957253
2,4-Dichlorophenol	U		0.000102	0.0100	1	11/15/2022 17:36	WG1957253
2,4-Dimethylphenol	U	J4	0.0000636	0.0100	1	11/15/2022 17:36	WG1957253
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	11/15/2022 17:36	WG1957253
2,4-Dinitrophenol	U		0.00593	0.0100	1	11/15/2022 17:36	WG1957253
2-Nitrophenol	U		0.000117	0.0100	1	11/15/2022 17:36	WG1957253
4-Nitrophenol	U		0.000143	0.0100	1	11/15/2022 17:36	WG1957253
Pentachlorophenol	U		0.000313	0.0100	1	11/15/2022 17:36	WG1957253
Phenol	U		0.00433	0.0100	1	11/15/2022 17:36	WG1957253
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	11/15/2022 17:36	WG1957253
(S) 2-Fluorophenol	21.8			10.0-120		11/15/2022 17:36	WG1957253
(S) Phenol-d5	20.8			10.0-120		11/15/2022 17:36	WG1957253
(S) Nitrobenzene-d5	47.0			10.0-127		11/15/2022 17:36	WG1957253
(S) 2-Fluorobiphenyl	59.3			10.0-130		11/15/2022 17:36	WG1957253
(S) 2,4,6-Tribromophenol	74.5			10.0-155		11/15/2022 17:36	WG1957253
(S) p-Terphenyl-d14	88.3			10.0-128		11/15/2022 17:36	WG1957253

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	U		0.0000190	0.0000500	1	11/11/2022 07:15	WG1957258
Acenaphthene	U		0.0000190	0.0000500	1	11/11/2022 07:15	WG1957258
Acenaphthylene	U		0.0000171	0.0000500	1	11/11/2022 07:15	WG1957258
Benzo(a)anthracene	U		0.0000203	0.0000500	1	11/11/2022 07:15	WG1957258
Benzo(a)pyrene	U		0.0000184	0.0000500	1	11/11/2022 07:15	WG1957258
Benzo(b)fluoranthene	U		0.0000168	0.0000500	1	11/11/2022 07:15	WG1957258
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	11/11/2022 07:15	WG1957258
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	11/11/2022 07:15	WG1957258
Chrysene	U		0.0000179	0.0000500	1	11/11/2022 07:15	WG1957258
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	11/11/2022 07:15	WG1957258
Fluoranthene	U		0.0000270	0.000100	1	11/11/2022 07:15	WG1957258
Fluorene	U		0.0000169	0.0000500	1	11/11/2022 07:15	WG1957258
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	11/11/2022 07:15	WG1957258
Naphthalene	U		0.0000917	0.000250	1	11/11/2022 07:15	WG1957258
Phenanthrene	U		0.0000180	0.0000500	1	11/11/2022 07:15	WG1957258
Pyrene	U		0.0000169	0.0000500	1	11/11/2022 07:15	WG1957258
1-Methylnaphthalene	U		0.0000687	0.000250	1	11/11/2022 07:15	WG1957258
2-Methylnaphthalene	U		0.0000674	0.000250	1	11/11/2022 07:15	WG1957258
2-Chloronaphthalene	U		0.0000682	0.000250	1	11/11/2022 07:15	WG1957258

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

Analyte	Result mg/l	<u>Qualifier</u>	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	<u>Batch</u>
(S) Nitrobenzene-d5	105			31.0-160		11/11/2022 07:15	WG1957258
(S) 2-Fluorobiphenyl	69.5			48.0-148		11/11/2022 07:15	WG1957258
(S) p-Terphenyl-d14	76.5			37.0-146		11/11/2022 07:15	WG1957258

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

Analyte	Result mg/l	<u>Qualifier</u>	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	<u>Batch</u>
1,4-Dioxane	0.000432		0.0000447	0.000400	1	11/15/2022 13:03	WG1959007
(S) Nitrobenzene-d5	42.1			10.0-120		11/15/2022 13:03	WG1959007

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	1600		50.0	1	11/14/2022 16:18	WG1958875

Mercury by Method 7470A

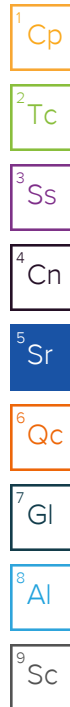
Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury,Dissolved	U		0.000100	0.000200	1	11/14/2022 09:39	WG1957941

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Arsenic,Dissolved	0.0204		0.000180	0.00200	1	11/16/2022 16:27	WG1959088
Barium,Dissolved	0.0194		0.000381	0.00200	1	11/16/2022 16:27	WG1959088
Cadmium,Dissolved	U		0.000150	0.00100	1	11/16/2022 16:27	WG1959088
Chromium,Dissolved	0.0113		0.00124	0.00200	1	11/16/2022 16:27	WG1959088
Lead,Dissolved	0.00629		0.000849	0.00200	1	11/16/2022 16:27	WG1959088
Selenium,Dissolved	0.000958	J	0.000300	0.00200	1	11/16/2022 16:27	WG1959088
Silver,Dissolved	U		0.0000700	0.00200	1	11/16/2022 16:27	WG1959088

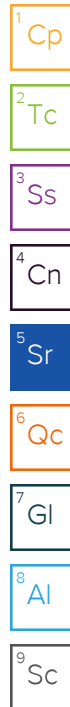
Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	1	11/12/2022 04:35	WG1958563
Acrolein	U		0.00254	0.0500	1	11/12/2022 04:35	WG1958563
Acrylonitrile	U		0.000671	0.0100	1	11/12/2022 04:35	WG1958563
Benzene	U		0.0000941	0.00100	1	11/12/2022 04:35	WG1958563
Bromobenzene	U		0.000118	0.00100	1	11/12/2022 04:35	WG1958563
Bromodichloromethane	U		0.000136	0.00100	1	11/12/2022 04:35	WG1958563
Bromoform	U	J4	0.000129	0.00100	1	11/12/2022 04:35	WG1958563
Bromomethane	U		0.000605	0.00500	1	11/12/2022 04:35	WG1958563
n-Butylbenzene	U		0.000157	0.00100	1	11/12/2022 04:35	WG1958563
sec-Butylbenzene	U		0.000125	0.00100	1	11/12/2022 04:35	WG1958563
tert-Butylbenzene	U		0.000127	0.00100	1	11/12/2022 04:35	WG1958563
Carbon tetrachloride	U		0.000128	0.00100	1	11/12/2022 04:35	WG1958563
Chlorobenzene	U		0.000116	0.00100	1	11/12/2022 04:35	WG1958563
Chlorodibromomethane	U	J4	0.000140	0.00100	1	11/12/2022 04:35	WG1958563
Chloroethane	U	J3	0.000192	0.00500	1	11/12/2022 04:35	WG1958563
2-Chloroethyl vinyl ether	U		0.000575	0.0500	1	11/12/2022 04:35	WG1958563
Chloroform	U		0.000111	0.00500	1	11/12/2022 04:35	WG1958563
Chloromethane	U		0.000960	0.00250	1	11/12/2022 04:35	WG1958563
2-Chlorotoluene	U		0.000106	0.00100	1	11/12/2022 04:35	WG1958563
4-Chlorotoluene	U		0.000114	0.00100	1	11/12/2022 04:35	WG1958563
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	11/12/2022 04:35	WG1958563
1,2-Dibromoethane	U	J4	0.000126	0.00100	1	11/12/2022 04:35	WG1958563
Dibromomethane	U		0.000122	0.00100	1	11/12/2022 04:35	WG1958563
1,2-Dichlorobenzene	U		0.000107	0.00100	1	11/12/2022 04:35	WG1958563
1,3-Dichlorobenzene	U		0.000110	0.00100	1	11/12/2022 04:35	WG1958563
1,4-Dichlorobenzene	U		0.000120	0.00100	1	11/12/2022 04:35	WG1958563
Dichlorodifluoromethane	U		0.000374	0.00500	1	11/12/2022 04:35	WG1958563
1,1-Dichloroethane	0.000178	J	0.000100	0.00100	1	11/12/2022 04:35	WG1958563
1,2-Dichloroethane	U		0.0000819	0.00100	1	11/12/2022 04:35	WG1958563
1,1-Dichloroethene	U	J3	0.000188	0.00100	1	11/12/2022 04:35	WG1958563
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	11/12/2022 04:35	WG1958563
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	11/12/2022 04:35	WG1958563
1,2-Dichloropropane	U		0.000149	0.00100	1	11/12/2022 04:35	WG1958563



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.000142	0.00100	1	11/12/2022 04:35	WG1958563
1,3-Dichloropropane	U		0.000110	0.00100	1	11/12/2022 04:35	WG1958563
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	11/12/2022 04:35	WG1958563
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	11/12/2022 04:35	WG1958563
2,2-Dichloropropane	U		0.000161	0.00100	1	11/12/2022 04:35	WG1958563
Di-isopropyl ether	U		0.000105	0.00100	1	11/12/2022 04:35	WG1958563
Ethylbenzene	U		0.000137	0.00100	1	11/12/2022 04:35	WG1958563
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	11/12/2022 04:35	WG1958563
Isopropylbenzene	U		0.000105	0.00100	1	11/12/2022 04:35	WG1958563
p-Isopropyltoluene	U		0.000120	0.00100	1	11/12/2022 04:35	WG1958563
2-Butanone (MEK)	U		0.00119	0.0100	1	11/12/2022 04:35	WG1958563
Methylene Chloride	U		0.000430	0.00500	1	11/12/2022 04:35	WG1958563
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	11/12/2022 04:35	WG1958563
Methyl tert-butyl ether	U		0.000101	0.00100	1	11/12/2022 04:35	WG1958563
Naphthalene	U		0.00100	0.00500	1	11/12/2022 04:35	WG1958563
n-Propylbenzene	U		0.0000993	0.00100	1	11/12/2022 04:35	WG1958563
Styrene	U		0.000118	0.00100	1	11/12/2022 04:35	WG1958563
1,1,1,2-Tetrachloroethane	U	J4	0.000147	0.00100	1	11/12/2022 04:35	WG1958563
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	11/12/2022 04:35	WG1958563
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100	1	11/12/2022 04:35	WG1958563
Tetrachloroethene	U		0.000300	0.00100	1	11/12/2022 04:35	WG1958563
Toluene	U		0.000278	0.00100	1	11/12/2022 04:35	WG1958563
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	11/12/2022 04:35	WG1958563
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	11/12/2022 04:35	WG1958563
1,1,1-Trichloroethane	U		0.000149	0.00100	1	11/12/2022 04:35	WG1958563
1,1,2-Trichloroethane	U		0.000158	0.00100	1	11/12/2022 04:35	WG1958563
Trichloroethene	U		0.000190	0.00100	1	11/12/2022 04:35	WG1958563
Trichlorofluoromethane	U		0.000160	0.00500	1	11/12/2022 04:35	WG1958563
1,2,3-Trichloropropane	U		0.000237	0.00250	1	11/12/2022 04:35	WG1958563
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	11/12/2022 04:35	WG1958563
1,2,3-Trimethylbenzene	U		0.000104	0.00100	1	11/12/2022 04:35	WG1958563
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	11/12/2022 04:35	WG1958563
Vinyl chloride	U		0.000234	0.00100	1	11/12/2022 04:35	WG1958563
Xylenes, Total	U		0.000174	0.00300	1	11/12/2022 04:35	WG1958563
(S) Toluene-d8	96.8			80.0-120		11/12/2022 04:35	WG1958563
(S) 4-Bromofluorobenzene	92.2			77.0-126		11/12/2022 04:35	WG1958563
(S) 1,2-Dichloroethane-d4	91.9			70.0-130		11/12/2022 04:35	WG1958563



Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzidine	U	J4	0.00374	0.0100	1	11/15/2022 17:58	WG1957253
Bis(2-chlorethoxy)methane	U		0.000116	0.0100	1	11/15/2022 17:58	WG1957253
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	11/15/2022 17:58	WG1957253
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	11/15/2022 17:58	WG1957253
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	11/15/2022 17:58	WG1957253
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	11/15/2022 17:58	WG1957253
1,2-Dichlorobenzene	U		0.0000713	0.0100	1	11/15/2022 17:58	WG1957253
1,3-Dichlorobenzene	U		0.000132	0.0100	1	11/15/2022 17:58	WG1957253
1,4-Dichlorobenzene	U		0.0000942	0.0100	1	11/15/2022 17:58	WG1957253
3,3-Dichlorobenzidine	U	J4	0.000212	0.0100	1	11/15/2022 17:58	WG1957253
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	11/15/2022 17:58	WG1957253
2,6-Dinitrotoluene	U		0.000250	0.0100	1	11/15/2022 17:58	WG1957253
Hexachlorobenzene	U		0.0000755	0.00100	1	11/15/2022 17:58	WG1957253
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	11/15/2022 17:58	WG1957253
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	11/15/2022 17:58	WG1957253

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hexachloroethane	U		0.000127	0.0100	1	11/15/2022 17:58	WG1957253
Isophorone	U		0.000143	0.0100	1	11/15/2022 17:58	WG1957253
Nitrobenzene	U		0.000297	0.0100	1	11/15/2022 17:58	WG1957253
n-Nitrosodimethylamine	U		0.000998	0.0100	1	11/15/2022 17:58	WG1957253
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	11/15/2022 17:58	WG1957253
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	11/15/2022 17:58	WG1957253
Benzylbutyl phthalate	U		0.000765	0.00300	1	11/15/2022 17:58	WG1957253
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	11/15/2022 17:58	WG1957253
Di-n-butyl phthalate	U		0.000453	0.00300	1	11/15/2022 17:58	WG1957253
Diethyl phthalate	U		0.000287	0.00300	1	11/15/2022 17:58	WG1957253
Dimethyl phthalate	U		0.000260	0.00300	1	11/15/2022 17:58	WG1957253
Di-n-octyl phthalate	U		0.000932	0.00300	1	11/15/2022 17:58	WG1957253
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	11/15/2022 17:58	WG1957253
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	11/15/2022 17:58	WG1957253
2-Chlorophenol	U		0.000133	0.0100	1	11/15/2022 17:58	WG1957253
2,4-Dichlorophenol	U		0.000102	0.0100	1	11/15/2022 17:58	WG1957253
2,4-Dimethylphenol	U	J4	0.0000636	0.0100	1	11/15/2022 17:58	WG1957253
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	11/15/2022 17:58	WG1957253
2,4-Dinitrophenol	U		0.00593	0.0100	1	11/15/2022 17:58	WG1957253
2-Nitrophenol	U		0.000117	0.0100	1	11/15/2022 17:58	WG1957253
4-Nitrophenol	U		0.000143	0.0100	1	11/15/2022 17:58	WG1957253
Pentachlorophenol	U		0.000313	0.0100	1	11/15/2022 17:58	WG1957253
Phenol	U		0.00433	0.0100	1	11/15/2022 17:58	WG1957253
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	11/15/2022 17:58	WG1957253
(S) 2-Fluorophenol	24.5			10.0-120		11/15/2022 17:58	WG1957253
(S) Phenol-d5	14.6			10.0-120		11/15/2022 17:58	WG1957253
(S) Nitrobenzene-d5	52.3			10.0-127		11/15/2022 17:58	WG1957253
(S) 2-Fluorobiphenyl	51.6			10.0-130		11/15/2022 17:58	WG1957253
(S) 2,4,6-Tribromophenol	57.0			10.0-155		11/15/2022 17:58	WG1957253
(S) p-Terphenyl-d14	69.7			10.0-128		11/15/2022 17:58	WG1957253

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	U		0.0000190	0.0000500	1	11/11/2022 08:08	WG1957258
Acenaphthene	U		0.0000190	0.0000500	1	11/11/2022 08:08	WG1957258
Acenaphthylene	U		0.0000171	0.0000500	1	11/11/2022 08:08	WG1957258
Benzo(a)anthracene	U		0.0000203	0.0000500	1	11/11/2022 08:08	WG1957258
Benzo(a)pyrene	U		0.0000184	0.0000500	1	11/11/2022 08:08	WG1957258
Benzo(b)fluoranthene	U		0.0000168	0.0000500	1	11/11/2022 08:08	WG1957258
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	11/11/2022 08:08	WG1957258
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	11/11/2022 08:08	WG1957258
Chrysene	U		0.0000179	0.0000500	1	11/11/2022 08:08	WG1957258
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	11/11/2022 08:08	WG1957258
Fluoranthene	U		0.0000270	0.000100	1	11/11/2022 08:08	WG1957258
Fluorene	U		0.0000169	0.0000500	1	11/11/2022 08:08	WG1957258
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	11/11/2022 08:08	WG1957258
Naphthalene	U		0.0000917	0.000250	1	11/11/2022 08:08	WG1957258
Phenanthrene	U		0.0000180	0.0000500	1	11/11/2022 08:08	WG1957258
Pyrene	U		0.0000169	0.0000500	1	11/11/2022 08:08	WG1957258
1-Methylnaphthalene	U		0.0000687	0.000250	1	11/11/2022 08:08	WG1957258
2-Methylnaphthalene	U		0.0000674	0.000250	1	11/11/2022 08:08	WG1957258
2-Chloronaphthalene	U		0.0000682	0.000250	1	11/11/2022 08:08	WG1957258
(S) Nitrobenzene-d5	77.5			31.0-160		11/11/2022 08:08	WG1957258
(S) 2-Fluorobiphenyl	45.1	J2		48.0-148		11/11/2022 08:08	WG1957258
(S) p-Terphenyl-d14	50.0			37.0-146		11/11/2022 08:08	WG1957258

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	0.000872		0.0000447	0.000400	1	11/11/2022 22:29	WG1957256
(S) Nitrobenzene-d5	53.7			10.0-120		11/11/2022 22:29	WG1957256

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	924		20.0	1	11/15/2022 14:27	WG1959964

Mercury by Method 7470A

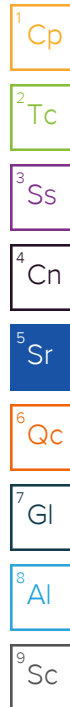
Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury,Dissolved	U		0.000100	0.000200	1	11/14/2022 09:41	WG1957941

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Arsenic,Dissolved	0.382		0.000180	0.00200	1	11/16/2022 16:31	WG1959088
Barium,Dissolved	0.0718		0.000381	0.00200	1	11/16/2022 16:31	WG1959088
Cadmium,Dissolved	U		0.000150	0.00100	1	11/16/2022 16:31	WG1959088
Chromium,Dissolved	0.00225		0.00124	0.00200	1	11/16/2022 16:31	WG1959088
Lead,Dissolved	U		0.000849	0.00200	1	11/16/2022 16:31	WG1959088
Selenium,Dissolved	0.0155		0.000300	0.00200	1	11/16/2022 16:31	WG1959088
Silver,Dissolved	U		0.0000700	0.00200	1	11/16/2022 16:31	WG1959088

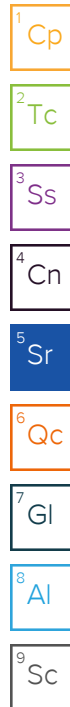
Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	1	11/12/2022 04:56	WG1958563
Acrolein	U		0.00254	0.0500	1	11/12/2022 04:56	WG1958563
Acrylonitrile	U		0.000671	0.0100	1	11/12/2022 04:56	WG1958563
Benzene	U		0.0000941	0.00100	1	11/12/2022 04:56	WG1958563
Bromobenzene	U		0.000118	0.00100	1	11/12/2022 04:56	WG1958563
Bromodichloromethane	U		0.000136	0.00100	1	11/12/2022 04:56	WG1958563
Bromoform	U	J4	0.000129	0.00100	1	11/12/2022 04:56	WG1958563
Bromomethane	U		0.000605	0.00500	1	11/12/2022 04:56	WG1958563
n-Butylbenzene	U		0.000157	0.00100	1	11/12/2022 04:56	WG1958563
sec-Butylbenzene	U		0.000125	0.00100	1	11/12/2022 04:56	WG1958563
tert-Butylbenzene	U		0.000127	0.00100	1	11/12/2022 04:56	WG1958563
Carbon tetrachloride	U		0.000128	0.00100	1	11/12/2022 04:56	WG1958563
Chlorobenzene	U		0.000116	0.00100	1	11/12/2022 04:56	WG1958563
Chlorodibromomethane	U	J4	0.000140	0.00100	1	11/12/2022 04:56	WG1958563
Chloroethane	U	J3	0.000192	0.00500	1	11/12/2022 04:56	WG1958563
2-Chloroethyl vinyl ether	U		0.000575	0.0500	1	11/12/2022 04:56	WG1958563
Chloroform	U		0.000111	0.00500	1	11/12/2022 04:56	WG1958563
Chloromethane	U		0.000960	0.00250	1	11/12/2022 04:56	WG1958563
2-Chlorotoluene	U		0.000106	0.00100	1	11/12/2022 04:56	WG1958563
4-Chlorotoluene	U		0.000114	0.00100	1	11/12/2022 04:56	WG1958563
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	11/12/2022 04:56	WG1958563
1,2-Dibromoethane	U	J4	0.000126	0.00100	1	11/12/2022 04:56	WG1958563
Dibromomethane	U		0.000122	0.00100	1	11/12/2022 04:56	WG1958563
1,2-Dichlorobenzene	U		0.000107	0.00100	1	11/12/2022 04:56	WG1958563
1,3-Dichlorobenzene	U		0.000110	0.00100	1	11/12/2022 04:56	WG1958563
1,4-Dichlorobenzene	U		0.000120	0.00100	1	11/12/2022 04:56	WG1958563
Dichlorodifluoromethane	U		0.000374	0.00500	1	11/12/2022 04:56	WG1958563
1,1-Dichloroethane	U		0.000100	0.00100	1	11/12/2022 04:56	WG1958563
1,2-Dichloroethane	U		0.0000819	0.00100	1	11/12/2022 04:56	WG1958563
1,1-Dichloroethene	U	J3	0.000188	0.00100	1	11/12/2022 04:56	WG1958563
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	11/12/2022 04:56	WG1958563
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	11/12/2022 04:56	WG1958563
1,2-Dichloropropane	U		0.000149	0.00100	1	11/12/2022 04:56	WG1958563



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.000142	0.00100	1	11/12/2022 04:56	WG1958563
1,3-Dichloropropane	U		0.000110	0.00100	1	11/12/2022 04:56	WG1958563
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	11/12/2022 04:56	WG1958563
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	11/12/2022 04:56	WG1958563
2,2-Dichloropropane	U		0.000161	0.00100	1	11/12/2022 04:56	WG1958563
Di-isopropyl ether	U		0.000105	0.00100	1	11/12/2022 04:56	WG1958563
Ethylbenzene	U		0.000137	0.00100	1	11/12/2022 04:56	WG1958563
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	11/12/2022 04:56	WG1958563
Isopropylbenzene	U		0.000105	0.00100	1	11/12/2022 04:56	WG1958563
p-Isopropyltoluene	U		0.000120	0.00100	1	11/12/2022 04:56	WG1958563
2-Butanone (MEK)	U		0.00119	0.0100	1	11/12/2022 04:56	WG1958563
Methylene Chloride	U		0.000430	0.00500	1	11/12/2022 04:56	WG1958563
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	11/12/2022 04:56	WG1958563
Methyl tert-butyl ether	U		0.000101	0.00100	1	11/12/2022 04:56	WG1958563
Naphthalene	U		0.00100	0.00500	1	11/12/2022 04:56	WG1958563
n-Propylbenzene	U		0.0000993	0.00100	1	11/12/2022 04:56	WG1958563
Styrene	U		0.000118	0.00100	1	11/12/2022 04:56	WG1958563
1,1,1,2-Tetrachloroethane	U	J4	0.000147	0.00100	1	11/12/2022 04:56	WG1958563
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	11/12/2022 04:56	WG1958563
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100	1	11/12/2022 04:56	WG1958563
Tetrachloroethene	U		0.000300	0.00100	1	11/12/2022 04:56	WG1958563
Toluene	U		0.000278	0.00100	1	11/12/2022 04:56	WG1958563
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	11/12/2022 04:56	WG1958563
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	11/12/2022 04:56	WG1958563
1,1,1-Trichloroethane	U		0.000149	0.00100	1	11/12/2022 04:56	WG1958563
1,1,2-Trichloroethane	U		0.000158	0.00100	1	11/12/2022 04:56	WG1958563
Trichloroethene	U		0.000190	0.00100	1	11/12/2022 04:56	WG1958563
Trichlorofluoromethane	U		0.000160	0.00500	1	11/12/2022 04:56	WG1958563
1,2,3-Trichloropropane	U		0.000237	0.00250	1	11/12/2022 04:56	WG1958563
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	11/12/2022 04:56	WG1958563
1,2,3-Trimethylbenzene	U		0.000104	0.00100	1	11/12/2022 04:56	WG1958563
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	11/12/2022 04:56	WG1958563
Vinyl chloride	U		0.000234	0.00100	1	11/12/2022 04:56	WG1958563
Xylenes, Total	U		0.000174	0.00300	1	11/12/2022 04:56	WG1958563
(S) Toluene-d8	95.4			80.0-120		11/12/2022 04:56	WG1958563
(S) 4-Bromofluorobenzene	86.3			77.0-126		11/12/2022 04:56	WG1958563
(S) 1,2-Dichloroethane-d4	94.1			70.0-130		11/12/2022 04:56	WG1958563



Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzidine	U	J4	0.00374	0.0100	1	11/15/2022 18:19	WG1957253
Bis(2-chloroethoxy)methane	U		0.000116	0.0100	1	11/15/2022 18:19	WG1957253
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	11/15/2022 18:19	WG1957253
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	11/15/2022 18:19	WG1957253
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	11/15/2022 18:19	WG1957253
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	11/15/2022 18:19	WG1957253
1,2-Dichlorobenzene	U		0.0000713	0.0100	1	11/15/2022 18:19	WG1957253
1,3-Dichlorobenzene	U		0.000132	0.0100	1	11/15/2022 18:19	WG1957253
1,4-Dichlorobenzene	U		0.0000942	0.0100	1	11/15/2022 18:19	WG1957253
3,3-Dichlorobenzidine	U	J4	0.000212	0.0100	1	11/15/2022 18:19	WG1957253
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	11/15/2022 18:19	WG1957253
2,6-Dinitrotoluene	U		0.000250	0.0100	1	11/15/2022 18:19	WG1957253
Hexachlorobenzene	U		0.0000755	0.00100	1	11/15/2022 18:19	WG1957253
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	11/15/2022 18:19	WG1957253
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	11/15/2022 18:19	WG1957253

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hexachloroethane	U		0.000127	0.0100	1	11/15/2022 18:19	WG1957253
Isophorone	U		0.000143	0.0100	1	11/15/2022 18:19	WG1957253
Nitrobenzene	U		0.000297	0.0100	1	11/15/2022 18:19	WG1957253
n-Nitrosodimethylamine	U		0.000998	0.0100	1	11/15/2022 18:19	WG1957253
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	11/15/2022 18:19	WG1957253
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	11/15/2022 18:19	WG1957253
Benzylbutyl phthalate	U		0.000765	0.00300	1	11/15/2022 18:19	WG1957253
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	11/15/2022 18:19	WG1957253
Di-n-butyl phthalate	U		0.000453	0.00300	1	11/15/2022 18:19	WG1957253
Diethyl phthalate	U		0.000287	0.00300	1	11/15/2022 18:19	WG1957253
Dimethyl phthalate	U		0.000260	0.00300	1	11/15/2022 18:19	WG1957253
Di-n-octyl phthalate	U		0.000932	0.00300	1	11/15/2022 18:19	WG1957253
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	11/15/2022 18:19	WG1957253
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	11/15/2022 18:19	WG1957253
2-Chlorophenol	U		0.000133	0.0100	1	11/15/2022 18:19	WG1957253
2,4-Dichlorophenol	U		0.000102	0.0100	1	11/15/2022 18:19	WG1957253
2,4-Dimethylphenol	U	J4	0.0000636	0.0100	1	11/15/2022 18:19	WG1957253
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	11/15/2022 18:19	WG1957253
2,4-Dinitrophenol	U		0.00593	0.0100	1	11/15/2022 18:19	WG1957253
2-Nitrophenol	U		0.000117	0.0100	1	11/15/2022 18:19	WG1957253
4-Nitrophenol	U		0.000143	0.0100	1	11/15/2022 18:19	WG1957253
Pentachlorophenol	U		0.000313	0.0100	1	11/15/2022 18:19	WG1957253
Phenol	U		0.00433	0.0100	1	11/15/2022 18:19	WG1957253
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	11/15/2022 18:19	WG1957253
(S) 2-Fluorophenol	4.79	J2		10.0-120		11/15/2022 18:19	WG1957253
(S) Phenol-d5	5.10	J2		10.0-120		11/15/2022 18:19	WG1957253
(S) Nitrobenzene-d5	39.7			10.0-127		11/15/2022 18:19	WG1957253
(S) 2-Fluorobiphenyl	52.6			10.0-130		11/15/2022 18:19	WG1957253
(S) 2,4,6-Tribromophenol	4.97	J2		10.0-155		11/15/2022 18:19	WG1957253
(S) p-Terphenyl-d14	76.0			10.0-128		11/15/2022 18:19	WG1957253

Sample Narrative:

L1555639-04 WG1957253: Duplicate Analysis performed due to surrogate failure. Results confirm; reporting in hold data

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	U		0.0000190	0.0000500	1	11/11/2022 03:46	WG1957258
Acenaphthene	U		0.0000190	0.0000500	1	11/11/2022 03:46	WG1957258
Acenaphthylene	U		0.0000171	0.0000500	1	11/11/2022 03:46	WG1957258
Benzo(a)anthracene	U		0.0000203	0.0000500	1	11/11/2022 03:46	WG1957258
Benzo(a)pyrene	U		0.0000184	0.0000500	1	11/11/2022 03:46	WG1957258
Benzo(b)fluoranthene	U		0.0000168	0.0000500	1	11/11/2022 03:46	WG1957258
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	11/11/2022 03:46	WG1957258
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	11/11/2022 03:46	WG1957258
Chrysene	U		0.0000179	0.0000500	1	11/11/2022 03:46	WG1957258
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	11/11/2022 03:46	WG1957258
Fluoranthene	U		0.0000270	0.000100	1	11/11/2022 03:46	WG1957258
Fluorene	U		0.0000169	0.0000500	1	11/11/2022 03:46	WG1957258
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	11/11/2022 03:46	WG1957258
Naphthalene	U		0.0000917	0.000250	1	11/11/2022 03:46	WG1957258
Phenanthrene	U		0.0000180	0.0000500	1	11/11/2022 03:46	WG1957258
Pyrene	U		0.0000169	0.0000500	1	11/11/2022 03:46	WG1957258
1-Methylnaphthalene	U		0.0000687	0.000250	1	11/11/2022 03:46	WG1957258
2-Methylnaphthalene	U		0.0000674	0.000250	1	11/11/2022 03:46	WG1957258
2-Chloronaphthalene	U		0.0000682	0.000250	1	11/11/2022 03:46	WG1957258

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

Analyte	Result mg/l	<u>Qualifier</u>	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	<u>Batch</u>
(S) Nitrobenzene-d5	98.5			31.0-160		11/11/2022 03:46	WG1957258
(S) 2-Fluorobiphenyl	79.5			48.0-148		11/11/2022 03:46	WG1957258
(S) p-Terphenyl-d14	88.0			37.0-146		11/11/2022 03:46	WG1957258

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

Analyte	Result mg/l	<u>Qualifier</u>	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	<u>Batch</u>
1,4-Dioxane	0.000436		0.0000447	0.000400	1	11/11/2022 22:48	WG1957256
(S) Nitrobenzene-d5	62.6			10.0-120		11/11/2022 22:48	WG1957256

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	9660		200	1	11/14/2022 16:18	WG1958875

Mercury by Method 7470A

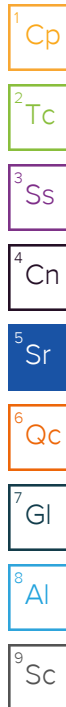
Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury,Dissolved	U		0.000100	0.000200	1	11/14/2022 09:47	WG1957941

