

PHASE II ENVIRONMENTAL INVESTIGATION RESULTS  
457 MAY AVENUE  
SANTA CRUZ, CALIFORNIA

by  
Haley & Aldrich, Inc.  
Walnut Creek, California

for  
TC NO. CAL. DEVELOPMENT, INC., a Delaware Corporation  
San Francisco, California

File No. 0205738-000  
November 2022





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8 November 2022  
File No. 0205738-000

TC NO. CAL. DEVELOPMENT, INC., a Delaware Corporation  
415 Mission Street, 45th Floor  
San Francisco, California 94105

Attention: Brian Pianca  
Senior Vice President

Subject: Phase II Environmental Investigation Results  
457 May Avenue  
Santa Cruz, California

Dear Mr. Pianca:

Haley & Aldrich, Inc. (Haley & Aldrich) is submitting to TC NO. CAL. DEVELOPMENT, INC., a Delaware Corporation (TC NO. CAL. DEVELOPMENT) this letter report presenting the results of the Phase II Environmental Investigation conducted at the project site located at 457 May Avenue, Santa Cruz, California (the "Site"; Figure 1). The purpose of this investigation was to assess the subsurface environmental conditions at the Site.

## Background

The Site was formerly occupied by "Reid & Son Cabinet Makers" in 1960 followed by "Coast Counties Electric Contractors" from at least 1964 to 1976. Since at least 1976, this property has been occupied by John's Electric Motor Service. During the site reconnaissance conducted as part of the ASTM Phase I Environmental Site Assessment (Phase I) conducted by Haley & Aldrich in August 2022, two recognized environmental conditions (RECs) were identified in association with the Site:

- According to the tenant representative at the Site, the office area located on the northwestern corner of the building was formerly used as a drum storage area. The tenant representative indicated the concrete slab of this area was heavily stained prior to the renovation of the office area, where the concrete floor was covered with wood flooring. In addition, stained soil and an odor were observed underneath a floor hatch on the west side of the building. According to the tenant representative, this area may have been the location of a former underground storage tank (UST), although no records of a UST at this location were found. Additionally, stained soil and poor housekeeping of industrial materials were observed throughout the backyard area of the Site.
- A 550-gallon gasoline UST was formerly located on the north end of the backyard area of the Site. The UST was removed in 1996. During removal activities, the UST was found to be heavily pitted with perforations and a sheen was observed in the surrounding groundwater. A soil

sample was reportedly collected below the UST; however, records of analytical results had not been found. In the *Limited Phase II Subsurface Investigation* report prepared by AEI Consultants (AEI) dated 14 July 2017, soil, soil vapor, and groundwater samples were collected to investigate potential impacts associated with this former UST. However, these samples were collected at the adjacent vacant property to the south, approximately 80 feet south and cross-gradient from the former UST location. The County of Santa Cruz Environmental Health Department (CSEHD) submitted a no further action (NFA) letter based on the results of AEI's report. Although an NFA letter was issued, Haley & Aldrich considered this former UST a REC given our findings that AEI's sampling activities were apparently performed at an incorrect location.

## Sampling Activities

The Phase II Environmental Investigation was completed from 22 July through 1 August 2022 and included:

- Advancing three borings for the collection of soil samples (HA-SB-01 through HA-SB-03), with groundwater samples also collected from two borings (HA-SB-01 and HA-SB-03). HA-SB-01 was advanced within the stained soil underneath the floor hatch at the western side of the building, HA-SB-02 was located near stained soil in the backyard of the Site, and HA-SB-03 was located in the approximate area of the former UST, as documented in CSEHD records.
- Installing and sampling two soil vapor probes (HA-SV-04 and HA-SV-05), located in the former drum storage area of the building and in the backyard of the Site, respectively, with soil samples also collected from these borings.

Figure 2 presents the boring and soil vapor probe locations.

## PRE-FIELD ACTIVITIES

The following pre-field activities were completed prior to performing the fieldwork associated with the soil, groundwater, and soil vapor sampling:

- Obtaining well permits from CSEHD for the installation of the two soil vapor probes;
- Marking the boring locations on the ground using white spray paint and notifying Underground Service Alert (USA);
- Retaining a private utility locating firm to scan the boring locations and identify nearby subsurface utilities; and
- Preparing a Site-specific health and safety plan to identify potential hazards and risks associated with the field activities.

## SOIL VAPOR PROBE INSTALLATION

The soil vapor sampling activities were performed in general accordance with the California Environmental Protection Agency/Department of Toxic Substances Control (DTSC) *Advisory Active Soil Gas Investigations (CalEPA/DTSC Advisory)*, dated July 2015. Two approximately 3.25-inch-diameter borings (HA-SV-04 and HA-SV-05) were advanced by Gregg Drilling, a California C-57 licensed driller,

using a hand auger to total depths of 3.5 feet below ground surface (bgs). The borings were logged in general accordance with the American Society for Testing and Materials (ASTM) Unified Soil Classification System, and the cored soil was screened for total volatile organic compounds (VOCs) using a photoionization detector (PID).

Small diameter (1/4-inch) Teflon® tubing, fitted with a 1-inch-long stainless-steel filter at the bottom to prevent particulate infiltration, was placed in each boring at approximately 3 feet bgs. Approximately 12 inches of filter pack sand was placed around the tubing inlet in the bottom of the boring (from 3.5 to 2.5 feet bgs), followed by 0.5-foot of dry bentonite placed from 2.5 to 2 feet bgs, then a hydrated bentonite seal to the surface. Each vapor probe was completed with a flush-mounted steel well box. Once the construction of each soil vapor probe was complete, the tubing was capped with an air-tight valve. Soil vapor probe construction details are included in the boring logs in Appendix A.

### SOIL VAPOR SAMPLING

In accordance with the *CalEPA/DTSC Advisory*, the new soil vapor probes were allowed to equilibrate for a minimum of 48 hours prior to sample collection. Sampling was not performed within 5 days following a rain event generating 0.5 inches or more within a 24-hour period. Soil vapor samples were collected using laboratory-provided airflow regulators and manifolds calibrated to approximately 200 milliliters per minute, and batch-certified passivated stainless-steel canisters. Prior to sample collection, a successful shut-in test was completed on the manifold and connections by applying and monitoring a vacuum on the manifold and connections using the passivated canister. The shut-in test was considered successful if the vacuum remained stable for at least 1 minute.

At least three purge volumes<sup>1</sup> were removed from the probe prior to sample collection to avoid sampling stagnant or ambient air. During purging, a leak-check was performed with a shroud placed over the entire sampling train and borehole using helium as a leak check compound. Purged soil vapor was collected in a Tedlar® bag for the measurement of helium, methane, oxygen, carbon dioxide, and total VOCs using hand-held field instruments. After the purging and leak test were completed, a soil vapor sample was collected by opening the 1-Liter Summa™ canister and allowing it to fill to a final vacuum of approximately 5 inches of mercury. Soil vapor sampling field forms are included in Appendix B.

Following sample collection, each canister was labeled with the respective sample identification, and transported under chain of custody protocols to Eurofins Air Toxics (Eurofins), a California-certified analytical laboratory. The collected soil vapor samples were analyzed by Eurofins for VOCs and Total Petroleum Hydrocarbons as gasoline (TPHg) using United States Environmental Protection Agency (USEPA) Method TO-15. In addition, for quality assurance/quality control (QA/QC) measures, one sample was analyzed for helium using Modified ASTM Method D1946.

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<sup>1</sup> Calculated based on the volume of void space in the tubing plus an estimate of the void space in the sand pack and dry bentonite in the vapor probe's annular space.

## SOIL AND GROUNDWATER SAMPLING

Soil and groundwater samples were collected from a total of five borings (including the two soil vapor borings described above). Two approximately 2.25-inch borings, HA-SB-01 and HA-SB-03, were advanced to total depths of 14 and 12 feet bgs, respectively, for the collection of soil and groundwater samples. These borings were initially hand-augered to a depth of 5 feet bgs as an additional safety check for subsurface utilities. HA-SB-02 was hand-augered to 3 feet bgs. Once cleared, the borings were advanced to their total depth using a direct-push technology (DPT) drill rig operated by Gregg Drilling. The borings were logged in general accordance with the ASTM Unified Soil Classification System and the soils were screened for total VOCs using a PID. At HA-SB-01 and HA-SB-03, a soil sample was collected from each boring within the capillary fringe at depths of approximately 5 and 4 to 5 feet bgs, respectively. A strong petroleum odor was noted at approximately 4 feet at HA-SB-01. Two additional shallow soil samples were collected at depths of 1 and 3 feet from HA-SB-01, HA-SB-02, and both soil vapor borings, HA-SV-04 and HA-SV-05. Boring logs are included as Appendix A.

The soil samples were collected in laboratory-provided glass jars, labeled with the boring location identification and sample depth, placed in resealable plastic bags, and stored in an ice-filled cooler. Soil samples submitted for VOC analysis were collected in accordance with USEPA Method 5035 and placed in laboratory-supplied containers with proper preservative (i.e., Terracores). The collected soil samples were transported under standard chain of custody protocols to Pace National Analytical (Pace), a California-certified laboratory, for the following analyses:

- Organochlorine Pesticides using USEPA Method 8081 (two 1 foot bgs samples only);
- TPHg and Total Petroleum Hydrocarbons as diesel (TPHd) and as motor oil (TPHmo) using USEPA Method 8015;
- VOCs using USEPA Method 8260B; and
- California Code of Regulations (CCR) Title 22 Metals using USEPA Method 6010/7471. After receipt of analytical results for the soil samples, additional leachability analyses, California Waste Extraction Test (CA WET) and USEPA Toxicity Characteristic Leaching Procedure (TCLP) analyses for lead were performed on select soil samples.

Grab groundwater samples were collected from borings HA-SB-01 and HA-SB-03. Groundwater was first encountered at HA-SB-01 and HA-SB-03 at 4.5 and 5.4 feet bgs, respectively. Once the borings were advanced to their respective total depths and below the groundwater table, a temporary polyvinyl chloride (PVC) casing with 5 feet of screen was placed in the open borehole to allow groundwater to accumulate. Groundwater samples were collected using new, disposable bailers and transferred to laboratory-supplied sample bottles with proper preservative. Each groundwater sample bottle was labeled with the boring location identification, placed in resealable plastic bags, and stored in an ice-filled cooler.

The collected groundwater samples were transported under standard chain of custody protocols to Pace for analysis of the following analytical methods:

- TPHg, TPHd, and TPHmo using USEPA Method 8015;
- VOCs using USEPA Method 8260B; and

- CCR Title 22 Metals using USEPA Method 6010/7471, reporting dissolved (filtered) concentrations.

## INVESTIGATION-DERIVED WASTE

The investigation-derived waste (IDW) consisted of the soil cuttings generated during drilling activities. These cuttings were placed in a labeled, Department of Transportation-approved, 55-gallon drum, which was sampled for waste characterization and disposal purposes. The IDW was characterized as non-hazardous and transported off-Site for disposal on 30 August 2022 by Belshire Environmental Services, Inc., a California-licensed waste hauler.

## Analytical Results

The analytical results are presented below, with copies of the Eurofins and Pace analytical laboratory reports provided in Appendix C. Table 1 summarizes the analytical results for the collected soil samples, Table 2 summarizes the analytical results for the collected groundwater samples, and Table 3 summarizes the analytical results for the collected soil vapor samples.

To evaluate if subsurface environmental conditions of concern may exist at the Site, the detected concentrations were compared against the following Environmental Screening Levels (ESLs) established by the San Francisco Bay Regional Water Quality Control Board (RWQCB), dated July 2019 (Rev. 2):

- Tier 1 ESLs: the most stringent screening levels established for various receptors and risks;
- Soil Residential, Commercial/Industrial, and Construction Worker: assess potential direct exposure human health risks for respective receptors;
- Groundwater Residential and Commercial/Industrial: assess potential vapor intrusion human health risks for respective receptors; and
- Soil Vapor Residential and Commercial/Industrial: assess potential vapor intrusion human health risks for respective receptors.

In addition, to evaluate disposal requirements for soil that may be excavated from the Site in the future, the detected concentrations in soil were compared against the CCR Title 22 Soluble Threshold Limit Concentration (STLC) and the Total Threshold Limit Concentration (TTL) and the Federal Resource Conservation and Recovery Act (RCRA) Toxicity Characteristic (TC).<sup>2</sup>

## SOIL

Soil samples were collected from each of the five borings, HA-SB-01, HA-SB-02, HA-SB-03, HA-SV-04, and HA-SV-05. The detected soil concentrations for TPHg, arsenic, and lead exceeded one or more of the regulatory criteria and are summarized below.

- TPHg was detected at concentrations ranging from 4.31 milligrams per kilogram (mg/kg) in the 1 foot bgs sample collected at HA-SV-05 to 1,260 mg/kg in the 4 to 5 feet bgs sample collected

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<sup>2</sup> This evaluation is based on the industry rule-of-thumb comparing the detected soil concentration directly to the TTL, and to 10 times the STLC and 20 times the TC.

at HA-SB-01. The Tier 1 and residential ESLs were exceeded in the following sample: HA-SB-01 at 4 to 5 feet bgs. The commercial/industrial and construction worker ESLs were not exceeded.

- Arsenic was detected at concentrations ranging from 1.74 mg/kg in the 4 to 5 feet bgs sample collected at HA-SB-01 to 6.60 mg/kg in the 1 foot bgs sample collected at HA-SV-5. The detected arsenic concentrations are below the upper estimate for background arsenic concentration of 11 mg/kg for soil in the region and accepted by the RWQCB for San Francisco Bay Area soil (Duvergé, 2011).<sup>3</sup>
- Lead was detected at concentrations ranging from 5.97 mg/kg in the 3 feet bgs sample collected at HA-SV-04 to 171 mg/kg in the 1 foot bgs sample collected at HA-SV-04. The Tier 1 ESL was exceeded in following samples: HA-SB-02 at 1 foot bgs, HA-SV-04 at 1 foot bgs, and HA-SV-05 at 1 foot bgs. The lead concentrations at HA-SV-04 at 1 foot bgs and HA-SV-05 at 1 foot bgs also exceeded the residential ESL. The lead concentration at HA-SV-04 at 1 foot bgs also exceeded the construction worker ESL. Additionally, the following samples exceeded both 10 times the STLC and 20 times the TC: HA-SV-04 at 1 foot bgs and HA-SV-05 at 1 foot bgs. Therefore, these samples underwent additional leachability testing (i.e., CA WET and TCLP). The TC was not exceeded in any of these samples. The STLC was exceeded in the sample collected from HA-SV-04 at 1 foot bgs, thereby indicating the soil if excavated for off-Site disposal would be characterized as California-only, non-RCRA hazardous waste.
- Vanadium was detected at concentrations ranging from 26.3 mg/kg in the 1 foot bgs sample collected at HA-SV-05 to 52.9 mg/kg in the sample collected at 5 feet bgs from HA-SB-03. Detected concentrations of vanadium exceed the Tier 1 ESL, but do not exceed the residential, commercial/industrial, or construction worker ESLs. The detected vanadium concentrations are below the upper estimate of the regional background level, 90 mg/kg (LBNL, 2009).

Concentrations of tetrachloroethene (PCE) were also detected in the 1 and 3 feet bgs soil samples collected from each of the borings, except HA-SB-03. None of the detected PCE concentrations were greater than ESLs.

## GROUNDWATER

Groundwater samples were collected from two of the five borings, HA-SB-01 and HA-SB-03. The detected groundwater concentrations of benzene, TPHg, TPHd, cadmium, copper, molybdenum, nickel, and selenium exceeded one or more of the regulatory criteria and are summarized below.

- Benzene was detected at a concentration of 1.14 micrograms per liter ( $\mu\text{g/L}$ ) in the sample collected from HA-SB-01, above the Tier 1 and residential ESL of 0.42  $\mu\text{g/L}$  but below the commercial/industrial ESL of 1.8  $\mu\text{g/L}$ . Benzene was not detected above laboratory reporting limits in the sample collected from HA-SB-03.
- TPHg was detected at a concentration of 147  $\mu\text{g/L}$  in the sample collected at HA-SB-01, above the Tier 1 ESL of 100  $\mu\text{g/L}$ .

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<sup>3</sup> The Tier 1, residential, commercial/industrial, and construction worker ESLs for arsenic are less than the background concentration; therefore, the detected concentrations are not compared against the ESLs for this evaluation.

- TPHd was detected at a concentration of 413 µg/L in the sample collected at HA-SB-01 and 203 µg/L in the sample collected from HA-SB-02, above the Tier 1 ESL of 100 µg/L.
- Cadmium was detected at a concentration of 0.8 µg/L in the sample collected from HA-SB-03, above the Tier 1 ESL of 0.25 µg/L.
- Copper was detected at a concentration of 6.06 µg/L in the sample collected from HA-SB-03, above the Tier 1 ESL of 3.1 µg/L.
- Molybdenum was detected at a concentration of 0.143 µg/L in the sample collected from HA-SB-01, above the Tier 1 ESL of 0.1 µg/L.
- Nickel was detected at a concentration of 12.6 µg/L in the sample collected from HA-SB-03, above the Tier 1 ESL of 8.2 µg/L.
- Selenium was detected at a concentration of 0.528 µg/L in the sample collected from HA-SB-01, above the Tier 1 ESL of 0.5 µg/L.

Several metals concentrations exceeded their respective Tier 1 ESLs, which are based on assessing potential risk to aquatic habitats<sup>4</sup> which is not a concern for the Site.

PCE was not detected above laboratory reporting limits in the groundwater samples.

## SOIL VAPOR

Soil vapor samples were collected from probes HA-SV-04 and HA-SV-05. The detected soil vapor concentrations for chloroform and PCE exceeded the residential and/or commercial/industrial ESLs and are summarized below.

- Chloroform was detected at a concentration of 7.6 micrograms per cubic meter (µg/m<sup>3</sup>) in the sample collected from HA-SV-05, exceeding the residential ESL of 4.1 µg/m<sup>3</sup> but not the commercial/industrial ESL of 18 µg/m<sup>3</sup>. Chloroform is commonly detected in soil vapor due to being found in municipal water that is often present in the vadose zone by way of leaking drinking water or irrigation pipelines (Agency for Toxic Substances and Disease Registry, 1997).
- PCE was detected at concentrations of 59 and 90 µg/m<sup>3</sup> at HA-SV-04 and HA-SV-05, respectively. The PCE detection at HA-SV-04 exceeds the residential ESL of 15 µg/m<sup>3</sup> but not the commercial/industrial ESL of 67 µg/m<sup>3</sup>. The PCE detection at HA-SV-05 exceeds both the residential and commercial/industrial ESLs.

Helium was not detected in HA-SV-05; therefore, no detectable leakage in the soil vapor sampling train occurred.

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<sup>4</sup> With the exception of molybdenum, which is based on tap water non-cancer human health risk. As shallow groundwater beneath the Site is not a drinking water resource, this potential risk is not a concern for the Site.



## Conclusions

Haley & Aldrich completed the Phase II Environmental Investigation at the Site between 22 July and 1 August 2022, which included the collection of soil, grab groundwater, and soil vapor samples. The findings of this investigation are summarized below:

- Concentrations of PCE in soil vapor exceeded residential and/or commercial/industrial ESLs. Low levels of PCE were detected in shallow soil samples at each of the boring locations, at concentrations below Tier 1 ESLs. PCE was not detected in any of the groundwater samples.
- Concentrations of TPHg, TPHd, benzene, and various metals exceeding Tier 1 ESLs were detected in groundwater samples.
- Shallow soil in the vicinity of HA-SB-02, HA-SV-04, and HA-SV-05 contained lead concentrations exceeding commercial/industrial and/or construction worker ESLs. Results indicate a portion of the soil at the Site may be expected to be characterized as California, non-RCRA hazardous waste if excavated for off-Site disposal due to elevated lead concentrations.

## Closing

We appreciate the opportunity to perform these services for you on this project. Please do not hesitate to contact the undersigned if you have any questions or comments.

Sincerely yours,  
**HALEY & ALDRICH, INC.**



Akash Caveney  
Staff Scientist



Brooke Mellin, P.G.  
Project Manager | Geologist



c: TC NO. CAL. DEVELOPMENT, INC.; Attn: Brian Schmidt

### Enclosures:

- Table 1 – Summary of Soil Analytical Results
- Table 2 – Summary of Groundwater Analytical Results
- Table 3 – Summary of Soil Vapor Analytical Results
- Figure 1 – Project Locus
- Figure 2 – Site Plan
- Appendix A – Boring Logs
- Appendix B – Soil Vapor Sampling Forms
- Appendix C – Analytical Laboratory Reports

## References

1. AEI Consultants, 2017. Limited Phase II Subsurface Investigation, 449 and 457 May Street & 908 Ocean Street, Santa Cruz, CA. 14 July.
2. Agency for Toxic Substances and Disease Registry, 1997. Toxicological profile for Chloroform. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.
3. California Environmental Protection Agency/Department of Toxic Substances Control, 2015. Advisory – Active Soil Gas Investigation. July.
4. Duvergé, D.J., 2011. Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region. December.
5. Haley & Aldrich, Inc., 2022. ASTM Phase I Environmental Site Assessment, Ocean Street Redevelopment Site, 908, 920, 928, 1004, 1008, 1010, and 1014 Ocean Street, 126 and 130 Hubbard Street, 417, 419, 421, 423, 429, 431, 435, 449, 451, 445, and 457 May Avenue, Santa Cruz, California. October.
6. Lawrence Berkeley National Laboratory (LBNL), 2009. Analysis of Background Distributions of Metals in Soil at Lawrence Berkeley National Laboratory. April.
7. San Francisco Bay Regional Water Quality Control Board, 2019. Environmental Screening Levels, Revision 2. July.

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## **TABLES**

**TABLE 1**  
**SUMMARY OF SOIL ANALYTICAL RESULTS**  
 457 MAY AVENUE  
 SANTA CRUZ, CALIFORNIA

Location Sample Date Sample Type Sample Depth (bgs)	10x STLC	TTL	20x TC	Construction Worker ESL	Commercial/ Industrial ESL	Residential ESL	Tier 1 ESL	HA-SB-01 07/22/2022 Primary 1 (ft)	HA-SB-01 07/22/2022 Primary 3 (ft)	HA-SB-01 07/22/2022 Primary 4 - 5 (ft)	HA-SB-02 07/25/2022 Primary 1 (ft)	HA-SB-02 07/25/2022 Primary 3 (ft)	HA-SB-03 07/22/2022 Primary 5 (ft)	HA-SV-04 07/22/2022 Primary 1 (ft)	HA-SV-04 07/22/2022 Primary 3 (ft)	HA-SV-05 07/25/2022 Primary 1 (ft)	HA-SV-05 07/25/2022 Primary 3 (ft)
<b>Inorganic Compounds (mg/kg)</b>																	
Antimony	150	500	--	50	160	11	11	< 0.745	< 0.739	< 0.658	< 0.632	< 0.698	< 0.697	< 0.713	< 0.742	< 0.617	< 0.721
Arsenic	50	500	100	0.98	0.31	0.067	0.067	2.38 J	3.7	1.74 J	4.83	3.02	4.21	5.73	2.68 J	6.6	2.6 J
Barium	1000	10000	2000	3000	220000	15000	390	186	164	172	200	265	184	184	318	230	242
Beryllium	7.5	75	--	27	230	16	5	0.661	0.743	0.416	0.521	0.844	0.961	0.441	0.722	0.345	0.808
Cadmium	10	100	20	51	1100	78	1.9	0.836	0.43 J	0.44 J	0.562 J	0.74	0.394 J	0.584 J	1	0.643	0.613 J
Chromium	50	2500	100	530,000	1,800,000	120,000	160	30	34.3	24.7	29	37.1	31.9	24.7	30.9	23.2	39.4
Cobalt	800	8000	--	28	350	23	23	6.34	5.51	6.59	4.98	5.62	7.02	5.33	6.73	4.21	6.35
Copper	250	2500	--	14000	47000	3100	180	12.6	13.3	11	128	41.6	13.9	19.1	13.9	67.4	25.5
Lead	50	1000	100	160	320	80	32	6.3	10.3	7.38	46.3	8.07	6.85	171	5.97	118	8.19
Mercury	2	20	4	44	190	13	13	< 0.0246	< 0.0244	< 0.0218	0.055	< 0.0231	0.0282 J	0.118	< 0.0246	0.0829	< 0.0238
Molybdenum	3500	3500	--	1800	5800	390	6.9	1.29	1.32	0.717	1.2	1.2	1.42	1.22	1.2	0.965	1.21
Nickel	200	2000	--	86	11000	820	86	15.1	15.9	14.7	11.5	19.1	17.8	10.5	17.4	9.31	18.5
Selenium	10	100	20	1700	5800	390	2.4	< 1.05	< 1.04	< 0.924	< 0.887	< 0.98	< 0.978	< 1	< 1.04	< 0.867	< 1.01
Silver	50	500	100	1800	5800	390	25	< 0.174	< 0.172	< 0.154	0.85 J	< 0.163	< 0.163	< 0.166	< 0.173	< 0.144	< 0.168
Thallium	70	700	--	3.5	12	0.78	0.78	< 0.539	< 0.535	< 0.476	< 0.458	< 0.505	< 0.505	< 0.516	< 0.538	< 0.447	< 0.522
Vanadium	240	2400	--	470	5800	390	18	40.5	52	34.8	33	47.5	52.9	30.1	44.1	26.3	51.9
Zinc	2500	5000	--	110000	350000	23000	340	52.1	56.7	48.8	120	66.8	67.5	170	57.5	155	64.1
<b>Extraction Metals (mg/L)</b>																	
STLC Lead	5.0 <sup>a</sup>	--	--	--	--	--	--	--	--	--	--	--	--	5.46	--	1.56	--
TCLP Lead	--	--	5.0 <sup>b</sup>	--	--	--	--	--	--	--	--	--	--	0.2	--	<0.1	--
<b>PCBs (mg/kg)</b>																	
Aroclor-1016 (PCB-1016)	--	50	--	--	--	--	--	< 0.0162	--	--	< 0.0137	--	--	< 0.0155	--	< 0.0134	--
Aroclor-1221 (PCB-1221)	--	50	--	--	--	--	--	< 0.0162	--	--	< 0.0137	--	--	< 0.0155	--	< 0.0134	--
Aroclor-1232 (PCB-1232)	--	50	--	--	--	--	--	< 0.0162	--	--	< 0.0137	--	--	< 0.0155	--	< 0.0134	--
Aroclor-1242 (PCB-1242)	--	50	--	--	--	--	--	< 0.0162	--	--	< 0.0137	--	--	< 0.0155	--	< 0.0134	--
Aroclor-1248 (PCB-1248)	--	50	--	--	--	--	--	< 0.0101	--	--	< 0.00857	--	--	< 0.00967	--	< 0.00837	--
Aroclor-1254 (PCB-1254)	--	50	--	--	--	--	--	< 0.0101	--	--	< 0.00857	--	--	< 0.00967	--	< 0.00837	--
Aroclor-1260 (PCB-1260)	--	50	--	--	--	--	--	< 0.0101	--	--	< 0.00857	--	--	< 0.00967	--	< 0.00837	--
<b>Pesticides (mg/kg)</b>																	
4,4'-DDD	--	--	--	81	12	2.7	2.7	< 0.00506	--	--	< 0.0043	--	--	--	--	--	--
4,4'-DDE	--	--	--	57	8.3	1.8	0.33	< 0.00501	--	--	< 0.00425	--	--	--	--	--	--
4,4'-DDT	--	--	--	57	8.5	1.9	0.0011	< 0.00858	--	--	< 0.00728	--	--	--	--	--	--
Aldrin	--	1.4	--	1	0.15	0.035	0.0024	< 0.00515	--	--	< 0.00437	--	--	--	--	--	--
alpha-BHC	--	--	--	--	--	--	--	< 0.00504	--	--	< 0.00427	--	--	--	--	--	--
beta-BHC	--	--	--	--	--	--	--	< 0.00519	--	--	< 0.0044	--	--	--	--	--	--
Chlordane	--	2.5	0.6	--	--	--	--	< 0.141	--	--	< 0.12	--	--	--	--	--	--
delta-BHC	--	--	--	--	--	--	--	< 0.00474	--	--	< 0.00402	--	--	--	--	--	--
Dieldrin	--	8	--	1.1	0.16	0.037	0.00046	< 0.00471	--	--	< 0.00399	--	--	--	--	--	--
Endosulfan I	--	--	--	--	--	--	--	< 0.00497	--	--	< 0.00422	--	--	--	--	--	--
Endosulfan II	--	--	--	--	--	--	--	< 0.00459	--	--	< 0.00389	--	--	--	--	--	--
Endosulfan sulfate	--	--	--	--	--	--	--	< 0.00498	--	--	< 0.00423	--	--	--	--	--	--
Endrin	--	0.2	0.4	74	290	21	0.0011	< 0.00479	--	--	< 0.00406	--	--	--	--	--	--
Endrin aldehyde	--	--	--	--	--	--	--	< 0.00464	--	--	< 0.00394	--	--	--	--	--	--
Endrin ketone	--	--	--	--	--	--	--	< 0.00973	--	--	< 0.00826	--	--	--	--	--	--
gamma-BHC (Lindane)	--	4	8	16	2.5	0.55	0.0074	< 0.00471	--	--	< 0.00399	--	--	--	--	--	--
Heptachlor	--	4.7	0.16	3.7	0.53	0.12	0.12	< 0.00586	--	--	< 0.00497	--	--	--	--	--	--
Heptachlor epoxide	--	--	--	1.9	0.28	0.062	0.00018	< 0.00464	--	--	< 0.00394	--	--	--	--	--	--
Hexachlorobenzene	--	--	2.6	7.7	0.78	0.18	0.0008	< 0.00474	--	--	< 0.00402	--	--	--	--	--	--
Methoxychlor	--	100	200	1200	4800	350	0.013	< 0.00662	--	--	< 0.00562	--	--	--	--	--	--
Toxaphene	--	5	10	14	2.2	0.51	0.51	< 0.17	--	--	< 0.144	--	--	--	--	--	--