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Arsenic,Dissolved	0.0224		0.000180	0.00200	1	11/16/2022 16:34	WG1959088
Barium,Dissolved	0.0831		0.000381	0.00200	1	11/16/2022 16:34	WG1959088
Cadmium,Dissolved	U		0.000150	0.00100	1	11/16/2022 16:34	WG1959088
Chromium,Dissolved	U		0.00124	0.00200	1	11/16/2022 16:34	WG1959088
Lead,Dissolved	0.00125	J	0.000849	0.00200	1	11/16/2022 16:34	WG1959088
Selenium,Dissolved	0.00104	J	0.000300	0.00200	1	11/16/2022 16:34	WG1959088
Silver,Dissolved	U		0.0000700	0.00200	1	11/16/2022 16:34	WG1959088

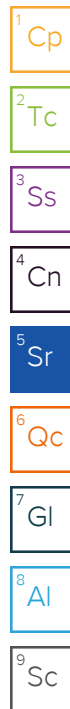
Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	1	11/12/2022 05:16	WG1958563
Acrolein	U		0.00254	0.0500	1	11/12/2022 05:16	WG1958563
Acrylonitrile	U		0.000671	0.0100	1	11/12/2022 05:16	WG1958563
Benzene	U		0.0000941	0.00100	1	11/12/2022 05:16	WG1958563
Bromobenzene	U		0.000118	0.00100	1	11/12/2022 05:16	WG1958563
Bromodichloromethane	U		0.000136	0.00100	1	11/12/2022 05:16	WG1958563
Bromoform	U	J4	0.000129	0.00100	1	11/12/2022 05:16	WG1958563
Bromomethane	U		0.000605	0.00500	1	11/12/2022 05:16	WG1958563
n-Butylbenzene	U		0.000157	0.00100	1	11/12/2022 05:16	WG1958563
sec-Butylbenzene	U		0.000125	0.00100	1	11/12/2022 05:16	WG1958563
tert-Butylbenzene	U		0.000127	0.00100	1	11/12/2022 05:16	WG1958563
Carbon tetrachloride	U		0.000128	0.00100	1	11/12/2022 05:16	WG1958563
Chlorobenzene	U		0.000116	0.00100	1	11/12/2022 05:16	WG1958563
Chlorodibromomethane	U	J4	0.000140	0.00100	1	11/12/2022 05:16	WG1958563
Chloroethane	U	J3	0.000192	0.00500	1	11/12/2022 05:16	WG1958563
2-Chloroethyl vinyl ether	U		0.000575	0.0500	1	11/12/2022 05:16	WG1958563
Chloroform	U		0.000111	0.00500	1	11/12/2022 05:16	WG1958563
Chloromethane	U		0.000960	0.00250	1	11/12/2022 05:16	WG1958563
2-Chlorotoluene	U		0.000106	0.00100	1	11/12/2022 05:16	WG1958563
4-Chlorotoluene	U		0.000114	0.00100	1	11/12/2022 05:16	WG1958563
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	11/12/2022 05:16	WG1958563
1,2-Dibromoethane	U	J4	0.000126	0.00100	1	11/12/2022 05:16	WG1958563
Dibromomethane	U		0.000122	0.00100	1	11/12/2022 05:16	WG1958563
1,2-Dichlorobenzene	U		0.000107	0.00100	1	11/12/2022 05:16	WG1958563
1,3-Dichlorobenzene	U		0.000110	0.00100	1	11/12/2022 05:16	WG1958563
1,4-Dichlorobenzene	U		0.000120	0.00100	1	11/12/2022 05:16	WG1958563
Dichlorodifluoromethane	U		0.000374	0.00500	1	11/12/2022 05:16	WG1958563
1,1-Dichloroethane	0.000126	J	0.000100	0.00100	1	11/12/2022 05:16	WG1958563
1,2-Dichloroethane	U		0.0000819	0.00100	1	11/12/2022 05:16	WG1958563
1,1-Dichloroethene	U	J3	0.000188	0.00100	1	11/12/2022 05:16	WG1958563
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	11/12/2022 05:16	WG1958563
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	11/12/2022 05:16	WG1958563
1,2-Dichloropropane	U		0.000149	0.00100	1	11/12/2022 05:16	WG1958563



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.000142	0.00100	1	11/12/2022 05:16	WG1958563
1,3-Dichloropropane	U		0.000110	0.00100	1	11/12/2022 05:16	WG1958563
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	11/12/2022 05:16	WG1958563
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	11/12/2022 05:16	WG1958563
2,2-Dichloropropane	U		0.000161	0.00100	1	11/12/2022 05:16	WG1958563
Di-isopropyl ether	U		0.000105	0.00100	1	11/12/2022 05:16	WG1958563
Ethylbenzene	U		0.000137	0.00100	1	11/12/2022 05:16	WG1958563
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	11/12/2022 05:16	WG1958563
Isopropylbenzene	U		0.000105	0.00100	1	11/12/2022 05:16	WG1958563
p-Isopropyltoluene	U		0.000120	0.00100	1	11/12/2022 05:16	WG1958563
2-Butanone (MEK)	U		0.00119	0.0100	1	11/12/2022 05:16	WG1958563
Methylene Chloride	U		0.000430	0.00500	1	11/12/2022 05:16	WG1958563
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	11/12/2022 05:16	WG1958563
Methyl tert-butyl ether	U		0.000101	0.00100	1	11/12/2022 05:16	WG1958563
Naphthalene	U		0.00100	0.00500	1	11/12/2022 05:16	WG1958563
n-Propylbenzene	U		0.0000993	0.00100	1	11/12/2022 05:16	WG1958563
Styrene	U		0.000118	0.00100	1	11/12/2022 05:16	WG1958563
1,1,1,2-Tetrachloroethane	U	J4	0.000147	0.00100	1	11/12/2022 05:16	WG1958563
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	11/12/2022 05:16	WG1958563
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100	1	11/12/2022 05:16	WG1958563
Tetrachloroethene	U		0.000300	0.00100	1	11/12/2022 05:16	WG1958563
Toluene	U		0.000278	0.00100	1	11/12/2022 05:16	WG1958563
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	11/12/2022 05:16	WG1958563
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	11/12/2022 05:16	WG1958563
1,1,1-Trichloroethane	U		0.000149	0.00100	1	11/12/2022 05:16	WG1958563
1,1,2-Trichloroethane	U		0.000158	0.00100	1	11/12/2022 05:16	WG1958563
Trichloroethene	U		0.000190	0.00100	1	11/12/2022 05:16	WG1958563
Trichlorofluoromethane	U		0.000160	0.00500	1	11/12/2022 05:16	WG1958563
1,2,3-Trichloropropane	U		0.000237	0.00250	1	11/12/2022 05:16	WG1958563
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	11/12/2022 05:16	WG1958563
1,2,3-Trimethylbenzene	U		0.000104	0.00100	1	11/12/2022 05:16	WG1958563
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	11/12/2022 05:16	WG1958563
Vinyl chloride	U		0.000234	0.00100	1	11/12/2022 05:16	WG1958563
Xylenes, Total	U		0.000174	0.00300	1	11/12/2022 05:16	WG1958563
(S) Toluene-d8	94.6			80.0-120		11/12/2022 05:16	WG1958563
(S) 4-Bromofluorobenzene	91.1			77.0-126		11/12/2022 05:16	WG1958563
(S) 1,2-Dichloroethane-d4	88.8			70.0-130		11/12/2022 05:16	WG1958563



Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzidine	U	J4	0.00374	0.0100	1	11/15/2022 18:41	WG1957253
Bis(2-chloroethoxy)methane	U		0.000116	0.0100	1	11/15/2022 18:41	WG1957253
Bis(2-chloroethyl)ether	U		0.000137	0.0100	1	11/15/2022 18:41	WG1957253
2,2-Oxybis(1-Chloropropane)	U		0.000210	0.0100	1	11/15/2022 18:41	WG1957253
4-Bromophenyl-phenylether	U		0.0000877	0.0100	1	11/15/2022 18:41	WG1957253
4-Chlorophenyl-phenylether	U		0.0000926	0.0100	1	11/15/2022 18:41	WG1957253
1,2-Dichlorobenzene	U		0.0000713	0.0100	1	11/15/2022 18:41	WG1957253
1,3-Dichlorobenzene	U		0.000132	0.0100	1	11/15/2022 18:41	WG1957253
1,4-Dichlorobenzene	U		0.0000942	0.0100	1	11/15/2022 18:41	WG1957253
3,3-Dichlorobenzidine	U	J4	0.000212	0.0100	1	11/15/2022 18:41	WG1957253
2,4-Dinitrotoluene	U		0.0000983	0.0100	1	11/15/2022 18:41	WG1957253
2,6-Dinitrotoluene	U		0.000250	0.0100	1	11/15/2022 18:41	WG1957253
Hexachlorobenzene	U		0.0000755	0.00100	1	11/15/2022 18:41	WG1957253
Hexachloro-1,3-butadiene	U		0.0000968	0.0100	1	11/15/2022 18:41	WG1957253
Hexachlorocyclopentadiene	U		0.0000598	0.0100	1	11/15/2022 18:41	WG1957253

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hexachloroethane	U		0.000127	0.0100	1	11/15/2022 18:41	WG1957253
Isophorone	U		0.000143	0.0100	1	11/15/2022 18:41	WG1957253
Nitrobenzene	U		0.000297	0.0100	1	11/15/2022 18:41	WG1957253
n-Nitrosodimethylamine	U		0.000998	0.0100	1	11/15/2022 18:41	WG1957253
n-Nitrosodiphenylamine	U		0.00237	0.0100	1	11/15/2022 18:41	WG1957253
n-Nitrosodi-n-propylamine	U		0.000261	0.0100	1	11/15/2022 18:41	WG1957253
Benzylbutyl phthalate	U		0.000765	0.00300	1	11/15/2022 18:41	WG1957253
Bis(2-ethylhexyl)phthalate	U		0.000895	0.00300	1	11/15/2022 18:41	WG1957253
Di-n-butyl phthalate	U		0.000453	0.00300	1	11/15/2022 18:41	WG1957253
Diethyl phthalate	U		0.000287	0.00300	1	11/15/2022 18:41	WG1957253
Dimethyl phthalate	U		0.000260	0.00300	1	11/15/2022 18:41	WG1957253
Di-n-octyl phthalate	U		0.000932	0.00300	1	11/15/2022 18:41	WG1957253
1,2,4-Trichlorobenzene	U		0.0000698	0.0100	1	11/15/2022 18:41	WG1957253
4-Chloro-3-methylphenol	U		0.000131	0.0100	1	11/15/2022 18:41	WG1957253
2-Chlorophenol	U		0.000133	0.0100	1	11/15/2022 18:41	WG1957253
2,4-Dichlorophenol	U		0.000102	0.0100	1	11/15/2022 18:41	WG1957253
2,4-Dimethylphenol	U	J4	0.0000636	0.0100	1	11/15/2022 18:41	WG1957253
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100	1	11/15/2022 18:41	WG1957253
2,4-Dinitrophenol	U		0.00593	0.0100	1	11/15/2022 18:41	WG1957253
2-Nitrophenol	U		0.000117	0.0100	1	11/15/2022 18:41	WG1957253
4-Nitrophenol	U		0.000143	0.0100	1	11/15/2022 18:41	WG1957253
Pentachlorophenol	U		0.000313	0.0100	1	11/15/2022 18:41	WG1957253
Phenol	U		0.00433	0.0100	1	11/15/2022 18:41	WG1957253
2,4,6-Trichlorophenol	U		0.000100	0.0100	1	11/15/2022 18:41	WG1957253
(S) 2-Fluorophenol	21.8			10.0-120		11/15/2022 18:41	WG1957253
(S) Phenol-d5	13.9			10.0-120		11/15/2022 18:41	WG1957253
(S) Nitrobenzene-d5	42.6			10.0-127		11/15/2022 18:41	WG1957253
(S) 2-Fluorobiphenyl	49.7			10.0-130		11/15/2022 18:41	WG1957253
(S) 2,4,6-Tribromophenol	69.0			10.0-155		11/15/2022 18:41	WG1957253
(S) p-Terphenyl-d14	83.3			10.0-128		11/15/2022 18:41	WG1957253

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	U		0.0000190	0.0000500	1	11/11/2022 04:04	WG1957258
Acenaphthene	U		0.0000190	0.0000500	1	11/11/2022 04:04	WG1957258
Acenaphthylene	U		0.0000171	0.0000500	1	11/11/2022 04:04	WG1957258
Benzo(a)anthracene	U		0.0000203	0.0000500	1	11/11/2022 04:04	WG1957258
Benzo(a)pyrene	U		0.0000184	0.0000500	1	11/11/2022 04:04	WG1957258
Benzo(b)fluoranthene	U		0.0000168	0.0000500	1	11/11/2022 04:04	WG1957258
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	11/11/2022 04:04	WG1957258
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	11/11/2022 04:04	WG1957258
Chrysene	0.0000185	U	0.0000179	0.0000500	1	11/11/2022 04:04	WG1957258
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	11/11/2022 04:04	WG1957258
Fluoranthene	0.0000843	U	0.0000270	0.000100	1	11/11/2022 04:04	WG1957258
Fluorene	U		0.0000169	0.0000500	1	11/11/2022 04:04	WG1957258
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	11/11/2022 04:04	WG1957258
Naphthalene	U		0.0000917	0.000250	1	11/11/2022 04:04	WG1957258
Phenanthrene	0.0000212	U	0.0000180	0.0000500	1	11/11/2022 04:04	WG1957258
Pyrene	0.0000993		0.0000169	0.0000500	1	11/11/2022 04:04	WG1957258
1-Methylnaphthalene	U		0.0000687	0.000250	1	11/11/2022 04:04	WG1957258
2-Methylnaphthalene	U		0.0000674	0.000250	1	11/11/2022 04:04	WG1957258
2-Chloronaphthalene	U		0.0000682	0.000250	1	11/11/2022 04:04	WG1957258
(S) Nitrobenzene-d5	106			31.0-160		11/11/2022 04:04	WG1957258
(S) 2-Fluorobiphenyl	83.5			48.0-148		11/11/2022 04:04	WG1957258
(S) p-Terphenyl-d14	93.5			37.0-146		11/11/2022 04:04	WG1957258

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	U		0.0000447	0.000400	1	11/11/2022 23:07	WG1957256
(S) Nitrobenzene-d5	54.2			10.0-120		11/11/2022 23:07	WG1957256

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	10600		200	1	11/14/2022 16:18	WG1958875

Mercury by Method 7470A

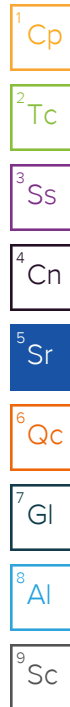
Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury,Dissolved	U		0.000100	0.000200	1	11/14/2022 09:49	WG1957941

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Arsenic,Dissolved	0.353		0.000180	0.00200	1	11/16/2022 16:37	WG1959088
Barium,Dissolved	0.0643		0.000381	0.00200	1	11/16/2022 16:37	WG1959088
Cadmium,Dissolved	U		0.000150	0.00100	1	11/16/2022 16:37	WG1959088
Chromium,Dissolved	0.00197	J	0.00124	0.00200	1	11/16/2022 16:37	WG1959088
Lead,Dissolved	U		0.000849	0.00200	1	11/16/2022 16:37	WG1959088
Selenium,Dissolved	0.0157		0.000300	0.00200	1	11/16/2022 16:37	WG1959088
Silver,Dissolved	U		0.0000700	0.00200	1	11/16/2022 16:37	WG1959088

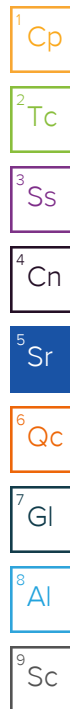
Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	1	11/12/2022 11:17	WG1958593
Acrolein	U		0.00254	0.0500	1	11/12/2022 11:17	WG1958593
Acrylonitrile	U		0.000671	0.0100	1	11/12/2022 11:17	WG1958593
Benzene	U		0.0000941	0.00100	1	11/12/2022 11:17	WG1958593
Bromobenzene	U		0.000118	0.00100	1	11/12/2022 11:17	WG1958593
Bromodichloromethane	U		0.000136	0.00100	1	11/12/2022 11:17	WG1958593
Bromoform	U		0.000129	0.00100	1	11/12/2022 11:17	WG1958593
Bromomethane	U		0.000605	0.00500	1	11/12/2022 11:17	WG1958593
n-Butylbenzene	U		0.000157	0.00100	1	11/12/2022 11:17	WG1958593
sec-Butylbenzene	U		0.000125	0.00100	1	11/12/2022 11:17	WG1958593
tert-Butylbenzene	U		0.000127	0.00100	1	11/12/2022 11:17	WG1958593
Carbon tetrachloride	U		0.000128	0.00100	1	11/12/2022 11:17	WG1958593
Chlorobenzene	U		0.000116	0.00100	1	11/12/2022 11:17	WG1958593
Chlorodibromomethane	U		0.000140	0.00100	1	11/12/2022 11:17	WG1958593
Chloroethane	U		0.000192	0.00500	1	11/12/2022 11:17	WG1958593
2-Chloroethyl vinyl ether	U		0.000575	0.0500	1	11/12/2022 11:17	WG1958593
Chloroform	0.000173	J	0.000111	0.00500	1	11/12/2022 11:17	WG1958593
Chloromethane	U		0.000960	0.00250	1	11/12/2022 11:17	WG1958593
2-Chlorotoluene	U		0.000106	0.00100	1	11/12/2022 11:17	WG1958593
4-Chlorotoluene	U		0.000114	0.00100	1	11/12/2022 11:17	WG1958593
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	11/12/2022 11:17	WG1958593
1,2-Dibromoethane	U		0.000126	0.00100	1	11/12/2022 11:17	WG1958593
Dibromomethane	U		0.000122	0.00100	1	11/12/2022 11:17	WG1958593
1,2-Dichlorobenzene	U		0.000107	0.00100	1	11/12/2022 11:17	WG1958593
1,3-Dichlorobenzene	U		0.000110	0.00100	1	11/12/2022 11:17	WG1958593
1,4-Dichlorobenzene	U		0.000120	0.00100	1	11/12/2022 11:17	WG1958593
Dichlorodifluoromethane	U		0.000374	0.00500	1	11/12/2022 11:17	WG1958593
1,1-Dichloroethane	U		0.000100	0.00100	1	11/12/2022 11:17	WG1958593
1,2-Dichloroethane	U		0.0000819	0.00100	1	11/12/2022 11:17	WG1958593
1,1-Dichloroethene	U		0.000188	0.00100	1	11/12/2022 11:17	WG1958593
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	11/12/2022 11:17	WG1958593
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	11/12/2022 11:17	WG1958593
1,2-Dichloropropane	U		0.000149	0.00100	1	11/12/2022 11:17	WG1958593



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1,1-Dichloropropene	U		0.000142	0.00100	1	11/12/2022 11:17	WG1958593
1,3-Dichloropropane	U		0.000110	0.00100	1	11/12/2022 11:17	WG1958593
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	11/12/2022 11:17	WG1958593
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	11/12/2022 11:17	WG1958593
2,2-Dichloropropane	U		0.000161	0.00100	1	11/12/2022 11:17	WG1958593
Di-isopropyl ether	U		0.000105	0.00100	1	11/12/2022 11:17	WG1958593
Ethylbenzene	U		0.000137	0.00100	1	11/12/2022 11:17	WG1958593
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	11/12/2022 11:17	WG1958593
Isopropylbenzene	U		0.000105	0.00100	1	11/12/2022 11:17	WG1958593
p-Isopropyltoluene	U		0.000120	0.00100	1	11/12/2022 11:17	WG1958593
2-Butanone (MEK)	U		0.00119	0.0100	1	11/12/2022 11:17	WG1958593
Methylene Chloride	U		0.000430	0.00500	1	11/12/2022 11:17	WG1958593
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	11/12/2022 11:17	WG1958593
Methyl tert-butyl ether	U		0.000101	0.00100	1	11/12/2022 11:17	WG1958593
Naphthalene	U		0.00100	0.00500	1	11/12/2022 11:17	WG1958593
n-Propylbenzene	U		0.0000993	0.00100	1	11/12/2022 11:17	WG1958593
Styrene	U		0.000118	0.00100	1	11/12/2022 11:17	WG1958593
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	11/12/2022 11:17	WG1958593
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	11/12/2022 11:17	WG1958593
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100	1	11/12/2022 11:17	WG1958593
Tetrachloroethene	U		0.000300	0.00100	1	11/12/2022 11:17	WG1958593
Toluene	U		0.000278	0.00100	1	11/12/2022 11:17	WG1958593
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	11/12/2022 11:17	WG1958593
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	11/12/2022 11:17	WG1958593
1,1,1-Trichloroethane	U		0.000149	0.00100	1	11/12/2022 11:17	WG1958593
1,1,2-Trichloroethane	U		0.000158	0.00100	1	11/12/2022 11:17	WG1958593
Trichloroethene	U		0.000190	0.00100	1	11/12/2022 11:17	WG1958593
Trichlorofluoromethane	U		0.000160	0.00500	1	11/12/2022 11:17	WG1958593
1,2,3-Trichloropropane	U		0.000237	0.00250	1	11/12/2022 11:17	WG1958593
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	11/12/2022 11:17	WG1958593
1,2,3-Trimethylbenzene	U		0.000104	0.00100	1	11/12/2022 11:17	WG1958593
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	11/12/2022 11:17	WG1958593
Vinyl chloride	U		0.000234	0.00100	1	11/12/2022 11:17	WG1958593
Xylenes, Total	U		0.000174	0.00300	1	11/12/2022 11:17	WG1958593
(S) Toluene-d8	113			80.0-120		11/12/2022 11:17	WG1958593
(S) 4-Bromofluorobenzene	110			77.0-126		11/12/2022 11:17	WG1958593
(S) 1,2-Dichloroethane-d4	95.0			70.0-130		11/12/2022 11:17	WG1958593



Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Benzidine	U	J4	0.00441	0.0118	1.18	11/15/2022 19:02	WG1957253
Bis(2-chlorethoxy)methane	U		0.000137	0.0118	1.18	11/15/2022 19:02	WG1957253
Bis(2-chloroethyl)ether	U		0.000162	0.0118	1.18	11/15/2022 19:02	WG1957253
2,2-Oxybis(1-Chloropropane)	U		0.000248	0.0118	1.18	11/15/2022 19:02	WG1957253
4-Bromophenyl-phenylether	U		0.000103	0.0118	1.18	11/15/2022 19:02	WG1957253
4-Chlorophenyl-phenylether	U		0.000109	0.0118	1.18	11/15/2022 19:02	WG1957253
1,2-Dichlorobenzene	U		0.0000841	0.0118	1.18	11/15/2022 19:02	WG1957253
1,3-Dichlorobenzene	U		0.000156	0.0118	1.18	11/15/2022 19:02	WG1957253
1,4-Dichlorobenzene	U		0.000111	0.0118	1.18	11/15/2022 19:02	WG1957253
3,3-Dichlorobenzidine	U	J4	0.000250	0.0118	1.18	11/15/2022 19:02	WG1957253
2,4-Dinitrotoluene	U		0.000116	0.0118	1.18	11/15/2022 19:02	WG1957253
2,6-Dinitrotoluene	U		0.000295	0.0118	1.18	11/15/2022 19:02	WG1957253
Hexachlorobenzene	U		0.0000891	0.00118	1.18	11/15/2022 19:02	WG1957253
Hexachloro-1,3-butadiene	U		0.000114	0.0118	1.18	11/15/2022 19:02	WG1957253
Hexachlorocyclopentadiene	U		0.0000706	0.0118	1.18	11/15/2022 19:02	WG1957253

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hexachloroethane	U		0.000150	0.0118	1.18	11/15/2022 19:02	WG1957253
Isophorone	U		0.000169	0.0118	1.18	11/15/2022 19:02	WG1957253
Nitrobenzene	U		0.000350	0.0118	1.18	11/15/2022 19:02	WG1957253
n-Nitrosodimethylamine	U		0.00118	0.0118	1.18	11/15/2022 19:02	WG1957253
n-Nitrosodiphenylamine	U		0.00280	0.0118	1.18	11/15/2022 19:02	WG1957253
n-Nitrosodi-n-propylamine	U		0.000308	0.0118	1.18	11/15/2022 19:02	WG1957253
Benzylbutyl phthalate	U		0.000903	0.00354	1.18	11/15/2022 19:02	WG1957253
Bis(2-ethylhexyl)phthalate	U		0.00106	0.00354	1.18	11/15/2022 19:02	WG1957253
Di-n-butyl phthalate	U		0.000535	0.00354	1.18	11/15/2022 19:02	WG1957253
Diethyl phthalate	U		0.000339	0.00354	1.18	11/15/2022 19:02	WG1957253
Dimethyl phthalate	U		0.000307	0.00354	1.18	11/15/2022 19:02	WG1957253
Di-n-octyl phthalate	U		0.00110	0.00354	1.18	11/15/2022 19:02	WG1957253
1,2,4-Trichlorobenzene	U		0.0000824	0.0118	1.18	11/15/2022 19:02	WG1957253
4-Chloro-3-methylphenol	U		0.000155	0.0118	1.18	11/15/2022 19:02	WG1957253
2-Chlorophenol	U		0.000157	0.0118	1.18	11/15/2022 19:02	WG1957253
2,4-Dichlorophenol	U		0.000120	0.0118	1.18	11/15/2022 19:02	WG1957253
2,4-Dimethylphenol	U	J4	0.0000750	0.0118	1.18	11/15/2022 19:02	WG1957253
4,6-Dinitro-2-methylphenol	U		0.00132	0.0118	1.18	11/15/2022 19:02	WG1957253
2,4-Dinitrophenol	U		0.00700	0.0118	1.18	11/15/2022 19:02	WG1957253
2-Nitrophenol	U		0.000138	0.0118	1.18	11/15/2022 19:02	WG1957253
4-Nitrophenol	U		0.000169	0.0118	1.18	11/15/2022 19:02	WG1957253
Pentachlorophenol	U		0.000369	0.0118	1.18	11/15/2022 19:02	WG1957253
Phenol	U		0.00511	0.0118	1.18	11/15/2022 19:02	WG1957253
2,4,6-Trichlorophenol	U		0.000118	0.0118	1.18	11/15/2022 19:02	WG1957253
(S) 2-Fluorophenol	3.68	J2		10.0-120		11/15/2022 19:02	WG1957253
(S) Phenol-d5	4.26	J2		10.0-120		11/15/2022 19:02	WG1957253
(S) Nitrobenzene-d5	55.0			10.0-127		11/15/2022 19:02	WG1957253
(S) 2-Fluorobiphenyl	61.3			10.0-130		11/15/2022 19:02	WG1957253
(S) 2,4,6-Tribromophenol	1.68	J2		10.0-155		11/15/2022 19:02	WG1957253
(S) p-Terphenyl-d14	91.5			10.0-128		11/15/2022 19:02	WG1957253

Sample Narrative:

L1555639-06 WG1957253: Duplicate Analysis performed due to surrogate failure. Results confirm; reporting in hold data

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

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Anthracene	U		0.0000190	0.0000500	1	11/11/2022 04:21	WG1957258
Acenaphthene	U		0.0000190	0.0000500	1	11/11/2022 04:21	WG1957258
Acenaphthylene	U		0.0000171	0.0000500	1	11/11/2022 04:21	WG1957258
Benzo(a)anthracene	U		0.0000203	0.0000500	1	11/11/2022 04:21	WG1957258
Benzo(a)pyrene	U		0.0000184	0.0000500	1	11/11/2022 04:21	WG1957258
Benzo(b)fluoranthene	U		0.0000168	0.0000500	1	11/11/2022 04:21	WG1957258
Benzo(g,h,i)perylene	U		0.0000184	0.0000500	1	11/11/2022 04:21	WG1957258
Benzo(k)fluoranthene	U		0.0000202	0.0000500	1	11/11/2022 04:21	WG1957258
Chrysene	U		0.0000179	0.0000500	1	11/11/2022 04:21	WG1957258
Dibenz(a,h)anthracene	U		0.0000160	0.0000500	1	11/11/2022 04:21	WG1957258
Fluoranthene	U		0.0000270	0.000100	1	11/11/2022 04:21	WG1957258
Fluorene	U		0.0000169	0.0000500	1	11/11/2022 04:21	WG1957258
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500	1	11/11/2022 04:21	WG1957258
Naphthalene	U		0.0000917	0.000250	1	11/11/2022 04:21	WG1957258
Phenanthrene	U		0.0000180	0.0000500	1	11/11/2022 04:21	WG1957258
Pyrene	U		0.0000169	0.0000500	1	11/11/2022 04:21	WG1957258
1-Methylnaphthalene	U		0.0000687	0.000250	1	11/11/2022 04:21	WG1957258
2-Methylnaphthalene	U		0.0000674	0.000250	1	11/11/2022 04:21	WG1957258
2-Chloronaphthalene	U		0.0000682	0.000250	1	11/11/2022 04:21	WG1957258

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

Analyte	Result mg/l	<u>Qualifier</u>	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	<u>Batch</u>
(S) Nitrobenzene-d5	108			31.0-160		11/11/2022 04:21	WG1957258
(S) 2-Fluorobiphenyl	85.5			48.0-148		11/11/2022 04:21	WG1957258
(S) p-Terphenyl-d14	97.5			37.0-146		11/11/2022 04:21	WG1957258

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

Analyte	Result mg/l	<u>Qualifier</u>	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	<u>Batch</u>
1,4-Dioxane	0.000567		0.0000496	0.000444	1.11	11/11/2022 23:26	WG1957256
(S) Nitrobenzene-d5	58.3			10.0-120		11/11/2022 23:26	WG1957256

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

TRIP BLANK

Collected date/time: 11/07/22 00:00

SAMPLE RESULTS - 07

L1555639

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0500	1	11/12/2022 09:02	WG1958593
Acrolein	U		0.00254	0.0500	1	11/12/2022 09:02	WG1958593
Acrylonitrile	U		0.000671	0.0100	1	11/12/2022 09:02	WG1958593
Benzene	0.000110	J	0.0000941	0.00100	1	11/12/2022 09:02	WG1958593
Bromobenzene	U		0.000118	0.00100	1	11/12/2022 09:02	WG1958593
Bromodichloromethane	U		0.000136	0.00100	1	11/12/2022 09:02	WG1958593
Bromoform	U		0.000129	0.00100	1	11/12/2022 09:02	WG1958593
Bromomethane	U		0.000605	0.00500	1	11/12/2022 09:02	WG1958593
n-Butylbenzene	U		0.000157	0.00100	1	11/12/2022 09:02	WG1958593
sec-Butylbenzene	U		0.000125	0.00100	1	11/12/2022 09:02	WG1958593
tert-Butylbenzene	U		0.000127	0.00100	1	11/12/2022 09:02	WG1958593
Carbon tetrachloride	U		0.000128	0.00100	1	11/12/2022 09:02	WG1958593
Chlorobenzene	U		0.000116	0.00100	1	11/12/2022 09:02	WG1958593
Chlorodibromomethane	U		0.000140	0.00100	1	11/12/2022 09:02	WG1958593
Chloroethane	U		0.000192	0.00500	1	11/12/2022 09:02	WG1958593
2-Chloroethyl vinyl ether	U		0.000575	0.0500	1	11/12/2022 09:02	WG1958593
Chloroform	U		0.000111	0.00500	1	11/12/2022 09:02	WG1958593
Chloromethane	U		0.000960	0.00250	1	11/12/2022 09:02	WG1958593
2-Chlorotoluene	U		0.000106	0.00100	1	11/12/2022 09:02	WG1958593
4-Chlorotoluene	U		0.000114	0.00100	1	11/12/2022 09:02	WG1958593
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500	1	11/12/2022 09:02	WG1958593
1,2-Dibromoethane	U		0.000126	0.00100	1	11/12/2022 09:02	WG1958593
Dibromomethane	U		0.000122	0.00100	1	11/12/2022 09:02	WG1958593
1,2-Dichlorobenzene	U		0.000107	0.00100	1	11/12/2022 09:02	WG1958593
1,3-Dichlorobenzene	U		0.000110	0.00100	1	11/12/2022 09:02	WG1958593
1,4-Dichlorobenzene	U		0.000120	0.00100	1	11/12/2022 09:02	WG1958593
Dichlorodifluoromethane	U		0.000374	0.00500	1	11/12/2022 09:02	WG1958593
1,1-Dichloroethane	U		0.000100	0.00100	1	11/12/2022 09:02	WG1958593
1,2-Dichloroethane	U		0.0000819	0.00100	1	11/12/2022 09:02	WG1958593
1,1-Dichloroethene	U		0.000188	0.00100	1	11/12/2022 09:02	WG1958593
cis-1,2-Dichloroethene	U		0.000126	0.00100	1	11/12/2022 09:02	WG1958593
trans-1,2-Dichloroethene	U		0.000149	0.00100	1	11/12/2022 09:02	WG1958593
1,2-Dichloropropane	U		0.000149	0.00100	1	11/12/2022 09:02	WG1958593
1,1-Dichloropropene	U		0.000142	0.00100	1	11/12/2022 09:02	WG1958593
1,3-Dichloropropane	U		0.000110	0.00100	1	11/12/2022 09:02	WG1958593
cis-1,3-Dichloropropene	U		0.000111	0.00100	1	11/12/2022 09:02	WG1958593
trans-1,3-Dichloropropene	U		0.000118	0.00100	1	11/12/2022 09:02	WG1958593
2,2-Dichloropropane	U		0.000161	0.00100	1	11/12/2022 09:02	WG1958593
Di-isopropyl ether	U		0.000105	0.00100	1	11/12/2022 09:02	WG1958593
Ethylbenzene	U		0.000137	0.00100	1	11/12/2022 09:02	WG1958593
Hexachloro-1,3-butadiene	U		0.000337	0.00100	1	11/12/2022 09:02	WG1958593
Isopropylbenzene	U		0.000105	0.00100	1	11/12/2022 09:02	WG1958593
p-Isopropyltoluene	U		0.000120	0.00100	1	11/12/2022 09:02	WG1958593
2-Butanone (MEK)	U		0.00119	0.0100	1	11/12/2022 09:02	WG1958593
Methylene Chloride	U		0.000430	0.00500	1	11/12/2022 09:02	WG1958593
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100	1	11/12/2022 09:02	WG1958593
Methyl tert-butyl ether	U		0.000101	0.00100	1	11/12/2022 09:02	WG1958593
Naphthalene	U		0.00100	0.00500	1	11/12/2022 09:02	WG1958593
n-Propylbenzene	U		0.0000993	0.00100	1	11/12/2022 09:02	WG1958593
Styrene	U		0.000118	0.00100	1	11/12/2022 09:02	WG1958593
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100	1	11/12/2022 09:02	WG1958593
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100	1	11/12/2022 09:02	WG1958593
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100	1	11/12/2022 09:02	WG1958593
Tetrachloroethene	U		0.000300	0.00100	1	11/12/2022 09:02	WG1958593
Toluene	U		0.000278	0.00100	1	11/12/2022 09:02	WG1958593
1,2,3-Trichlorobenzene	U		0.000230	0.00100	1	11/12/2022 09:02	WG1958593

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

ACCOUNT:

Terracon - Salt Lake City, UT

PROJECT:

61227342 TASK 4.1

SDG:

L1555639

DATE/TIME:

11/21/22 12:56

PAGE:

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Collected date/time: 11/07/22 00:00

SAMPLE RESULTS - 07

L1555639

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.000481	0.00100	1	11/12/2022 09:02	WG1958593
1,1,1-Trichloroethane	U		0.000149	0.00100	1	11/12/2022 09:02	WG1958593
1,1,2-Trichloroethane	U		0.000158	0.00100	1	11/12/2022 09:02	WG1958593
Trichloroethene	U		0.000190	0.00100	1	11/12/2022 09:02	WG1958593
Trichlorofluoromethane	U		0.000160	0.00500	1	11/12/2022 09:02	WG1958593
1,2,3-Trichloropropane	U		0.000237	0.00250	1	11/12/2022 09:02	WG1958593
1,2,4-Trimethylbenzene	U		0.000322	0.00100	1	11/12/2022 09:02	WG1958593
1,2,3-Trimethylbenzene	U		0.000104	0.00100	1	11/12/2022 09:02	WG1958593
1,3,5-Trimethylbenzene	U		0.000104	0.00100	1	11/12/2022 09:02	WG1958593
Vinyl chloride	U		0.000234	0.00100	1	11/12/2022 09:02	WG1958593
Xylenes, Total	0.000225	<u>J</u>	0.000174	0.00300	1	11/12/2022 09:02	WG1958593
(S) Toluene-d8	109			80.0-120		11/12/2022 09:02	WG1958593
(S) 4-Bromofluorobenzene	109			77.0-126		11/12/2022 09:02	WG1958593
(S) 1,2-Dichloroethane-d4	93.7			70.0-130		11/12/2022 09:02	WG1958593

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Method Blank (MB)

(MB) R3861913-1 11/14/22 16:18

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	33.0		10.0	10.0

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

L1555046-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1555046-03 11/14/22 16:18 • (DUP) R3861913-3 11/14/22 16:18

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	1570	1840	1	15.8	J3	5

L1555223-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1555223-01 11/14/22 16:18 • (DUP) R3861913-4 11/14/22 16:18

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	438	442	1	0.909		5

7Gl

8Al

9Sc

Laboratory Control Sample (LCS)

(LCS) R3861913-2 11/14/22 16:18

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8580	97.5	77.3-123	

Method Blank (MB)

(MB) R3862644-1 11/15/22 14:27

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		10.0	10.0

L1555577-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1555577-05 11/15/22 14:27 • (DUP) R3862644-3 11/15/22 14:27

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	2110	2370	1	11.6	J3	5

L1555577-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1555577-11 11/15/22 14:27 • (DUP) R3862644-4 11/15/22 14:27

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	2150	2460	1	13.7	J3	5

Laboratory Control Sample (LCS)

(LCS) R3862644-2 11/15/22 14:27

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8390	95.3	77.3-123	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3860658-1 11/14/22 09:27

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Mercury,Dissolved	U		0.000100	0.000200

Laboratory Control Sample (LCS)

(LCS) R3860658-2 11/14/22 09:29

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury,Dissolved	0.00300	0.00328	109	80.0-120	

L1555639-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1555639-02 11/14/22 09:31 • (MS) R3860658-3 11/14/22 09:33 • (MSD) R3860658-4 11/14/22 09:35

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury,Dissolved	0.00300	U	0.00208	0.00194	69.2	64.8	1	75.0-125	J6	J6	6.59	20

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Method Blank (MB)

(MB) R3861862-1 11/16/22 14:54

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic,Dissolved	U		0.000180	0.00200
Barium,Dissolved	0.000593	U	0.000381	0.00200
Cadmium,Dissolved	U		0.000150	0.00100
Chromium,Dissolved	U		0.00124	0.00200
Lead,Dissolved	U		0.000849	0.00200
Selenium,Dissolved	U		0.000300	0.00200
Silver,Dissolved	U		0.0000700	0.00200

Laboratory Control Sample (LCS)

(LCS) R3861862-2 11/16/22 14:57

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic,Dissolved	0.0500	0.0505	101	80.0-120	
Barium,Dissolved	0.0500	0.0483	96.5	80.0-120	
Cadmium,Dissolved	0.0500	0.0510	102	80.0-120	
Chromium,Dissolved	0.0500	0.0521	104	80.0-120	
Lead,Dissolved	0.0500	0.0506	101	80.0-120	
Selenium,Dissolved	0.0500	0.0523	105	80.0-120	
Silver,Dissolved	0.0500	0.0484	96.8	80.0-120	

L1555639-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1555639-02 11/16/22 15:01 • (MS) R3861862-4 11/16/22 15:07 • (MSD) R3861862-5 11/16/22 15:11

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic,Dissolved	0.0500	0.132	0.183	0.184	102	104	1	75.0-125			0.650	20
Barium,Dissolved	0.0500	0.0496	0.0992	0.0976	99.2	96.1	1	75.0-125			1.59	20
Cadmium,Dissolved	0.0500	U	0.0494	0.0493	98.8	98.6	1	75.0-125			0.166	20
Chromium,Dissolved	0.0500	U	0.0506	0.0506	101	101	1	75.0-125			0.152	20
Lead,Dissolved	0.0500	U	0.0481	0.0492	96.2	98.4	1	75.0-125			2.27	20
Selenium,Dissolved	0.0500	0.000705	0.0560	0.0561	111	111	1	75.0-125			0.130	20
Silver,Dissolved	0.0500	U	0.0472	0.0466	94.4	93.3	1	75.0-125			1.14	20

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Method Blank (MB)

(MB) R3861689-4 11/11/22 22:05

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0113	0.0500
Acrolein	U		0.00254	0.0500
Acrylonitrile	U		0.000671	0.0100
Benzene	U		0.0000941	0.00100
Bromobenzene	U		0.000118	0.00100
Bromodichloromethane	U		0.000136	0.00100
Bromoform	U		0.000129	0.00100
Bromomethane	U		0.000605	0.00500
n-Butylbenzene	U		0.000157	0.00100
sec-Butylbenzene	U		0.000125	0.00100
tert-Butylbenzene	U		0.000127	0.00100
Carbon tetrachloride	U		0.000128	0.00100
Chlorobenzene	U		0.000116	0.00100
Chlorodibromomethane	U		0.000140	0.00100
Chloroethane	U		0.000192	0.00500
2-Chloroethyl vinyl ether	U		0.000575	0.0500
Chloroform	U		0.000111	0.00500
Chloromethane	U		0.000960	0.00250
2-Chlorotoluene	U		0.000106	0.00100
4-Chlorotoluene	U		0.000114	0.00100
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500
1,2-Dibromoethane	U		0.000126	0.00100
Dibromomethane	U		0.000122	0.00100
1,2-Dichlorobenzene	U		0.000107	0.00100
1,3-Dichlorobenzene	U		0.000110	0.00100
1,4-Dichlorobenzene	U		0.000120	0.00100
Dichlorodifluoromethane	U		0.000374	0.00500
1,1-Dichloroethane	U		0.000100	0.00100
1,2-Dichloroethane	U		0.0000819	0.00100
1,1-Dichloroethene	U		0.000188	0.00100
cis-1,2-Dichloroethene	U		0.000126	0.00100
trans-1,2-Dichloroethene	U		0.000149	0.00100
1,2-Dichloropropane	U		0.000149	0.00100
1,1-Dichloropropene	U		0.000142	0.00100
1,3-Dichloropropane	U		0.000110	0.00100
cis-1,3-Dichloropropene	U		0.000111	0.00100
trans-1,3-Dichloropropene	U		0.000118	0.00100
2,2-Dichloropropane	U		0.000161	0.00100
Di-isopropyl ether	U		0.000105	0.00100
Ethylbenzene	U		0.000137	0.00100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3861689-4 11/11/22 22:05

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Hexachloro-1,3-butadiene	U		0.000337	0.00100
Isopropylbenzene	U		0.000105	0.00100
p-Isopropyltoluene	U		0.000120	0.00100
2-Butanone (MEK)	U		0.00119	0.0100
Methylene Chloride	U		0.000430	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100
Methyl tert-butyl ether	U		0.000101	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.0000993	0.00100
Styrene	U		0.000118	0.00100
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100
Tetrachloroethene	U		0.000300	0.00100
Toluene	U		0.000278	0.00100
1,2,3-Trichlorobenzene	U		0.000230	0.00100
1,2,4-Trichlorobenzene	U		0.000481	0.00100
1,1,1-Trichloroethane	U		0.000149	0.00100
1,1,2-Trichloroethane	U		0.000158	0.00100
Trichloroethene	U		0.000190	0.00100
Trichlorofluoromethane	U		0.000160	0.00500
1,2,3-Trichloropropane	U		0.000237	0.00250
1,2,4-Trimethylbenzene	U		0.000322	0.00100
1,2,3-Trimethylbenzene	U		0.000104	0.00100
1,3,5-Trimethylbenzene	U		0.000104	0.00100
Vinyl chloride	U		0.000234	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	91.7			80.0-120
(S) 4-Bromofluorobenzene	85.2			77.0-126
(S) 1,2-Dichloroethane-d4	88.1			70.0-130

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3861689-1 11/11/22 20:42 • (LCSD) R3861689-2 11/11/22 21:03

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.0250	0.0261	0.0252	104	101	19.0-160			3.51	27
Acrolein	0.0250	0.0123	0.0104	49.2	41.6	10.0-160			16.7	26
Acrylonitrile	0.0250	0.0281	0.0263	112	105	55.0-149			6.62	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3861689-1 11/11/22 20:42 • (LCSD) R3861689-2 11/11/22 21:03

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Benzene	0.00500	0.00502	0.00440	100	88.0	70.0-123			13.2	20
Bromobenzene	0.00500	0.00553	0.00502	111	100	73.0-121			9.67	20
Bromodichloromethane	0.00500	0.00501	0.00433	100	86.6	75.0-120			14.6	20
Bromoform	0.00500	0.00348	0.00314	69.6	62.8	68.0-132		J4	10.3	20
Bromomethane	0.00500	0.00589	0.00498	118	99.6	10.0-160			16.7	25
n-Butylbenzene	0.00500	0.00496	0.00472	99.2	94.4	73.0-125			4.96	20
sec-Butylbenzene	0.00500	0.00485	0.00464	97.0	92.8	75.0-125			4.43	20
tert-Butylbenzene	0.00500	0.00502	0.00476	100	95.2	76.0-124			5.32	20
Carbon tetrachloride	0.00500	0.00505	0.00443	101	88.6	68.0-126			13.1	20
Chlorobenzene	0.00500	0.00477	0.00410	95.4	82.0	80.0-121			15.1	20
Chlorodibromomethane	0.00500	0.00382	0.00364	76.4	72.8	77.0-125	J4	J4	4.83	20
Chloroethane	0.00500	0.00574	0.00466	115	93.2	47.0-150		J3	20.8	20
2-Chloroethyl vinyl ether	0.0250	0.0266	0.0240	106	96.0	51.0-160			10.3	20
Chloroform	0.00500	0.00493	0.00436	98.6	87.2	73.0-120			12.3	20
Chloromethane	0.00500	0.00506	0.00423	101	84.6	41.0-142			17.9	20
2-Chlorotoluene	0.00500	0.00574	0.00546	115	109	76.0-123			5.00	20
4-Chlorotoluene	0.00500	0.00526	0.00516	105	103	75.0-122			1.92	20
1,2-Dibromo-3-Chloropropane	0.00500	0.00374	0.00355	74.8	71.0	58.0-134			5.21	20
1,2-Dibromoethane	0.00500	0.00430	0.00383	86.0	76.6	80.0-122		J4	11.6	20
Dibromomethane	0.00500	0.00486	0.00427	97.2	85.4	80.0-120			12.9	20
1,2-Dichlorobenzene	0.00500	0.00458	0.00451	91.6	90.2	79.0-121			1.54	20
1,3-Dichlorobenzene	0.00500	0.00501	0.00471	100	94.2	79.0-120			6.17	20
1,4-Dichlorobenzene	0.00500	0.00475	0.00447	95.0	89.4	79.0-120			6.07	20
Dichlorodifluoromethane	0.00500	0.00449	0.00375	89.8	75.0	51.0-149			18.0	20
1,1-Dichloroethane	0.00500	0.00541	0.00471	108	94.2	70.0-126			13.8	20
1,2-Dichloroethane	0.00500	0.00490	0.00439	98.0	87.8	70.0-128			11.0	20
1,1-Dichloroethene	0.00500	0.00495	0.00399	99.0	79.8	71.0-124		J3	21.5	20
cis-1,2-Dichloroethene	0.00500	0.00496	0.00449	99.2	89.8	73.0-120			9.95	20
trans-1,2-Dichloroethene	0.00500	0.00510	0.00435	102	87.0	73.0-120			15.9	20
1,2-Dichloropropane	0.00500	0.00529	0.00503	106	101	77.0-125			5.04	20
1,1-Dichloropropene	0.00500	0.00506	0.00467	101	93.4	74.0-126			8.02	20
1,3-Dichloropropane	0.00500	0.00481	0.00418	96.2	83.6	80.0-120			14.0	20
cis-1,3-Dichloropropene	0.00500	0.00466	0.00436	93.2	87.2	80.0-123			6.65	20
trans-1,3-Dichloropropene	0.00500	0.00465	0.00391	93.0	78.2	78.0-124			17.3	20
2,2-Dichloropropane	0.00500	0.00474	0.00496	94.8	99.2	58.0-130			4.54	20
Di-isopropyl ether	0.00500	0.00556	0.00490	111	98.0	58.0-138			12.6	20
Ethylbenzene	0.00500	0.00481	0.00437	96.2	87.4	79.0-123			9.59	20
Hexachloro-1,3-butadiene	0.00500	0.00463	0.00483	92.6	96.6	54.0-138			4.23	20
Isopropylbenzene	0.00500	0.00449	0.00405	89.8	81.0	76.0-127			10.3	20
p-Isopropyltoluene	0.00500	0.00494	0.00480	98.8	96.0	76.0-125			2.87	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3861689-1 11/11/22 20:42 • (LCSD) R3861689-2 11/11/22 21:03

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
2-Butanone (MEK)	0.0250	0.0279	0.0265	112	106	44.0-160			5.15	20
Methylene Chloride	0.00500	0.00511	0.00422	102	84.4	67.0-120			19.1	20
4-Methyl-2-pentanone (MIBK)	0.0250	0.0259	0.0223	104	89.2	68.0-142			14.9	20
Methyl tert-butyl ether	0.00500	0.00446	0.00402	89.2	80.4	68.0-125			10.4	20
Naphthalene	0.00500	0.00379	0.00322	75.8	64.4	54.0-135			16.3	20
n-Propylbenzene	0.00500	0.00536	0.00508	107	102	77.0-124			5.36	20
Styrene	0.00500	0.00444	0.00382	88.8	76.4	73.0-130			15.0	20
1,1,1,2-Tetrachloroethane	0.00500	0.00412	0.00367	82.4	73.4	75.0-125		J4	11.6	20
1,1,2,2-Tetrachloroethane	0.00500	0.00514	0.00479	103	95.8	65.0-130			7.05	20
1,1,2-Trichlorotrifluoroethane	0.00500	0.00472	0.00390	94.4	78.0	69.0-132			19.0	20
Tetrachloroethene	0.00500	0.00443	0.00404	88.6	80.8	72.0-132			9.21	20
Toluene	0.00500	0.00497	0.00429	99.4	85.8	79.0-120			14.7	20
1,2,3-Trichlorobenzene	0.00500	0.00410	0.00355	82.0	71.0	50.0-138			14.4	20
1,2,4-Trichlorobenzene	0.00500	0.00424	0.00376	84.8	75.2	57.0-137			12.0	20
1,1,1-Trichloroethane	0.00500	0.00541	0.00480	108	96.0	73.0-124			11.9	20
1,1,2-Trichloroethane	0.00500	0.00473	0.00413	94.6	82.6	80.0-120			13.5	20
Trichloroethene	0.00500	0.00515	0.00433	103	86.6	78.0-124			17.3	20
Trichlorofluoromethane	0.00500	0.00496	0.00415	99.2	83.0	59.0-147			17.8	20
1,2,3-Trichloropropane	0.00500	0.00517	0.00463	103	92.6	73.0-130			11.0	20
1,2,4-Trimethylbenzene	0.00500	0.00500	0.00480	100	96.0	76.0-121			4.08	20
1,2,3-Trimethylbenzene	0.00500	0.00475	0.00450	95.0	90.0	77.0-120			5.41	20
1,3,5-Trimethylbenzene	0.00500	0.00525	0.00485	105	97.0	76.0-122			7.92	20
Vinyl chloride	0.00500	0.00542	0.00454	108	90.8	67.0-131			17.7	20
Xylenes, Total	0.0150	0.0142	0.0124	94.7	82.7	79.0-123			13.5	20
(S) Toluene-d8				96.8	93.8	80.0-120				
(S) 4-Bromofluorobenzene				89.1	89.5	77.0-126				
(S) 1,2-Dichloroethane-d4				89.1	89.9	70.0-130				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1555297-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1555297-01 11/11/22 23:24 • (MS) R3861689-5 11/12/22 05:58 • (MSD) R3861689-6 11/12/22 06:19

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Acetone	0.0250	U	0.0268	0.0257	107	103	1	10.0-160			4.19	35
Acrolein	0.0250	U	0.0166	0.0168	66.4	67.2	1	10.0-160			1.20	39
Acrylonitrile	0.0250	U	0.0274	0.0261	110	104	1	21.0-160			4.86	32
Benzene	0.00500	U	0.00359	0.00455	71.8	91.0	1	17.0-158			23.6	27
Bromobenzene	0.00500	U	0.00415	0.00494	83.0	98.8	1	30.0-149			17.4	28
Bromodichloromethane	0.00500	U	0.00396	0.00451	79.2	90.2	1	31.0-150			13.0	27

L1555297-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1555297-01 11/11/22 23:24 • (MS) R3861689-5 11/12/22 05:58 • (MSD) R3861689-6 11/12/22 06:19

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Bromoform	0.00500	U	0.00315	0.00328	63.0	65.6	1	29.0-150			4.04	29
Bromomethane	0.00500	U	0.00355	0.00464	71.0	92.8	1	10.0-160			26.6	38
n-Butylbenzene	0.00500	U	0.00340	0.00472	68.0	94.4	1	31.0-150		J3	32.5	30
sec-Butylbenzene	0.00500	U	0.00337	0.00464	67.4	92.8	1	33.0-155		J3	31.7	29
tert-Butylbenzene	0.00500	U	0.00341	0.00465	68.2	93.0	1	34.0-153		J3	30.8	28
Carbon tetrachloride	0.00500	U	0.00353	0.00451	70.6	90.2	1	23.0-159			24.4	28
Chlorobenzene	0.00500	U	0.00341	0.00412	68.2	82.4	1	33.0-152			18.9	27
Chlorodibromomethane	0.00500	U	0.00330	0.00389	66.0	77.8	1	37.0-149			16.4	27
Chloroethane	0.00500	U	0.00350	0.00506	70.0	101	1	10.0-160		J3	36.4	30
2-Chloroethyl vinyl ether	0.0250	U	U	U	0.000	0.000	1	10.0-160	J6	J6	0.000	31
Chloroform	0.00500	U	0.00358	0.00444	71.6	88.8	1	29.0-154			21.4	28
Chloromethane	0.00500	U	0.00289	0.00402	57.8	80.4	1	10.0-160		J3	32.7	29
2-Chlorotoluene	0.00500	U	0.00399	0.00544	79.8	109	1	32.0-153		J3	30.8	28
4-Chlorotoluene	0.00500	U	0.00396	0.00507	79.2	101	1	32.0-150			24.6	28
1,2-Dibromo-3-Chloropropane	0.00500	U	0.00434	0.00371	86.8	74.2	1	22.0-151			15.7	34
1,2-Dibromoethane	0.00500	U	0.00365	0.00383	73.0	76.6	1	34.0-147			4.81	27
Dibromomethane	0.00500	U	0.00403	0.00416	80.6	83.2	1	30.0-151			3.17	27
1,2-Dichlorobenzene	0.00500	U	0.00382	0.00423	76.4	84.6	1	34.0-149			10.2	28
1,3-Dichlorobenzene	0.00500	U	0.00382	0.00473	76.4	94.6	1	36.0-146			21.3	27
1,4-Dichlorobenzene	0.00500	U	0.00366	0.00442	73.2	88.4	1	35.0-142			18.8	27
Dichlorodifluoromethane	0.00500	U	0.00324	0.00400	64.8	80.0	1	10.0-160			21.0	29
1,1-Dichloroethane	0.00500	U	0.00371	0.00475	74.2	95.0	1	25.0-158			24.6	27
1,2-Dichloroethane	0.00500	U	0.00415	0.00469	83.0	93.8	1	29.0-151			12.2	27
1,1-Dichloroethene	0.00500	U	0.00290	0.00407	58.0	81.4	1	11.0-160		J3	33.6	29
cis-1,2-Dichloroethene	0.00500	U	0.00349	0.00439	69.8	87.8	1	10.0-160			22.8	27
trans-1,2-Dichloroethene	0.00500	U	0.00322	0.00439	64.4	87.8	1	17.0-153		J3	30.7	27
1,2-Dichloropropane	0.00500	U	0.00418	0.00490	83.6	98.0	1	30.0-156			15.9	27
1,1-Dichloropropene	0.00500	U	0.00347	0.00435	69.4	87.0	1	25.0-158			22.5	27
1,3-Dichloropropane	0.00500	U	0.00396	0.00441	79.2	88.2	1	38.0-147			10.8	27
cis-1,3-Dichloropropene	0.00500	U	0.00356	0.00449	71.2	89.8	1	34.0-149			23.1	28
trans-1,3-Dichloropropene	0.00500	U	0.00364	0.00408	72.8	81.6	1	32.0-149			11.4	28
2,2-Dichloropropane	0.00500	U	0.00345	0.00452	69.0	90.4	1	24.0-152			26.9	29
Di-isopropyl ether	0.00500	U	0.00460	0.00519	92.0	104	1	21.0-160			12.1	28
Ethylbenzene	0.00500	U	0.00294	0.00425	58.8	85.0	1	30.0-155		J3	36.4	27
Hexachloro-1,3-butadiene	0.00500	U	0.00322	0.00434	64.4	86.8	1	20.0-154			29.6	34
Isopropylbenzene	0.00500	U	0.00301	0.00404	60.2	80.8	1	28.0-157		J3	29.2	27
p-Isopropyltoluene	0.00500	U	0.00340	0.00443	68.0	88.6	1	30.0-154			26.3	29
2-Butanone (MEK)	0.0250	U	0.0268	0.0263	107	105	1	10.0-160			1.88	32
Methylene Chloride	0.00500	U	0.00351	0.00435	70.2	87.0	1	23.0-144			21.4	28
4-Methyl-2-pentanone (MIBK)	0.0250	U	0.0240	0.0238	96.0	95.2	1	29.0-160			0.837	29

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1555297-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1555297-01 11/11/22 23:24 • (MS) R3861689-5 11/12/22 05:58 • (MSD) R3861689-6 11/12/22 06:19

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Methyl tert-butyl ether	0.00500	0.000308	0.00427	0.00455	79.2	84.8	1	28.0-150			6.35	29
Naphthalene	0.00500	U	0.00332	0.00353	66.4	70.6	1	12.0-156			6.13	35
n-Propylbenzene	0.00500	U	0.00366	0.00501	73.2	100	1	31.0-154		J3	31.1	28
Styrene	0.00500	U	0.00301	0.00378	60.2	75.6	1	33.0-155			22.7	28
1,1,1,2-Tetrachloroethane	0.00500	U	0.00321	0.00393	64.2	78.6	1	36.0-151			20.2	29
1,1,2,2-Tetrachloroethane	0.00500	U	0.00509	0.00512	102	102	1	33.0-150			0.588	28
1,1,2-Trichlorotrifluoroethane	0.00500	U	0.00318	0.00435	63.6	87.0	1	23.0-160		J3	31.1	30
Tetrachloroethene	0.00500	U	0.00278	0.00406	55.6	81.2	1	10.0-160		J3	37.4	27
Toluene	0.00500	U	0.00339	0.00453	67.8	90.6	1	26.0-154		J3	28.8	28
1,2,3-Trichlorobenzene	0.00500	U	0.00333	0.00380	66.6	76.0	1	17.0-150			13.2	36
1,2,4-Trichlorobenzene	0.00500	U	0.00333	0.00382	66.6	76.4	1	24.0-150			13.7	33
1,1,1-Trichloroethane	0.00500	U	0.00359	0.00507	71.8	101	1	23.0-160		J3	34.2	28
1,1,2-Trichloroethane	0.00500	U	0.00398	0.00434	79.6	86.8	1	35.0-147			8.65	27
Trichloroethene	0.00500	U	0.00328	0.00424	65.6	84.8	1	10.0-160		J3	25.5	25
Trichlorofluoromethane	0.00500	U	0.00324	0.00439	64.8	87.8	1	17.0-160			30.1	31
1,2,3-Trichloropropane	0.00500	U	0.00466	0.00491	93.2	98.2	1	34.0-151			5.22	29
1,2,4-Trimethylbenzene	0.00500	U	0.00340	0.00456	68.0	91.2	1	26.0-154		J3	29.1	27
1,2,3-Trimethylbenzene	0.00500	U	0.00347	0.00436	69.4	87.2	1	32.0-149			22.7	28
1,3,5-Trimethylbenzene	0.00500	U	0.00344	0.00465	68.8	93.0	1	28.0-153		J3	29.9	27
Vinyl chloride	0.00500	U	0.00315	0.00443	63.0	88.6	1	10.0-160		J3	33.8	27
Xylenes, Total	0.0150	U	0.00973	0.0130	64.9	86.7	1	29.0-154		J3	28.8	28
(S) Toluene-d8					91.8	94.8	80.0-120					
(S) 4-Bromofluorobenzene					90.6	90.3	77.0-126					
(S) 1,2-Dichloroethane-d4					93.6	91.4	70.0-130					

L1555639-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1555639-02 11/12/22 05:37 • (MS) R3861689-7 11/12/22 06:40 • (MSD) R3861689-8 11/12/22 07:00

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	U	0.182	0.161	146	129	5	10.0-160			12.2	35
Acrolein	0.125	U	0.0594	0.0459	47.5	36.7	5	10.0-160			25.6	39
Acrylonitrile	0.125	U	0.144	0.124	115	99.2	5	21.0-160			14.9	32
Benzene	0.0250	U	0.0183	0.0212	73.2	84.8	5	17.0-158			14.7	27
Bromobenzene	0.0250	U	0.0221	0.0232	88.4	92.8	5	30.0-149			4.86	28
Bromodichloromethane	0.0250	U	0.0213	0.0213	85.2	85.2	5	31.0-150			0.000	27
Bromoform	0.0250	U	0.0171	0.0153	68.4	61.2	5	29.0-150			11.1	29
Bromomethane	0.0250	U	0.0190	0.0230	76.0	92.0	5	10.0-160			19.0	38
n-Butylbenzene	0.0250	U	0.0185	0.0216	74.0	86.4	5	31.0-150			15.5	30

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1555639-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1555639-02 11/12/22 05:37 • (MS) R3861689-7 11/12/22 06:40 • (MSD) R3861689-8 11/12/22 07:00