**TABLE 1**  
**SUMMARY OF SOIL ANALYTICAL RESULTS**  
 457 MAY AVENUE  
 SANTA CRUZ, CALIFORNIA

Location Sample Date Sample Type Sample Depth (bgs)	10x STLC	TTLCL	20x TC	Construction Worker ESL	Commercial/ Industrial ESL	Residential ESL	Tier 1 ESL	HA-SB-01 07/22/2022 Primary 1 (ft)	HA-SB-01 07/22/2022 Primary 3 (ft)	HA-SB-01 07/22/2022 Primary 4 - 5 (ft)	HA-SB-02 07/25/2022 Primary 1 (ft)	HA-SB-02 07/25/2022 Primary 3 (ft)	HA-SB-03 07/22/2022 Primary 5 (ft)	HA-SV-04 07/22/2022 Primary 1 (ft)	HA-SV-04 07/22/2022 Primary 3 (ft)	HA-SV-05 07/25/2022 Primary 1 (ft)	HA-SV-05 07/25/2022 Primary 3 (ft)
Cymene (p-Isopropyltoluene)	--	--	--	--	--	--	--	< 0.00639	< 0.0075	< 0.00584	< 0.00509	< 0.00441	< 0.00604	< 0.00603	< 0.0067	< 0.00372	< 0.00477
Dibromochloromethane	--	--	--	290	39	8.3	0.35	< 0.00153	< 0.00179	< 0.0014	< 0.00122	< 0.00106	< 0.00145	< 0.00145	< 0.00162	< 0.000895	< 0.00115
Dibromomethane	--	--	--	--	--	--	--	< 0.00188	< 0.00221	< 0.00172	< 0.0015	< 0.0013	< 0.00177	< 0.00178	< 0.00198	< 0.0011	< 0.0014
Dichlorodifluoromethane (CFC-12)	--	--	--	--	--	--	--	< 0.00403	< 0.00473	< 0.00368	< 0.00321	< 0.00279	< 0.00381	< 0.00382	< 0.00423	< 0.00235	< 0.00301
Diisopropyl ether (DIPE)	--	--	--	--	--	--	--	< 0.00103	< 0.0012	< 0.000938	< 0.000819	< 0.00071	< 0.000971	< 0.000971	< 0.00108	< 0.0006	< 0.000769
Ethylbenzene	--	--	--	540	26	5.9	0.43	< 0.00185	< 0.00216	< 0.00169	< 0.00147	< 0.00128	< 0.00174	< 0.00175	< 0.00193	< 0.00108	< 0.00138
Hexachlorobutadiene	--	--	10	100	5.3	1.2	0.028	< 0.015	< 0.0176	< 0.0137	< 0.012	< 0.0104	< 0.0142	< 0.0142	< 0.0158	< 0.00877	< 0.0112
Isopropylbenzene (Cumene)	--	--	--	--	--	--	--	< 0.00106	< 0.00125	<b>0.0267</b>	< 0.000849	< 0.000736	< 0.00101	< 0.00101	< 0.00112	< 0.000621	< 0.000796
Methyl Tert Butyl Ether (MTBE)	--	--	--	4100	210	47	0.028	< 0.000876	< 0.00103	< 0.000801	< 0.000699	< 0.000607	< 0.00083	< 0.00083	<b>0.00092 J</b>	< 0.000511	<b>0.000655 J</b>
Methylene chloride (Dichloromethane)	--	--	--	490	25	1.9	0.12	< 0.0167	< 0.0195	< 0.0152	< 0.0133	< 0.0115	< 0.0157	< 0.0157	< 0.0174	< 0.00971	< 0.0124
Naphthalene	--	--	--	400	17	3.8	0.042	< 0.0122	< 0.0143	< 0.0112	< 0.00974	< 0.00844	< 0.0116	< 0.0116	< 0.0128	< 0.00714	< 0.00914
n-Butylbenzene	--	--	--	--	--	--	--	< 0.0131	< 0.0154	<b>1.29</b>	< 0.0105	< 0.00909	< 0.0124	< 0.0124	< 0.0138	< 0.00767	< 0.00983
n-Propylbenzene	--	--	--	--	--	--	--	< 0.00237	< 0.0028	< 0.00217	< 0.0019	< 0.00164	< 0.00225	< 0.00225	< 0.0025	< 0.00139	< 0.00178
Styrene	--	--	--	25000	33000	5700	0.92	< 0.000573	< 0.000672	< 0.000524	< 0.000457	< 0.000397	< 0.000542	< 0.000543	< 0.000602	< 0.000335	< 0.000429
tert-Butylbenzene	--	--	--	--	--	--	--	< 0.00488	< 0.00573	<b>0.0785</b>	< 0.00389	< 0.00337	< 0.00462	< 0.00462	< 0.00513	< 0.00285	< 0.00365
Tetrachloroethene	--	--	14	33	2.7	0.59	0.08	<b>0.00964</b>	<b>0.00374 J</b>	< 0.00205	<b>0.00788</b>	<b>0.0019 J</b>	< 0.00212	<b>0.00278 J</b>	<b>0.00722</b>	<b>0.00274 J</b>	< 0.00168
Toluene	--	--	--	4700	5300	1100	3.2	< 0.00326	< 0.00382	< 0.00298	<b>0.00335 J</b>	< 0.00225	< 0.00308	< 0.00308	< 0.00342	< 0.0019	< 0.00243
trans-1,2-Dichloroethene	--	--	--	570	600	130	0.65	< 0.0026	< 0.00306	< 0.00238	< 0.00207	< 0.00181	< 0.00247	< 0.00246	< 0.00274	< 0.00152	< 0.00195
trans-1,3-Dichloropropene	--	--	--	--	--	--	--	< 0.00286	< 0.00335	< 0.00261	< 0.00227	< 0.00198	< 0.0027	< 0.0027	< 0.00299	< 0.00166	< 0.00213
Trichloroethene	--	2040	10	18	6.1	0.95	0.085	< 0.00146	< 0.00172	< 0.00133	< 0.00117	< 0.00101	< 0.00138	< 0.00138	< 0.00154	< 0.000854	< 0.00109
Trichlorofluoromethane (CFC-11)	--	--	--	--	--	--	--	< 0.00207	< 0.00243	< 0.00189	< 0.00166	< 0.00143	< 0.00196	< 0.00196	< 0.00217	< 0.00121	< 0.00155
Trifluorotrchloroethane (Freon 113)	--	--	--	--	--	--	--	< 0.00189	< 0.00221	< 0.00173	< 0.0015	< 0.00131	< 0.00179	< 0.00178	< 0.00198	< 0.0011	< 0.00141
Vinyl chloride	--	10	4	3.4	0.15	0.0083	0.0015	< 0.0029	< 0.0034	< 0.00266	< 0.00231	< 0.00201	< 0.00275	< 0.00275	< 0.00306	< 0.0017	< 0.00218
Xylene (total)	--	--	--	2400	2500	580	2.1	< 0.0022	< 0.00258	<b>0.00572 J</b>	<b>0.00589 J</b>	< 0.00152	< 0.00208	< 0.00208	<b>0.0126 J</b>	< 0.00129	< 0.00165

**Notes and Abbreviations:**

- a. California Hazardous Waste Criteria using Soluble Threshold Limit Concentration (STLC).
- b. Federal Hazardous Waste Criteria using Resource Conservation and Recovery Act (RCRA) Toxicity Characteristic (TC).
- TTLCL = California Hazardous Waste Criteria using Total Threshold Limit Concentrations.
- TCLP = Federal Hazardous Waste Criteria using Resource Conservation and Recovery Act (RCRA) Toxicity Characteristic Leaching Procedure
- Tier 1 ESL = Tier 1 Environmental Screening Level established by the San Francisco Bay Regional Water Quality Control Board, July 2019 (Revision 2)
- Residential ESL = Residential Direct Exposure Environmental Screening Level (ESL) established by the San Francisco Bay Regional Water Quality Control Board, July 2019 (Rev. 2)
- Commercial/Industrial ESL = Commercial/Industrial Direct Exposure Environmental Screening Level (ESL) established by the San Francisco Bay Regional Water Quality Control Board, July 2019 (Rev. 2)
- Construction Worker ESL = Construction Worker Direct Exposure ESL established by the San Francisco Bay Regional Water Quality Control Board, July 2019 (Rev. 2)
- µg/L = micrograms per liter
- Non-detects are reported to the laboratory method detection limit (< MDL).
- Detects are **bolded**.
- Highlighted results exceed corresponding screening criteria.
- J = estimated result
- Analyses were completed using USEPA Method 6010B, 6020, 7470A, 8015, and 8260B.
- ESL for total chromium provided as chromium (III).
- Blue highlight = indicates an exceedance of the Tier 1 ESL.
- Green highlight = indicates an exceedance of the Residential ESL.
- Yellow highlight = indicates an exceedance of the Construction Worker ESL.

**TABLE 2**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
 457 MAY AVENUE  
 SANTA CRUZ, CALIFORNIA

Location Sample Date Sample Type	Commercial/ Industrial ESL	Residential ESL	Tier 1 ESL	HA-SB-01 07/22/2022 Primary	HA-SB-03 07/22/2022 Primary
<b>Inorganic Compounds (mg/L)</b>					
Barium, Dissolved	--	--	1	<b>0.136</b>	<b>0.07</b>
Beryllium, Dissolved	--	--	0.0027	< 0.00033	< 0.00033
Chromium, Dissolved	--	--	0.05	< 0.0014	< 0.0014
Cobalt, Dissolved	--	--	0.003	< 0.00084	< 0.00084
Molybdenum, Dissolved	--	--	0.1	<b>0.143</b>	<b>0.00233 J</b>
Vanadium, Dissolved	--	--	0.019	<b>0.00606 J</b>	< 0.00499
<b>Inorganic Compounds (ug/L)</b>					
Antimony, Dissolved	--	--	6	< 1.03	< 1.03
Arsenic, Dissolved	--	--	10	<b>1.16 J</b>	<b>0.189 J</b>
Cadmium, Dissolved	--	--	0.25	< 0.15	<b>0.8 J</b>
Copper, Dissolved	--	--	3.1	<b>2.16 J</b>	<b>6.06</b>
Lead, Dissolved	--	--	2.5	< 0.849	< 0.849
Mercury, Dissolved	0.38	0.089	0.025	< 0.1	< 0.1
Nickel, Dissolved	--	--	8.2	<b>3.04</b>	<b>12.6</b>
Selenium, Dissolved	--	--	0.5	<b>0.528 J</b>	<b>0.406 J</b>
Silver, Dissolved	--	--	0.19	< 0.07	< 0.07
Thallium, Dissolved	--	--	2	< 0.121	< 0.121
Zinc, Dissolved	--	--	81	<b>5.88 J</b>	<b>16.2 J</b>
<b>Total Petroleum Hydrocarbons (ug/L)</b>					
Total Petroleum Hydrocarbons (C5-C12) as Gasoline	--	--	100	<b>147 J</b>	< 30.4
Total Petroleum Hydrocarbons (C12-C22) as Diesel	--	--	100	<b>413</b>	<b>203</b>
Total Petroleum Hydrocarbons (C22-C40) as Motor Oil	--	--	--	<b>161 J</b>	<b>348</b>
<b>Volatile Organic Compounds (ug/L)</b>					
1,1,1,2-Tetrachloroethane	17	3.8	0.57	< 0.294	< 0.147
1,1,1-Trichloroethane	6300	1500	62	< 0.298	< 0.149
1,1,2,2-Tetrachloroethane	14	3.2	1	< 0.266	< 0.133
1,1,2-Trichloroethane	23	5.2	5	< 0.316	< 0.158
1,1-Dichloroethane	33	7.6	5	< 0.2	< 0.1
1,1-Dichloroethene	280	66	3.2	< 0.376	< 0.188
1,1-Dichloropropene	--	--	--	< 0.284	< 0.142
1,2,3-Trichlorobenzene	--	--	--	< 0.46	< 0.23
1,2,3-Trichloropropane	94	22	0.005	< 0.474	< 0.237
1,2,3-Trimethylbenzene	--	--	--	< 0.208	< 0.104
1,2,4-Trichlorobenzene	150	36	5	< 0.962	< 0.481
1,2,4-Trimethylbenzene	--	--	--	<b>10.4</b>	< 0.322
1,2-Dibromo-3-chloropropane (DBCP)	0.34	0.028	0.028	< 0.552	< 0.276
1,2-Dibromoethane (Ethylene Dibromide)	0.76	0.17	0.05	< 0.252	< 0.126
1,2-Dichlorobenzene	11000	2700	14	< 0.214	< 0.107
1,2-Dichloroethane	9.8	2.2	0.5	< 0.164	< 0.0819
1,2-Dichloropropane	10	2.3	2.3	< 0.298	< 0.149
1,3,5-Trimethylbenzene	--	--	--	< 0.208	< 0.104
1,3-Dichlorobenzene	--	--	65	< 0.22	< 0.11
1,3-Dichloropropane	--	--	--	< 0.22	< 0.11
1,4-Dichlorobenzene	11	2.6	2.6	< 0.24	< 0.12
2,2-Dichloropropane	--	--	--	< 0.322	< 0.161
2-Butanone (Methyl Ethyl Ketone)	9.50E+06	2.30E+06	5600	< 2.38	< 1.19
2-Chlorotoluene	--	--	--	< 0.212	< 0.106
2-Phenylbutane (sec-Butylbenzene)	--	--	--	<b>1.84 J</b>	< 0.125
4-Chlorotoluene	--	--	--	< 0.228	< 0.114
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	2.30E+06	560000	120	< 0.956	< 0.478
Acetone	9.70E+07	2.30E+07	1500	< 22.6 J4	< 11.3 J4

**TABLE 2**  
**SUMMARY OF GROUNDWATER ANALYTICAL RESULTS**  
 457 MAY AVENUE  
 SANTA CRUZ, CALIFORNIA

Location Sample Date Sample Type	Commercial/ Industrial ESL	Residential ESL	Tier 1 ESL	HA-SB-01 07/22/2022 Primary	HA-SB-03 07/22/2022 Primary
Acrolein	--	--	--	< 5.08	< 2.54
Acrylonitrile	--	--	--	< 1.34	< 0.671
Benzene	1.8	0.42	0.42	<b>1.14 J</b>	< 0.0941
Bromobenzene	--	--	--	< 0.236	< 0.118
Bromodichloromethane	3.8	0.87	0.87	< 0.272	< 0.136
Bromoform	510	120	80	< 0.258	< 0.129
Bromomethane (Methyl Bromide)	73	17	7.5	< 1.21	< 0.605
Carbon tetrachloride	1.9	0.43	0.43	< 0.256	< 0.128
Chlorobenzene	1700	400	25	< 0.232	< 0.116
Chloroethane	97000	23000	16	< 0.384 J3	< 0.192 J3
Chloroform (Trichloromethane)	3.6	0.81	0.81	< 0.222	< 0.111
Chloromethane (Methyl Chloride)	1100	260	190	< 1.92	< 0.96
cis-1,2-Dichloroethene	210	49	6	< 0.252	< 0.126
cis-1,3-Dichloropropene	--	--	--	< 0.222	< 0.111
Cymene (p-Isopropyltoluene)	--	--	--	< 0.24	< 0.12
Dibromochloromethane	--	--	34	< 0.28	< 0.14
Dibromomethane	--	--	--	< 0.244	< 0.122
Dichlorodifluoromethane (CFC-12)	--	--	--	< 0.748	< 0.374
Diisopropyl ether (DIPE)	--	--	--	< 0.21 J4	< 0.105 J4
Ethylbenzene	15	3.5	3.5	< 0.274	< 0.137
Hexachlorobutadiene	1.3	0.3	0.14	< 0.674	< 0.337
Isopropylbenzene (Cumene)	--	--	--	< 0.21	< 0.105
Methyl Tert Butyl Ether (MTBE)	2000	450	5	<b>1.5 J</b>	< 0.101
Methylene chloride (Dichloromethane)	94	7.8	5	< 0.86	< 0.43
Naphthalene	20	4.6	0.17	< 2	< 1
n-Butylbenzene	--	--	--	<b>1.05 J</b>	< 0.157
n-Propylbenzene	--	--	--	< 0.199	< 0.0993
Styrene	36000	8500	10	< 0.236	< 0.118
tert-Butylbenzene	--	--	--	< 0.254	< 0.127
Tetrachloroethene	2.8	0.64	0.64	< 0.6	< 0.3
Toluene	4900	1200	40	< 0.556	< 0.278
trans-1,2-Dichloroethene	920	220	10	< 0.298	< 0.149
trans-1,3-Dichloropropene	--	--	--	< 0.236	< 0.118
Trichloroethene	7.5	1.2	1.2	< 0.38	< 0.19
Trichlorofluoromethane (CFC-11)	--	--	--	< 0.32	< 0.16
Trifluorotrchloroethane (Freon 113)	--	--	--	< 0.36	< 0.18
Vinyl chloride	0.14	0.0086	0.0086	< 0.468	< 0.234
Xylene (total)	1600	390	20	<b>0.867 J</b>	< 0.174

**Notes and Abbreviations:**

µg/L = micrograms per liter

Tier 1 ESL = Tier 1 Environmental Screening Level established by the San Francisco Bay Regional Water Quality Control Board, July 2019 (Rev. 2)

Residential ESL = Residential Vapor Intrusion Environmental Screening Level established by the San Francisco Bay Regional Water Quality Control Board, July 2019 (Rev. 2)

Commercial/Industrial ESL = Commercial/Industrial Vapor Intrusion Environmental Screening Level (ESL) established by the San Francisco Bay Regional Water Quality Control Board, July 2019 (Rev. 2)

Non-detects are reported to the laboratory method detection limit (< MDL).

Detects are **bolded**.

Blue highlight = indicates an exceedance of the Tier 1 ESL.

J = estimated result

Analyses were completed using USEPA Method 6010B, 6020, 7470A, 8015, and 8260B.

ESL for total chromium provided as chromium (III).



**TABLE 3**  
**SUMMARY OF SOIL VAPOR ANALYTICAL RESULTS**  
 457 MAY AVENUE  
 SANTA CRUZ, CALIFORNIA

Location Sample Date Sample Type	Commercial/ Industrial ESL	Residential ESL	HA-SV-04 08/01/2022 Primary	HA-SV-05 08/01/2022 Primary
<b>Natural Gases (%)</b>				
Helium	--	--	--	< 0.11
<b>Volatile Organic Compounds (ug/m3)</b>				
1,1,1-Trichloroethane	150,000	35,000	< 5.6	< 6
1,1,2,2-Tetrachloroethane	7	1.6	< 7	< 7.6
1,1,2-Trichloroethane	26	5.8	< 5.6	< 6
1,1-Dichloroethane	260	58	< 4.1	< 4.4
1,1-Dichloroethene	10,000	2,400	< 4	< 4.4
1,2,4-Trichlorobenzene	290	70	< 30	< 33
1,2,4-Trimethylbenzene	--	--	< 5	< 5.4
1,2-Dibromoethane (Ethylene Dibromide)	0.68	0.16	< 7.8	< 8.4
1,2-Dichlorobenzene	29,000	7,000	< 6.1	< 6.6
1,2-Dichloroethane	16	3.6	< 4.1	< 4.4
1,2-Dichloropropane	41	9.4	< 4.7	< 5.1
1,2-Dichlorotetrafluoroethane (CFC 114)	--	--	< 7.1	< 7.7
1,3,5-Trimethylbenzene	--	--	< 5	< 5.4
1,3-Butadiene	--	--	< 2.2	< 2.4
1,3-Dichlorobenzene	--	--	< 6.1	< 6.6
1,4-Dichlorobenzene	37	8.5	< 6.1	< 6.6
1,4-Dioxane	53	12	< 15	< 16
2,2,4-Trimethylpentane	--	--	< 4.8	< 5.1
2-Butanone (Methyl Ethyl Ketone)	730,000	170,000	< 12	< 13
2-Hexanone (Methyl Butyl Ketone)	--	--	< 17	< 18
4-Ethyltoluene (1-Ethyl-4-Methylbenzene)	--	--	< 5	< 5.4
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	440,000	14,000	< 4.2	< 4.5
Acetone	4,500,000	1,000,000	< 24	<b>47</b>
Allyl chloride	--	--	< 13	< 14
Benzene	14	3.2	< 3.2	< 3.5
Benzyl Chloride (alpha-Chlorotoluene)	--	--	< 5.3	< 5.7
Bromodichloromethane	11	2.5	< 6.8	< 7.4
Bromoform	370	85	< 10	< 11
Bromomethane (Methyl Bromide)	730	170	< 40	< 43
Carbon disulfide	--	--	<b>17</b>	<b>15</b>
Carbon tetrachloride	68	16	< 6.4	< 6.9
Chlorobenzene	7,300	1,700	< 4.7	<b>7.5</b>
Chloroethane	1,500,000	350,000	< 11	< 12
Chloroform (Trichloromethane)	18	4.1	< 5	<b>7.6</b>
Chloromethane (Methyl Chloride)	13,000	3,100	< 21	< 23
cis-1,2-Dichloroethene	1,200	280	< 4	< 4.4
cis-1,3-Dichloropropene	--	--	< 4.6	< 5
Cyclohexane	--	--	< 3.5	< 3.8
Dibromochloromethane	--	--	< 8.7	< 9.4
Dichlorodifluoromethane (CFC-12)	--	--	< 5	< 5.4
Ethanol	--	--	< 19	< 21
Ethylbenzene	160	37	< 4.4	< 4.8
Hexachlorobutadiene	19	4.3	< 44	< 47
Hexane	--	--	< 3.6	< 3.9
Isopropyl Alcohol (2-Propanol)	--	--	< 10	< 11
Isopropylbenzene (Cumene)	--	--	< 5	< 5.4
m,p-Xylenes	15,000	3,500	<b>11</b>	<b>20</b>
Methyl Tert Butyl Ether (MTBE)	1,600	360	< 15	< 16
Methylene chloride (Dichloromethane)	410	34	< 35	< 38
Naphthalene	12	2.8	< 11	< 12
N-Heptane	--	--	< 4.2	< 4.5
n-Propylbenzene	--	--	< 5	< 5.4
o-Xylene	15,000	3,500	< 4.4	<b>6.8</b>
Styrene	130,000	31,000	< 4.3	< 4.7
Tetrachloroethene	67	15	<b>59</b>	<b>90</b>
Tetrahydrofuran	--	--	< 3	< 3.2
Toluene	44,000	10,000	<b>5.3</b>	< 4.1
Total Petroleum Hydrocarbon – Gasoline	83,000	20,000	< 420	<b>700</b>
trans-1,2-Dichloroethene	12,000	2,800	< 4	< 4.4
trans-1,3-Dichloropropene	--	--	< 4.6	< 5
Trichloroethene	100	16	< 5.5	< 5.9
Trichlorofluoromethane (CFC-11)	--	--	< 5.7	< 6.2
Trifluorotrchloroethane (Freon 113)	--	--	< 7.8	< 8.4
Vinyl chloride	5.2	0.32	< 2.6	< 2.8

**Notes and Abbreviations:**

$\mu\text{g}/\text{m}^3$  = micrograms per cubic meter

Residential ESL = Residential Environmental Screening Level established by the San Francisco Bay Regional Water Quality Control Board, July 2019 (Rev. 2)

Commercial/Industrial ESL = Commercial/Industrial Environmental Screening Level established by the San Francisco Bay Regional Water Quality Control Board, July 2019 (Rev. 2)

Non-detects are reported to the laboratory reporting limit (< RL).

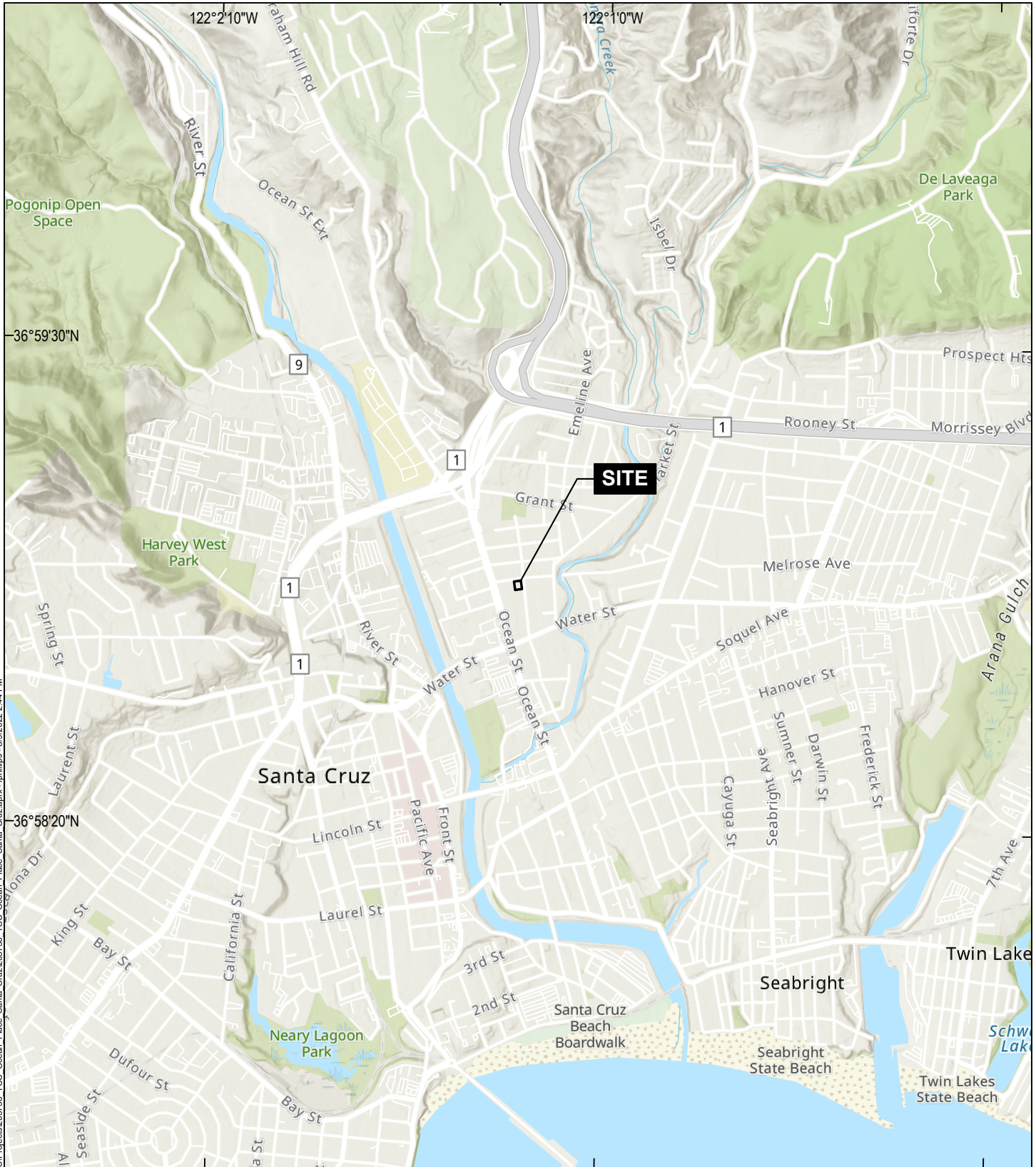
Detects are **bolded**.