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
sec-Butylbenzene	0.0250	U	0.0176	0.0210	70.4	84.0	5	33.0-155			17.6	29
tert-Butylbenzene	0.0250	U	0.0179	0.0214	71.6	85.6	5	34.0-153			17.8	28
Carbon tetrachloride	0.0250	U	0.0159	0.0215	63.6	86.0	5	23.0-159		J3	29.9	28
Chlorobenzene	0.0250	U	0.0183	0.0194	73.2	77.6	5	33.0-152			5.84	27
Chlorodibromomethane	0.0250	U	0.0182	0.0186	72.8	74.4	5	37.0-149			2.17	27
Chloroethane	0.0250	U	0.0180	0.0220	72.0	88.0	5	10.0-160			20.0	30
2-Chloroethyl vinyl ether	0.125	U	0.129	0.113	103	90.4	5	10.0-160			13.2	31
Chloroform	0.0250	U	0.0196	0.0209	78.4	83.6	5	29.0-154			6.42	28
Chloromethane	0.0250	U	0.0153	0.0183	61.2	73.2	5	10.0-160			17.9	29
2-Chlorotoluene	0.0250	U	0.0223	0.0240	89.2	96.0	5	32.0-153			7.34	28
4-Chlorotoluene	0.0250	U	0.0219	0.0226	87.6	90.4	5	32.0-150			3.15	28
1,2-Dibromo-3-Chloropropane	0.0250	U	0.0205	0.0176	82.0	70.4	5	22.0-151			15.2	34
1,2-Dibromoethane	0.0250	U	0.0210	0.0178	84.0	71.2	5	34.0-147			16.5	27
Dibromomethane	0.0250	U	0.0227	0.0198	90.8	79.2	5	30.0-151			13.6	27
1,2-Dichlorobenzene	0.0250	U	0.0211	0.0208	84.4	83.2	5	34.0-149			1.43	28
1,3-Dichlorobenzene	0.0250	U	0.0209	0.0210	83.6	84.0	5	36.0-146			0.477	27
1,4-Dichlorobenzene	0.0250	U	0.0205	0.0206	82.0	82.4	5	35.0-142			0.487	27
Dichlorodifluoromethane	0.0250	U	0.0123	0.0181	49.2	72.4	5	10.0-160		J3	38.2	29
1,1-Dichloroethane	0.0250	U	0.0201	0.0234	80.4	93.6	5	25.0-158			15.2	27
1,2-Dichloroethane	0.0250	U	0.0221	0.0215	88.4	86.0	5	29.0-151			2.75	27
1,1-Dichloroethene	0.0250	U	0.0133	0.0191	53.2	76.4	5	11.0-160		J3	35.8	29
cis-1,2-Dichloroethene	0.0250	U	0.0185	0.0211	74.0	84.4	5	10.0-160			13.1	27
trans-1,2-Dichloroethene	0.0250	U	0.0164	0.0207	65.6	82.8	5	17.0-153			23.2	27
1,2-Dichloropropane	0.0250	U	0.0221	0.0234	88.4	93.6	5	30.0-156			5.71	27
1,1-Dichloropropene	0.0250	U	0.0147	0.0212	58.8	84.8	5	25.0-158		J3	36.2	27
1,3-Dichloropropane	0.0250	U	0.0231	0.0204	92.4	81.6	5	38.0-147			12.4	27
cis-1,3-Dichloropropene	0.0250	U	0.0215	0.0209	86.0	83.6	5	34.0-149			2.83	28
trans-1,3-Dichloropropene	0.0250	U	0.0208	0.0190	83.2	76.0	5	32.0-149			9.05	28
2,2-Dichloropropane	0.0250	U	0.0178	0.0243	71.2	97.2	5	24.0-152		J3	30.9	29
Di-isopropyl ether	0.0250	U	0.0241	0.0235	96.4	94.0	5	21.0-160			2.52	28
Ethylbenzene	0.0250	U	0.0161	0.0179	64.4	71.6	5	30.0-155			10.6	27
Hexachloro-1,3-butadiene	0.0250	U	0.0213	0.0220	85.2	88.0	5	20.0-154			3.23	34
Isopropylbenzene	0.0250	U	0.0159	0.0196	63.6	78.4	5	28.0-157			20.8	27
p-Isopropyltoluene	0.0250	U	0.0184	0.0216	73.6	86.4	5	30.0-154			16.0	29
2-Butanone (MEK)	0.125	0.0792	0.217	0.189	110	87.8	5	10.0-160			13.8	32
Methylene Chloride	0.0250	U	0.0202	0.0204	80.8	81.6	5	23.0-144			0.985	28
4-Methyl-2-pentanone (MIBK)	0.125	U	0.125	0.107	100	85.6	5	29.0-160			15.5	29
Methyl tert-butyl ether	0.0250	U	0.0230	0.0192	92.0	76.8	5	28.0-150			18.0	29
Naphthalene	0.0250	U	0.0193	0.0161	77.2	64.4	5	12.0-156			18.1	35
n-Propylbenzene	0.0250	U	0.0189	0.0230	75.6	92.0	5	31.0-154			19.6	28

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1555639-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1555639-02 11/12/22 05:37 • (MS) R3861689-7 11/12/22 06:40 • (MSD) R3861689-8 11/12/22 07:00

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Styrene	0.0250	U	0.0168	0.0184	67.2	73.6	5	33.0-155			9.09	28
1,1,1,2-Tetrachloroethane	0.0250	U	0.0187	0.0180	74.8	72.0	5	36.0-151			3.81	29
1,1,2,2-Tetrachloroethane	0.0250	U	0.0264	0.0220	106	88.0	5	33.0-150			18.2	28
1,1,2-Trichlorotrifluoroethane	0.0250	U	0.0135	0.0212	54.0	84.8	5	23.0-160		J3	44.4	30
Tetrachloroethene	0.0250	U	0.0141	0.0191	56.4	76.4	5	10.0-160		J3	30.1	27
Toluene	0.0250	U	0.0172	0.0202	68.8	80.8	5	26.0-154			16.0	28
1,2,3-Trichlorobenzene	0.0250	U	0.0190	0.0184	76.0	73.6	5	17.0-150			3.21	36
1,2,4-Trichlorobenzene	0.0250	U	0.0186	0.0180	74.4	72.0	5	24.0-150			3.28	33
1,1,1-Trichloroethane	0.0250	U	0.0168	0.0243	67.2	97.2	5	23.0-160		J3	36.5	28
1,1,2-Trichloroethane	0.0250	U	0.0225	0.0186	90.0	74.4	5	35.0-147			19.0	27
Trichloroethene	0.0250	U	0.0156	0.0206	62.4	82.4	5	10.0-160		J3	27.6	25
Trichlorofluoromethane	0.0250	U	0.0140	0.0214	56.0	85.6	5	17.0-160		J3	41.8	31
1,2,3-Trichloropropane	0.0250	U	0.0245	0.0223	98.0	89.2	5	34.0-151			9.40	29
1,2,4-Trimethylbenzene	0.0250	U	0.0187	0.0213	74.8	85.2	5	26.0-154			13.0	27
1,2,3-Trimethylbenzene	0.0250	U	0.0199	0.0193	79.6	77.2	5	32.0-149			3.06	28
1,3,5-Trimethylbenzene	0.0250	U	0.0194	0.0216	77.6	86.4	5	28.0-153			10.7	27
Vinyl chloride	0.0250	U	0.0136	0.0201	54.4	80.4	5	10.0-160		J3	38.6	27
Xylenes, Total	0.0750	U	0.0498	0.0573	66.4	76.4	5	29.0-154			14.0	28
(S) Toluene-d8					94.4	93.8		80.0-120				
(S) 4-Bromofluorobenzene					90.6	87.3		77.0-126				
(S) 1,2-Dichloroethane-d4					92.6	91.6		70.0-130				

Sample Narrative:

OS: Non-target compounds too high to run at a lower dilution.

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3860551-2 11/12/22 06:33

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0113	0.0500
Acrolein	U		0.00254	0.0500
Acrylonitrile	U		0.000671	0.0100
Benzene	U		0.0000941	0.00100
Bromobenzene	U		0.000118	0.00100
Bromodichloromethane	U		0.000136	0.00100
Bromoform	U		0.000129	0.00100
Bromomethane	U		0.000605	0.00500
n-Butylbenzene	U		0.000157	0.00100
sec-Butylbenzene	U		0.000125	0.00100
tert-Butylbenzene	U		0.000127	0.00100
Carbon tetrachloride	U		0.000128	0.00100
Chlorobenzene	U		0.000116	0.00100
Chlorodibromomethane	U		0.000140	0.00100
Chloroethane	U		0.000192	0.00500
2-Chloroethyl vinyl ether	U		0.000575	0.0500
Chloroform	U		0.000111	0.00500
Chloromethane	U		0.000960	0.00250
2-Chlorotoluene	U		0.000106	0.00100
4-Chlorotoluene	U		0.000114	0.00100
1,2-Dibromo-3-Chloropropane	U		0.000276	0.00500
1,2-Dibromoethane	U		0.000126	0.00100
Dibromomethane	U		0.000122	0.00100
1,2-Dichlorobenzene	U		0.000107	0.00100
1,3-Dichlorobenzene	U		0.000110	0.00100
1,4-Dichlorobenzene	U		0.000120	0.00100
Dichlorodifluoromethane	U		0.000374	0.00500
1,1-Dichloroethane	U		0.000100	0.00100
1,2-Dichloroethane	U		0.0000819	0.00100
1,1-Dichloroethene	U		0.000188	0.00100
cis-1,2-Dichloroethene	U		0.000126	0.00100
trans-1,2-Dichloroethene	U		0.000149	0.00100
1,2-Dichloropropane	U		0.000149	0.00100
1,1-Dichloropropene	U		0.000142	0.00100
1,3-Dichloropropane	U		0.000110	0.00100
cis-1,3-Dichloropropene	U		0.000111	0.00100
trans-1,3-Dichloropropene	U		0.000118	0.00100
2,2-Dichloropropane	U		0.000161	0.00100
Di-isopropyl ether	U		0.000105	0.00100
Ethylbenzene	U		0.000137	0.00100

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3860551-2 11/12/22 06:33

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Hexachloro-1,3-butadiene	U		0.000337	0.00100
Isopropylbenzene	U		0.000105	0.00100
p-Isopropyltoluene	U		0.000120	0.00100
2-Butanone (MEK)	U		0.00119	0.0100
Methylene Chloride	U		0.000430	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.000478	0.0100
Methyl tert-butyl ether	U		0.000101	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.0000993	0.00100
Styrene	U		0.000118	0.00100
1,1,1,2-Tetrachloroethane	U		0.000147	0.00100
1,1,2,2-Tetrachloroethane	U		0.000133	0.00100
1,1,2-Trichlorotrifluoroethane	U		0.000180	0.00100
Tetrachloroethene	U		0.000300	0.00100
Toluene	U		0.000278	0.00100
1,2,3-Trichlorobenzene	U		0.000230	0.00100
1,2,4-Trichlorobenzene	U		0.000481	0.00100
1,1,1-Trichloroethane	U		0.000149	0.00100
1,1,2-Trichloroethane	U		0.000158	0.00100
Trichloroethene	U		0.000190	0.00100
Trichlorofluoromethane	U		0.000160	0.00500
1,2,3-Trichloropropane	U		0.000237	0.00250
1,2,4-Trimethylbenzene	U		0.000322	0.00100
1,2,3-Trimethylbenzene	U		0.000104	0.00100
1,3,5-Trimethylbenzene	U		0.000104	0.00100
Vinyl chloride	U		0.000234	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	111			80.0-120
(S) 4-Bromofluorobenzene	108			77.0-126
(S) 1,2-Dichloroethane-d4	93.4			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3860551-1 11/12/22 05:55

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.0250	0.0174	69.6	19.0-160	
Acrolein	0.0250	0.00638	25.5	10.0-160	
Acrylonitrile	0.0250	0.0188	75.2	55.0-149	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3860551-1 11/12/22 05:55

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Benzene	0.00500	0.00503	101	70.0-123	
Bromobenzene	0.00500	0.00429	85.8	73.0-121	
Bromodichloromethane	0.00500	0.00476	95.2	75.0-120	
Bromoform	0.00500	0.00464	92.8	68.0-132	
Bromomethane	0.00500	0.00655	131	10.0-160	
n-Butylbenzene	0.00500	0.00508	102	73.0-125	
sec-Butylbenzene	0.00500	0.00492	98.4	75.0-125	
tert-Butylbenzene	0.00500	0.00495	99.0	76.0-124	
Carbon tetrachloride	0.00500	0.00514	103	68.0-126	
Chlorobenzene	0.00500	0.00566	113	80.0-121	
Chlorodibromomethane	0.00500	0.00502	100	77.0-125	
Chloroethane	0.00500	0.00587	117	47.0-150	
2-Chloroethyl vinyl ether	0.0250	0.0200	80.0	51.0-160	
Chloroform	0.00500	0.00529	106	73.0-120	
Chloromethane	0.00500	0.00393	78.6	41.0-142	
2-Chlorotoluene	0.00500	0.00451	90.2	76.0-123	
4-Chlorotoluene	0.00500	0.00446	89.2	75.0-122	
1,2-Dibromo-3-Chloropropane	0.00500	0.00464	92.8	58.0-134	
1,2-Dibromoethane	0.00500	0.00525	105	80.0-122	
Dibromomethane	0.00500	0.00513	103	80.0-120	
1,2-Dichlorobenzene	0.00500	0.00531	106	79.0-121	
1,3-Dichlorobenzene	0.00500	0.00507	101	79.0-120	
1,4-Dichlorobenzene	0.00500	0.00518	104	79.0-120	
Dichlorodifluoromethane	0.00500	0.00391	78.2	51.0-149	
1,1-Dichloroethane	0.00500	0.00478	95.6	70.0-126	
1,2-Dichloroethane	0.00500	0.00467	93.4	70.0-128	
1,1-Dichloroethene	0.00500	0.00503	101	71.0-124	
cis-1,2-Dichloroethene	0.00500	0.00544	109	73.0-120	
trans-1,2-Dichloroethene	0.00500	0.00530	106	73.0-120	
1,2-Dichloropropane	0.00500	0.00443	88.6	77.0-125	
1,1-Dichloropropene	0.00500	0.00494	98.8	74.0-126	
1,3-Dichloropropane	0.00500	0.00497	99.4	80.0-120	
cis-1,3-Dichloropropene	0.00500	0.00441	88.2	80.0-123	
trans-1,3-Dichloropropene	0.00500	0.00424	84.8	78.0-124	
2,2-Dichloropropane	0.00500	0.00488	97.6	58.0-130	
Di-isopropyl ether	0.00500	0.00370	74.0	58.0-138	
Ethylbenzene	0.00500	0.00522	104	79.0-123	
Hexachloro-1,3-butadiene	0.00500	0.00619	124	54.0-138	
Isopropylbenzene	0.00500	0.00574	115	76.0-127	
p-Isopropyltoluene	0.00500	0.00510	102	76.0-125	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3860551-1 11/12/22 05:55

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
2-Butanone (MEK)	0.0250	0.0164	65.6	44.0-160	
Methylene Chloride	0.00500	0.00492	98.4	67.0-120	
4-Methyl-2-pentanone (MIBK)	0.0250	0.0194	77.6	68.0-142	
Methyl tert-butyl ether	0.00500	0.00481	96.2	68.0-125	
Naphthalene	0.00500	0.00561	112	54.0-135	
n-Propylbenzene	0.00500	0.00451	90.2	77.0-124	
Styrene	0.00500	0.00493	98.6	73.0-130	
1,1,1,2-Tetrachloroethane	0.00500	0.00571	114	75.0-125	
1,1,2,2-Tetrachloroethane	0.00500	0.00442	88.4	65.0-130	
1,1,2-Trichlorotrifluoroethane	0.00500	0.00556	111	69.0-132	
Tetrachloroethene	0.00500	0.00551	110	72.0-132	
Toluene	0.00500	0.00541	108	79.0-120	
1,2,3-Trichlorobenzene	0.00500	0.00590	118	50.0-138	
1,2,4-Trichlorobenzene	0.00500	0.00592	118	57.0-137	
1,1,1-Trichloroethane	0.00500	0.00513	103	73.0-124	
1,1,2-Trichloroethane	0.00500	0.00556	111	80.0-120	
Trichloroethene	0.00500	0.00554	111	78.0-124	
Trichlorofluoromethane	0.00500	0.00608	122	59.0-147	
1,2,3-Trichloropropane	0.00500	0.00461	92.2	73.0-130	
1,2,4-Trimethylbenzene	0.00500	0.00498	99.6	76.0-121	
1,2,3-Trimethylbenzene	0.00500	0.00497	99.4	77.0-120	
1,3,5-Trimethylbenzene	0.00500	0.00488	97.6	76.0-122	
Vinyl chloride	0.00500	0.00517	103	67.0-131	
Xylenes, Total	0.0150	0.0161	107	79.0-123	
(S) Toluene-d8			107	80.0-120	
(S) 4-Bromofluorobenzene			108	77.0-126	
(S) 1,2-Dichloroethane-d4			96.8	70.0-130	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3861739-2 11/15/22 15:28

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzidine	U		0.00374	0.0100
Bis(2-chlorethoxy)methane	U		0.000116	0.0100
Bis(2-chloroethyl)ether	U		0.000137	0.0100
2,2-oxybis(1-chloropropane)	U		0.000210	0.0100
4-Bromophenyl-phenylether	U		0.0000877	0.0100
4-Chlorophenyl-phenylether	U		0.0000926	0.0100
1,2-Dichlorobenzene	U		0.0000713	0.0100
1,3-Dichlorobenzene	U		0.000132	0.0100
1,4-Dichlorobenzene	U		0.0000942	0.0100
3,3-Dichlorobenzidine	U		0.000212	0.0100
2,4-Dinitrotoluene	U		0.0000983	0.0100
2,6-Dinitrotoluene	U		0.000250	0.0100
Hexachlorobenzene	U		0.0000755	0.00100
Hexachloro-1,3-butadiene	U		0.0000968	0.0100
Hexachlorocyclopentadiene	U		0.0000598	0.0100
Hexachloroethane	U		0.000127	0.0100
Isophorone	U		0.000143	0.0100
Nitrobenzene	U		0.000297	0.0100
n-Nitrosodimethylamine	U		0.000998	0.0100
n-Nitrosodiphenylamine	U		0.00237	0.0100
n-Nitrosodi-n-propylamine	U		0.000261	0.0100
Benzylbutyl phthalate	U		0.000765	0.00300
Bis(2-ethylhexyl)phthalate	0.00135	U	0.000895	0.00300
Di-n-butyl phthalate	U		0.000453	0.00300
Diethyl phthalate	U		0.000287	0.00300
Dimethyl phthalate	U		0.000260	0.00300
Di-n-octyl phthalate	U		0.000932	0.00300
1,2,4-Trichlorobenzene	U		0.0000698	0.0100
4-Chloro-3-methylphenol	U		0.000131	0.0100
2-Chlorophenol	U		0.000133	0.0100
2,4-Dichlorophenol	U		0.000102	0.0100
2,4-Dimethylphenol	U		0.0000636	0.0100
4,6-Dinitro-2-methylphenol	U		0.00112	0.0100
2,4-Dinitrophenol	U		0.00593	0.0100
2-Nitrophenol	U		0.000117	0.0100
4-Nitrophenol	U		0.000143	0.0100
Pentachlorophenol	U		0.000313	0.0100
Phenol	U		0.00433	0.0100
2,4,6-Trichlorophenol	U		0.000100	0.0100
(S) 2-Fluorophenol	21.6			10.0-120

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3861739-2 11/15/22 15:28

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
(S) Phenol-d5	13.4			10.0-120
(S) Nitrobenzene-d5	51.9			10.0-127
(S) 2-Fluorobiphenyl	56.4			10.0-130
(S) 2,4,6-Tribromophenol	57.0			10.0-155
(S) p-Terphenyl-d14	97.4			10.0-128

Laboratory Control Sample (LCS)

(LCS) R3861739-1 11/15/22 15:07

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzidine	0.100	0.00442	4.42	10.0-120	J4
Bis(2-chlorethoxy)methane	0.0500	0.0322	64.4	33.0-120	
Bis(2-chloroethyl)ether	0.0500	0.0304	60.8	23.0-120	
2,2-oxybis(1-chloropropane)	0.0500	0.0307	61.4	28.0-120	
4-Bromophenyl-phenylether	0.0500	0.0470	94.0	45.0-120	
4-Chlorophenyl-phenylether	0.0500	0.0443	88.6	44.0-120	
1,2-Dichlorobenzene	0.0500	0.0284	56.8	20.0-120	
1,3-Dichlorobenzene	0.0500	0.0280	56.0	17.0-120	
1,4-Dichlorobenzene	0.0500	0.0283	56.6	18.0-120	
3,3-Dichlorobenzidine	0.100	0.0277	27.7	44.0-120	J4
2,4-Dinitrotoluene	0.0500	0.0452	90.4	49.0-124	
2,6-Dinitrotoluene	0.0500	0.0440	88.0	46.0-120	
Hexachlorobenzene	0.0500	0.0443	88.6	44.0-120	
Hexachloro-1,3-butadiene	0.0500	0.0267	53.4	19.0-120	
Hexachlorocyclopentadiene	0.0500	0.0282	56.4	15.0-120	
Hexachloroethane	0.0500	0.0274	54.8	15.0-120	
Isophorone	0.0500	0.0324	64.8	36.0-120	
Nitrobenzene	0.0500	0.0285	57.0	27.0-120	
n-Nitrosodimethylamine	0.0500	0.0155	31.0	10.0-120	
n-Nitrosodiphenylamine	0.0500	0.0291	58.2	47.0-120	
n-Nitrosodi-n-propylamine	0.0500	0.0362	72.4	31.0-120	
Benzylbutyl phthalate	0.0500	0.0480	96.0	43.0-121	
Bis(2-ethylhexyl)phthalate	0.0500	0.0482	96.4	43.0-122	
Di-n-butyl phthalate	0.0500	0.0481	96.2	49.0-121	
Diethyl phthalate	0.0500	0.0452	90.4	48.0-122	
Dimethyl phthalate	0.0500	0.0438	87.6	48.0-120	
Di-n-octyl phthalate	0.0500	0.0447	89.4	42.0-125	
1,2,4-Trichlorobenzene	0.0500	0.0276	55.2	24.0-120	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS)

(LCS) R3861739-1 11/15/22 15:07

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
4-Chloro-3-methylphenol	0.0500	0.0258	51.6	40.0-120	
2-Chlorophenol	0.0500	0.0225	45.0	25.0-120	
2,4-Dichlorophenol	0.0500	0.0261	52.2	36.0-120	
2,4-Dimethylphenol	0.0500	0.0159	31.8	33.0-120	J4
4,6-Dinitro-2-methylphenol	0.0500	0.0432	86.4	38.0-138	
2,4-Dinitrophenol	0.0500	0.0363	72.6	10.0-120	
2-Nitrophenol	0.0500	0.0301	60.2	31.0-120	
4-Nitrophenol	0.0500	0.0103	20.6	10.0-120	
Pentachlorophenol	0.0500	0.0331	66.2	23.0-120	
Phenol	0.0500	0.00818	16.4	10.0-120	
2,4,6-Trichlorophenol	0.0500	0.0344	68.8	42.0-120	
(S) 2-Fluorophenol			23.4	10.0-120	
(S) Phenol-d5			15.3	10.0-120	
(S) Nitrobenzene-d5			52.8	10.0-127	
(S) 2-Fluorobiphenyl			71.2	10.0-130	
(S) 2,4,6-Tribromophenol			69.0	10.0-155	
(S) p-Terphenyl-d14			87.4	10.0-128	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1555626-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1555626-01 11/15/22 22:15 • (MS) R3861739-3 11/15/22 22:36 • (MSD) R3861739-4 11/15/22 22:58

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Benzidine	0.100	U	0.00428	0.00418	4.28	4.18	1	10.0-120	J6	J6	2.36	37
Bis(2-chlorethoxy)methane	0.0500	U	0.0315	0.0309	63.0	61.8	1	17.0-120			1.92	31
Bis(2-chloroethyl)ether	0.0500	U	0.0281	0.0271	56.2	54.2	1	14.0-120			3.62	33
2,2-oxybis(1-chloropropane)	0.0500	U	0.0280	0.0272	56.0	54.4	1	18.0-120			2.90	34
4-Bromophenyl-phenylether	0.0500	U	0.0468	0.0445	93.6	89.0	1	37.0-120			5.04	24
4-Chlorophenyl-phenylether	0.0500	U	0.0431	0.0423	86.2	84.6	1	36.0-120			1.87	23
1,2-Dichlorobenzene	0.0500	U	0.0232	0.0235	46.4	47.0	1	18.0-120			1.28	40
1,3-Dichlorobenzene	0.0500	U	0.0224	0.0227	44.8	45.4	1	15.0-120			1.33	40
1,4-Dichlorobenzene	0.0500	U	0.0223	0.0225	44.6	45.0	1	17.0-120			0.893	40
3,3-Dichlorobenzidine	0.100	U	0.00526	0.00414	5.26	4.14	1	10.0-134	J6	J6	23.8	30
2,4-Dinitrotoluene	0.0500	U	0.0440	0.0424	88.0	84.8	1	39.0-125			3.70	25
2,6-Dinitrotoluene	0.0500	U	0.0433	0.0426	86.6	85.2	1	36.0-120			1.63	27
Hexachlorobenzene	0.0500	U	0.0445	0.0414	89.0	82.8	1	35.0-122			7.22	24
Hexachloro-1,3-butadiene	0.0500	U	0.0237	0.0242	47.4	48.4	1	12.0-120			2.09	34
Hexachlorocyclopentadiene	0.0500	U	0.0280	0.0267	56.0	53.4	1	10.0-120			4.75	33
Hexachloroethane	0.0500	U	0.0225	0.0228	45.0	45.6	1	10.0-120			1.32	40

L1555626-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1555626-01 11/15/22 22:15 • (MS) R3861739-3 11/15/22 22:36 • (MSD) R3861739-4 11/15/22 22:58

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Isophorone	0.0500	U	0.0321	0.0321	64.2	64.2	1	21.0-120			0.000	27
Nitrobenzene	0.0500	U	0.0333	0.0328	66.6	65.6	1	12.0-120			1.51	30
n-Nitrosodimethylamine	0.0500	U	0.0156	0.0143	31.2	28.6	1	10.0-120			8.70	40
n-Nitrosodiphenylamine	0.0500	U	0.0373	0.0359	74.6	71.8	1	37.0-120			3.83	24
n-Nitrosodi-n-propylamine	0.0500	U	0.0350	0.0343	70.0	68.6	1	16.0-120			2.02	30
Benzylbutyl phthalate	0.0500	U	0.0489	0.0474	97.8	94.8	1	34.0-126			3.12	24
Bis(2-ethylhexyl)phthalate	0.0500	U	0.0484	0.0481	96.8	96.2	1	33.0-126			0.622	25
Di-n-butyl phthalate	0.0500	U	0.0487	0.0457	97.4	91.4	1	35.0-128			6.36	23
Diethyl phthalate	0.0500	U	0.0452	0.0435	90.4	87.0	1	39.0-125			3.83	24
Dimethyl phthalate	0.0500	U	0.0429	0.0413	85.8	82.6	1	37.0-120			3.80	24
Di-n-octyl phthalate	0.0500	U	0.0461	0.0451	92.2	90.2	1	25.0-135			2.19	26
1,2,4-Trichlorobenzene	0.0500	U	0.0253	0.0247	50.6	49.4	1	15.0-120			2.40	31
4-Chloro-3-methylphenol	0.0500	U	0.0307	0.0311	61.4	62.2	1	26.0-120			1.29	27
2-Chlorophenol	0.0500	U	0.0217	0.0214	43.4	42.8	1	18.0-120			1.39	34
2,4-Dichlorophenol	0.0500	U	0.0283	0.0287	56.6	57.4	1	19.0-120			1.40	27
2,4-Dimethylphenol	0.0500	U	0.0249	0.0251	49.8	50.2	1	15.0-120			0.800	28
4,6-Dinitro-2-methylphenol	0.0500	U	0.0385	0.0376	77.0	75.2	1	10.0-144			2.37	39
2,4-Dinitrophenol	0.0500	U	0.0350	0.0344	70.0	68.8	1	10.0-120			1.73	40
2-Nitrophenol	0.0500	U	0.0284	0.0284	56.8	56.8	1	20.0-120			0.000	30
4-Nitrophenol	0.0500	U	0.0127	0.0118	25.4	23.6	1	10.0-120			7.35	40
Pentachlorophenol	0.0500	U	0.0406	0.0391	81.2	78.2	1	10.0-128			3.76	37
Phenol	0.0500	U	0.00912	0.00857	18.2	17.1	1	10.0-120			6.22	40
2,4,6-Trichlorophenol	0.0500	U	0.0375	0.0366	75.0	73.2	1	26.0-120			2.43	31
(S) 2-Fluorophenol					25.5	23.2		10.0-120				
(S) Phenol-d5					17.0	15.7		10.0-120				
(S) Nitrobenzene-d5					52.2	49.9		10.0-127				
(S) 2-Fluorobiphenyl					72.8	68.6		10.0-130				
(S) 2,4,6-Tribromophenol					78.0	71.0		10.0-155				
(S) p-Terphenyl-d14					87.1	85.5		10.0-128				

1

Cp

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Tc

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Ss

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Cn

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Sr

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Qc

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Gl

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Al

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Sc

Method Blank (MB)

(MB) R3860733-3 11/11/22 02:36

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Anthracene	U		0.0000190	0.0000500
Acenaphthene	U		0.0000190	0.0000500
Acenaphthylene	U		0.0000171	0.0000500
Benzo(a)anthracene	U		0.0000203	0.0000500
Benzo(a)pyrene	U		0.0000184	0.0000500
Benzo(b)fluoranthene	U		0.0000168	0.0000500
Benzo(g,h,i)perylene	U		0.0000184	0.0000500
Benzo(k)fluoranthene	U		0.0000202	0.0000500
Chrysene	U		0.0000179	0.0000500
Dibenz(a,h)anthracene	U		0.0000160	0.0000500
Fluoranthene	U		0.0000270	0.000100
Fluorene	U		0.0000169	0.0000500
Indeno(1,2,3-cd)pyrene	U		0.0000158	0.0000500
Naphthalene	U		0.0000917	0.000250
Phenanthrene	U		0.0000180	0.0000500
Pyrene	U		0.0000169	0.0000500
1-Methylnaphthalene	U		0.0000687	0.000250
2-Methylnaphthalene	U		0.0000674	0.000250
2-Chloronaphthalene	U		0.0000682	0.000250
(S) Nitrobenzene-d5	92.5			31.0-160
(S) 2-Fluorobiphenyl	77.0			48.0-148
(S) p-Terphenyl-d14	89.0			37.0-146

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3860733-1 11/11/22 02:02 • (LCSD) R3860733-2 11/11/22 02:19

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Anthracene	0.00200	0.00174	0.00175	87.0	87.5	67.0-150			0.573	20
Acenaphthene	0.00200	0.00158	0.00160	79.0	80.0	65.0-138			1.26	20
Acenaphthylene	0.00200	0.00160	0.00160	80.0	80.0	66.0-140			0.000	20
Benzo(a)anthracene	0.00200	0.00182	0.00177	91.0	88.5	61.0-140			2.79	20
Benzo(a)pyrene	0.00200	0.00179	0.00173	89.5	86.5	60.0-143			3.41	20
Benzo(b)fluoranthene	0.00200	0.00164	0.00163	82.0	81.5	58.0-141			0.612	20
Benzo(g,h,i)perylene	0.00200	0.00167	0.00164	83.5	82.0	52.0-153			1.81	20
Benzo(k)fluoranthene	0.00200	0.00160	0.00156	80.0	78.0	58.0-148			2.53	20
Chrysene	0.00200	0.00178	0.00175	89.0	87.5	64.0-144			1.70	20
Dibenz(a,h)anthracene	0.00200	0.00171	0.00165	85.5	82.5	52.0-155			3.57	20
Fluoranthene	0.00200	0.00195	0.00194	97.5	97.0	69.0-153			0.514	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3860733-1 11/11/22 02:02 • (LCSD) R3860733-2 11/11/22 02:19

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Fluorene	0.00200	0.00170	0.00170	85.0	85.0	64.0-136			0.000	20
Indeno(1,2,3-cd)pyrene	0.00200	0.00190	0.00180	95.0	90.0	54.0-153			5.41	20
Naphthalene	0.00200	0.00135	0.00139	67.5	69.5	61.0-137			2.92	20
Phenanthrene	0.00200	0.00169	0.00171	84.5	85.5	62.0-137			1.18	20
Pyrene	0.00200	0.00170	0.00167	85.0	83.5	60.0-142			1.78	20
1-Methylnaphthalene	0.00200	0.00138	0.00140	69.0	70.0	66.0-142			1.44	20
2-Methylnaphthalene	0.00200	0.00139	0.00143	69.5	71.5	62.0-136			2.84	20
2-Chloronaphthalene	0.00200	0.00143	0.00146	71.5	73.0	64.0-140			2.08	20
(S) Nitrobenzene-d5				94.5	90.0	31.0-160				
(S) 2-Fluorobiphenyl				74.0	72.5	48.0-148				
(S) p-Terphenyl-d14				79.5	77.5	37.0-146				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3860540-2 11/11/22 16:44

Analyte	MB Result mg/l	<u>MB Qualifier</u>	MB MDL mg/l	MB RDL mg/l
1,4-Dioxane	U		0.0000447	0.000400
(S) Nitrobenzene-d5	48.0			10.0-120

Laboratory Control Sample (LCS)

(LCS) R3860540-1 11/11/22 16:25

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
1,4-Dioxane	0.0500	0.0602	120	73.0-146	
(S) Nitrobenzene-d5			62.3	10.0-120	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3861065-3 11/14/22 10:31

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,4-Dioxane	U		0.0000447	0.000400
(S) Nitrobenzene-d5	64.4			10.0-120

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3861065-1 11/14/22 09:53 • (LCSD) R3861065-2 11/14/22 10:12

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,4-Dioxane	0.0500	0.0724	0.0723	145	145	73.0-146			0.138	20
(S) Nitrobenzene-d5				66.2	68.0	10.0-120				

1
Cp

2
Tc

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Ss

4
Cn

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Sr

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Qc

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Gl

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Al

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Sc

Method Blank (MB)

(MB) R3861881-2 11/15/22 07:59

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,4-Dioxane	U		0.0000447	0.000400
(S) Nitrobenzene-d5	53.9			10.0-120

Laboratory Control Sample (LCS)

(LCS) R3861881-1 11/15/22 07:40

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
1,4-Dioxane	0.0500	0.0600	120	73.0-146	
(S) Nitrobenzene-d5			52.2	10.0-120	

L1555639-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1555639-02 11/15/22 13:03 • (MS) R3861881-3 11/15/22 13:22 • (MSD) R3861881-4 11/15/22 13:41

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,4-Dioxane	0.0476	0.000432	0.0566	0.0563	118	117	1	38.0-160			0.531	21
(S) Nitrobenzene-d5					48.0	50.3		10.0-120				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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.