Blue highlight = indicates an exceedance of the Residential ESL.

Red highlight = indicates an exceedance of the Commercial/Industrial ESL.

Analyses were completed using USEPA Method TO-15 and ASTM D-1946.

## FIGURES



GIS: \\haleyaldrich.com\share\CF\Projects\0205738\GIS\Projects\05738\_TCC\_Ocean\_Place\_Santa\_Cruz.aprx - 8/9/2022 2:44 PM



MAP SOURCE: ESRI  
 SITE COORDINATES: 36°58'55"N, 122°01'15"W

**HALEY  
 ALDRICH**

SE-SANTA CRUZ, LLC  
 457 MAY AVENUE  
 SANTA CRUZ, CALIFORNIA

**PROJECT LOCUS**







APPROXIMATE SCALE: 1 IN = 2000 FT  
 AUGUST 2022

**FIGURE 1**

C:\GIS\FILE\_PATH\haleyaldrich.com\share\CF\Projects\0205738\GIS\Projects\0205738 TCC Ocean Place Santa Cruz.aprx — USER: lphillips — LAST SAVED: 8/9/2022 2:48 PM

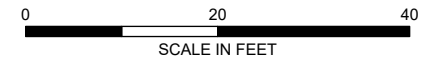


**LEGEND**

-  SOIL AND GROUNDWATER BORING
-  SOIL AND SOIL VAPOR BORING
-  SOIL BORING
-  FORMER UNDERGROUND STORAGE TANK (UST)
-  SUBJECT SITE
-  PARCEL BOUNDARY

**NOTES**

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. ASSESSOR PARCEL DATA SOURCE: SANTA CRUZ COUNTY
3. AERIAL IMAGERY SOURCE: NEARMAP, 19 MAY 2022



**HALEY ALDRICH** SE-SANTA CRUZ, LLC  
457 MAY AVENUE  
SANTA CRUZ, CALIFORNIA

**SITE PLAN**

AUGUST 2022

**FIGURE 2**

**APPENDIX A**  
**Boring Logs**



# TEST BORING REPORT

Boring No. HA-SB-01

Project TCC Ocean Place, 457 May Avenue Santa Cruz, CA  
Client TC NO. CAL. DEVELOPMENT, INC.  
Contractor Coastwide Utility Locate; Gregg Drilling

File No. 0205738-000  
Sheet No. 1 of 1  
Start July 22, 2022  
Finish July 22, 2022

Driller P. Green  
H&A Rep. A. Caveney  
Reviewed By B. Mellin, PG #9488

Type	Casing	Drilling Equipment and Procedures
Inside Diameter (in.)	DPT	Rig Make & Model: Geoprobe 7822 DT
	2.25	Casing: Direct Push Technology
		PID Make & Model: ppBRAE3000
		Elevation
		Datum NA
		Location See Figure 2

Depth (ft)	Recovery	Sample No.	PID (ppb)	Stratum Change Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION	Gravel			Sand			Field Test					
							% Coarse	% Fine		% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength	
0				0.3	CL	~3 in. CONCRETE under floor board Black (GLEY 1 2.5/N) sandy lean CLAY (CL), no odor, dry							25	75	S	M	L	M
		HA-SB-01-1	0															
		HA-SB-01-3	0			At 2.0 ft, slight mottling with reddish brown (2.5YR 4/4)												
		HA-SB-01-4-5	0			At 4.0 ft, strong petroleum-like odor												
5			334.18 ppm															
		HA-SB-01-GW	160	6.0	CL	Black (10YR 2/1) lean CLAY (CL), slight odor, moist At 6.8 ft, mottling with reddish brown (2.5YR 4/4) From 7.85 to 8.0 ft, No Recovery At 9.0 ft, moisture increased to wet, visible water in acetate sleeve							10	90	N	H	M	H
			0															
			2503															
10			83	11.0	CL	Very dark gray (GLEY1 3/1) sandy lean CLAY (CL), slight petroleum-like odor, moist At 11.5 ft, increased fines (clay) At 13.0 ft, wet, visible water in acetate sleeve From 13.5 to 14.0 ft, No Recovery							45	55	S	L	M	L
			57										25	75	N	M	M	M
			138															
				14.0		BOTTOM OF EXPLORATION 14.0 FT												

<b>Water Level Data</b> Depth to water: 4.52 ft	<b>Sample ID</b> O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Split Spoon Sample	<b>Recovery</b> No Recovery Recovery Sample Collected	<b>Well Diagram</b> Riser Pipe Screen Filter Sand Cuttings Grout Concrete Bentonite Seal	<b>Boring No. HA-SB-01</b>
--	--	--	---	----------------------------

**Field Tests:** Dilatancy: R - Rapid S - Slow N - None Toughness: L - Low M - Medium H - High Plasticity: N - Nonplastic L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High

**Note:** Depth to water measured from concrete at surface, slightly below grade.

**Note:** Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

WNC TEST BOR 2022-SPECIAL RZA CAVENEY 205738\_HA-LIB09\_WNC.GLB WNC BORING SPECIAL GDT \\HALEYALDRICH.COM\SHARE\CF\PROJECTS\0205738\GINT\205738\_BORING LOGS.GPJ Aug 29, 22



# TEST BORING REPORT

**Boring No. HA-SB-02**

Project TCC Ocean Place, 457 May Avenue Santa Cruz, CA  
 Client TC NO. CAL. DEVELOPMENT, INC.  
 Contractor Coastwide Utility Locate; Gregg Drilling

File No. 0205738-000  
 Sheet No. 1 of 1  
 Start July 25, 2022  
 Finish July 25, 2022  
 Driller P. Green  
 H&A Rep. A. Caveney  
 Reviewed By B. Mellin, PG #9488

	Casing	Drilling Equipment and Procedures	
Type	Hand Auger	Rig Make & Model: Hand Auger	
Inside Diameter (in.)	3.25	PID Make & Model: ppBRAE3000	
		Elevation	
		Datum NA	
		Location See Figure 2	

Depth (ft)	Recovery	Sample No.	PID (ppb)	Stratum Change Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION	Gravel		Sand			Field Test						
							% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength		
0					SP	Dark yellowish brown (10YR 4/4) poorly-graded SAND with gravel (SP), no odor, dry	5	10			85							
0.5		HA-SB-02-1	726		CL	Very dark brown (10YR 2/2) sandy lean CLAY with gravel (CL), no odor, moist	5	10		25	60	S	L	M	L			
608			608			At 1.5 ft, increase in fines, trace wood/roots	5	10		20	65							
2.0		HA-SB-02-3	702		CL	Very dark brown (10YR 2/2) sandy lean CLAY (CL), no odor, moist, mottled with reddish brown (2.5YR 4/4)				20	80	N	M	M	M			
3.0						BOTTOM OF EXPLORATION 3.0 FT												

<b>Water Level Data</b>	<b>Sample ID</b>	<b>Recovery</b>	<b>Well Diagram</b>	<b>Boring No. HA-SB-02</b>
Depth to water: --	O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Split Spoon Sample	No Recovery Recovery Sample Collected	Riser Pipe Screen Filter Sand Cuttings Grout Concrete Bentonite Seal	

**Field Tests:** Dilatancy: R - Rapid S - Slow N - None Plasticity: N - Nonplastic L - Low M - Medium H - High  
 Toughness: L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High

**Note:** Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

WNC TEST BOR 2022-SPECIAL R2B CAVENEY 205738\_HA-LIB09\_WNC.GLB WNC BORING SPECIAL GDT \\HALEYALDRICH.COM\SHARE\CF\PROJECTS\0205738\_GINT\205738\_BORING LOGS.GPJ Aug 29, 22



# TEST BORING REPORT

Boring No. HA-SB-03

Project TCC Ocean Place, 457 May Avenue Santa Cruz, CA  
 Client TC NO. CAL. DEVELOPMENT, INC.  
 Contractor Coastwide Utility Locate; Gregg Drilling

File No. 0205738-000  
 Sheet No. 1 of 1  
 Start July 22, 2022  
 Finish July 22, 2022  
 Driller P. Green  
 H&A Rep. A. Caveney  
 Reviewed By B. Mellin, PG #9488

Type	Casing	Drilling Equipment and Procedures
Inside Diameter (in.)	DPT 2.25	Rig Make & Model: Geoprobe 7822 DT Casing: Direct Push Technology PID Make & Model: ppBRAE3000
Elevation		NA
Datum		NA
Location		See Figure 2

Depth (ft)	Recovery	Sample No.	PID (ppb)	Stratum Change Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION	Gravel			Sand			Field Test						
							% Coarse	% Fine		% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength		
0				0.2	SP	2 in. ASPHALTIC CONCRETE Dark yellowish brown (10YR 4/6) poorly-graded SAND (SP), no odor, moist, backfill sand						100							
5.0				5.0	CL	Very dark grayish brown (10YR 3/2) sandy lean CLAY (CL), no odor, moist					25	75	S	L	M	L			
5.5				5.5	SP-SM	Light gray (GLE1 7/1) poorly-graded SAND with silt (SP-SM), no odor, wet From 6.0 to 8.0 ft, No Recovery				90		10							
8.7				8.7	CL	Black (10YR 2.5/1) sandy lean CLAY (CL), no odor, moist  From 11.4 to 12.0 ft, No Recovery					15	85	S	M	M	M			
12.0				12.0		BOTTOM OF EXPLORATION 12.0 FT													

WNC TEST BOR 2022-SPECIAL RZA CAVENEY 205738\_HA-LIB03\_WNC.GLB WNC BORING SPECIAL GDT \\HALEYALDRICH.COM\SHARE\CF\PROJECTS\0205738\GINT\205738\_BORING LOGS.GPJ Aug 29, 22

Water Level Data	Sample ID	Recovery	Well Diagram	Boring No. HA-SB-03
Depth to water: 5.4 ft	O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Split Spoon Sample	No Recovery Recovery Sample Collected	Riser Pipe Screen Filter Sand Cuttings Grout Concrete Bentonite Seal	

**Field Tests:** Dilatancy: R - Rapid S - Slow N - None Plasticity: N - Nonplastic L - Low M - Medium H - High  
 Toughness: L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High  
**Note:** Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.



**TEST BORING REPORT**

**Boring No. HA-SV-04**

Project TCC Ocean Place, 457 May Avenue Santa Cruz, CA  
 Client TC NO. CAL. DEVELOPMENT, INC.  
 Contractor Coastwide Utility Locate; Gregg Drilling

File No. 0205738-000  
 Sheet No. 1 of 1  
 Start July 22, 2022  
 Finish July 22, 2022  
 Driller P. Green  
 H&A Rep. A. Caveney  
 Reviewed By B. Mellin, PG #9488  
 Elevation  
 Datum NA  
 Location See Figure 2

	Casing	Drilling Equipment and Procedures
Type	Hand Auger	Rig Make & Model: Hand Auger
Inside Diameter (in.)	3.25	PID Make & Model: ppBRAE3000

Depth (ft)	Recovery	Sample No.	PID (ppb)	SV Probe Diagram	Stratum Change Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION	Gravel			Sand			Field Test					
								% Coarse	% Fine		% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength	
0							3.75 in. WOOD FLOORING/CONCRETE												
0.3						CL	Very dark gray (10YR 3/1) sandy lean CLAY (CL), no odor, dry						40	60			L	L	L
249	Hand Auger	HA-SV-04-1																	
262																			
262		HA-SV-04-3				CL	Black (2/1) lean CLAY with sand (CL), no odor, moist						25	75			L	L	L
3.0																			
3.5							BOTTOM OF EXPLORATION 3.5 FT												

<b>Water Level Data</b>	<b>Sample ID</b>	<b>Recovery</b>	<b>Well Diagram</b>	<b>Boring No. HA-SV-04</b>
Depth to water: --	O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Split Spoon Sample	☒ No Recovery ☐ Recovery ■ Sample Collected		

**Field Tests:** Dilatancy: R - Rapid S - Slow N - None Plasticity: N - Nonplastic L - Low M - Medium H - High  
 Toughness: L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High

**Note:** 0.5 ft of dry bentonite was placed from 2.5 to 2 ft bgs.

**Note:** Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

**TEST BORING REPORT**

**Boring No. HA-SV-05**

Project TCC Ocean Place, 457 May Avenue Santa Cruz, CA  
 Client TC NO. CAL. DEVELOPMENT, INC.  
 Contractor Coastwide Utility Locate; Gregg Drilling

File No. 0205738-000  
 Sheet No. 1 of 1  
 Start July 22, 2022  
 Finish July 22, 2022  
 Driller P. Green  
 H&A Rep. A. Caveney  
 Reviewed By B. Mellin, PG #9488  
 Elevation  
 Datum NA  
 Location See Figure 2

	Casing	Drilling Equipment and Procedures
Type	Hand Auger	Rig Make & Model: Hand Auger
Inside Diameter (in.)	3.25	PID Make & Model: ppBRAE3000