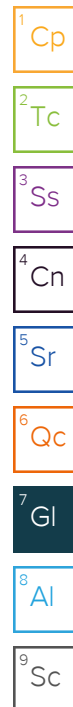
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	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.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.



ACCREDITATIONS & LOCATIONS

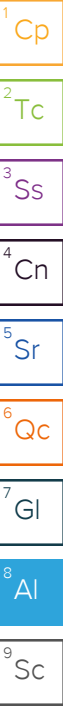
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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	LA000356
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.



Terracon - Salt Lake City, UT

6949 South High Tech Drive
Midvale, UT 84047

Accounts Payable
6949 South High Tech Drive
Midvale, UT 84047

Report to:
Nancy Saunders

Email To: nancy.saunders@terracon.com

Project Description:

City/State
Collected:

Please Circle:
PT MT CT ET

Phone:

Client Project #
61227342 TASK 4.1

Lab Project #
TERRDUT-61227342

Collected by (print):

Site/Facility ID #

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)

___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

No.
of
Cntrs

Immediately
Packed on Ice N ___ Y ___

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

TOSAMW-01

Grab

GW

11/7/2022 15:50

11

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

TOSAMW-02

GW

12:10

11

X

X

X

X

X

X

X

X

X

X

X

X

X

-01

TOSAMW-03

GW

17:05

11

X

X

X

X

X

X

X

X

X

X

X

X

X

-02

TOSAMW-04

GW

10:00

11

X

X

X

X

X

X

X

X

X

X

X

X

X

-03

TOSAMW-05

GW

14:25

11

X

X

X

X

X

X

X

X

X

X

X

X

X

-04

TOSAMW-400

↓

GW

10:15

11

X

X

X

X

X

X

X

X

X

X

X

X

X

-05

TRIP BLANK

X

GW

X

-07

* Matrix:

SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other

Remarks:MS/MSD Parent Sample: TUSA MW04 MW02

INCLUDE CASE NARRATIVE

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

Relinquished by: (Signature)

Date

Time

Received by: (Signature)

Temp: NSA 60 Bottles Received: 66

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date

Time

Received for lab by: (Signature)

Date: 11/9/22 Time: 08:00

Hold: Condition: OK



MT JULIET, TN

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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 # L1555039

H005

Acctnum: **TERRDUT**

Template: **T219498**

Prelogin: **P961706**

PM: **824 - Chris Ward**

PB:

Shipped Via: **FedEX Ground**

Remarks Sample # (lab only)

Sample Receipt Checklist
COC Seal Present/Intact: Yes ___ N
COC Signed/Accurate: Yes ___ N
Bottles arrive intact: Yes ___ N
Correct bottles used: Yes ___ N
Sufficient volume sent: Yes ___ N
If Applicable
VQA Zero Headspace: Yes ___ N
Preservation Correct/Checked: Yes ___ N
RAD Screen <0.5 mR/hr: Yes ___ N

L-1555639

Southwest

<u>Tracking Numbers</u>		<u>Temperature</u>
526 SLC 81302 ²⁵		NSAG 1.2 + 0 = 1.2
526 SLC 81302115		NSAG 3.0 + 0 = 3.0

Terracon - Salt Lake City, UT

Sample Delivery Group: L1557296
Samples Received: 11/12/2022
Project Number: 61227342 Task 4.1
Description:

Report To: Nancy Saunders
6949 South High Tech Drive
Midvale, UT 84047

Entire Report Reviewed By:



Chris Ward
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 National12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

Cp: Cover Page	1	¹ Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	² Tc
Cn: Case Narrative	4	³ Ss
Gl: Glossary of Terms	5	⁴ Cn
Al: Accreditations & Locations	6	⁵ Gl
Sc: Sample Chain of Custody	7	⁶ Al
		⁷ Sc

SAMPLE SUMMARY

TP-41 FILL L1557296-02 Solid

Collected by
Steve Maliszkeski

Collected date/time
11/10/22 10:50

Received date/time
11/12/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Subcontracted Analyses	WG1959187	1	12/07/22 00:00	12/07/22 00:00	-	Minneapolis, MN 55414

¹Cp

²Tc

³Ss

⁴Cn

⁵Gl

⁶Al

⁷Sc

CASE NARRATIVE

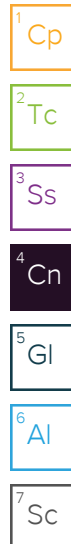
Unless qualified or notated within the narrative below, all sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental 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.



Chris Ward
Project Manager

Project Comments

L1557296 -02 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

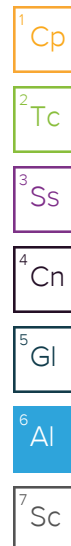
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
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Arkansas	88-0469	New Jersey--NELAP	TN002
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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	LA000356
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.



Company Name/Address:

Terracon - Salt Lake City, UT**6949 South High Tech Drive
Midvale, UT 84047**

Report to:

Nancy Saunders

Project Description:

City/State
Collected:Please Circle:
PT MT CT ET

Phone:

Client Project #

61227342 TASK 4.1

Lab Project #

TERRDUT-61227342

Collected by (print):

STEVE MALISZESKI

Site/Facility ID #

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)

☐ Same Day ☐ Five Day
☐ Next Day ☐ 5 Day (Rad Only)
☐ Two Day ☐ 10 Day (Rad Only)
☐ Three Day

Quote #

Date Results Needed

No.
of
Cntrs

Immediately

Packed on Ice N ☐ Y ☒

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

TP-33 Fill

Comp

SS

0-1.75

11/10/2022

11:26
11:30

X

TP-33 Fill

Grab

0.75

11:25

1

TP-33 Native

Grab

2.0

11:30

3

TP-34 Fill

Comp

0-2.0

11:50

3

TP-34 Fill

Grab

1.0

11:53

1

TP-34 Native

Grab

2.25

12:00

4

TP-35 Fill

Comp

0-3'

12:25

3

TP-35 Fill

Grab

1.5

12:27

1

TP-35 Native

Grab

3.25

12:30

4

TRIP BLANK

11/10/2022

4

* Matrix:

SS - Soil AIR - Air F - Filter
 GW - Groundwater B - Bioassay
 WW - WasteWater
 DW - Drinking Water
 OT - Other

Remarks: MS/MSD Parent Sample: TP-34 FLL
 Level III QA; include case narrative

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:

☐ UPS ☐ FedEx ☐ Courier

Tracking #

Relinquished by: (Signature)

Date:

11/11/22

Time:

1100

Received by: (Signature)

Received by: (Signature)

Received for lab by: (Signature)

Trip Blank Received:

Yes/No

HCL MeOH
TBR

Temp: 4.60-4.6

Bottles Received:

Date:

Time:

11/12/22

0800

Sample Receipt Checklist

COC Seal Present/Intact: ☒ NP ☐ N
 COC Signed/Accurate: ☒ ☐ N
 Bottles arrive intact: ☒ ☐ N
 Correct bottles used: ☒ ☐ N
 Sufficient volume sent: ☒ ☐ N
 If Applicable
 VOA Zero Headspace: ☒ ☐ N
 Preservation Correct/Checked: ☒ ☐ N
 RAD Screen <0.5 mR/hr: ☒ ☐ N

If preservation required by Login: Date/Time

Hold:

Condition:
NCF / OK

Billing Information:

Accounts Payable

6949 South High Tech Drive
 Midvale, UT 84047

Pres
ChkEmail To: nancy.saunders@terracon.com

Analysis / Container / Preservative

Chain of Custody Page 1 of 4

**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 #

1557296
 A003

Acctnum: **TERRDUT**Template: **T219262**Prelogin: **P961704**PM: **824 - Chris Ward**

PB:

Shipped Via: **FedEX Ground**

Remarks

Sample # (lab only)

-01

HOLD

HOLD

HOLD

Company Name/Address:

Terracon - Salt Lake City, UT

6949 South High Tech Drive
Midvale, UT 84047

Report to:

Nancy Saunders

Project Description:

City/State
Collected:Please Circle:
PT MT CT ET

Phone:

Client Project #

61227342 TASK 4.1

Lab Project #

TERRDUT-61227342

Collected by (print):

STEVE MALISZESKI

Site/Facility ID #

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)

☐ Same Day ☐ Five Day
☐ Next Day ☐ 5 Day (Rad Only)
☐ Two Day ☐ 10 Day (Rad Only)
☐ Three Day

Quote #

Date Results Needed

No.
of
Cnts

Immediately

Packed on Ice N ☐ Y ☒

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

TP-36 FILL

COMP

SS

0-4.5'

11/10/2022

12:05

3

X

X

X

TP-36 FILL

GRAB

SS

2-5'

12:08

1

X

X

X

TP-36 NATIVE

GRAB

SS

4-7.5'

12:15

4

X

X

X

TP-37 SHALLOW

GRAB

SS

0-0.5'

13:00

4

X

X

X

TP-37 FILL

COMP

SS

0-6.5'

13:15

3

X

X

X

TP-37 FILL

GRAB

SS

6.5-13'

13:18

1

X

X

X

TP-37 NATIVE

COMP

SS

6-7.5'

13:20

4

X

X

X

TP-38 FILL

COMP

SS

0-4.5'

14:06

3

X

X

X

TP-38 FILL

GRAB

SS

2'

14:10

1

X

X

X

TP-38 NATIVE

GRAB

SS

4-7.5'

14:15

4

X

X

X

* Matrix:

SS - Soil AIR - Air F - Filter
 GW - Groundwater B - Bioassay
 WW - WasteWater
 DW - Drinking Water
 OT - Other

Remarks:MS/MSD Parent Sample: _____

LEVEL III QA/QC; include case narrative

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:

___ UPS ___ FedEx ___ Courier

Tracking #

Relinquished by: (Signature)

Date:

11/11/22 1100

Time:

Received by: (Signature)

J. Eggenhaus

Trip Blank Received: Yes/No

HCL MeOH

TBR

Temp: 4.6 to 4.6

Bottles Received: 97

Relinquished by: (Signature)

Date:

11/11/22 1700

Time:

Received by: (Signature)

J. Eggenhaus

Date:

Time:

11/12/22 2800

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

J. Eggenhaus

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

Analysis / Container / Preservative

Chain of Custody Page 4 of 4



PEOPLE ADVANCING SCIENCE

MT JULIET, TN

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<https://info.pacelabs.com/hubfs/pas-standard-terms.pdf>

SDG #

Table #

Acctnum: TERRDUT

Template: T219262

Prelogin: P961704

PM: 824 - Chris Ward

PB:

Shipped Via: FedEX Ground

Remarks

Sample # (lab only)

Company Name/Address:

Terracon - Salt Lake City, UT

5949 South High Tech Drive
Midvale, UT 84047

Report to:

Nancy Saunders

Project Description:

City/State
Collected:Please Circle:
PT MT CT ET

Phone:

Client Project #
61227342 TASK 4.1Lab Project #
TERRDUT-61227342

Site/Facility ID #

P.O. #

Rush? (Lab MUST Be Notified)

☐ Same Day ☐ Five Day
☐ Next Day ☐ 5 Day (Rad Only)
☐ Two Day ☐ 10 Day (Rad Only)
☐ Three Day

Quote #

Date Results Needed

No.
of
CntsImmediately
Packed on Ice N ☐ Y ☒

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

MRCRA8 4ozClr-NoPres

SV8082 4ozClr-NoPres

SV8270,SV8270PAHSIM, 4ozClr-NoPres

SV8290 4ozClr-NoPres

V8260AP9,TS 2ozClr-NoPres

TP-39 FILL

COMP

SS

0-1.5'

11/10/2022

1340

1/2

X

X

X

X

TP-39 FILL

GRAB

SS

0.75'

1343

1

X

X

X

X

HOLD

TP-39 NATIVE

GRAB

SS

1.75'

1350

1/3

X

X

X

TP-40 FILL

COMP

SS

0-2.5'

9:35

3

X

X

X

X

TP-40 FILL

GRAB

SS

1.5'

9:30

1

X

X

X

X

TP-40 NATIVE

GRAB

SS

2.5-3

9:40

4

X

X

X

X

TP-41 FILL

COMP

SS

0-1'

10:50

1/4

X

X

X

X

TP-41 FILL

GRAB

SS

0.5'

10:51

1

X

X

X

X

TP-41 NA-
TIVE

GRAB

SS

1-1.5'

11:00

1/5

X

X

X

X

* Matrix:
 SS - Soil AIR - Air F - Filter
 GW - Groundwater B - Bioassay
 WW - WasteWater
 DW - Drinking Water
 OT - Other

Remarks:MS/MSD Parent Sample: TP-39 FILL, TP-39 NATIVE
 LEVEL III QA/QC; include case narrative

Samples returned via:
☐ UPS ☐ FedEx ☐ Courier

Tracking #

Relinquished by: (Signature)

Date:

11/11/22 1100

Time:

Received by: (Signature)

J. Egan - PMSUC

Trip Blank Received: ☒ NoHCL/ MeOH
TBR

Relinquished by: (Signature)

Date:

11.11.22 1700

Time:

Received by: (Signature)

J. Egan - PMSUC

Temp: 6.6°C Bottles Received: 97

4.6 to 4.6

Relinquished by: (Signature)

Date:

11/11/22 1700

Time:

Received for lab by: (Signature)

J. Egan - PMSUC

Date: 11/11/22

Time: 1700

Hold:

Condition

NCF / OK

Chain of Custody

Page 5 of 7



MT JULIET, TN

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SDG #

1557296

Table #

Acctnum: TERRDUT

Template: T219262

Prelogin: P961704

PM: 824 - Chris Ward

PB:

Shipped Via: FedEX Ground

Remarks Sample # (lab only)

Terracon - Salt Lake City, UT

949 South High Tech Drive
Midvale, UT 84047

Accounts Payable
6949 South High Tech Drive
Midvale, UT 84047

Email To: nancy.saunders@terracon.com

Report to:
Nancy Saunders

Project Description:

City/State
Collected:

Please Circle:
PT MT CT ET

Client Project #
61227342 TASK 4.1

Lab Project #
TERRDUT-61227342

Site/Facility ID #

P.O. #

Rush? (Lab MUST Be Notified)
Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day

Quote #

Date Results Needed

No.
of
Cnts

Collected by (print):
Ter Maliszewski / N Saunders

Collected by (signature):
N Saunders

Backed on Ice N ☐ Y ☒

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

MRCRA8 4ozClr-NoPres

SV8082 4ozClr-NoPres

SV8270,SV8270PAHSIM, 4ozClr-NoPres

SV8290 4ozClr-NoPres

V8260AP9,TS 2ozClr-NoPres

TP-42 FILL

TP-42 FILL

TP-42 NATIVE

TP-138 FILL

TP-138 FILL

TP-140 FILL

TP-140 FILL

ND-4

ND-5

ND-105 104

COMP

SS

0-3.5'

11/10/2022

10:15

3

X

X

X

X

GRAB

SS

2'

10:15

1

X

GRAB

SS

3.5-4' 3.75'

10:20

4

X

X

X

X

COMP

SS

0-4.5'

12:00

1

X

GRAB

SS

2'

20:01

1

COMP

SS

0-2.5'

20:30

3

X

X

X

GRAB

SS

1-5'

20:30

1

X

GRAB

SS

0-0.5'

10:20

3

X

X

X

GRAB

SS

0-0.5'

10:00

3

X

X

X

GRAB

SS

0-0.5'

10:25

3

X

X

X

Remarks:MS/MSD Parent Sample:

Put all Native Samples on HOLD

pH Temp

Flow Other

Matrix:
S - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - Wastewater
DW - Drinking Water
OT - Other

Samples returned via:

UPS FedEx Courier

Tracking #

Received by: (Signature)

Received by: (Signature)

Received for lab by: (Signature)

Trip Blank Received: Yes/No

Temp: 4.0°C

Bottles Received: 97

Date: 11/11/22 Time: 0800

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

Relinquished by: (Signature)

Relinquished by: (Signature)

Relinquished by: (Signature)

Date:

Date:

Date:

Time:

Time:

Time:



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/hubs/pas-standard-
terms.pdf

SDG # 1557296

Table #

Acctnum: TERRDUT

Template: T219262

Prelogin: P961704

PM: 824 - Chris Ward

PB:

Shipped Via: FedEX Ground

Remarks Sample # (lab only)

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:

December 7, 2022

Report Information:

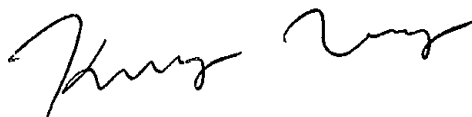
Pace Project #: 10633842
Sample Receipt Date: 11/15/2022
Client Project #: L1557296 WG1959187
Client Sub PO #: L1557296
State Cert #: N/A

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 Kongmeng Vang, your Pace Project Manager.

This report has been reviewed by:



December 07, 2022

Kongmeng Vang, Project Manager
(612) 607-6382
(612) 607-6333 (fax)
kongmeng.vang@pacelabs.com



Report of Laboratory Analysis

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The results relate only to the samples included in this report.



DISCUSSION

This report presents the results from the analysis performed on one sample submitted by a representative of Pace Analytical National. The sample was 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.

The recoveries of the isotopically-labeled PCDD/PCDF internal standards in the sample extract ranged from 33-95%. Except for one low value, which was 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. Concentrations below the calibration range were flagged "J" and should be regarded as estimates.

A laboratory method blank was prepared and analyzed with the sample batch as part of our routine quality control procedures. The results show the blank to contain trace levels of selected congeners. These levels were below the calibration range of the method. The concentrations reported for the affected congeners in the field sample were higher than the corresponding blank levels by one or more orders of magnitude.

A laboratory spike sample was also prepared with the sample batch using clean reference matrix that had been fortified with native standard materials. The results show that the spiked native compounds were recovered at 96-116%. These results were within the target range for the method. Matrix spikes were prepared with the sample batch using sample material from a separate project; results from these analyses will be provided upon request.

The responses obtained for three labeled congeners and the native OCDF in calibration standard analysis U221119A_16 were outside the target range. 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 this runshift. The affected values were flagged "Y" on the results tables.

REPORT OF LABORATORY ANALYSIS

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Minnesota Laboratory Certifications

Authority	Certificate #	Authority	Certificate #
A2LA	2926.01	Missouri	10100
Alabama	40770	Montana	CERT0092
Alaska-DW	MN00064	Nebraska	NE-OS-18-06
Alaska-UST	17-009	Nevada	MN00064
Arizona	AZ0014	New Hampshire	2081
Arkansas - WW	88-0680	New Jersey	MN002
Arkansas-DW	MN00064	New York	11647
California	2929	North Carolina-	27700
Colorado	MN00064	North Carolina-	530
Connecticut	PH-0256	North Dakota	R-036
Florida	E87605	Ohio-DW	41244
Georgia	959	Ohio-VAP (170	CL101
Hawaii	MN00064	Ohio-VAP (180	CL110
Idaho	MN00064	Oklahoma	9507
Illinois	200011	Oregon-Primary	MN300001
Indiana	C-MN-01	Oregon-Second	MN200001
Iowa	368	Pennsylvania	68-00563
Kansas	E-10167	Puerto Rico	MN00064
Kentucky-DW	90062	South Carolina	74003
Kentucky-WW	90062	Tennessee	TN02818
Louisiana-DEQ	AI-84596	Texas	T104704192
Louisiana-DW	MN00064	Utah	MN00064
Maine	MN00064	Vermont	VT-027053137
Maryland	322	Virginia	460163
Michigan	9909	Washington	C486
Minnesota	027-053-137	West Virginia-D	382
Minnesota-Ag	via MN 027-053	West Virginia-D	9952C
Minnesota-Petr	1240	Wisconsin	999407970
Mississippi	MN00064	Wyoming-UST	via A2LA 2926.

REPORT OF LABORATORY ANALYSIS

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Appendix A

Sample Management

REPORT OF LABORATORY ANALYSIS

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CHAIN-OF-CUSTODY / Analytical Report

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant information must be recorded.

WO#: 10633842



10633842

1

Section A		Section B		Section C	
Required Client Information:		Required Project Information:		Invoice Information:	
Company: Pace Analytical		Report To: Pace Analytical Subout Team		Attention: Nancy Saunders	
Address: 12065 Lebanon Rd.		Copy To:		Company Name:	
Mt. Juliet, TN 37122				Address:	
Email: MTJLSuboutTeam@pacelabs.com		Purchase Order #: L1557296		Pace Quote:	
Phone: (615) 773-9756 Fax: (615) 758-5859		Project Name:		Pace Project Manager: Kongmeng Vang	
Requested Due Date: 14-Dec		Project #: 61227342 Task 4.1		Pace Profile #: 38076	
Regulatory Agency					
State / Location					
Salt Lake, UT					

82000FC-12.dft

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	MATRIX Drinking Water Water Waste Water Product Soil/Solid Oil Wipe Air Other Tissue	CODE DW WT WW P SL OL WP AR OT TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analyses Test	Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
						START		END				Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other		Dioxins/Furans 8290																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Pace Analytical Batch: WG1959187	James C Huckaba	14-Nov	10:08	<i>[Signature]</i> Pace	11/15/21	8:50	22	Y	Y	Y
Pace Analytical SDGs: L1557296										
Location: Minneapolis, MN 55414										

SAMPLER NAME AND SIGNATURE		TEMP in C	Received on Ice (Y/N)	Custody Sealed (Y/N)	Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:						
SIGNATURE of SAMPLER:	DATE Signed:					

Report No: 10633842-12.dft
Page 5 of 11

Effective Date: 8/26/2022

Sample Condition Upon Receipt	Client Name: <u>Pace Mt. Juliet</u>	Project #: <u>WO#: 10633842</u>
	Courier: ☒ FedEx ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ Speedee ☐ Commercial	PM: KV Due Date: 12/08/22 CLIENT: ESC_TN
Tracking Number: <u>612665369108</u>		☐ See Exceptions 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 Wrap ☒ Bubble Bags ☐ None ☐ Other	Temp Blank? ☒ Yes ☐ No	Type of Ice: ☒ Wet ☐ Blue ☐ Dry ☐ None
Thermometer: ☐ T1 (0461) ☐ T2 (1336) ☒ T3 (0459) ☐ T4 (0254) ☐ T5 (0178)	☐ T6 (0235) ☐ T7 (0042) ☐ T8 (0775) ☐ 01339252/1710	☒ Melted

Did Samples Originate in West Virginia? ☐ Yes ☒ No	Were All Container Temps Taken? ☐ Yes ☐ No ☒ N/A
Temp should be above freezing to 6 °C Cooler temp Read w/Temp Blank: <u>2.2</u> °C	Average Corrected Temp (no temp blank only): _____ °C
Correction Factor: <u>+1.4</u> Cooler Temp Corrected w/temp blank: <u>2.2</u> °C	☐ See Exceptions ENV-FRM-MIN4-0142 ☐ 1 Container

 USDA Regulated Soil: (☐ N/A, water sample/other: _____) Date/Initials of Person Examining Contents: ADOC 11-15-22

 Did samples originate in a quarantine zone within the United States: AL, AR, AZ CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? ☒ Yes ☐ No

 Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☒ Yes ☐ No

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	COMMENTS
Chain of Custody Present and Filled Out? ☒ Yes ☐ No	1.
Chain of Custody Relinquished? ☒ Yes ☐ No	2.
Sampler Name and/or Signature on COC? ☐ Yes ☐ No ☒ N/A	3.
Samples Arrived within Hold Time? ☒ Yes ☐ No	4. If fecal: ☐ <8 hrs ☐ >8 hr, <24 ☐ No
Short Hold Time Analysis (<72 hr)? ☐ Yes ☒ No	5. ☐ Fecal Coliform ☐ HPC ☐ Total Coliform/E.coli
Rush Turn Around Time Requested? ☐ Yes ☒ No	☐ BOD/cBOD ☐ Hex Chrom ☐ Turbidity ☐ Nitrate
Sufficient Sample Volume? ☒ Yes ☐ No	☐ Nitrite ☐ Orthophos ☐ Other _____
Correct Containers Used? ☒ Yes ☐ No ☐ N/A	6.
-Pace Containers Used? ☒ Yes ☐ No	7.
Containers Intact? ☒ Yes ☐ No	8.
Field Filtered Volume Received for Dissolved Tests? ☐ Yes ☐ No ☒ N/A	9.
Is sufficient information available to reconcile the samples to the COC? ☒ Yes ☐ No	10. Is sediment visible in the dissolved container? ☐ Yes ☐ No
Matrix: ☐ Water ☒ Soil ☐ Oil ☐ Other	11. If no, write ID/Date/Time of container below: ☐ See Exceptions ENV-FRM-MIN4-0142
All containers needing acid/base preservation have been checked? ☐ Yes ☐ No ☒ N/A	12. Sample #
All containers needing preservation are found to be in compliance with EPA recommendation? ☐ Yes ☐ No ☒ N/A	☐ NaOH ☐ HNO3
(HNO3, H2SO4, <2pH, NaOH >9 Sulfide, NaOH >10 Cyanide)	☐ H2SO4 ☐ Zinc Acetate
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxins/PFAS	Positive for Residual Chlorine? ☐ Yes ☐ No ☐ See Exceptions ENV-FRM-MIN4-0142
(*If adding preservative to a container, it must be added to associated field and equipment blanks--verify with PM first.)	pH Paper Lot #
Headspace in Methyl Mercury Container? ☐ Yes ☐ No ☒ N/A	Residual Chlorine 0-6 Roll 0-6 Strip 0-14 Strip
Extra labels present on soil VOA or WIDRO containers? ☐ Yes ☐ No ☒ N/A	13.
Headspace in VOA Vials (greater than 6mm)? ☐ Yes ☐ No ☒ N/A	14. ☐ See Exceptions ENV-FRM-MIN4-0142
3 Trip Blanks Present? ☐ Yes ☐ No ☒ N/A	15.
Trip Blank Custody Seals Present? ☐ Yes ☐ No ☒ N/A	Pace Trip Blank Lot # (if purchased): _____

CLIENT NOTIFICATION/RESOLUTION

Person Contacted: _____

Comments/Resolution: _____

Project Manager Review: _____

Field Data Required? ☐ Yes ☐ No

Date/Time: _____

Date: 11/15/22

NOTE: Whenever 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 hold, incorrect preservative, out of temp, incorrect containers).

Labeled By: ADOCLine: 3



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Fax: 612.607.6444
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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
- 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
- * = See Discussion

REPORT OF LABORATORY ANALYSIS

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Appendix B

Sample Analysis Summary

REPORT OF LABORATORY ANALYSIS

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Method 8290 Sample Analysis Results

Client - Pace Analytical National

Client's Sample ID	TP-41 FILL		
Lab Sample ID	10633842001		
Filename	U221119A_05		
Injected By	JRH		
Total Amount Extracted	11.3 g	Matrix	Solid
% Moisture	21.9	Dilution	NA
Dry Weight Extracted	8.82 g	Collected	11/10/2022 10:50
ICAL ID	U221005	Received	11/15/2022 08:50
CCal Filename(s)	U221118A_16 & U221119A_16	Extracted	11/16/2022 14:12
Method Blank ID	BLANK-102506	Analyzed	11/19/2022 02:36

Native Isomers	Conc ng/Kg	EMPC ng/Kg	EDL ng/Kg	Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF	ND	----	0.62	2,3,7,8-TCDF-13C	2.00	93
Total TCDF	13	----	0.62	2,3,7,8-TCDD-13C	2.00	76
				1,2,3,7,8-PeCDF-13C	2.00	88
2,3,7,8-TCDD	ND	----	0.65	2,3,4,7,8-PeCDF-13C	2.00	88
Total TCDD	ND	----	0.65	1,2,3,7,8-PeCDD-13C	2.00	83
				1,2,3,4,7,8-HxCDF-13C	2.00	95
1,2,3,7,8-PeCDF	ND	----	0.66	1,2,3,6,7,8-HxCDF-13C	2.00	90
2,3,4,7,8-PeCDF	----	1.4	0.71 J	2,3,4,6,7,8-HxCDF-13C	2.00	85
Total PeCDF	20	----	0.66	1,2,3,7,8,9-HxCDF-13C	2.00	80
				1,2,3,4,7,8-HxCDD-13C	2.00	79
1,2,3,7,8-PeCDD	ND	----	0.64	1,2,3,6,7,8-HxCDD-13C	2.00	85
Total PeCDD	ND	----	0.64	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	1.8	----	0.61 J	1,2,3,4,6,7,8-HpCDD-13C	2.00	59 Y
1,2,3,6,7,8-HxCDF	ND	----	0.81	OCDD-13C	4.00	33 RY
2,3,4,6,7,8-HxCDF	1.5	----	0.70 J			
1,2,3,7,8,9-HxCDF	ND	----	0.34	1,2,3,4-TCDD-13C	2.00	NA
Total HxCDF	18	----	0.34	1,2,3,7,8,9-HxCDD-13C	2.00	NA
1,2,3,4,7,8-HxCDD	ND	----	0.75	2,3,7,8-TCDD-37Cl4	0.20	78
1,2,3,6,7,8-HxCDD	----	1.4	0.61 J			
1,2,3,7,8,9-HxCDD	----	1.1	0.86 J			
Total HxCDD	3.7	----	0.61 J			
1,2,3,4,6,7,8-HpCDF	13	----	0.82	Total 2,3,7,8-TCDD		
1,2,3,4,7,8,9-HpCDF	ND	----	1.2	Equivalence: 1.7 ng/Kg		
Total HpCDF	13	----	0.82	(Lower-bound - Using 2005 WHO Factors)		
1,2,3,4,6,7,8-HpCDD	41	----	1.5			
Total HpCDD	85	----	1.5			
OCDF	22	----	1.2 Y			
OCDD	600	----	1.8			

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

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Method 8290 Blank Analysis Results

Lab Sample Name	DFBLKWA	Matrix	Solid
Lab Sample ID	BLANK-102506	Dilution	NA
Filename	L221118A_10	Extracted	11/16/2022 14:12
Total Amount Extracted	10.7 g	Analyzed	11/18/2022 14:47
ICAL ID	L220811	Injected By	JRH
CCal Filename(s)	L221117B_17 & L221118A_15		