Depth (ft)	Recovery	Sample No.	PID (ppb)	SV Probe Diagram	Stratum Change Depth (ft)	USCS Symbol	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION	Gravel		Sand			Field Test					
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength	
0					0.1	SP	Approximately 1.0 in. ASPHALTIC CONCRETE	10	20			70						
					0.5	CL	Dark yellowish brown (10YR 4/4) poorly-graded SAND with gravel (SP), mps=1 in., no odor, dry	5	10			20	65	S	L	M	L	
			616				Very dark gray (10YR 3/1) sandy lean CLAY (CL), no odor, moist											
			404		2.0	CL	Very dark brown (10YR 2/2) sandy lean CLAY (CL), no odor, moist					20	80	N	M	M	M	
							At 3.5 ft, slight mottling with reddish-brown (2.5YR 4/4), trace gravel											
					3.5		BOTTOM OF EXPLORATION 3.5 FT											

<b>Water Level Data</b>	<b>Sample ID</b>	<b>Recovery</b>	<b>Well Diagram</b>	<b>Boring No. HA-SV-05</b>
Depth to water: --	O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Split Spoon Sample	<input type="checkbox"/> No Recovery <input type="checkbox"/> Recovery <input checked="" type="checkbox"/> Sample Collected	<input type="checkbox"/> Riser Pipe <input type="checkbox"/> Screen <input type="checkbox"/> Filter Sand <input type="checkbox"/> Cuttings <input type="checkbox"/> Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Bentonite Seal	

**Field Tests:** Dilatancy: R - Rapid S - Slow N - None Plasticity: N - Nonplastic L - Low M - Medium H - High  
 Toughness: L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High

**Note:** 0.5 ft of dry bentonite was placed from 2.5 to 2 ft bgs.  
**Note:** Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

WNC TEST BOR 2022-WELL R2B CAVENEY 205738\_HA-LB09\_WNC.GLB WNC BORING SPECIAL.GDT \\HALEYALDRICH.COM\SHARE\CF\PROJECTS\0205738\GINT\205738\_BORING LOGS.GPJ Aug 29, 22

**APPENDIX B**  
**Soil Vapor Sampling Forms**

## SOIL VAPOR PROBE MEASUREMENTS



Project: TCC Ocean Place Santa Cruz Project Number: 0205738-000 Probe ID: HA-SV-04 Soil vapor probe Sub-slab probe  
 Site Location: 457 May Avenue, Santa Cruz, CA PID Model and ID#: ppbRAE 3000  
 Date: 8/1/2022 Weather: Fair Landfill Gas Meter and ID#: GEM 5000  
 Site Personnel: A.Caveney Helium Detector Model and ID#: MGD 2002

Surface Type:  Concrete  Grass  Soil  Paving Stone  
 Asphalt  Other (specify): with well box  
 Surface Thickness (in inches): \_\_\_\_\_ (or) \_\_\_\_\_ Unknown  
 (If asphalt or concrete)

Calculated Casing Volume (one volume):  
 Soil Vapor Probe 0.881 (L) Sub-Slab Probe \_\_\_\_\_ (L)

Purge Measurements								Helium Tracer Gas Measurements			
Pre- or Post-Sample?	Canister Vac. Gauge (in. Hg)	Pump Vac. Gauge (in. Hg)	Purge Volume (L)	Cumulative Volume (L)	Landfill Gas Meter (%)			PID (ppb)	Shroud (%)		Purge Sample Concentration (ppm)
					CH <sub>4</sub>	CO <sub>2</sub>	O <sub>2</sub>		VOCs	Min	
Pre	0	--	0.885	0.885	0.2	2.8	16	876	31.7	33.9	0
Pre	0	--	0.885	1.77	0.1	3	15.8	741	31.4	32.4	0
Pre	0	--	0.885	2.655	0.1	3	16.1	729	32.2	33	0
Sample	--	--	--	--	--	--	--	--	30.9	35.2	--
Post	0	--	0.885	3.54	0.1	2.8	16.2	738	32.1	35.4	0

Shut-in test completed prior to purging and sampling? **Yes**     
 Vac. Pressure while purging is less than -7 in. Hg? **Yes**     
 Helium concentration in field-screened samples is less than 10% of minimum concentration in the shroud? **Yes**

Sample Collection							Comments:
Start Time	End Time	Flow Controller	Canister ID	Initial Vacuum (in. Hg)	Final Vacuum (in. Hg)	Sample ID	
1114	1120	23504	1L2253	-26.5	-5	HA-SV-04	<b>Weather Readings</b> Temperature: <u>74</u> °F Humidity: <u>56</u> % Barometric Pressure: <u>30.02</u> in. Hg Wind: <u>2</u> mph Direction: <u>from WSW</u>

## SOIL VAPOR PROBE MEASUREMENTS



Project: TCC Ocean Place Santa Cruz Project Number: 0205738-000 Probe ID: HA-SV-05 Soil vapor probe Sub-slab probe  
 Site Location: 457 May Avenue, Santa Cruz, CA PID Model and ID#: ppbRAE 3000  
 Date: 8/1/2022 Weather: Partly Cloudy Landfill Gas Meter and ID#: GEM 5000  
 Site Personnel: A.Caveney Helium Detector Model and ID#: MGD 2002

Surface Type:  Concrete  Grass  Soil  Paving Stone  
 Asphalt  Other (specify): with well box  
 Surface Thickness (in inches): \_\_\_\_\_ (or) \_\_\_\_\_ Unknown  
 (If asphalt or concrete)

Calculated Casing Volume (one volume):  
 Soil Vapor Probe 0.881 (L) Sub-Slab Probe \_\_\_\_\_ (L)

Purge Measurements								Helium Tracer Gas Measurements			
Pre- or Post-Sample?	Canister Vac. Gauge (in. Hg)	Pump Vac. Gauge (in. Hg)	Purge Volume (L)	Cumulative Volume (L)	Landfill Gas Meter (%)			PID (ppb)	Shroud (%)		Purge Sample Concentration (ppm)
					CH <sub>4</sub>	CO <sub>2</sub>	O <sub>2</sub>		VOCs	Min	
Pre	0	--	0.885	0.885	0	2.9	17	658	33.1	34.4	0
Pre	0	--	0.885	1.77	0	2.8	16.7	559	30.2	32.7	0
Pre	0	--	0.885	2.655	0	2.7	16.7	254	35.2	36.5	0
Sample	--	--	--	--	--	--	--	--	30.6	35.7	--
Post	0	--	0.885	3.54	0	2.6	16.4	689	30.3	35.9	0

Shut-in test completed prior to purging and sampling? **Yes**     
 Vac. Pressure while purging is less than -7 in. Hg? **Yes**     
 Helium concentration in field-screened samples is less than 10% of minimum concentration in the shroud? **Yes**

Sample Collection							Comments:
Start Time	End Time	Flow Controller	Canister ID	Initial Vacuum (in. Hg)	Final Vacuum (in. Hg)	Sample ID	
1230	1236	24291	1L2450	-26.5	-5	HA-SV-05	<b>Weather Readings</b> Temperature: <u>77</u> °F Humidity: <u>50</u> % Barometric Pressure: <u>30.01</u> in. Hg Wind: <u>6</u> mph Direction: <u>from SW</u>

**APPENDIX C**  
**Analytical Laboratory Reports**

8/9/2022

Mr. Akash Caveney

Haley & Aldrich

2107 N. 1st Street

Suite 380

San Jose CA 95131-2028

Project Name: TCC Santa Cruz

Project #:

Workorder #: 2208060A

Dear Mr. Akash Caveney

The following report includes the data for the above referenced project for sample(s) received on 8/2/2022 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kelly Buettner

Project Manager

**WORK ORDER #: 2208060A**

Work Order Summary

<b>CLIENT:</b>	Mr. Akash Caveney Haley & Aldrich 2107 N. 1st Street Suite 380 San Jose, CA 95131-2028	<b>BILL TO:</b>	Accounts Payable Haley & Aldrich 70 Blanchard Road Suite 430 Burlington, MA 02129-1400
<b>PHONE:</b>	408-961-4805	<b>P.O. #</b>	0205738-000-002-02
<b>FAX:</b>	408-453-8708	<b>PROJECT #</b>	TCC Santa Cruz
<b>DATE RECEIVED:</b>	08/02/2022	<b>CONTACT:</b>	Kelly Buettner
<b>DATE COMPLETED:</b>	08/09/2022		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	HA-SV-04	TO-15	5.5 "Hg	9.8 psi
02A	HA-SV-05	TO-15	7.1 "Hg	10 psi
03A	Lab Blank	TO-15	NA	NA
04A	CCV	TO-15	NA	NA
05A	LCS	TO-15	NA	NA
05AA	LCSD	TO-15	NA	NA

CERTIFIED BY:   
 \_\_\_\_\_  
 Technical Director

DATE: 08/09/22

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209221, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-21-17, UT NELAP – CA009332021-13, VA NELAP - 10615, WA NELAP - C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)  
 Accreditation number: CA300005-015, Effective date: 10/18/2021, Expiration date: 10/17/2022.

Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

*This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.*

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630  
 (916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279



**LABORATORY NARRATIVE**  
**EPA Method TO-15**  
**Haley & Aldrich**  
**Workorder# 2208060A**

Two 1 Liter Summa Canister samples were received on August 02, 2022. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

**Receiving Notes**

There were no receiving discrepancies.

**Analytical Notes**

A single point calibration for TPH referenced to Gasoline was performed for each daily analytical batch. Recovery is reported as 100% in the associated results for each CCV.

**Definition of Data Qualifying Flags**

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds  
EPA METHOD TO-15 GC/MS FULL SCAN**

**Client Sample ID: HA-SV-04**

**Lab ID#: 2208060A-01A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Carbon Disulfide	4.1	5.5	13	17
Toluene	1.0	1.4	3.8	5.3
Tetrachloroethene	1.0	8.7	6.9	59
m,p-Xylene	1.0	2.5	4.4	11

**Client Sample ID: HA-SV-05**

**Lab ID#: 2208060A-02A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Acetone	11	20	26	47
Carbon Disulfide	4.4	4.8	14	15
Chloroform	1.1	1.6	5.4	7.6
Tetrachloroethene	1.1	13	7.5	90
Chlorobenzene	1.1	1.6	5.1	7.5
m,p-Xylene	1.1	4.6	4.8	20
o-Xylene	1.1	1.6	4.8	6.8
TPH ref. to Gasoline (MW=100)	110	170	450	700



Air Toxics

Client Sample ID: HA-SV-04

Lab ID#: 2208060A-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a080425	Date of Collection:	8/1/22 11:14:00 AM
Dil. Factor:	2.04	Date of Analysis:	8/5/22 02:27 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.0	Not Detected	5.0	Not Detected
Freon 114	1.0	Not Detected	7.1	Not Detected
Chloromethane	10	Not Detected	21	Not Detected
Vinyl Chloride	1.0	Not Detected	2.6	Not Detected
1,3-Butadiene	1.0	Not Detected	2.2	Not Detected
Bromomethane	10	Not Detected	40	Not Detected
Chloroethane	4.1	Not Detected	11	Not Detected
Freon 11	1.0	Not Detected	5.7	Not Detected
Ethanol	10	Not Detected	19	Not Detected
Freon 113	1.0	Not Detected	7.8	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.0	Not Detected
Acetone	10	Not Detected	24	Not Detected
2-Propanol	4.1	Not Detected	10	Not Detected
Carbon Disulfide	4.1	5.5	13	17
3-Chloropropene	4.1	Not Detected	13	Not Detected
Methylene Chloride	10	Not Detected	35	Not Detected
Methyl tert-butyl ether	4.1	Not Detected	15	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.0	Not Detected
Hexane	1.0	Not Detected	3.6	Not Detected
1,1-Dichloroethane	1.0	Not Detected	4.1	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.1	Not Detected	12	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.0	Not Detected
Tetrahydrofuran	1.0	Not Detected	3.0	Not Detected
Chloroform	1.0	Not Detected	5.0	Not Detected
1,1,1-Trichloroethane	1.0	Not Detected	5.6	Not Detected
Cyclohexane	1.0	Not Detected	3.5	Not Detected
Carbon Tetrachloride	1.0	Not Detected	6.4	Not Detected
2,2,4-Trimethylpentane	1.0	Not Detected	4.8	Not Detected
Benzene	1.0	Not Detected	3.2	Not Detected
1,2-Dichloroethane	1.0	Not Detected	4.1	Not Detected
Heptane	1.0	Not Detected	4.2	Not Detected
Trichloroethene	1.0	Not Detected	5.5	Not Detected
1,2-Dichloropropane	1.0	Not Detected	4.7	Not Detected
1,4-Dioxane	4.1	Not Detected	15	Not Detected
Bromodichloromethane	1.0	Not Detected	6.8	Not Detected
cis-1,3-Dichloropropene	1.0	Not Detected	4.6	Not Detected
4-Methyl-2-pentanone	1.0	Not Detected	4.2	Not Detected
Toluene	1.0	1.4	3.8	5.3
trans-1,3-Dichloropropene	1.0	Not Detected	4.6	Not Detected
1,1,2-Trichloroethane	1.0	Not Detected	5.6	Not Detected
Tetrachloroethene	1.0	8.7	6.9	59
2-Hexanone	4.1	Not Detected	17	Not Detected

Client Sample ID: HA-SV-04

Lab ID#: 2208060A-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a080425	Date of Collection:	8/1/22 11:14:00 AM
Dil. Factor:	2.04	Date of Analysis:	8/5/22 02:27 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.0	Not Detected	8.7	Not Detected
1,2-Dibromoethane (EDB)	1.0	Not Detected	7.8	Not Detected
Chlorobenzene	1.0	Not Detected	4.7	Not Detected
Ethyl Benzene	1.0	Not Detected	4.4	Not Detected
m,p-Xylene	1.0	2.5	4.4	11
o-Xylene	1.0	Not Detected	4.4	Not Detected
Styrene	1.0	Not Detected	4.3	Not Detected
Bromoform	1.0	Not Detected	10	Not Detected
Cumene	1.0	Not Detected	5.0	Not Detected
1,1,2,2-Tetrachloroethane	1.0	Not Detected	7.0	Not Detected
Propylbenzene	1.0	Not Detected	5.0	Not Detected
4-Ethyltoluene	1.0	Not Detected	5.0	Not Detected
1,3,5-Trimethylbenzene	1.0	Not Detected	5.0	Not Detected
1,2,4-Trimethylbenzene	1.0	Not Detected	5.0	Not Detected
1,3-Dichlorobenzene	1.0	Not Detected	6.1	Not Detected
1,4-Dichlorobenzene	1.0	Not Detected	6.1	Not Detected
alpha-Chlorotoluene	1.0	Not Detected	5.3	Not Detected
1,2-Dichlorobenzene	1.0	Not Detected	6.1	Not Detected
1,2,4-Trichlorobenzene	4.1	Not Detected	30	Not Detected
Hexachlorobutadiene	4.1	Not Detected	44	Not Detected
Naphthalene	2.0	Not Detected	11	Not Detected
TPH ref. to Gasoline (MW=100)	100	Not Detected	420	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	92	70-130