Native Isomers	Conc ng/Kg	EMPC ng/Kg	EDL ng/Kg	Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF	ND	----	0.15	2,3,7,8-TCDF-13C	2.00	65
Total TCDF	0.36	----	0.15 J	2,3,7,8-TCDD-13C	2.00	62
				1,2,3,7,8-PeCDF-13C	2.00	74
2,3,7,8-TCDD	ND	----	0.12	2,3,4,7,8-PeCDF-13C	2.00	75
Total TCDD	ND	----	0.12	1,2,3,7,8-PeCDD-13C	2.00	77
				1,2,3,4,7,8-HxCDF-13C	2.00	89
1,2,3,7,8-PeCDF	ND	----	0.069	1,2,3,6,7,8-HxCDF-13C	2.00	92
2,3,4,7,8-PeCDF	ND	----	0.049	2,3,4,6,7,8-HxCDF-13C	2.00	81
Total PeCDF	0.068	----	0.049 J	1,2,3,7,8,9-HxCDF-13C	2.00	59
				1,2,3,4,7,8-HxCDD-13C	2.00	80
1,2,3,7,8-PeCDD	ND	----	0.071	1,2,3,6,7,8-HxCDD-13C	2.00	94
Total PeCDD	ND	----	0.071	1,2,3,4,6,7,8-HpCDF-13C	2.00	81
				1,2,3,4,7,8,9-HpCDF-13C	2.00	62
1,2,3,4,7,8-HxCDF	ND	----	0.041	1,2,3,4,6,7,8-HpCDD-13C	2.00	82
1,2,3,6,7,8-HxCDF	ND	----	0.044	OCDD-13C	4.00	55
2,3,4,6,7,8-HxCDF	ND	----	0.053			
1,2,3,7,8,9-HxCDF	ND	----	0.096	1,2,3,4-TCDD-13C	2.00	NA
Total HxCDF	ND	----	0.041	1,2,3,7,8,9-HxCDD-13C	2.00	NA
1,2,3,4,7,8-HxCDD	0.15	----	0.087 J	2,3,7,8-TCDD-37Cl4	0.20	54
1,2,3,6,7,8-HxCDD	ND	----	0.095			
1,2,3,7,8,9-HxCDD	ND	----	0.072			
Total HxCDD	0.15	----	0.072 J			
1,2,3,4,6,7,8-HpCDF	ND	----	0.041	Total 2,3,7,8-TCDD		
1,2,3,4,7,8,9-HpCDF	ND	----	0.072	Equivalence: 0.015 ng/Kg		
Total HpCDF	ND	----	0.041	(Lower-bound - Using 2005 WHO Factors)		
1,2,3,4,6,7,8-HpCDD	ND	----	0.088			
Total HpCDD	ND	----	0.088			
OCDF	ND	----	0.13			
OCDD	ND	----	0.17			

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

REPORT OF LABORATORY ANALYSIS

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Method 8290 Laboratory Control Spike Results

Lab Sample ID	LCS-102507	Matrix	Solid
Filename	L221118A_14	Dilution	NA
Total Amount Extracted	10.4 g	Extracted	11/16/2022 14:12
ICAL ID	L220811	Analyzed	11/18/2022 17:33
CCal Filename(s)	L221117B_17 & L221118A_15	Injected By	JRH
Method Blank ID	BLANK-102506		

Native Isomers	Qs (ng)	Qm (ng)	% Rec.	Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF	0.20	0.23	114	2,3,7,8-TCDF-13C	2.0	65
Total TCDF				2,3,7,8-TCDD-13C	2.0	64
				1,2,3,7,8-PeCDF-13C	2.0	77
2,3,7,8-TCDD	0.20	0.22	110	2,3,4,7,8-PeCDF-13C	2.0	77
Total TCDD				1,2,3,7,8-PeCDD-13C	2.0	81
				1,2,3,4,7,8-HxCDF-13C	2.0	82
1,2,3,7,8-PeCDF	1.0	1.0	101	1,2,3,6,7,8-HxCDF-13C	2.0	82
2,3,4,7,8-PeCDF	1.0	1.0	102	2,3,4,6,7,8-HxCDF-13C	2.0	76
Total PeCDF				1,2,3,7,8,9-HxCDF-13C	2.0	68
				1,2,3,4,7,8-HxCDD-13C	2.0	71
1,2,3,7,8-PeCDD	1.0	0.99	99	1,2,3,6,7,8-HxCDD-13C	2.0	89
Total PeCDD				1,2,3,4,6,7,8-HpCDF-13C	2.0	74
				1,2,3,4,7,8,9-HpCDF-13C	2.0	61
1,2,3,4,7,8-HxCDF	1.0	1.1	106	1,2,3,4,6,7,8-HpCDD-13C	2.0	78
1,2,3,6,7,8-HxCDF	1.0	1.1	112	OCDD-13C	4.0	51
2,3,4,6,7,8-HxCDF	1.0	1.1	108			
1,2,3,7,8,9-HxCDF	1.0	1.1	108	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	112	2,3,7,8-TCDD-37Cl4	0.20	58
1,2,3,6,7,8-HxCDD	1.0	1.0	105			
1,2,3,7,8,9-HxCDD	1.0	1.0	104			
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	1.0	104			
Total HpCDF						
1,2,3,4,6,7,8-HpCDD	1.0	0.96	96			
Total HpCDD						
OCDF	2.0	2.2	112			
OCDD	2.0	2.3	116			

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

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LELAP Certificate Number: 01955

A2LA Accredited (DoD ELAP-QSM 5.4) Certificate Number: 6429.01

ANALYTICAL RESULTS

PERFORMED BY

Pace Analytical Gulf Coast

7979 Innovation Park Dr.

Baton Rouge, LA 70820

(225) 769-4900

Report Date 01/05/2023

Report # 222110910



***Project* Redwood Road Dump**

Samples Collected 11/7/22

Deliver To

SuboutTeam
Pace Analytical Services
12065 Lebanon Road
Mount Juliet, TN 37122
(615)773-9756

Additional Recipients

Chris Ward, Pace Analytical Services, Inc.
Jimmy Huckaba, Pace Analytical Services, Inc.
Angela Ford, Pace Analytical Services, Inc.



Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with Pace Gulf Coast's Standard Operating Procedures.

Common Abbreviations that may be Utilized in this Report

ND	Indicates the result was Not Detected at the specified reporting limit
NO	Indicates the sample did not ignite when preliminary test performed for EPA Method 1030
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
DL	Detection Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
RE	Re-analysis
CF	HPLC or GC Confirmation
00:01	Reported as a time equivalent to 12:00 AM

Reporting Flags that may be Utilized in this Report

J or I	Indicates the result is between the MDL and LOQ
J	DOD flag on analyte in the parent sample for MS/MSD outside acceptance criteria
U	Indicates the compound was analyzed for but not detected
B or V	Indicates the analyte was detected in the associated Method Blank
Q	Indicates a non-compliant QC Result (See Q Flag Application Report)
*	Indicates a non-compliant or not applicable QC recovery or RPD – see narrative
E	Organics - The result is estimated because it exceeded the instrument calibration range
E	Metals - % difference for the serial dilution is > 10%
L	Reporting Limits adjusted to meet risk-based limit.
P	RPD between primary and confirmation result is greater than 40
DL	Diluted analysis – when appended to Client Sample ID

Sample receipt at Pace Gulf Coast is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of Pace Gulf Coast. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with The NELAC Institute (TNI) Standard 2009 and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.



Authorized Signature
Pace Gulf Coast Report 222110910

Certifications

Certification	Certification Number
A2LA Accredited (DoD ELAP-QSM 5.4)	6429.01
Alabama	01955
Arkansas	88-0655
Colorado	01955
Delaware	01955
Florida	E87854
Georgia	01955
Hawaii	01955
Idaho	01955
Illinois	200048
Indiana	01955
Kansas	E-10354
Kentucky	95
Louisiana	01955
Maryland	01955
Massachusetts	01955
Michigan	01955
Mississippi	01955
Missouri	01955
Montana	N/A
Nebraska	01955
New Mexico	01955
North Carolina	618
North Dakota	R-195
Oklahoma	9403
South Carolina	73006001
South Dakota	01955
Tennessee	01955
Texas	T104704178
Vermont	01955
Virginia	460215
Washington	C929
USDA Soil Permit	P330-16-00234

Case Narrative

Client: Pace Analytical Services **Report:** 222110910

Pace Analytical Gulf Coast received and analyzed the sample(s) listed on the Report Sample Summary page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

COC ANOMALIES

COC Anomalies\Changes - MS/MSD analyses were requested on sample TOSA-MW02. Insufficient volume was provided to the lab for these analyses. (Ruth Welsh(Do Not 11/10/2022 13:51)

SEMI-VOLATILES MASS SPECTROMETRY

In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA and d-NMeFOSA is outside the control limits for sample 2424071 (MB for HBN 754543 [LCMS/7052]) .

In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 2424072 (LCS for HBN 754543 [LCMS/7052]) .

In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA, d-NMeFOSA, d7-NMeFOSE, d9-NEtFOSE, M2PFHxDA and M2PFTA is outside the control limits for sample 22211091001 (TOSA-MW01) .

In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA, d-NMeFOSA, d7-NMeFOSE, d9-NEtFOSE, M5PFPeA and MPFBA is outside the control limits for sample 22211091002 (TOSA-MW02) .

In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA, d-NMeFOSA, d7-NMeFOSE, d9-NEtFOSE, M2PFHxDA and M2PFTA is outside the control limits for sample 22211091003 (TOSA-MW03) .

In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA, d-NMeFOSA, d7-NMeFOSE, d9-NEtFOSE and MPFBA is outside the control limits for sample 22211091004 (TOSA-MW04) .

In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA, d-NMeFOSA, d7-NMeFOSE and d9-NEtFOSE is outside the control limits for sample 22211091005 (TOSA-MW05) .

In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE, M2PFHxDA, M2PFTA and MPFBA is outside the control limits for sample 22211091006 (TOSA-MW40) .

In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA and d-NMeFOSA is outside the control limits for sample 22211091007 (TOSA-MWFB) .

In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA and d-NMeFOSA is outside the control limits for sample 22211091008 (TOSA-MWEB) .

In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA and d-NMeFOSA is outside the control limits for sample 22211091009 (TOSA-TRIP BLANK) .

In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 2424072 (LCS for HBN 754543 [LCMS/7052]) . The recovery of the associated compounds is within control limits.

In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 2424072 (LCS for HBN 754543 [LCMS/7052]) . The recovery of the associated compounds is within control limits.

In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 2424072 (LCS for HBN 754543 [LCMS/7052]) . The recovery of the associated compounds is within control limits.

In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 2424073 (LCSD for HBN 754543 [LCMS/7052]). The recovery of the associated compounds is within control limits.

In the EPA 537 Mod Isotope Dilution analysis for prep batch 754543, the LCS and/or LCSD recoveries are outside control limits for NEtFOSA.

In the EPA 537 Mod Isotope Dilution analysis for prep batch 754543, the LCS/LCSD RPD is above the control limit for NEtFOSA.



Sample Summary

Lab ID	Client ID	Matrix	Collect Date	Receive Date
22211091001	TOSA-MW01	Water	11/07/22 15:50	11/09/22 09:12
22211091002	TOSA-MW02	Water	11/07/22 12:10	11/09/22 09:12
22211091003	TOSA-MW03	Water	11/07/22 17:05	11/09/22 09:12
22211091004	TOSA-MW04	Water	11/07/22 10:00	11/09/22 09:12
22211091005	TOSA-MW05	Water	11/07/22 14:25	11/09/22 09:12
22211091006	TOSA-MW40	Water	11/07/22 10:15	11/09/22 09:12
22211091007	TOSA-MWFB	Water	11/07/22 12:10	11/09/22 09:12
22211091008	TOSA-MWEB	Water	11/07/22 08:55	11/09/22 09:12
22211091009	TOSA-TRIP BLANK	Water	11/07/22 00:01	11/09/22 09:12

Detect Summary

Results and Detection Limits are adjusted for dilution and moisture when applicable

EPA 537 Mod Isotope Dil.						
Lab ID	Client ID	Parameter	Units	Result	Dil.	%Moist
22211091001	TOSA-MW01	Perfluorobutanesulfonic acid (PFBS)	ng/L	3.10J	1	NA
22211091001	TOSA-MW01	Perfluorobutanoic acid (PFBA)	ng/L	2.94J	1	NA
22211091001	TOSA-MW01	Perfluorohexanesulfonic acid (PFHxS)	ng/L	2.30J	1	NA
22211091001	TOSA-MW01	Perfluorooctanesulfonic acid (PFOS)	ng/L	1.90J	1	NA
22211091001	TOSA-MW01	Perfluorooctanoic acid (PFOA)	ng/L	2.27J	1	NA
22211091002	TOSA-MW02	6:2 Fluorotelomer sulfonic acid (6:2FTS)	ng/L	602	1	NA
22211091002	TOSA-MW02	NEtFOSA	ng/L	4.27J	1	NA
22211091002	TOSA-MW02	Perfluorobutanesulfonic acid (PFBS)	ng/L	120	1	NA
22211091002	TOSA-MW02	Perfluorobutanoic acid (PFBA)	ng/L	507	1	NA
22211091002	TOSA-MW02	Perfluoroheptanesulfonic acid (PFHpS)	ng/L	2.03J	1	NA
22211091002	TOSA-MW02	Perfluoroheptanoic acid (PFHpA)	ng/L	354	1	NA
22211091002	TOSA-MW02	Perfluorohexanesulfonic acid (PFHxS)	ng/L	161	1	NA
22211091002	TOSA-MW02	Perfluorohexanoic acid (PFHxA)	ng/L	1600	1	NA
22211091002	TOSA-MW02	Perfluorononanoic acid (PFNA)	ng/L	2.91J	1	NA
22211091002	TOSA-MW02	Perfluorooctanesulfonic acid (PFOS)	ng/L	27.6	1	NA
22211091002	TOSA-MW02	Perfluorooctanoic acid (PFOA)	ng/L	216	1	NA
22211091002	TOSA-MW02	Perfluoropentanesulfonic acid (PFPeS)	ng/L	64.5	1	NA
22211091002	TOSA-MW02	Perfluoropentanoic acid (PFPeA)	ng/L	2850	5	NA
22211091003	TOSA-MW03	Perfluorobutanesulfonic acid (PFBS)	ng/L	5.63	1	NA
22211091003	TOSA-MW03	Perfluorobutanoic acid (PFBA)	ng/L	14.6	1	NA
22211091003	TOSA-MW03	Perfluoroheptanoic acid (PFHpA)	ng/L	8.13	1	NA
22211091003	TOSA-MW03	Perfluorohexanesulfonic acid (PFHxS)	ng/L	6.84	1	NA
22211091003	TOSA-MW03	Perfluorohexanoic acid (PFHxA)	ng/L	23.3	1	NA
22211091003	TOSA-MW03	Perfluorooctanesulfonic acid (PFOS)	ng/L	4.32	1	NA
22211091003	TOSA-MW03	Perfluorooctanoic acid (PFOA)	ng/L	14.3	1	NA
22211091003	TOSA-MW03	Perfluoropentanoic acid (PFPeA)	ng/L	33.3	1	NA
22211091004	TOSA-MW04	6:2 Fluorotelomer sulfonic acid (6:2FTS)	ng/L	39.5	1	NA
22211091004	TOSA-MW04	Perfluorobutanesulfonic acid (PFBS)	ng/L	99.8	1	NA
22211091004	TOSA-MW04	Perfluorobutanoic acid (PFBA)	ng/L	424	1	NA
22211091004	TOSA-MW04	Perfluoroheptanoic acid (PFHpA)	ng/L	119	1	NA
22211091004	TOSA-MW04	Perfluorohexanesulfonic acid (PFHxS)	ng/L	68.5	1	NA
22211091004	TOSA-MW04	Perfluorohexanoic acid (PFHxA)	ng/L	857	1	NA
22211091004	TOSA-MW04	Perfluorooctanesulfonic acid (PFOS)	ng/L	3.93	1	NA
22211091004	TOSA-MW04	Perfluorooctanoic acid (PFOA)	ng/L	52.2	1	NA
22211091004	TOSA-MW04	Perfluoropentanesulfonic acid (PFPeS)	ng/L	36.0	1	NA
22211091004	TOSA-MW04	Perfluoropentanoic acid (PFPeA)	ng/L	1740	5	NA
22211091005	TOSA-MW05	6:2 Fluorotelomer sulfonic acid (6:2FTS)	ng/L	2.28J	1	NA
22211091005	TOSA-MW05	Perfluorobutanesulfonic acid (PFBS)	ng/L	17.0	1	NA
22211091005	TOSA-MW05	Perfluorobutanoic acid (PFBA)	ng/L	36.1	1	NA

Detect Summary (Continued)

Results and Detection Limits are adjusted for dilution and moisture when applicable

EPA 537 Mod Isotope Dil.						
Lab ID	Client ID	Parameter	Units	Result	Dil.	%Moist
22211091005	TOSA-MW05	Perfluoroheptanoic acid (PFHpA)	ng/L	13.8	1	NA
22211091005	TOSA-MW05	Perfluorohexanesulfonic acid (PFHxS)	ng/L	29.2	1	NA
22211091005	TOSA-MW05	Perfluorohexanoic acid (PFHxA)	ng/L	21.3	1	NA
22211091005	TOSA-MW05	Perfluorononanoic acid (PFNA)	ng/L	3.46J	1	NA
22211091005	TOSA-MW05	Perfluorooctane Sulfonamide (FOSA)	ng/L	0.857J	1	NA
22211091005	TOSA-MW05	Perfluorooctanesulfonic acid (PFOS)	ng/L	37.6	1	NA
22211091005	TOSA-MW05	Perfluorooctanoic acid (PFOA)	ng/L	47.3	1	NA
22211091005	TOSA-MW05	Perfluoropentanesulfonic acid (PFPeS)	ng/L	2.12J	1	NA
22211091005	TOSA-MW05	Perfluoropentanoic acid (PFPeA)	ng/L	22.2	1	NA
22211091006	TOSA-MW40	6:2 Fluorotelomer sulfonic acid (6:2FTS)	ng/L	31.2	1	NA
22211091006	TOSA-MW40	Perfluorobutanesulfonic acid (PFBS)	ng/L	171	1	NA
22211091006	TOSA-MW40	Perfluorobutanoic acid (PFBA)	ng/L	778	1	NA
22211091006	TOSA-MW40	Perfluoroheptanoic acid (PFHpA)	ng/L	215	1	NA
22211091006	TOSA-MW40	Perfluorohexanesulfonic acid (PFHxS)	ng/L	146	1	NA
22211091006	TOSA-MW40	Perfluorohexanoic acid (PFHxA)	ng/L	1710	5	NA
22211091006	TOSA-MW40	Perfluorooctanesulfonic acid (PFOS)	ng/L	8.58	1	NA
22211091006	TOSA-MW40	Perfluorooctanoic acid (PFOA)	ng/L	85.9	1	NA
22211091006	TOSA-MW40	Perfluoropentanesulfonic acid (PFPeS)	ng/L	68.1	1	NA
22211091006	TOSA-MW40	Perfluoropentanoic acid (PFPeA)	ng/L	3350	5	NA

Sample Results

TOSA-MW01	Collect Date	11/07/2022 15:50	Lab ID	22211091001
	Receive Date	11/09/2022 09:12	Matrix	Water

EPA 537 Mod Isotope Dilution

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
11/25/22 07:55	754543	EPA 537 Mod Isotope Dilution	1	12/13/22 21:16	756035	SXA	NA

CAS#	Parameter	Result	DL	LOQ	Units
120226-60-0	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	1.93U	1.93	4.55	ng/L
763051-92-9	11CI-PF3OUdS	1.02U	1.02	4.55	ng/L
757124-72-4	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	1.41U	1.41	4.55	ng/L
27619-97-2	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	1.70U	1.70	4.55	ng/L
39108-34-4	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	1.20U	1.20	4.55	ng/L
756426-58-1	9CI-PF3ONS	1.02U	1.02	4.55	ng/L
919005-14-4	ADONA	0.977U	0.977	4.55	ng/L
4151-50-2	NEtFOSA	1.59U	1.59	9.09	ng/L
2991-50-6	NEtFOSAA	1.80U	1.80	9.09	ng/L
1691-99-2	NEtFOSE	1.15U	1.15	9.09	ng/L
31506-32-8	NMeFOSA	1.89U	1.89	9.09	ng/L
2355-31-9	NMeFOSAA	1.02U	1.02	9.09	ng/L
24448-09-7	NMeFOSE	1.48U	1.48	9.09	ng/L
151772-58-6	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.70U	1.70	4.55	ng/L
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	1.76U	1.76	4.55	ng/L
13252-13-6	Perfluoro-2-proxypropanoic acid (HFPO-DA)	7.58U	7.58	22.7	ng/L
377-73-1	Perfluoro-3-methoxypropanoic acid (PFMPA)	1.58U	1.58	4.55	ng/L
863090-89-5	Perfluoro-4-methoxybutanoic acid (PFMBA)	1.70U	1.70	4.55	ng/L
375-73-5	Perfluorobutanesulfonic acid (PFBS)	3.10J	0.705	4.55	ng/L
375-22-4	Perfluorobutanoic acid (PFBA)	2.94J	1.73	4.55	ng/L
335-77-3	Perfluorodecane sulfonic acid (PFDS)	1.39U	1.39	4.55	ng/L
335-76-2	Perfluorodecanoic acid (PFDA)	1.64U	1.64	4.55	ng/L
307-55-1	Perfluorododecanoic acid (PFDoA)	1.48U	1.48	4.55	ng/L
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	1.39U	1.39	4.55	ng/L
375-85-9	Perfluoroheptanoic acid (PFHpA)	1.32U	1.32	4.55	ng/L
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	2.30J	1.41	4.55	ng/L
307-24-4	Perfluorohexanoic acid (PFHxA)	1.07U	1.07	4.55	ng/L
68259-12-1	Perfluorononanesulfonic acid (PFNS)	1.98U	1.98	4.55	ng/L
375-95-1	Perfluorononanoic acid (PFNA)	1.11U	1.11	4.55	ng/L
754-91-6	Perfluorooctane Sulfonamide (FOSA)	0.841U	0.841	4.55	ng/L
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.90J	0.864	4.55	ng/L
335-67-1	Perfluorooctanoic acid (PFOA)	2.27J	0.955	4.55	ng/L
2706-91-4	Perfluoropentanesulfonic acid (PFPeS)	1.16U	1.16	4.55	ng/L
2706-90-3	Perfluoropentanoic acid (PFPeA)	1.00U	1.00	4.55	ng/L
376-06-7	Perfluorotetradecanoic acid (PFTA)	1.30U	1.30	4.55	ng/L
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	1.40U	1.40	4.55	ng/L
2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.41U	1.41	4.55	ng/L
79780-39-5	PFDoS	1.49U	1.49	4.55	ng/L
67905-19-5	PFHxDA	1.70U	1.70	4.55	ng/L

Sample Results

TOSA-MW01	Collect Date	11/07/2022 15:50	Lab ID	22211091001
	Receive Date	11/09/2022 09:12	Matrix	Water

EPA 537 Mod Isotope Dilution (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
11/25/22 07:55	754543	EPA 537 Mod Isotope Dilution	1	12/13/22 21:16	756035	SXA	NA

CAS#	Parameter	Result	DL	LOQ	Units	
16517-11-6	PFODA	1.17U	1.17	4.55	ng/L	
CAS#	Extracted Internal Standard(EIS)	Cal Area	Samp Area	Units	%Recovery	%Rec Limits
4151-50-2-EIS	d-NEtFOSA	114	24.6	ng/L	22*	50 - 150
31506-32-8-EIS	d-NMeFOSA	114	48.2	ng/L	42*	50 - 150
2355-31-9-EIS	d3-NMeFOSAA	114	99.1	ng/L	87	50 - 150
2991-50-6-EIS	d5-NEtFOSAA	114	104	ng/L	92	50 - 150
24448-09-7-EIS	d7-NMeFOSE	114	21.4	ng/L	19*	50 - 150
1691-99-2-EIS	d9-NEtFOSE	114	13.4	ng/L	12*	50 - 150
757124-72-4-EIS	M2 4:2 FTS	114	78.6	ng/L	69	50 - 150
27619-97-2-EIS	M2 6:2 FTS	114	111	ng/L	98	50 - 150
39108-34-4-EIS	M2 8:2 FTS	114	108	ng/L	95	50 - 150
67905-19-5-EIS	M2PFHxDA	114	11.4	ng/L	10*	50 - 150
376-06-7-EIS	M2PFTA	114	48.8	ng/L	43*	50 - 150
13252-13-6-EIS	M3HFPODA	114	99.1	ng/L	87	50 - 150
375-73-5-EIS	M3PFBS	114	97.7	ng/L	86	50 - 150
355-46-4-EIS	M3PFHxS	114	99.3	ng/L	87	50 - 150
375-85-9-EIS	M4PFHpA	114	98.2	ng/L	86	50 - 150
307-24-4-EIS	M5PFHxA	114	100	ng/L	88	50 - 150
2706-90-3-EIS	M5PFPeA	114	97.8	ng/L	86	50 - 150
335-76-2-EIS	M6PFDA	114	98.5	ng/L	87	50 - 150
2058-94-8-EIS	M7PFUnA	114	105	ng/L	92	50 - 150
754-91-6-EIS	M8FOSA	114	98.8	ng/L	87	50 - 150
335-67-1-EIS	M8PFOA	114	103	ng/L	91	50 - 150
1763-23-1-EIS	M8PFOS	114	98	ng/L	86	50 - 150
375-95-1-EIS	M9PFNA	114	99.5	ng/L	88	50 - 150
375-22-4-EIS	MPFBA	114	94	ng/L	83	50 - 150
307-55-1-EIS	MPFDoA	114	96.9	ng/L	85	50 - 150

Sample Results

TOSA-MW02	Collect Date	11/07/2022 12:10	Lab ID	22211091002
	Receive Date	11/09/2022 09:12	Matrix	Water

EPA 537 Mod Isotope Dilution

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
11/25/22 07:55	754543	EPA 537 Mod Isotope Dilution	1	12/13/22 21:31	756035	SXA	NA

CAS#	Parameter	Result	DL	LOQ	Units
120226-60-0	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	1.74U	1.74	4.10	ng/L
763051-92-9	11Cl-PF3OUdS	0.922U	0.922	4.10	ng/L
757124-72-4	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	1.27U	1.27	4.10	ng/L
27619-97-2	6:2 Fluorotelomer sulfonic acid (6:2FTS)	602	1.54	4.10	ng/L
39108-34-4	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	1.09U	1.09	4.10	ng/L
756426-58-1	9Cl-PF3ONS	0.922U	0.922	4.10	ng/L
919005-14-4	ADONA	0.881U	0.881	4.10	ng/L
4151-50-2	NEtFOSA	4.27J	1.43	8.20	ng/L
2991-50-6	NEtFOSAA	1.62U	1.62	8.20	ng/L
1691-99-2	NEtFOSE	1.03U	1.03	8.20	ng/L
31506-32-8	NMeFOSA	1.70U	1.70	8.20	ng/L
2355-31-9	NMeFOSAA	0.922U	0.922	8.20	ng/L
24448-09-7	NMeFOSE	1.33U	1.33	8.20	ng/L
151772-58-6	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.54U	1.54	4.10	ng/L
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	1.59U	1.59	4.10	ng/L
13252-13-6	Perfluoro-2-proxypropanoic acid (HFPO-DA)	6.83U	6.83	20.5	ng/L
377-73-1	Perfluoro-3-methoxypropanoic acid (PFMPA)	1.42U	1.42	4.10	ng/L
863090-89-5	Perfluoro-4-methoxybutanoic acid (PFMBA)	1.54U	1.54	4.10	ng/L
375-73-5	Perfluorobutanesulfonic acid (PFBS)	120	0.635	4.10	ng/L
375-22-4	Perfluorobutanoic acid (PFBA)	507	1.56	4.10	ng/L
335-77-3	Perfluorodecane sulfonic acid (PFDS)	1.25U	1.25	4.10	ng/L
335-76-2	Perfluorodecanoic acid (PFDA)	1.48U	1.48	4.10	ng/L
307-55-1	Perfluorododecanoic acid (PFDoA)	1.33U	1.33	4.10	ng/L
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	2.03J	1.25	4.10	ng/L
375-85-9	Perfluoroheptanoic acid (PFHpA)	354	1.19	4.10	ng/L
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	161	1.27	4.10	ng/L
307-24-4	Perfluorohexanoic acid (PFHxA)	1600	0.963	4.10	ng/L
68259-12-1	Perfluorononanesulfonic acid (PFNS)	1.78U	1.78	4.10	ng/L
375-95-1	Perfluorononanoic acid (PFNA)	2.91J	1.00	4.10	ng/L
754-91-6	Perfluorooctane Sulfonamide (FOSA)	0.758U	0.758	4.10	ng/L
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	27.6	0.779	4.10	ng/L
335-67-1	Perfluorooctanoic acid (PFOA)	216	0.861	4.10	ng/L
2706-91-4	Perfluoropentanesulfonic acid (PFPeS)	64.5	1.05	4.10	ng/L
376-06-7	Perfluorotetradecanoic acid (PFTA)	1.17U	1.17	4.10	ng/L
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	1.26U	1.26	4.10	ng/L
2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.27U	1.27	4.10	ng/L
79780-39-5	PFDoS	1.34U	1.34	4.10	ng/L
67905-19-5	PFHxDA	1.54U	1.54	4.10	ng/L

Sample Results

TOSA-MW02	Collect Date	11/07/2022 12:10	Lab ID	22211091002
	Receive Date	11/09/2022 09:12	Matrix	Water

EPA 537 Mod Isotope Dilution (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
11/25/22 07:55	754543	EPA 537 Mod Isotope Dilution	1	12/13/22 21:31	756035	SXA	NA

CAS#	Parameter	Result	DL	LOQ	Units	
16517-11-6	PFODA	1.06U	1.06	4.10	ng/L	
CAS#	Extracted Internal Standard(EIS)	Cal Area	Samp Area	Units	%Recovery	%Rec Limits
4151-50-2-EIS	d-NEtFOSA	102	1.87	ng/L	2*	50 - 150
31506-32-8-EIS	d-NMeFOSA	102	2.42	ng/L	2*	50 - 150
2355-31-9-EIS	d3-NMeFOSAA	102	77.8	ng/L	76	50 - 150
2991-50-6-EIS	d5-NEtFOSAA	102	80.6	ng/L	79	50 - 150
24448-09-7-EIS	d7-NMeFOSE	102	16.9	ng/L	16*	50 - 150
1691-99-2-EIS	d9-NEtFOSE	102	10.8	ng/L	11*	50 - 150
757124-72-4-EIS	M2 4:2 FTS	102	114	ng/L	111	50 - 150
27619-97-2-EIS	M2 6:2 FTS	102	87.6	ng/L	86	50 - 150
39108-34-4-EIS	M2 8:2 FTS	102	82.8	ng/L	81	50 - 150
67905-19-5-EIS	M2PFHxDA	102	60.1	ng/L	59	50 - 150
376-06-7-EIS	M2PFTA	102	78.7	ng/L	77	50 - 150
13252-13-6-EIS	M3HFPODA	102	63.2	ng/L	62	50 - 150
375-73-5-EIS	M3PFBS	102	68.8	ng/L	67	50 - 150
355-46-4-EIS	M3PFHxS	102	84.8	ng/L	83	50 - 150
375-85-9-EIS	M4PFHpA	102	83.9	ng/L	82	50 - 150
307-24-4-EIS	M5PFHxA	102	70.1	ng/L	68	50 - 150
2706-90-3-EIS	M5PFPeA	102	47.9	ng/L	47*	50 - 150
335-76-2-EIS	M6PFDA	102	84.5	ng/L	82	50 - 150
2058-94-8-EIS	M7PFUnA	102	85.1	ng/L	83	50 - 150
754-91-6-EIS	M8FOSA	102	55.6	ng/L	54	50 - 150
335-67-1-EIS	M8PFOA	102	93.1	ng/L	91	50 - 150
1763-23-1-EIS	M8PFOS	102	81.9	ng/L	80	50 - 150
375-95-1-EIS	M9PFNA	102	85.4	ng/L	83	50 - 150
375-22-4-EIS	MPFBA	102	38.5	ng/L	38*	50 - 150
307-55-1-EIS	MPFDoA	102	80.8	ng/L	79	50 - 150



Report#: 222110910
Project ID: Redwood Road Dump

Report Date: 01/05/2023

Sample Results

TOSA-MW02	Collect Date	11/07/2022 12:10	Lab ID	22211091002
	Receive Date	11/09/2022 09:12	Matrix	Water

EPA 537 Mod Isotope Dilution

*Results and limits are adjusted for dilution.

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
11/25/22 07:55	754543	EPA 537 Mod Isotope Dilution	5	12/23/22 19:20	756845	SXA	NA

CAS#	Parameter	Result	DL	LOQ	Units		
2706-90-3	Perfluoropentanoic acid (PFPeA)	2850	4.51	20.5	ng/L		
CAS#	Extracted Internal Standard(EIS)	Cal Area	Samp Area	Units	%Recovery	%Rec Limits	
2706-90-3-EIS	M5PFPeA	102	66.5	ng/L	65	50 - 150	

Sample Results

TOSA-MW03	Collect Date	11/07/2022 17:05	Lab ID	22211091003
	Receive Date	11/09/2022 09:12	Matrix	Water

EPA 537 Mod Isotope Dilution

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
11/25/22 07:55	754543	EPA 537 Mod Isotope Dilution	1	12/13/22 21:46	756035	SXA	NA

CAS#	Parameter	Result	DL	LOQ	Units
120226-60-0	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	1.61U	1.61	3.79	ng/L
763051-92-9	11CI-PF3OUdS	0.852U	0.852	3.79	ng/L
757124-72-4	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	1.17U	1.17	3.79	ng/L
27619-97-2	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	1.42U	1.42	3.79	ng/L
39108-34-4	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	1.00U	1.00	3.79	ng/L
756426-58-1	9CI-PF3ONS	0.852U	0.852	3.79	ng/L
919005-14-4	ADONA	0.814U	0.814	3.79	ng/L
4151-50-2	NEtFOSA	1.33U	1.33	7.58	ng/L
2991-50-6	NEtFOSAA	1.50U	1.50	7.58	ng/L
1691-99-2	NEtFOSE	0.956U	0.956	7.58	ng/L
31506-32-8	NMeFOSA	1.57U	1.57	7.58	ng/L
2355-31-9	NMeFOSAA	0.852U	0.852	7.58	ng/L
24448-09-7	NMeFOSE	1.23U	1.23	7.58	ng/L
151772-58-6	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.42U	1.42	3.79	ng/L
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	1.47U	1.47	3.79	ng/L
13252-13-6	Perfluoro-2-proxypropanoic acid (HFPO-DA)	6.32U	6.32	18.9	ng/L
377-73-1	Perfluoro-3-methoxypropanoic acid (PFMPA)	1.32U	1.32	3.79	ng/L
863090-89-5	Perfluoro-4-methoxybutanoic acid (PFMBA)	1.42U	1.42	3.79	ng/L
375-73-5	Perfluorobutanesulfonic acid (PFBS)	5.63	0.587	3.79	ng/L
375-22-4	Perfluorobutanoic acid (PFBA)	14.6	1.44	3.79	ng/L
335-77-3	Perfluorodecane sulfonic acid (PFDS)	1.16U	1.16	3.79	ng/L
335-76-2	Perfluorodecanoic acid (PFDA)	1.36U	1.36	3.79	ng/L
307-55-1	Perfluorododecanoic acid (PFDoA)	1.23U	1.23	3.79	ng/L
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	1.16U	1.16	3.79	ng/L
375-85-9	Perfluoroheptanoic acid (PFHpA)	8.13	1.10	3.79	ng/L
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	6.84	1.17	3.79	ng/L
307-24-4	Perfluorohexanoic acid (PFHxA)	23.3	0.890	3.79	ng/L
68259-12-1	Perfluorononanesulfonic acid (PFNS)	1.65U	1.65	3.79	ng/L
375-95-1	Perfluorononanoic acid (PFNA)	0.928U	0.928	3.79	ng/L
754-91-6	Perfluorooctane Sulfonamide (FOSA)	0.701U	0.701	3.79	ng/L
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	4.32	0.720	3.79	ng/L
335-67-1	Perfluorooctanoic acid (PFOA)	14.3	0.795	3.79	ng/L
2706-91-4	Perfluoropentanesulfonic acid (PFPeS)	0.966U	0.966	3.79	ng/L
2706-90-3	Perfluoropentanoic acid (PFPeA)	33.3	0.833	3.79	ng/L
376-06-7	Perfluorotetradecanoic acid (PFTA)	1.08U	1.08	3.79	ng/L
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	1.16U	1.16	3.79	ng/L
2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.17U	1.17	3.79	ng/L
79780-39-5	PFDoS	1.24U	1.24	3.79	ng/L
67905-19-5	PFHxDA	1.42U	1.42	3.79	ng/L

Sample Results

TOSA-MW03	Collect Date	11/07/2022 17:05	Lab ID	22211091003
	Receive Date	11/09/2022 09:12	Matrix	Water

EPA 537 Mod Isotope Dilution (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
11/25/22 07:55	754543	EPA 537 Mod Isotope Dilution	1	12/13/22 21:46	756035	SXA	NA

CAS#	Parameter	Result	DL	LOQ	Units	
16517-11-6	PFODA	0.975U	0.975	3.79	ng/L	
CAS#	Extracted Internal Standard(EIS)	Cal Area	Samp Area	Units	%Recovery	%Rec Limits
4151-50-2-EIS	d-NEtFOSA	94.7	2.99	ng/L	3*	50 - 150
31506-32-8-EIS	d-NMeFOSA	94.7	10.2	ng/L	11*	50 - 150
2355-31-9-EIS	d3-NMeFOSAA	94.7	74.4	ng/L	79	50 - 150
2991-50-6-EIS	d5-NEtFOSAA	94.7	74	ng/L	78	50 - 150
24448-09-7-EIS	d7-NMeFOSE	94.7	4.47	ng/L	5*	50 - 150
1691-99-2-EIS	d9-NEtFOSE	94.7	2.82	ng/L	3*	50 - 150
757124-72-4-EIS	M2 4:2 FTS	94.7	70.4	ng/L	74	50 - 150
27619-97-2-EIS	M2 6:2 FTS	94.7	85.1	ng/L	90	50 - 150
39108-34-4-EIS	M2 8:2 FTS	94.7	76.1	ng/L	80	50 - 150
67905-19-5-EIS	M2PFHxDA	94.7	5.6	ng/L	6*	50 - 150
376-06-7-EIS	M2PFTA	94.7	24.8	ng/L	26*	50 - 150
13252-13-6-EIS	M3HFPODA	94.7	82.9	ng/L	88	50 - 150
375-73-5-EIS	M3PFBS	94.7	82.1	ng/L	87	50 - 150
355-46-4-EIS	M3PFHxS	94.7	81.7	ng/L	86	50 - 150
375-85-9-EIS	M4PFHpA	94.7	81.7	ng/L	86	50 - 150
307-24-4-EIS	M5PFHxA	94.7	84.5	ng/L	89	50 - 150
2706-90-3-EIS	M5PFPeA	94.7	79.2	ng/L	84	50 - 150
335-76-2-EIS	M6PFDA	94.7	77.3	ng/L	82	50 - 150
2058-94-8-EIS	M7PFUnA	94.7	80.1	ng/L	85	50 - 150
754-91-6-EIS	M8FOSA	94.7	78.2	ng/L	83	50 - 150
335-67-1-EIS	M8PFOA	94.7	84.9	ng/L	90	50 - 150
1763-23-1-EIS	M8PFOS	94.7	79.7	ng/L	84	50 - 150
375-95-1-EIS	M9PFNA	94.7	80.6	ng/L	85	50 - 150
375-22-4-EIS	MPFBA	94.7	73.5	ng/L	78	50 - 150
307-55-1-EIS	MPFDoA	94.7	67.7	ng/L	71	50 - 150

Sample Results

TOSA-MW04	Collect Date	11/07/2022 10:00	Lab ID	22211091004
	Receive Date	11/09/2022 09:12	Matrix	Water

EPA 537 Mod Isotope Dilution

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
11/25/22 07:55	754543	EPA 537 Mod Isotope Dilution	1	12/13/22 22:01	756035	SXA	NA

CAS#	Parameter	Result	DL	LOQ	Units
120226-60-0	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	1.66U	1.66	3.91	ng/L
763051-92-9	11CI-PF3OUdS	0.879U	0.879	3.91	ng/L
757124-72-4	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	1.21U	1.21	3.91	ng/L
27619-97-2	6:2 Fluorotelomer sulfonic acid (6:2FTS)	39.5	1.46	3.91	ng/L
39108-34-4	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	1.04U	1.04	3.91	ng/L
756426-58-1	9CI-PF3ONS	0.879U	0.879	3.91	ng/L
919005-14-4	ADONA	0.840U	0.840	3.91	ng/L
4151-50-2	NEtFOSA	1.37U	1.37	7.81	ng/L
2991-50-6	NEtFOSAA	1.54U	1.54	7.81	ng/L
1691-99-2	NEtFOSE	0.986U	0.986	7.81	ng/L
31506-32-8	NMeFOSA	1.62U	1.62	7.81	ng/L
2355-31-9	NMeFOSAA	0.879U	0.879	7.81	ng/L
24448-09-7	NMeFOSE	1.27U	1.27	7.81	ng/L
151772-58-6	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.46U	1.46	3.91	ng/L
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	1.51U	1.51	3.91	ng/L
13252-13-6	Perfluoro-2-proxypropanoic acid (HFPO-DA)	6.51U	6.51	19.5	ng/L
377-73-1	Perfluoro-3-methoxypropanoic acid (PFMPA)	1.36U	1.36	3.91	ng/L
863090-89-5	Perfluoro-4-methoxybutanoic acid (PFMBA)	1.46U	1.46	3.91	ng/L
375-73-5	Perfluorobutanesulfonic acid (PFBS)	99.8	0.605	3.91	ng/L
375-22-4	Perfluorobutanoic acid (PFBA)	424	1.48	3.91	ng/L
335-77-3	Perfluorodecane sulfonic acid (PFDS)	1.19U	1.19	3.91	ng/L
335-76-2	Perfluorodecanoic acid (PFDA)	1.41U	1.41	3.91	ng/L
307-55-1	Perfluorododecanoic acid (PFDoA)	1.27U	1.27	3.91	ng/L
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	1.19U	1.19	3.91	ng/L
375-85-9	Perfluoroheptanoic acid (PFHpA)	119	1.13	3.91	ng/L
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	68.5	1.21	3.91	ng/L
307-24-4	Perfluorohexanoic acid (PFHxA)	857	0.918	3.91	ng/L
68259-12-1	Perfluorononanesulfonic acid (PFNS)	1.70U	1.70	3.91	ng/L
375-95-1	Perfluorononanoic acid (PFNA)	0.957U	0.957	3.91	ng/L
754-91-6	Perfluorooctane Sulfonamide (FOSA)	0.723U	0.723	3.91	ng/L
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	3.93	0.742	3.91	ng/L
335-67-1	Perfluorooctanoic acid (PFOA)	52.2	0.820	3.91	ng/L
2706-91-4	Perfluoropentanesulfonic acid (PFPeS)	36.0	0.996	3.91	ng/L
376-06-7	Perfluorotetradecanoic acid (PFTA)	1.11U	1.11	3.91	ng/L
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	1.20U	1.20	3.91	ng/L
2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.21U	1.21	3.91	ng/L
79780-39-5	PFDoS	1.28U	1.28	3.91	ng/L
67905-19-5	PFHxDA	1.46U	1.46	3.91	ng/L

Sample Results

TOSA-MW04	Collect Date	11/07/2022 10:00	Lab ID	22211091004
	Receive Date	11/09/2022 09:12	Matrix	Water

EPA 537 Mod Isotope Dilution (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
11/25/22 07:55	754543	EPA 537 Mod Isotope Dilution	1	12/13/22 22:01	756035	SXA	NA

CAS#	Parameter	Result	DL	LOQ	Units
16517-11-6	PFODA	1.01U	1.01	3.91	ng/L

CAS#	Extracted Internal Standard(EIS)	Cal Area	Samp Area	Units	%Recovery	%Rec Limits
4151-50-2-EIS	d-NEtFOSA	97.7	22.9	ng/L	23*	50 - 150
31506-32-8-EIS	d-NMeFOSA	97.7	38.9	ng/L	40*	50 - 150
2355-31-9-EIS	d3-NMeFOSAA	97.7	83.5	ng/L	86	50 - 150
2991-50-6-EIS	d5-NEtFOSAA	97.7	81.1	ng/L	83	50 - 150
24448-09-7-EIS	d7-NMeFOSE	97.7	30.9	ng/L	32*	50 - 150
1691-99-2-EIS	d9-NEtFOSE	97.7	22.3	ng/L	23*	50 - 150
757124-72-4-EIS	M2 4:2 FTS	97.7	100	ng/L	103	50 - 150
27619-97-2-EIS	M2 6:2 FTS	97.7	81.6	ng/L	84	50 - 150
39108-34-4-EIS	M2 8:2 FTS	97.7	83.6	ng/L	86	50 - 150
67905-19-5-EIS	M2PFHxDA	97.7	59.8	ng/L	61	50 - 150
376-06-7-EIS	M2PFTA	97.7	79.1	ng/L	81	50 - 150
13252-13-6-EIS	M3HFPODA	97.7	71.5	ng/L	73	50 - 150
375-73-5-EIS	M3PFBS	97.7	74.4	ng/L	76	50 - 150
355-46-4-EIS	M3PFHxS	97.7	89.3	ng/L	91	50 - 150
375-85-9-EIS	M4PFHpA	97.7	87.4	ng/L	90	50 - 150
307-24-4-EIS	M5PFHxA	97.7	80.4	ng/L	82	50 - 150
2706-90-3-EIS	M5PFPeA	97.7	57	ng/L	58	50 - 150
335-76-2-EIS	M6PFDA	97.7	84.2	ng/L	86	50 - 150
2058-94-8-EIS	M7PFUnA	97.7	84.3	ng/L	86	50 - 150
754-91-6-EIS	M8FOSA	97.7	81.6	ng/L	84	50 - 150
335-67-1-EIS	M8PFOA	97.7	91.1	ng/L	93	50 - 150
1763-23-1-EIS	M8PFOS	97.7	83.9	ng/L	86	50 - 150
375-95-1-EIS	M9PFNA	97.7	85.1	ng/L	87	50 - 150
375-22-4-EIS	MPFBA	97.7	37.7	ng/L	39*	50 - 150
307-55-1-EIS	MPFDoA	97.7	82.1	ng/L	84	50 - 150



Report#: 222110910
Project ID: Redwood Road Dump

Report Date: 01/05/2023

Sample Results

TOSA-MW04	Collect Date	11/07/2022 10:00	Lab ID	22211091004
	Receive Date	11/09/2022 09:12	Matrix	Water

EPA 537 Mod Isotope Dilution

*Results and limits are adjusted for dilution.

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
11/25/22 07:55	754543	EPA 537 Mod Isotope Dilution	5	12/23/22 19:49	756845	SXA	NA

CAS#	Parameter	Result	DL	LOQ	Units	
2706-90-3	Perfluoropentanoic acid (PFPeA)	1740	4.30	19.5	ng/L	
CAS#	Extracted Internal Standard(EIS)	Cal Area	Samp Area	Units	%Recovery	%Rec Limits
2706-90-3-EIS	M5PFPeA	97.7	76.4	ng/L	78	50 - 150

Sample Results

TOSA-MW05	Collect Date	11/07/2022 14:25	Lab ID	22211091005
	Receive Date	11/09/2022 09:12	Matrix	Water

EPA 537 Mod Isotope Dilution

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
11/25/22 07:55	754543	EPA 537 Mod Isotope Dilution	1	12/13/22 22:31	756035	SXA	NA

CAS#	Parameter	Result	DL	LOQ	Units
120226-60-0	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	1.63U	1.63	3.85	ng/L
763051-92-9	11CI-PF3OUdS	0.865U	0.865	3.85	ng/L
757124-72-4	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	1.19U	1.19	3.85	ng/L
27619-97-2	6:2 Fluorotelomer sulfonic acid (6:2FTS)	2.28J	1.44	3.85	ng/L
39108-34-4	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	1.02U	1.02	3.85	ng/L
756426-58-1	9CI-PF3ONS	0.865U	0.865	3.85	ng/L
919005-14-4	ADONA	0.827U	0.827	3.85	ng/L
4151-50-2	NEtFOSA	1.35U	1.35	7.69	ng/L
2991-50-6	NEtFOSAA	1.52U	1.52	7.69	ng/L
1691-99-2	NEtFOSE	0.971U	0.971	7.69	ng/L
31506-32-8	NMeFOSA	1.60U	1.60	7.69	ng/L
2355-31-9	NMeFOSAA	0.865U	0.865	7.69	ng/L
24448-09-7	NMeFOSE	1.25U	1.25	7.69	ng/L
151772-58-6	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.44U	1.44	3.85	ng/L
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	1.49U	1.49	3.85	ng/L
13252-13-6	Perfluoro-2-proxypropanoic acid (HFPO-DA)	6.41U	6.41	19.2	ng/L
377-73-1	Perfluoro-3-methoxypropanoic acid (PFMPA)	1.34U	1.34	3.85	ng/L
863090-89-5	Perfluoro-4-methoxybutanoic acid (PFMBA)	1.44U	1.44	3.85	ng/L
375-73-5	Perfluorobutanesulfonic acid (PFBS)	17.0	0.596	3.85	ng/L
375-22-4	Perfluorobutanoic acid (PFBA)	36.1	1.46	3.85	ng/L
335-77-3	Perfluorodecane sulfonic acid (PFDS)	1.17U	1.17	3.85	ng/L
335-76-2	Perfluorodecanoic acid (PFDA)	1.38U	1.38	3.85	ng/L
307-55-1	Perfluorododecanoic acid (PFDoA)	1.25U	1.25	3.85	ng/L
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	1.17U	1.17	3.85	ng/L
375-85-9	Perfluoroheptanoic acid (PFHpA)	13.8	1.12	3.85	ng/L
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	29.2	1.19	3.85	ng/L
307-24-4	Perfluorohexanoic acid (PFHxA)	21.3	0.904	3.85	ng/L
68259-12-1	Perfluorononanesulfonic acid (PFNS)	1.67U	1.67	3.85	ng/L
375-95-1	Perfluorononanoic acid (PFNA)	3.46J	0.942	3.85	ng/L
754-91-6	Perfluorooctane Sulfonamide (FOSA)	0.857J	0.712	3.85	ng/L
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	37.6	0.731	3.85	ng/L
335-67-1	Perfluorooctanoic acid (PFOA)	47.3	0.808	3.85	ng/L
2706-91-4	Perfluoropentanesulfonic acid (PFPeS)	2.12J	0.981	3.85	ng/L
2706-90-3	Perfluoropentanoic acid (PFPeA)	22.2	0.846	3.85	ng/L
376-06-7	Perfluorotetradecanoic acid (PFTA)	1.10U	1.10	3.85	ng/L
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	1.18U	1.18	3.85	ng/L
2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.19U	1.19	3.85	ng/L
79780-39-5	PFDoS	1.26U	1.26	3.85	ng/L
67905-19-5	PFHxDA	1.44U	1.44	3.85	ng/L

Sample Results

TOSA-MW05	Collect Date	11/07/2022 14:25	Lab ID	22211091005
	Receive Date	11/09/2022 09:12	Matrix	Water

EPA 537 Mod Isotope Dilution (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
11/25/22 07:55	754543	EPA 537 Mod Isotope Dilution	1	12/13/22 22:31	756035	SXA	NA

CAS#	Parameter	Result	DL	LOQ	Units	
16517-11-6	PFODA	0.990U	0.990	3.85	ng/L	
CAS#	Extracted Internal Standard(EIS)	Cal Area	Samp Area	Units	%Recovery	%Rec Limits
4151-50-2-EIS	d-NEtFOSA	96.2	4.78	ng/L	5*	50 - 150
31506-32-8-EIS	d-NMeFOSA	96.2	8.88	ng/L	9*	50 - 150
2355-31-9-EIS	d3-NMeFOSAA	96.2	77.3	ng/L	80	50 - 150
2991-50-6-EIS	d5-NEtFOSAA	96.2	86.1	ng/L	90	50 - 150
24448-09-7-EIS	d7-NMeFOSE	96.2	42.8	ng/L	45*	50 - 150
1691-99-2-EIS	d9-NEtFOSE	96.2	34	ng/L	35*	50 - 150
757124-72-4-EIS	M2 4:2 FTS	96.2	85.8	ng/L	89	50 - 150
27619-97-2-EIS	M2 6:2 FTS	96.2	76.8	ng/L	80	50 - 150
39108-34-4-EIS	M2 8:2 FTS	96.2	86.1	ng/L	90	50 - 150
67905-19-5-EIS	M2PFHxDA	96.2	52.4	ng/L	54	50 - 150
376-06-7-EIS	M2PFTA	96.2	78.1	ng/L	81	50 - 150
13252-13-6-EIS	M3HFPODA	96.2	86.5	ng/L	90	50 - 150
375-73-5-EIS	M3PFBS	96.2	86.9	ng/L	90	50 - 150
355-46-4-EIS	M3PFHxS	96.2	87.1	ng/L	91	50 - 150
375-85-9-EIS	M4PFHpA	96.2	88.6	ng/L	92	50 - 150
307-24-4-EIS	M5PFHxA	96.2	91.1	ng/L	95	50 - 150
2706-90-3-EIS	M5PFPeA	96.2	86.9	ng/L	90	50 - 150
335-76-2-EIS	M6PFDA	96.2	85.5	ng/L	89	50 - 150
2058-94-8-EIS	M7PFUnA	96.2	85.2	ng/L	89	50 - 150
754-91-6-EIS	M8FOSA	96.2	75.6	ng/L	79	50 - 150
335-67-1-EIS	M8PFOA	96.2	89.9	ng/L	93	50 - 150
1763-23-1-EIS	M8PFOS	96.2	83.6	ng/L	87	50 - 150
375-95-1-EIS	M9PFNA	96.2	86	ng/L	89	50 - 150
375-22-4-EIS	MPFBA	96.2	86.4	ng/L	90	50 - 150
307-55-1-EIS	MPFDoA	96.2	81.7	ng/L	85	50 - 150

Sample Results

TOSA-MW40	Collect Date	11/07/2022 10:15	Lab ID	22211091006
	Receive Date	11/09/2022 09:12	Matrix	Water

EPA 537 Mod Isotope Dilution

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
11/25/22 07:55	754543	EPA 537 Mod Isotope Dilution	1	12/13/22 22:46	756035	SXA	NA

CAS#	Parameter	Result	DL	LOQ	Units
120226-60-0	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	1.74U	1.74	4.10	ng/L
763051-92-9	11CI-PF3OUdS	0.922U	0.922	4.10	ng/L
757124-72-4	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	1.27U	1.27	4.10	ng/L
27619-97-2	6:2 Fluorotelomer sulfonic acid (6:2FTS)	31.2	1.54	4.10	ng/L
39108-34-4	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	1.09U	1.09	4.10	ng/L
756426-58-1	9CI-PF3ONS	0.922U	0.922	4.10	ng/L
919005-14-4	ADONA	0.881U	0.881	4.10	ng/L
4151-50-2	NEtFOSA	1.43U	1.43	8.20	ng/L
2991-50-6	NEtFOSAA	1.62U	1.62	8.20	ng/L
1691-99-2	NEtFOSE	1.03U	1.03	8.20	ng/L
31506-32-8	NMeFOSA	1.70U	1.70	8.20	ng/L
2355-31-9	NMeFOSAA	0.922U	0.922	8.20	ng/L
24448-09-7	NMeFOSE	1.33U	1.33	8.20	ng/L
151772-58-6	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.54U	1.54	4.10	ng/L
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	1.59U	1.59	4.10	ng/L
13252-13-6	Perfluoro-2-proxypropanoic acid (HFPO-DA)	6.83U	6.83	20.5	ng/L
377-73-1	Perfluoro-3-methoxypropanoic acid (PFMPA)	1.42U	1.42	4.10	ng/L
863090-89-5	Perfluoro-4-methoxybutanoic acid (PFMBA)	1.54U	1.54	4.10	ng/L
375-73-5	Perfluorobutanesulfonic acid (PFBS)	171	0.635	4.10	ng/L
375-22-4	Perfluorobutanoic acid (PFBA)	778	1.56	4.10	ng/L
335-77-3	Perfluorodecane sulfonic acid (PFDS)	1.25U	1.25	4.10	ng/L
335-76-2	Perfluorodecanoic acid (PFDA)	1.48U	1.48	4.10	ng/L
307-55-1	Perfluorododecanoic acid (PFDoA)	1.33U	1.33	4.10	ng/L
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	1.25U	1.25	4.10	ng/L
375-85-9	Perfluoroheptanoic acid (PFHpA)	215	1.19	4.10	ng/L
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	146	1.27	4.10	ng/L
68259-12-1	Perfluorononanesulfonic acid (PFNS)	1.78U	1.78	4.10	ng/L
375-95-1	Perfluorononanoic acid (PFNA)	1.00U	1.00	4.10	ng/L
754-91-6	Perfluorooctane Sulfonamide (FOSA)	0.758U	0.758	4.10	ng/L
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	8.58	0.779	4.10	ng/L
335-67-1	Perfluorooctanoic acid (PFOA)	85.9	0.861	4.10	ng/L
2706-91-4	Perfluoropentanesulfonic acid (PFPeS)	68.1	1.05	4.10	ng/L
376-06-7	Perfluorotetradecanoic acid (PFTA)	1.17U	1.17	4.10	ng/L
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	1.26U	1.26	4.10	ng/L
2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.27U	1.27	4.10	ng/L
79780-39-5	PFDoS	1.34U	1.34	4.10	ng/L
67905-19-5	PFHxDA	1.54U	1.54	4.10	ng/L

Sample Results

TOSA-MW40	Collect Date	11/07/2022 10:15	Lab ID	22211091006
	Receive Date	11/09/2022 09:12	Matrix	Water

EPA 537 Mod Isotope Dilution (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
11/25/22 07:55	754543	EPA 537 Mod Isotope Dilution	1	12/13/22 22:46	756035	SXA	NA

CAS#	Parameter	Result	DL	LOQ	Units	
16517-11-6	PFODA	1.06U	1.06	4.10	ng/L	
CAS#	Extracted Internal Standard(EIS)	Cal Area	Samp Area	Units	%Recovery	%Rec Limits
4151-50-2-EIS	d-NEtFOSA	102	52.5	ng/L	51	50 - 150
31506-32-8-EIS	d-NMeFOSA	102	62	ng/L	61	50 - 150
2355-31-9-EIS	d3-NMeFOSAA	102	84.6	ng/L	83	50 - 150
2991-50-6-EIS	d5-NEtFOSAA	102	88.2	ng/L	86	50 - 150
24448-09-7-EIS	d7-NMeFOSE	102	52.6	ng/L	51	50 - 150
1691-99-2-EIS	d9-NEtFOSE	102	40	ng/L	39*	50 - 150
757124-72-4-EIS	M2 4:2 FTS	102	92.6	ng/L	90	50 - 150
27619-97-2-EIS	M2 6:2 FTS	102	86.5	ng/L	84	50 - 150
39108-34-4-EIS	M2 8:2 FTS	102	88.1	ng/L	86	50 - 150
67905-19-5-EIS	M2PFHxDA	102	13.2	ng/L	13*	50 - 150
376-06-7-EIS	M2PFTA	102	46	ng/L	45*	50 - 150
13252-13-6-EIS	M3HFPODA	102	78.5	ng/L	77	50 - 150
375-73-5-EIS	M3PFBS	102	80.6	ng/L	79	50 - 150
355-46-4-EIS	M3PFHxS	102	90.3	ng/L	88	50 - 150
375-85-9-EIS	M4PFHpA	102	91	ng/L	89	50 - 150
307-24-4-EIS	M5PFHxA	102	85.3	ng/L	83	50 - 150
2706-90-3-EIS	M5PFPeA	102	62.8	ng/L	61	50 - 150
335-76-2-EIS	M6PFDA	102	85.6	ng/L	84	50 - 150
2058-94-8-EIS	M7PFUnA	102	84	ng/L	82	50 - 150
754-91-6-EIS	M8FOSA	102	87.3	ng/L	85	50 - 150
335-67-1-EIS	M8PFOA	102	94.4	ng/L	92	50 - 150
1763-23-1-EIS	M8PFOS	102	85.6	ng/L	84	50 - 150
375-95-1-EIS	M9PFNA	102	87	ng/L	85	50 - 150
375-22-4-EIS	MPFBA	102	44.5	ng/L	43*	50 - 150
307-55-1-EIS	MPFDoA	102	78.2	ng/L	76	50 - 150

Sample Results

TOSA-MW40	Collect Date	11/07/2022 10:15	Lab ID	22211091006
	Receive Date	11/09/2022 09:12	Matrix	Water

EPA 537 Mod Isotope Dilution

*Results and limits are adjusted for dilution.

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
11/25/22 07:55	754543	EPA 537 Mod Isotope Dilution	5	12/23/22 20:04	756845	SXA	NA

CAS#	Parameter	Result	DL	LOQ	Units	
307-24-4	Perfluorohexanoic acid (PFHxA)	1710	4.82	20.5	ng/L	
2706-90-3	Perfluoropentanoic acid (PFPeA)	3350	4.51	20.5	ng/L	
CAS#	Extracted Internal Standard(EIS)	Cal Area	Samp Area	Units	%Recovery	%Rec Limits
307-24-4-EIS	M5PFHxA	102	94.8	ng/L	93	50 - 150
2706-90-3-EIS	M5PFPeA	102	86	ng/L	84	50 - 150

Sample Results

TOSA-MWFB	Collect Date	11/07/2022 12:10	Lab ID	22211091007
	Receive Date	11/09/2022 09:12	Matrix	Water

EPA 537 Mod Isotope Dilution

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
11/25/22 07:55	754543	EPA 537 Mod Isotope Dilution	1	12/13/22 23:01	756035	SXA	NA

CAS#	Parameter	Result	DL	LOQ	Units
120226-60-0	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	1.85U	1.85	4.35	ng/L
763051-92-9	11CI-PF3OUdS	0.978U	0.978	4.35	ng/L
757124-72-4	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	1.35U	1.35	4.35	ng/L
27619-97-2	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	1.63U	1.63	4.35	ng/L
39108-34-4	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	1.15U	1.15	4.35	ng/L
756426-58-1	9CI-PF3ONS	0.978U	0.978	4.35	ng/L
919005-14-4	ADONA	0.935U	0.935	4.35	ng/L
4151-50-2	NEtFOSA	1.52U	1.52	8.70	ng/L
2991-50-6	NEtFOSAA	1.72U	1.72	8.70	ng/L
1691-99-2	NEtFOSE	1.10U	1.10	8.70	ng/L
31506-32-8	NMeFOSA	1.80U	1.80	8.70	ng/L
2355-31-9	NMeFOSAA	0.978U	0.978	8.70	ng/L
24448-09-7	NMeFOSE	1.41U	1.41	8.70	ng/L
151772-58-6	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.63U	1.63	4.35	ng/L
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	1.68U	1.68	4.35	ng/L
13252-13-6	Perfluoro-2-proxypropanoic acid (HFPO-DA)	7.25U	7.25	21.7	ng/L
377-73-1	Perfluoro-3-methoxypropanoic acid (PFMPA)	1.51U	1.51	4.35	ng/L
863090-89-5	Perfluoro-4-methoxybutanoic acid (PFMBA)	1.63U	1.63	4.35	ng/L
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.674U	0.674	4.35	ng/L
375-22-4	Perfluorobutanoic acid (PFBA)	1.65U	1.65	4.35	ng/L
335-77-3	Perfluorodecane sulfonic acid (PFDS)	1.33U	1.33	4.35	ng/L
335-76-2	Perfluorodecanoic acid (PFDA)	1.57U	1.57	4.35	ng/L
307-55-1	Perfluorododecanoic acid (PFDoA)	1.41U	1.41	4.35	ng/L
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	1.33U	1.33	4.35	ng/L
375-85-9	Perfluoroheptanoic acid (PFHpA)	1.26U	1.26	4.35	ng/L
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.35U	1.35	4.35	ng/L
307-24-4	Perfluorohexanoic acid (PFHxA)	1.02U	1.02	4.35	ng/L
68259-12-1	Perfluorononanesulfonic acid (PFNS)	1.89U	1.89	4.35	ng/L
375-95-1	Perfluorononanoic acid (PFNA)	1.07U	1.07	4.35	ng/L
754-91-6	Perfluorooctane Sulfonamide (FOSA)	0.804U	0.804	4.35	ng/L
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.826U	0.826	4.35	ng/L
335-67-1	Perfluorooctanoic acid (PFOA)	0.913U	0.913	4.35	ng/L
2706-91-4	Perfluoropentanesulfonic acid (PFPeS)	1.11U	1.11	4.35	ng/L
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.957U	0.957	4.35	ng/L
376-06-7	Perfluorotetradecanoic acid (PFTA)	1.24U	1.24	4.35	ng/L
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	1.34U	1.34	4.35	ng/L
2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.35U	1.35	4.35	ng/L
79780-39-5	PFDoS	1.42U	1.42	4.35	ng/L
67905-19-5	PFHxDA	1.63U	1.63	4.35	ng/L

Sample Results

TOSA-MWFB	Collect Date	11/07/2022 12:10	Lab ID	22211091007
	Receive Date	11/09/2022 09:12	Matrix	Water

EPA 537 Mod Isotope Dilution (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
11/25/22 07:55	754543	EPA 537 Mod Isotope Dilution	1	12/13/22 23:01	756035	SXA	NA

CAS#	Parameter	Result	DL	LOQ	Units	
16517-11-6	PFODA	1.12U	1.12	4.35	ng/L	
CAS#	Extracted Internal Standard(EIS)	Cal Area	Samp Area	Units	%Recovery	%Rec Limits
4151-50-2-EIS	d-NEtFOSA	109	27.2	ng/L	25*	50 - 150
31506-32-8-EIS	d-NMeFOSA	109	34.7	ng/L	32*	50 - 150
2355-31-9-EIS	d3-NMeFOSAA	109	92.2	ng/L	85	50 - 150
2991-50-6-EIS	d5-NEtFOSAA	109	92.7	ng/L	85	50 - 150
24448-09-7-EIS	d7-NMeFOSE	109	64.3	ng/L	59	50 - 150
1691-99-2-EIS	d9-NEtFOSE	109	60.6	ng/L	56	50 - 150
757124-72-4-EIS	M2 4:2 FTS	109	98.1	ng/L	90	50 - 150
27619-97-2-EIS	M2 6:2 FTS	109	96.8	ng/L	89	50 - 150
39108-34-4-EIS	M2 8:2 FTS	109	100	ng/L	92	50 - 150
67905-19-5-EIS	M2PFHxDA	109	94.7	ng/L	87	50 - 150
376-06-7-EIS	M2PFTA	109	96.1	ng/L	88	50 - 150
13252-13-6-EIS	M3HFPODA	109	102	ng/L	94	50 - 150
375-73-5-EIS	M3PFBS	109	99.3	ng/L	91	50 - 150
355-46-4-EIS	M3PFHxS	109	97	ng/L	89	50 - 150
375-85-9-EIS	M4PFHpA	109	97.7	ng/L	90	50 - 150
307-24-4-EIS	M5PFHxA	109	101	ng/L	93	50 - 150
2706-90-3-EIS	M5PFPeA	109	102	ng/L	94	50 - 150
335-76-2-EIS	M6PFDA	109	91	ng/L	84	50 - 150
2058-94-8-EIS	M7PFUnA	109	93.5	ng/L	86	50 - 150
754-91-6-EIS	M8FOSA	109	87.2	ng/L	80	50 - 150
335-67-1-EIS	M8PFOA	109	98.7	ng/L	91	50 - 150
1763-23-1-EIS	M8PFOS	109	92.4	ng/L	85	50 - 150
375-95-1-EIS	M9PFNA	109	95	ng/L	87	50 - 150
375-22-4-EIS	MPFBA	109	101	ng/L	93	50 - 150
307-55-1-EIS	MPFDoA	109	93.7	ng/L	86	50 - 150

Sample Results

TOSA-MWEB	Collect Date	11/07/2022 08:55	Lab ID	22211091008
	Receive Date	11/09/2022 09:12	Matrix	Water

EPA 537 Mod Isotope Dilution

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
11/25/22 07:55	754543	EPA 537 Mod Isotope Dilution	1	12/13/22 23:16	756035	SXA	NA

CAS#	Parameter	Result	DL	LOQ	Units
120226-60-0	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	1.52U	1.52	3.57	ng/L
763051-92-9	11CI-PF3OUdS	0.804U	0.804	3.57	ng/L
757124-72-4	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	1.11U	1.11	3.57	ng/L
27619-97-2	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	1.34U	1.34	3.57	ng/L
39108-34-4	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	0.946U	0.946	3.57	ng/L
756426-58-1	9CI-PF3ONS	0.804U	0.804	3.57	ng/L
919005-14-4	ADONA	0.768U	0.768	3.57	ng/L
4151-50-2	NEtFOSA	1.25U	1.25	7.14	ng/L
2991-50-6	NEtFOSAA	1.41U	1.41	7.14	ng/L
1691-99-2	NEtFOSE	0.902U	0.902	7.14	ng/L
31506-32-8	NMeFOSA	1.48U	1.48	7.14	ng/L
2355-31-9	NMeFOSAA	0.804U	0.804	7.14	ng/L
24448-09-7	NMeFOSE	1.16U	1.16	7.14	ng/L
151772-58-6	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.34U	1.34	3.57	ng/L
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	1.38U	1.38	3.57	ng/L
13252-13-6	Perfluoro-2-proxypropanoic acid (HFPO-DA)	5.96U	5.96	17.9	ng/L
377-73-1	Perfluoro-3-methoxypropanoic acid (PFMPA)	1.24U	1.24	3.57	ng/L
863090-89-5	Perfluoro-4-methoxybutanoic acid (PFMBA)	1.34U	1.34	3.57	ng/L
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.554U	0.554	3.57	ng/L
375-22-4	Perfluorobutanoic acid (PFBA)	1.36U	1.36	3.57	ng/L
335-77-3	Perfluorodecane sulfonic acid (PFDS)	1.09U	1.09	3.57	ng/L
335-76-2	Perfluorodecanoic acid (PFDA)	1.29U	1.29	3.57	ng/L
307-55-1	Perfluorododecanoic acid (PFDoA)	1.16U	1.16	3.57	ng/L
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	1.09U	1.09	3.57	ng/L
375-85-9	Perfluoroheptanoic acid (PFHpA)	1.04U	1.04	3.57	ng/L
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.11U	1.11	3.57	ng/L
307-24-4	Perfluorohexanoic acid (PFHxA)	0.839U	0.839	3.57	ng/L
68259-12-1	Perfluorononanesulfonic acid (PFNS)	1.55U	1.55	3.57	ng/L
375-95-1	Perfluorononanoic acid (PFNA)	0.875U	0.875	3.57	ng/L
754-91-6	Perfluorooctane Sulfonamide (FOSA)	0.661U	0.661	3.57	ng/L
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.679U	0.679	3.57	ng/L
335-67-1	Perfluorooctanoic acid (PFOA)	0.750U	0.750	3.57	ng/L
2706-91-4	Perfluoropentanesulfonic acid (PFPeS)	0.911U	0.911	3.57	ng/L
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.786U	0.786	3.57	ng/L
376-06-7	Perfluorotetradecanoic acid (PFTA)	1.02U	1.02	3.57	ng/L
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	1.10U	1.10	3.57	ng/L
2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.11U	1.11	3.57	ng/L
79780-39-5	PFDoS	1.17U	1.17	3.57	ng/L
67905-19-5	PFHxDA	1.34U	1.34	3.57	ng/L

Sample Results

TOSA-MWEB	Collect Date	11/07/2022 08:55	Lab ID	22211091008
	Receive Date	11/09/2022 09:12	Matrix	Water

EPA 537 Mod Isotope Dilution (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
11/25/22 07:55	754543	EPA 537 Mod Isotope Dilution	1	12/13/22 23:16	756035	SXA	NA

CAS#	Parameter	Result	DL	LOQ	Units	
16517-11-6	PFODA	0.920U	0.920	3.57	ng/L	
CAS#	Extracted Internal Standard(EIS)	Cal Area	Samp Area	Units	%Recovery	%Rec Limits
4151-50-2-EIS	d-NEtFOSA	89.3	22.2	ng/L	25*	50 - 150
31506-32-8-EIS	d-NMeFOSA	89.3	28.9	ng/L	32*	50 - 150
2355-31-9-EIS	d3-NMeFOSAA	89.3	68.7	ng/L	77	50 - 150
2991-50-6-EIS	d5-NEtFOSAA	89.3	69.1	ng/L	77	50 - 150
24448-09-7-EIS	d7-NMeFOSE	89.3	49.7	ng/L	56	50 - 150
1691-99-2-EIS	d9-NEtFOSE	89.3	48	ng/L	54	50 - 150
757124-72-4-EIS	M2 4:2 FTS	89.3	76.3	ng/L	85	50 - 150
27619-97-2-EIS	M2 6:2 FTS	89.3	75	ng/L	84	50 - 150
39108-34-4-EIS	M2 8:2 FTS	89.3	80.7	ng/L	90	50 - 150
67905-19-5-EIS	M2PFHxDA	89.3	69.2	ng/L	78	50 - 150
376-06-7-EIS	M2PFTA	89.3	72.3	ng/L	81	50 - 150
13252-13-6-EIS	M3HFPODA	89.3	83	ng/L	93	50 - 150
375-73-5-EIS	M3PFBS	89.3	77.9	ng/L	87	50 - 150
355-46-4-EIS	M3PFHxS	89.3	75.6	ng/L	85	50 - 150
375-85-9-EIS	M4PFHpA	89.3	76.7	ng/L	86	50 - 150
307-24-4-EIS	M5PFHxA	89.3	79.1	ng/L	89	50 - 150
2706-90-3-EIS	M5PFPeA	89.3	80.1	ng/L	90	50 - 150
335-76-2-EIS	M6PFDA	89.3	73.6	ng/L	82	50 - 150
2058-94-8-EIS	M7PFUnA	89.3	73.2	ng/L	82	50 - 150
754-91-6-EIS	M8FOSA	89.3	67.7	ng/L	76	50 - 150
335-67-1-EIS	M8PFOA	89.3	77.5	ng/L	87	50 - 150
1763-23-1-EIS	M8PFOS	89.3	72.4	ng/L	81	50 - 150
375-95-1-EIS	M9PFNA	89.3	74.7	ng/L	84	50 - 150
375-22-4-EIS	MPFBA	89.3	80.5	ng/L	90	50 - 150
307-55-1-EIS	MPFDoA	89.3	67.8	ng/L	76	50 - 150

Sample Results

TOSA-TRIP BLANK	Collect Date	11/07/2022 00:01	Lab ID	22211091009
	Receive Date	11/09/2022 09:12	Matrix	Water

EPA 537 Mod Isotope Dilution

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
11/25/22 07:55	754543	EPA 537 Mod Isotope Dilution	1	12/13/22 23:31	756035	SXA	NA

CAS#	Parameter	Result	DL	LOQ	Units
120226-60-0	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	1.60U	1.60	3.76	ng/L
763051-92-9	11Cl-PF3OUdS	0.846U	0.846	3.76	ng/L
757124-72-4	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	1.17U	1.17	3.76	ng/L
27619-97-2	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	1.41U	1.41	3.76	ng/L
39108-34-4	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	0.996U	0.996	3.76	ng/L
756426-58-1	9Cl-PF3ONS	0.846U	0.846	3.76	ng/L
919005-14-4	ADONA	0.808U	0.808	3.76	ng/L
4151-50-2	NEtFOSA	1.32U	1.32	7.52	ng/L
2991-50-6	NEtFOSAA	1.48U	1.48	7.52	ng/L
1691-99-2	NEtFOSE	0.949U	0.949	7.52	ng/L
31506-32-8	NMeFOSA	1.56U	1.56	7.52	ng/L
2355-31-9	NMeFOSAA	0.846U	0.846	7.52	ng/L
24448-09-7	NMeFOSE	1.22U	1.22	7.52	ng/L
151772-58-6	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.41U	1.41	3.76	ng/L
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	1.46U	1.46	3.76	ng/L
13252-13-6	Perfluoro-2-proxypropanoic acid (HFPO-DA)	6.27U	6.27	18.8	ng/L
377-73-1	Perfluoro-3-methoxypropanoic acid (PFMPA)	1.31U	1.31	3.76	ng/L
863090-89-5	Perfluoro-4-methoxybutanoic acid (PFMBA)	1.41U	1.41	3.76	ng/L
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.583U	0.583	3.76	ng/L
375-22-4	Perfluorobutanoic acid (PFBA)	1.43U	1.43	3.76	ng/L
335-77-3	Perfluorodecane sulfonic acid (PFDS)	1.15U	1.15	3.76	ng/L
335-76-2	Perfluorodecanoic acid (PFDA)	1.35U	1.35	3.76	ng/L
307-55-1	Perfluorododecanoic acid (PFDoA)	1.22U	1.22	3.76	ng/L
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	1.15U	1.15	3.76	ng/L
375-85-9	Perfluoroheptanoic acid (PFHpA)	1.09U	1.09	3.76	ng/L
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.17U	1.17	3.76	ng/L
307-24-4	Perfluorohexanoic acid (PFHxA)	0.883U	0.883	3.76	ng/L
68259-12-1	Perfluorononanesulfonic acid (PFNS)	1.64U	1.64	3.76	ng/L
375-95-1	Perfluorononanoic acid (PFNA)	0.921U	0.921	3.76	ng/L
754-91-6	Perfluorooctane Sulfonamide (FOSA)	0.695U	0.695	3.76	ng/L
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.714U	0.714	3.76	ng/L
335-67-1	Perfluorooctanoic acid (PFOA)	0.789U	0.789	3.76	ng/L
2706-91-4	Perfluoropentanesulfonic acid (PFPeS)	0.959U	0.959	3.76	ng/L
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.827U	0.827	3.76	ng/L
376-06-7	Perfluorotetradecanoic acid (PFTA)	1.07U	1.07	3.76	ng/L
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	1.16U	1.16	3.76	ng/L
2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.17U	1.17	3.76	ng/L
79780-39-5	PFDoS	1.23U	1.23	3.76	ng/L
67905-19-5	PFHxDA	1.41U	1.41	3.76	ng/L

Sample Results

TOSA-TRIP BLANK	Collect Date	11/07/2022 00:01	Lab ID	22211091009
	Receive Date	11/09/2022 09:12	Matrix	Water

EPA 537 Mod Isotope Dilution (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
11/25/22 07:55	754543	EPA 537 Mod Isotope Dilution	1	12/13/22 23:31	756035	SXA	NA

CAS#	Parameter	Result	DL	LOQ	Units	
16517-11-6	PFODA	0.968U	0.968	3.76	ng/L	
CAS#	Extracted Internal Standard(EIS)	Cal Area	Samp Area	Units	%Recovery	%Rec Limits
4151-50-2-EIS	d-NEtFOSA	94	37.6	ng/L	40*	50 - 150
31506-32-8-EIS	d-NMeFOSA	94	37.8	ng/L	40*	50 - 150
2355-31-9-EIS	d3-NMeFOSAA	94	75.8	ng/L	81	50 - 150
2991-50-6-EIS	d5-NEtFOSAA	94	79	ng/L	84	50 - 150
24448-09-7-EIS	d7-NMeFOSE	94	60.7	ng/L	65	50 - 150
1691-99-2-EIS	d9-NEtFOSE	94	61.1	ng/L	65	50 - 150
757124-72-4-EIS	M2 4:2 FTS	94	80.6	ng/L	86	50 - 150
27619-97-2-EIS	M2 6:2 FTS	94	81.2	ng/L	86	50 - 150
39108-34-4-EIS	M2 8:2 FTS	94	81.8	ng/L	87	50 - 150
67905-19-5-EIS	M2PFHxDA	94	75.9	ng/L	81	50 - 150
376-06-7-EIS	M2PFTA	94	78.2	ng/L	83	50 - 150
13252-13-6-EIS	M3HFPODA	94	85.4	ng/L	91	50 - 150
375-73-5-EIS	M3PFBS	94	81.9	ng/L	87	50 - 150
355-46-4-EIS	M3PFHxS	94	79.9	ng/L	85	50 - 150
375-85-9-EIS	M4PFHpA	94	81.9	ng/L	87	50 - 150
307-24-4-EIS	M5PFHxA	94	82.8	ng/L	88	50 - 150
2706-90-3-EIS	M5PFPeA	94	84	ng/L	89	50 - 150
335-76-2-EIS	M6PFDA	94	80.1	ng/L	85	50 - 150
2058-94-8-EIS	M7PFUnA	94	80	ng/L	85	50 - 150
754-91-6-EIS	M8FOSA	94	71.8	ng/L	76	50 - 150
335-67-1-EIS	M8PFOA	94	81.8	ng/L	87	50 - 150
1763-23-1-EIS	M8PFOS	94	78.3	ng/L	83	50 - 150
375-95-1-EIS	M9PFNA	94	79.8	ng/L	85	50 - 150
375-22-4-EIS	MPFBA	94	83.6	ng/L	89	50 - 150
307-55-1-EIS	MPFDoA	94	77.6	ng/L	83	50 - 150

LC-MS/MS PFAS QC Summary

Analytical Batch		Client ID	MB754543	LCS754543				LCSD754543					
756035		Lab ID	2424071	2424072				2424073					
Prep Batch		Sample Type	MB	LCS				LCSD					
754543		Prep Date	11/25/22 07:55	11/25/22 07:55				11/25/22 07:55					
Prep Method		Analysis Date	12/13/22 19:02	12/13/22 19:17				12/13/22 19:32					
EPA 537 Mod Isotope Dilution		Matrix	Water	Water				Water					
EPA 537 Mod Isotope Dilution		Units Result	ng/L DL	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit	
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	1.70U	1.70	77.2	97.2	126	70 - 130	77.2	90.2	117	7	30	
11Cl-PF3OUdS	763051-92-9	0.900U	0.900	75.4	74.7	99	70 - 130	75.4	76.5	101	2	30	
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	1.24U	1.24	75.0	85.5	114	70 - 130	75.0	80.4	107	6	30	
6:2 Fluorotelomer sulfonic acid (6:2FTS)	27619-97-2	1.50U	1.50	76.1	82.0	108	70 - 130	76.1	82.2	108	0	30	
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	1.06U	1.06	76.8	84.5	110	70 - 130	76.8	81.1	106	4	30	
9Cl-PF3ONS	756426-58-1	0.900U	0.900	74.6	78.0	105	70 - 130	74.6	79.2	106	2	30	
ADONA	919005-14-4	0.860U	0.860	75.6	78.4	104	70 - 130	75.6	76.3	101	3	30	
NEtFOSA	4151-50-2	1.40U	1.40	80.0	53.8	67*	70 - 130	80.0	91.4	114	52*	30	
NEtFOSAA	2991-50-6	1.58U	1.58	80.0	86.7	108	70 - 130	80.0	84.7	106	2	30	
NEtFOSE	1691-99-2	1.01U	1.01	80.0	76.6	96	70 - 130	80.0	87.2	109	13	30	
NMeFOSA	31506-32-8	1.66U	1.66	80.0	84.2	105	70 - 130	80.0	91.9	115	9	30	
NMeFOSAA	2355-31-9	0.900U	0.900	80.0	83.3	104	70 - 130	80.0	83.7	105	1	30	
NMeFOSE	24448-09-7	1.30U	1.30	80.0	90.9	114	70 - 130	80.0	84.0	105	8	30	
Nonafluoro-3,6-dioxahexanoic acid (NFDHA)	151772-58-6	1.50U	1.50	80.0	89.3	112	70 - 130	80.0	85.7	107	4	30	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	113507-82-7	1.55U	1.55	71.2	77.5	109	70 - 130	71.2	75.4	106	3	30	
Perfluoro-2-proxypropanoic acid (HFPO-DA)	13252-13-6	6.67U	6.67	160	181	113	70 - 130	160	178	111	2	30	
Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	1.39U	1.39	80.0	89.9	112	70 - 130	80.0	88.0	110	2	30	
Perfluoro-4-methoxybutanoic acid (PFMBA)	863090-89-5	1.50U	1.50	80.0	86.0	108	70 - 130	80.0	85.9	107	0	30	
Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.620U	0.620	71.0	77.1	109	70 - 130	71.0	72.2	102	6	30	
Perfluorobutanoic acid (PFBA)	375-22-4	1.52U	1.52	80.0	85.5	107	70 - 130	80.0	82.7	103	3	30	
Perfluorodecane sulfonic acid (PFDS)	335-77-3	1.22U	1.22	77.2	77.3	100	70 - 130	77.2	77.6	100	0	30	
Perfluorodecanoic acid (PFDA)	335-76-2	1.44U	1.44	80.0	86.5	108	70 - 130	80.0	86.4	108	0	30	
Perfluorododecanoic acid (PFDoA)	307-55-1	1.30U	1.30	80.0	88.7	111	70 - 130	80.0	83.4	104	6	30	
Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	1.22U	1.22	76.2	80.8	106	70 - 130	76.2	79.5	104	2	30	
Perfluoroheptanoic acid (PFHpA)	375-85-9	1.16U	1.16	80.0	85.4	107	70 - 130	80.0	82.4	103	4	30	
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1.24U	1.24	73.1	75.1	103	70 - 130	73.1	72.4	99	4	30	
Perfluorohexanoic acid (PFHxA)	307-24-4	0.940U	0.940	80.0	83.7	105	70 - 130	80.0	82.7	103	1	30	
Perfluorononanesulfonic acid (PFNS)	68259-12-1	1.74U	1.74	77.0	80.4	104	70 - 130	77.0	79.8	104	1	30	
Perfluorononanoic acid (PFNA)	375-95-1	0.980U	0.980	80.0	85.7	107	70 - 130	80.0	82.9	104	3	30	
Perfluorooctane Sulfonamide (FOSA)	754-91-6	0.740U	0.740	80.0	87.8	110	70 - 130	80.0	82.4	103	6	30	
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	0.760U	0.760	74.2	70.4	95	70 - 130	74.2	70.7	95	0	30	
Perfluorooctanoic acid (PFOA)	335-67-1	0.840U	0.840	80.0	84.5	106	70 - 130	80.0	82.8	104	2	30	
Perfluoropentanesulfonic acid (PFPeS)	2706-91-4	1.02U	1.02	75.3	81.3	108	70 - 130	75.3	76.7	102	6	30	
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.880U	0.880	80.0	84.4	106	70 - 130	80.0	81.9	102	3	30	
Perfluorotetradecanoic acid (PFTA)	376-06-7	1.14U	1.14	80.0	84.8	106	70 - 130	80.0	85.8	107	1	30	
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	1.23U	1.23	80.0	88.6	111	70 - 130	80.0	84.7	106	5	30	
Perfluoroundecanoic acid (PFUnA)	2058-94-8	1.24U	1.24	80.0	87.3	109	70 - 130	80.0	82.2	103	6	30	
PFDoS	79780-39-5	1.31U	1.31	77.6	75.8	98	70 - 130	77.6	77.3	100	2	30	
PFHxDA	67905-19-5	1.50U	1.50	80.0	85.7	107	70 - 130	80.0	86.1	108	0	30	
PFODA	16517-11-6	1.03U	1.03	80.0	73.6	92	70 - 130	80.0	74.1	93	1	30	
Extracted Internal Standard(EIS)		CAS#	Area	%R	CalArea	Area	%R	Limits	CalArea	Area	%	RPD	Limit
d3-NMeFOSAA	2355-31-9-EIS	80.6	81	100	85.4	85	50 - 150	100	81.4	81	NA	NA	
d5-NEtFOSAA	2991-50-6-EIS	86.9	87	100	84.3	84	50 - 150	100	85	85	NA	NA	
d7-NMeFOSE	24448-09-7-EIS	54.5	55	100	3.1	3*	50 - 150	100	72	72	NA	NA	
d9-NEtFOSE	1691-99-2-EIS	51.2	51	100	3.4	3*	50 - 150	100	69.9	70	NA	NA	
d-NEtFOSA	4151-50-2-EIS	17	17*	100	1.03	1*	50 - 150	100	40.6	41*	NA	NA	
d-NMeFOSA	31506-32-8-EIS	24.4	24*	100	.82	.8*	50 - 150	100	50.3	50	NA	NA	
M2 4:2 FTS	757124-72-4-EIS	91.9	92	100	84.9	85	50 - 150	100	83.7	84	NA	NA	
M2 6:2 FTS	27619-97-2-EIS	88.3	88	100	88	88	50 - 150	100	82.9	83	NA	NA	
M2 8:2 FTS	39108-34-4-EIS	98.6	99	100	94.7	95	50 - 150	100	92.1	92	NA	NA	
M2PFHxDA	67905-19-5-EIS	84.5	84	100	86.9	87	50 - 150	100	86.6	87	NA	NA	
M2PFTA	376-06-7-EIS	87.4	87	100	88.3	88	50 - 150	100	83.9	84	NA	NA	
M3HFPODA	13252-13-6-EIS	95	95	100	96.5	97	50 - 150	100	92.5	93	NA	NA	
M3PFBS	375-73-5-EIS	90.7	91	100	90.5	90	50 - 150	100	89.4	89	NA	NA	
M3PFHxS	355-46-4-EIS	91.7	92	100	91	91	50 - 150	100	88.6	89	NA	NA	
M4PFHpA	375-85-9-EIS	90.8	91	100	90.9	91	50 - 150	100	88.8	89	NA	NA	
M5PFHxA	307-24-4-EIS	93.9	94	100	93.8	94	50 - 150	100	89.6	90	NA	NA	
M5PFPeA	2706-90-3-EIS	91.6	92	100	92.7	93	50 - 150	100	89.4	89	NA	NA	



Report#: 222110910
Project ID: Redwood Road Dump

Report Date: 01/05/2023

LC-MS/MS PFAS QC Summary

Analytical Batch 756035		Client ID	MB754543		LCS754543			LCSD754543					
Prep Batch 754543		Lab ID	2424071		2424072			2424073					
Prep Method EPA 537 Mod Isotope Dilution		Sample Type	MB		LCS			LCSD					
		Prep Date	11/25/22 07:55		11/25/22 07:55			11/25/22 07:55					
		Analysis Date	12/13/22 19:02		12/13/22 19:17			12/13/22 19:32					
		Matrix	Water		Water			Water					
EPA 537 Mod Isotope Dilution			Units Result	ng/L DL	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
M6PFDA	335-76-2-EIS		89	89	100	89.6	90	50 - 150	100	86.6	87	NA	NA
M7PFUnA	2058-94-8-EIS		89.3	89	100	87.9	88	50 - 150	100	88.7	89	NA	NA
M8FOSA	754-91-6-EIS		83.7	84	100	66.8	67	50 - 150	100	81.1	81	NA	NA
M8PFOA	335-67-1-EIS		91.9	92	100	93.5	93	50 - 150	100	89.9	90	NA	NA
M8PFOS	1763-23-1-EIS		88.1	88	100	91.7	92	50 - 150	100	86.4	86	NA	NA
M9PFNA	375-95-1-EIS		90.7	91	100	90.9	91	50 - 150	100	88.2	88	NA	NA
MPFBA	375-22-4-EIS		92.8	93	100	92.2	92	50 - 150	100	89.9	90	NA	NA
MPFDoA	307-55-1-EIS		86.8	87	100	84.4	84	50 - 150	100	85.3	85	NA	NA

CHAIN-OF-CUSTODY Analytical Request Document Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields LAB USE ONLY- Affix Work ALL SHAD Container Preservative Ty Client ID: 4367 - Pace Analytical Services SDG: 222110910 PM: RWe										
Company: <u>Terracom</u> Address: <u>6949 S High Tech Dr</u> Report To: <u>Nancy SAUNDERS</u> Copy To:			Billing Information: Email To: <u>nancy.saunders@terracom.com</u> Site Collection Info/Address:			** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other				
Customer Project Name/Number: <u>Redwood Road Dump VCI</u>			State: <u>1</u> County/City: <u></u> Time Zone Collected: <u>[] PT [] MT [] CT [] ET</u>			Analyses				
Phone: <u></u> Site/Facility ID #: <u></u> Compliance Monitoring? Email: <u></u> <u>[] Yes [] No</u>			Collected By (print): <u>Nancy SAUNDERS</u> Purchase Order #: <u>61227342 TASK 4.1</u> Collected By (signature): <u>N. Saunders</u> Quote #: <u>61227342 TASK 4.1</u> Sample Disposal: <u>[] Dispose as appropriate [] Return [] Archive [] Hold:</u> Turnaround Date Required: <u>std</u> Immediately Packed on Ice: <u>[x] Yes [] No</u> Rush: <u>[] Same Day [] Next Day [] 2 Day [] 3 Day [] 4 Day [] 5 Day</u> Field Filtered (if applicable): <u>[] Yes [x] No</u> <u>(Expedite Charges Apply)</u> Analysis: <u></u>			Lab Profile/Line: Lab Sample Receipt Checklist: Custody Seals Present/Intact Y N NA Custody Signatures Present Y N NA Collector Signature Present Y N NA Bottles Intact Y N NA Correct Bottles Y N NA Sufficient Volume Y N NA Samples Received on Ice Y N NA VOA - Headspace Acceptable Y N NA USDA Regulated Soils Y N NA Samples in Holding Time Y N NA Residual Chlorine Present Y N NA Cl Strips: Y N NA Sample pH Acceptable Y N NA pH Strips: Y N NA Sulfide Present Y N NA Lead Acetate Strips: Y N NA LAB USE ONLY: Lab Sample # / Comments:				
* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)										
Customer Sample ID		Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns	
				Date	Time	Date	Time			
TOSA-MW01		water gr	gr	11/7/22	15:50				2	
TOSA-MW02					12:10					
TOSA-MW03					17:05					
TOSA-MW04					10:00					
TOSA-MW05					14:25					
TOSA-MW400					10:15					
TOSA-MW0FB					12:10					
TOSA-MW0EB					8:55					
TOSA-TRIP BLAK										
Customer Remarks / Special Conditions / Possible Hazards:			Type of Ice Used: Wet Blue Dry None			SHORT HOLDS PRESENT (<72 hours): Y N N/A			Lab Sample Temperature Info:	
<u>Include CASE NARRATIVE</u> <u>LEVEL III QA/QC</u> <u>MS/MSD FROM TOSA MW02</u>			Packing Material Used:			Lab Tracking #:			Temp Blank Received: Y N NA	
			<u>6105 6239 6037</u>			<u>2876317</u>			Therm ID#:	
			Radchem sample(s) screened (<500 cpm): Y N NA			Samples received via: FEDEX UPS Client Courier Pace Courier			Cooler 1 Temp Upon Receipt: °C	
Relinquished by/Company: (Signature)		Date/Time:	Received by/Company: (Signature)		Date/Time:	MTJL LAB USE ONLY		Cooler 1 Therm Corr. Factor: °C		
<u>Nancy Saunders</u>		<u>11/8/2022 11:53</u>	<u>J. Gagnier</u>		<u>11/8/22 1700</u>	Table #:		Cooler 1 Corrected Temp: °C		
<u>RNSCCT</u>		<u>11-8-22 1700</u>	<u></u>		<u></u>	Acctnum:		Comments:		
<u>FedEx</u>		<u>11-9-22 0912</u>	<u></u>		<u>11-9-22 0912</u>	Template:		<u>1.2E38</u>		
						Prelogin:		Trip Blank Received: Y N NA		
						PM:		HCL MeOH TSP Other		
						PB:		Non Conformance(s): YES / NO		
								Page: of:		



SAMPLE RECEIVING CHECKLIST



SAMPLE DELIVERY GROUP 222110910			CHECKLIST		YES	NO
Client 4367 - Pace Analytical Services	PM R/Ve	Transport Method FEDEX	Samples received with proper thermal preservation?	☒	☐	
			Radioactivity is <1600 cpm? If no, record cpm value in notes section.	☒	☐	
Profile Number 300928		Received By Roberts, George S.	COC relinquished and complete (including sampleIDs, collect times, and sampler)?	☒	☐	
			All containers received in good condition and within hold time?	☒	☐	
Line Item(s) 1 - PFAs - water		Receive Date(s) 11/09/22	All sample labels and containers received match the chain of custody?	☒	☐	
			Preservative added to any containers?	☐	☒	
			If received, was headspace for VOC water containers < 6mm?	☒	☐	
			Samples collected in containers provided by Pace Gulf Coast?	☒	☐	
COOLERS			DISCREPANCIES	LAB PRESERVATIONS		
Airbill	Thermometer ID: E38	Temp °C	None	None		
610562396037		1.2				
NOTES	MS/MSD analyses requested on sample TOSA-MW02. There was insufficient volume provided to the lab for these analyses					