Air Toxics

Client Sample ID: HA-SV-05

Lab ID#: 2208060A-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a080429	Date of Collection:	8/1/22 12:30:00 PM
Dil. Factor:	2.20	Date of Analysis:	8/5/22 09:13 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.1	Not Detected	5.4	Not Detected
Freon 114	1.1	Not Detected	7.7	Not Detected
Chloromethane	11	Not Detected	23	Not Detected
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
1,3-Butadiene	1.1	Not Detected	2.4	Not Detected
Bromomethane	11	Not Detected	43	Not Detected
Chloroethane	4.4	Not Detected	12	Not Detected
Freon 11	1.1	Not Detected	6.2	Not Detected
Ethanol	11	Not Detected	21	Not Detected
Freon 113	1.1	Not Detected	8.4	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Acetone	11	20	26	47
2-Propanol	4.4	Not Detected	11	Not Detected
Carbon Disulfide	4.4	4.8	14	15
3-Chloropropene	4.4	Not Detected	14	Not Detected
Methylene Chloride	11	Not Detected	38	Not Detected
Methyl tert-butyl ether	4.4	Not Detected	16	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Hexane	1.1	Not Detected	3.9	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.4	Not Detected	13	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.2	Not Detected
Chloroform	1.1	1.6	5.4	7.6
1,1,1-Trichloroethane	1.1	Not Detected	6.0	Not Detected
Cyclohexane	1.1	Not Detected	3.8	Not Detected
Carbon Tetrachloride	1.1	Not Detected	6.9	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.1	Not Detected
Benzene	1.1	Not Detected	3.5	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.4	Not Detected
Heptane	1.1	Not Detected	4.5	Not Detected
Trichloroethene	1.1	Not Detected	5.9	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.1	Not Detected
1,4-Dioxane	4.4	Not Detected	16	Not Detected
Bromodichloromethane	1.1	Not Detected	7.4	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	5.0	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.5	Not Detected
Toluene	1.1	Not Detected	4.1	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	5.0	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.0	Not Detected
Tetrachloroethene	1.1	13	7.5	90
2-Hexanone	4.4	Not Detected	18	Not Detected

Client Sample ID: HA-SV-05

Lab ID#: 2208060A-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a080429	Date of Collection:	8/1/22 12:30:00 PM
Dil. Factor:	2.20	Date of Analysis:	8/5/22 09:13 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.1	Not Detected	9.4	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.4	Not Detected
Chlorobenzene	1.1	1.6	5.1	7.5
Ethyl Benzene	1.1	Not Detected	4.8	Not Detected
m,p-Xylene	1.1	4.6	4.8	20
o-Xylene	1.1	1.6	4.8	6.8
Styrene	1.1	Not Detected	4.7	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Cumene	1.1	Not Detected	5.4	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.6	Not Detected
Propylbenzene	1.1	Not Detected	5.4	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.4	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.7	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,2,4-Trichlorobenzene	4.4	Not Detected	33	Not Detected
Hexachlorobutadiene	4.4	Not Detected	47	Not Detected
Naphthalene	2.2	Not Detected	12	Not Detected
TPH ref. to Gasoline (MW=100)	110	170	450	700

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	90	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2208060A-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a080406	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	8/4/22 03:05 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	5.0	Not Detected	10	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	5.0	Not Detected	9.4	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected

Client Sample ID: Lab Blank

Lab ID#: 2208060A-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a080406	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/4/22 03:05 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
Cumene	0.50	Not Detected	2.4	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
Naphthalene	1.0	Not Detected	5.2	Not Detected
TPH ref. to Gasoline (MW=100)	50	Not Detected	200	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	94	70-130



Client Sample ID: CCV

Lab ID#: 2208060A-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a080402	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/4/22 11:32 AM

Compound	%Recovery
Freon 12	104
Freon 114	102
Chloromethane	101
Vinyl Chloride	102
1,3-Butadiene	96
Bromomethane	105
Chloroethane	99
Freon 11	96
Ethanol	86
Freon 113	97
1,1-Dichloroethene	94
Acetone	90
2-Propanol	90
Carbon Disulfide	94
3-Chloropropene	94
Methylene Chloride	94
Methyl tert-butyl ether	93
trans-1,2-Dichloroethene	96
Hexane	92
1,1-Dichloroethane	94
2-Butanone (Methyl Ethyl Ketone)	97
cis-1,2-Dichloroethene	101
Tetrahydrofuran	90
Chloroform	94
1,1,1-Trichloroethane	96
Cyclohexane	95
Carbon Tetrachloride	99
2,2,4-Trimethylpentane	97
Benzene	98
1,2-Dichloroethane	98
Heptane	94
Trichloroethene	100
1,2-Dichloropropane	96
1,4-Dioxane	94
Bromodichloromethane	100
cis-1,3-Dichloropropene	103
4-Methyl-2-pentanone	94
Toluene	97
trans-1,3-Dichloropropene	100
1,1,2-Trichloroethane	98
Tetrachloroethene	97
2-Hexanone	95

Client Sample ID: CCV

Lab ID#: 2208060A-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a080402	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/4/22 11:32 AM

Compound	%Recovery
Dibromochloromethane	101
1,2-Dibromoethane (EDB)	100
Chlorobenzene	95
Ethyl Benzene	97
m,p-Xylene	96
o-Xylene	94
Styrene	96
Bromoform	103
Cumene	94
1,1,2,2-Tetrachloroethane	92
Propylbenzene	93
4-Ethyltoluene	93
1,3,5-Trimethylbenzene	93
1,2,4-Trimethylbenzene	94
1,3-Dichlorobenzene	93
1,4-Dichlorobenzene	93
alpha-Chlorotoluene	97
1,2-Dichlorobenzene	93
1,2,4-Trichlorobenzene	88
Hexachlorobutadiene	91
Naphthalene	82
TPH ref. to Gasoline (MW=100)	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	101	70-130

Client Sample ID: LCS

Lab ID#: 2208060A-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a080403	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/4/22 11:55 AM

Compound	%Recovery	Method Limits
Freon 12	101	70-130
Freon 114	102	70-130
Chloromethane	98	70-130
Vinyl Chloride	99	70-130
1,3-Butadiene	92	70-130
Bromomethane	108	70-130
Chloroethane	100	70-130
Freon 11	97	70-130
Ethanol	84	70-130
Freon 113	98	70-130
1,1-Dichloroethene	96	70-130
Acetone	91	70-130
2-Propanol	98	70-130
Carbon Disulfide	97	70-130
3-Chloropropene	95	70-130
Methylene Chloride	93	70-130
Methyl tert-butyl ether	96	70-130
trans-1,2-Dichloroethene	100	70-130
Hexane	90	70-130
1,1-Dichloroethane	95	70-130
2-Butanone (Methyl Ethyl Ketone)	94	70-130
cis-1,2-Dichloroethene	98	70-130
Tetrahydrofuran	92	70-130
Chloroform	95	70-130
1,1,1-Trichloroethane	99	70-130
Cyclohexane	97	70-130
Carbon Tetrachloride	99	70-130
2,2,4-Trimethylpentane	95	70-130
Benzene	96	70-130
1,2-Dichloroethane	96	70-130
Heptane	90	70-130
Trichloroethene	98	70-130
1,2-Dichloropropane	94	70-130
1,4-Dioxane	94	70-130
Bromodichloromethane	97	70-130
cis-1,3-Dichloropropene	102	70-130
4-Methyl-2-pentanone	94	70-130
Toluene	94	70-130
trans-1,3-Dichloropropene	103	70-130
1,1,2-Trichloroethane	101	70-130
Tetrachloroethene	101	70-130
2-Hexanone	97	70-130

Client Sample ID: LCS

Lab ID#: 2208060A-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a080403	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/4/22 11:55 AM

Compound	%Recovery	Method Limits
Dibromochloromethane	101	70-130
1,2-Dibromoethane (EDB)	98	70-130
Chlorobenzene	94	70-130
Ethyl Benzene	97	70-130
m,p-Xylene	95	70-130
o-Xylene	92	70-130
Styrene	94	70-130
Bromoform	104	70-130
Cumene	91	70-130
1,1,2,2-Tetrachloroethane	93	70-130
Propylbenzene	93	70-130
4-Ethyltoluene	92	70-130
1,3,5-Trimethylbenzene	91	70-130
1,2,4-Trimethylbenzene	91	70-130
1,3-Dichlorobenzene	93	70-130
1,4-Dichlorobenzene	92	70-130
alpha-Chlorotoluene	96	70-130
1,2-Dichlorobenzene	93	70-130
1,2,4-Trichlorobenzene	105	70-130
Hexachlorobutadiene	106	70-130
Naphthalene	97	60-140
TPH ref. to Gasoline (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	95	70-130
4-Bromofluorobenzene	104	70-130

Client Sample ID: LCSD

Lab ID#: 2208060A-05AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a080404	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/4/22 12:19 PM

Compound	%Recovery	Method Limits
Freon 12	98	70-130
Freon 114	100	70-130
Chloromethane	93	70-130
Vinyl Chloride	100	70-130
1,3-Butadiene	95	70-130
Bromomethane	108	70-130
Chloroethane	102	70-130
Freon 11	98	70-130
Ethanol	83	70-130
Freon 113	99	70-130
1,1-Dichloroethene	97	70-130
Acetone	91	70-130
2-Propanol	98	70-130
Carbon Disulfide	96	70-130
3-Chloropropene	97	70-130
Methylene Chloride	92	70-130
Methyl tert-butyl ether	96	70-130
trans-1,2-Dichloroethene	101	70-130
Hexane	92	70-130
1,1-Dichloroethane	96	70-130
2-Butanone (Methyl Ethyl Ketone)	99	70-130
cis-1,2-Dichloroethene	99	70-130
Tetrahydrofuran	90	70-130
Chloroform	92	70-130
1,1,1-Trichloroethane	98	70-130
Cyclohexane	94	70-130
Carbon Tetrachloride	98	70-130
2,2,4-Trimethylpentane	97	70-130
Benzene	99	70-130
1,2-Dichloroethane	100	70-130
Heptane	95	70-130
Trichloroethene	98	70-130
1,2-Dichloropropane	95	70-130
1,4-Dioxane	93	70-130
Bromodichloromethane	98	70-130
cis-1,3-Dichloropropene	105	70-130
4-Methyl-2-pentanone	96	70-130
Toluene	95	70-130
trans-1,3-Dichloropropene	103	70-130
1,1,2-Trichloroethane	102	70-130
Tetrachloroethene	102	70-130
2-Hexanone	95	70-130

Client Sample ID: LCSD

Lab ID#: 2208060A-05AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	a080404	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/4/22 12:19 PM

Compound	%Recovery	Method Limits
Dibromochloromethane	101	70-130
1,2-Dibromoethane (EDB)	98	70-130
Chlorobenzene	94	70-130
Ethyl Benzene	96	70-130
m,p-Xylene	94	70-130
o-Xylene	91	70-130
Styrene	94	70-130
Bromoform	105	70-130
Cumene	91	70-130
1,1,2,2-Tetrachloroethane	91	70-130
Propylbenzene	93	70-130
4-Ethyltoluene	91	70-130
1,3,5-Trimethylbenzene	92	70-130
1,2,4-Trimethylbenzene	93	70-130
1,3-Dichlorobenzene	95	70-130
1,4-Dichlorobenzene	94	70-130
alpha-Chlorotoluene	97	70-130
1,2-Dichlorobenzene	94	70-130
1,2,4-Trichlorobenzene	109	70-130
Hexachlorobutadiene	112	70-130
Naphthalene	100	60-140
TPH ref. to Gasoline (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	106	70-130

8/9/2022

Mr. Akash Caveney

Haley & Aldrich

2107 N. 1st Street

Suite 380

San Jose CA 95131-2028

Project Name: TCC Santa Cruz

Project #:

Workorder #: 2208060B

Dear Mr. Akash Caveney

The following report includes the data for the above referenced project for sample(s) received on 8/2/2022 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by Modified ASTM D-1946 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kelly Buettner

Project Manager

**WORK ORDER #: 2208060B**

Work Order Summary

<b>CLIENT:</b>	Mr. Akash Caveney Haley & Aldrich 2107 N. 1st Street Suite 380 San Jose, CA 95131-2028	<b>BILL TO:</b>	Accounts Payable Haley & Aldrich 70 Blanchard Road Suite 430 Burlington, MA 02129-1400
<b>PHONE:</b>	408-961-4805	<b>P.O. #</b>	0205738-000-002-02
<b>FAX:</b>	408-453-8708	<b>PROJECT #</b>	TCC Santa Cruz
<b>DATE RECEIVED:</b>	08/02/2022	<b>CONTACT:</b>	Kelly Buettner
<b>DATE COMPLETED:</b>	08/09/2022		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
02A	HA-SV-05	Modified ASTM D-1946	7.1 "Hg	10 psi
03A	Lab Blank	Modified ASTM D-1946	NA	NA
04A	CCV	Modified ASTM D-1946	NA	NA
05A	LCS	Modified ASTM D-1946	NA	NA
05AA	LCSD	Modified ASTM D-1946	NA	NA

CERTIFIED BY:   
 \_\_\_\_\_  
 Technical Director

DATE: 08/09/22

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209221, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-21-17, UT NELAP – CA009332021-13, VA NELAP - 10615, WA NELAP - C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005-015, Effective date: 10/18/2021, Expiration date: 10/17/2022.

Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

*This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.*

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630  
 (916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279



**LABORATORY NARRATIVE**  
**Modified ASTM D-1946**  
**Haley & Aldrich**  
**Workorder# 2208060B**

One 1 Liter Summa Canister sample was received on August 02, 2022. The laboratory performed analysis via Modified ASTM Method D-1946 for Helium in air using GC/TCD. The method involves direct injection of 1.0 mL of sample.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the EATL modifications.

<i>Requirement</i>	<i>ASTM D-1946</i>	<i>ATL Modifications</i>
Calibration	A single point calibration is performed using a reference standard closely matching the composition of the unknown.	A minimum of 5-point calibration curve is performed. Quantitation is based on average Response Factor.
Reference Standard	The composition of any reference standard must be known to within 0.01 mol % for any component.	The standards used by ATL are blended to a $\geq 95\%$ accuracy.
Sample Injection Volume	Components whose concentrations are in excess of 5 % should not be analyzed by using sample volumes greater than 0.5 mL.	The sample container is connected directly to a fixed volume sample loop of 1.0 mL on the GC. Linear range is defined by the calibration curve. Bags are loaded by vacuum.
Normalization	Normalize the mole percent values by multiplying each value by 100 and dividing by the sum of the original values. The sum of the original values should not differ from 100% by more than 1.0%.	Results are not normalized. The sum of the reported values can differ from 100% by as much as 15%, either due to analytical variability or an unusual sample matrix.
Precision	Precision requirements established at each concentration level.	Duplicates should agree within 25% RPD for detections > 5 X's the RL.

**Receiving Notes**

There were no receiving discrepancies.

**Analytical Notes**

There were no analytical discrepancies.

**Definition of Data Qualifying Flags**

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

B - Compound present in laboratory blank greater than reporting limit.

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the detection limit.

M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds**  
**NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946**

**Client Sample ID: HA-SV-05**

**Lab ID#: 2208060B-02A**

No Detections Were Found.



Air Toxics

Client Sample ID: HA-SV-05

Lab ID#: 2208060B-02A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	11080414c	Date of Collection:	8/1/22 12:30:00 PM
Dil. Factor:	2.20	Date of Analysis:	8/4/22 04:09 PM

Compound	Rpt. Limit (%)	Amount (%)
Helium	0.11	Not Detected

Container Type: 1 Liter Summa Canister



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2208060B-03A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	11080403c	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	8/4/22 10:02 AM

Compound	Rpt. Limit (%)	Amount (%)
Helium	0.050	Not Detected

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: CCV

Lab ID#: 2208060B-04A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	11080401c	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/4/22 09:11 AM

Compound	%Recovery
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Helium	94
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Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCS

Lab ID#: 2208060B-05A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	11080402c	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/4/22 09:37 AM

Compound	%Recovery	Method Limits
Helium	110	85-115

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCSD

Lab ID#: 2208060B-05AA

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	11080426c	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	8/4/22 10:05 PM

Compound	%Recovery	Method Limits
Helium	111	85-115

Container Type: NA - Not Applicable



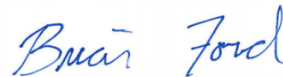
- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Ds
- 6 Sr
- 7 Qc
- 8 Gl
- 9 Al
- 10 Sc

## Haley & Aldrich - Walnut Creek, CA

Sample Delivery Group: L1519177  
Samples Received: 07/27/2022  
Project Number: 0205738-000-002-02  
Description: TCC-Santa Cruz

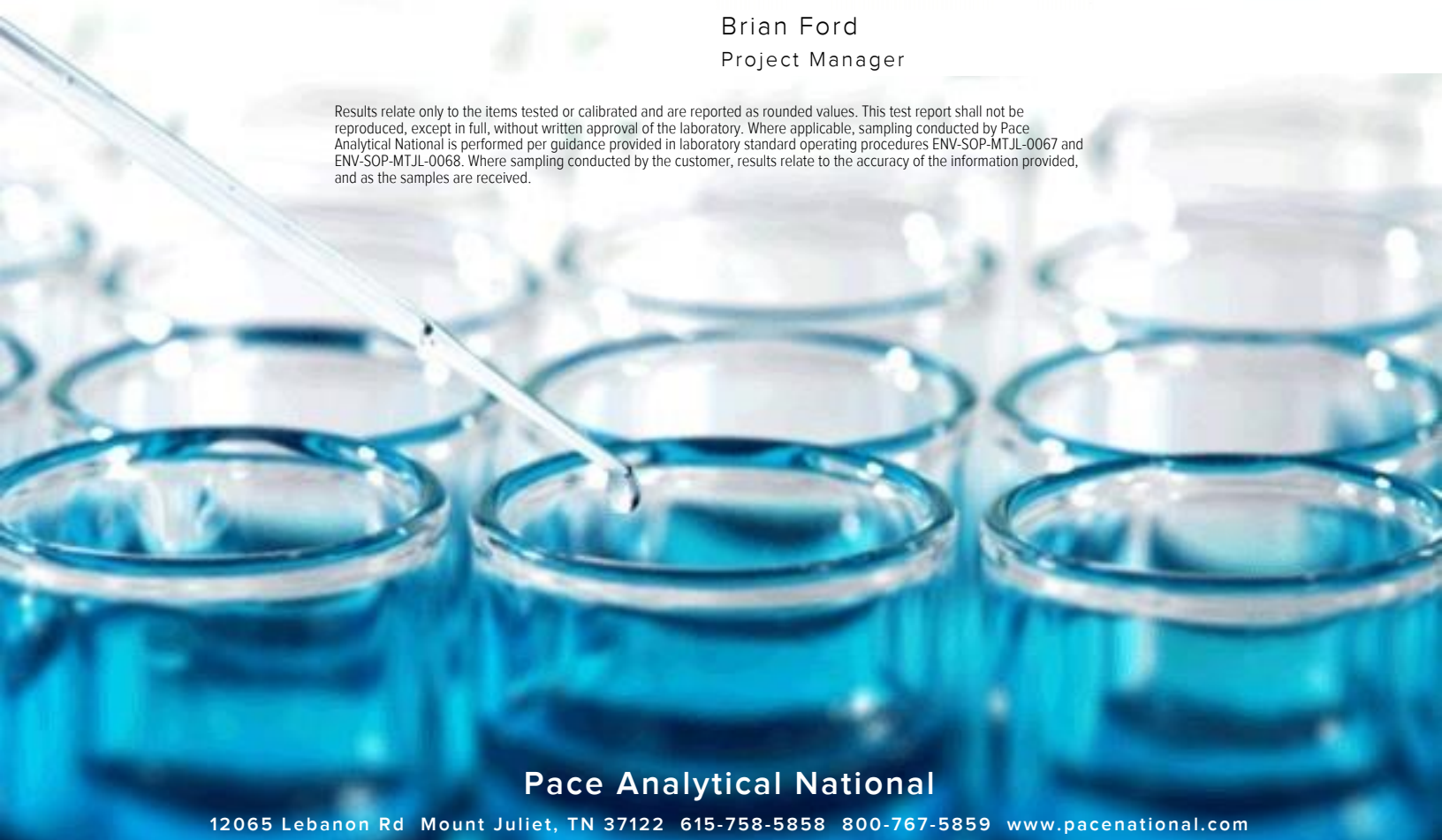
Report To: Jason Grant  
2033 N Main Street  
Suite 309  
Walnut Creek, CA 94596

Entire Report Reviewed By:



Brian Ford  
Project Manager

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



Pace Analytical National

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

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<sup>1</sup> Cp
<sup>2</sup> Tc
<sup>3</sup> Ss
<sup>4</sup> Cn
<sup>5</sup> Ds
<sup>6</sup> Sr
<sup>7</sup> Qc
<sup>8</sup> Gl
<sup>9</sup> Al
<sup>10</sup> Sc

# SAMPLE SUMMARY

## HA-SB-01-1 L1519177-01 Solid

Collected by Akash Cavenev    Collected date/time 07/22/22 12:05    Received date/time 07/27/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1902180	1	07/30/22 09:51	07/30/22 10:24	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1902729	1	07/30/22 10:17	07/31/22 11:42	MRW	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1902661	1	08/07/22 22:58	08/08/22 13:55	ZSA	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG1903924	39	07/22/22 12:05	08/01/22 20:47	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1903108	1.56	07/22/22 12:05	07/29/22 18:20	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1902914	1	07/30/22 14:00	07/30/22 22:15	JDG	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1902320	1	07/29/22 03:18	07/29/22 17:03	AMM	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG1902320	1	07/29/22 03:18	07/29/22 17:03	AMM	Mt. Juliet, TN



## HA-SB-01-3 L1519177-02 Solid

Collected by Akash Cavenev    Collected date/time 07/22/22 12:00    Received date/time 07/27/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1902180	1	07/30/22 09:51	07/30/22 10:24	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1902729	1	07/30/22 10:17	07/31/22 11:47	MRW	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1902661	1	08/07/22 22:58	08/08/22 13:57	ZSA	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG1903485	47.5	07/22/22 12:00	07/31/22 16:11	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1903108	1.9	07/22/22 12:00	07/29/22 18:39	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1902914	1	07/30/22 14:00	07/30/22 22:32	JDG	Mt. Juliet, TN

## HA-SB-01-4-5 L1519177-03 Solid

Collected by Akash Cavenev    Collected date/time 07/22/22 11:55    Received date/time 07/27/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1902180	1	07/30/22 09:51	07/30/22 10:24	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1902729	1	07/30/22 10:17	07/31/22 11:49	MRW	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1902661	1	08/07/22 22:58	08/08/22 17:08	ZSA	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG1903924	344	07/22/22 11:55	08/02/22 00:12	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1903108	1.72	07/22/22 11:55	07/29/22 18:57	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1902914	1	07/30/22 14:00	07/31/22 00:13	JDG	Mt. Juliet, TN

## HA-SB-01-GW L1519177-04 GW

Collected by Akash Cavenev    Collected date/time 07/22/22 13:10    Received date/time 07/27/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG1902168	1	07/29/22 08:15	07/30/22 12:13	SRT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1905920	1	08/08/22 23:45	08/09/22 12:48	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1903521	1	08/01/22 15:05	08/02/22 13:38	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG1902469	2	07/29/22 02:58	07/29/22 02:58	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1902815	2	07/29/22 16:52	07/29/22 16:52	TJJ	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1903588	2	08/01/22 12:59	08/01/22 12:59	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1903200	2	07/31/22 07:37	08/01/22 06:19	HLJ	Mt. Juliet, TN

## HA-SB-02-1 L1519177-05 Solid

Collected by Akash Cavenev    Collected date/time 07/25/22 10:10    Received date/time 07/27/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1902180	1	07/30/22 09:51	07/30/22 10:24	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1902729	1	07/30/22 10:17	07/31/22 11:51	MRW	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1902661	1	08/07/22 22:58	08/08/22 17:10	ZSA	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG1903924	39.5	07/25/22 10:10	08/01/22 21:07	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1903108	1.58	07/25/22 10:10	07/29/22 19:16	JHH	Mt. Juliet, TN

ACCOUNT:

Haley & Aldrich - Walnut Creek, CA

PROJECT:

0205738-000-002-02

SDG:

L1519177

DATE/TIME:

08/10/22 10:15

PAGE:

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# SAMPLE SUMMARY

## HA-SB-02-1 L1519177-05 Solid

Collected by Akash Cavenev    Collected date/time 07/25/22 10:10    Received date/time 07/27/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1902914	1	07/30/22 14:00	07/31/22 03:35	JDG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1902914	5	07/30/22 14:00	08/01/22 14:46	JAS	Mt. Juliet, TN
Pesticides (GC) by Method 8081	WG1902320	1	07/29/22 03:18	07/29/22 17:15	AMM	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG1902320	1	07/29/22 03:18	07/29/22 17:15	AMM	Mt. Juliet, TN



## HA-SB-02-3 L1519177-06 Solid

Collected by Akash Cavenev    Collected date/time 07/25/22 10:15    Received date/time 07/27/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1902180	1	07/30/22 09:51	07/30/22 10:24	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1902729	1	07/30/22 10:17	07/31/22 11:53	MRW	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1902661	1	08/07/22 22:58	08/08/22 17:13	ZSA	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG1903485	28.2	07/25/22 10:15	07/31/22 17:22	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1903108	1.13	07/25/22 10:15	07/29/22 19:34	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1902914	1	07/30/22 14:00	07/30/22 23:22	JDG	Mt. Juliet, TN

## HA-SB-03-5 L1519177-07 Solid

Collected by Akash Cavenev    Collected date/time 07/22/22 10:55    Received date/time 07/27/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1902180	1	07/30/22 09:51	07/30/22 10:24	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1902729	1	07/30/22 10:17	07/31/22 11:55	MRW	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1902661	1	08/07/22 22:58	08/08/22 17:15	ZSA	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG1903485	40.8	07/22/22 10:55	07/31/22 17:45	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1903108	1.63	07/22/22 10:55	07/29/22 19:53	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1902914	1	07/30/22 14:00	07/30/22 23:39	JDG	Mt. Juliet, TN

## HA-SB-03-GW L1519177-08 GW

Collected by Akash Cavenev    Collected date/time 07/22/22 11:26    Received date/time 07/27/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Mercury by Method 7470A	WG1902168	1	07/29/22 08:15	07/30/22 12:15	SRT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1905920	1	08/08/22 23:45	08/09/22 12:50	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1903521	1	08/01/22 15:05	08/02/22 14:06	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG1902469	1	07/29/22 03:20	07/29/22 03:20	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1902815	1	07/29/22 13:36	07/29/22 13:36	TJJ	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG1903200	1.05	07/31/22 07:37	08/01/22 06:40	HLJ	Mt. Juliet, TN

## HA-SV-4-1 L1519177-09 Solid

Collected by Akash Cavenev    Collected date/time 07/22/22 14:40    Received date/time 07/27/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1902181	1	07/30/22 10:27	07/30/22 10:59	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1902729	1	07/30/22 10:17	07/31/22 11:57	MRW	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1902661	1	08/07/22 22:58	08/08/22 17:18	ZSA	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG1903321	39.3	07/22/22 14:40	07/30/22 23:58	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1903108	1.57	07/22/22 14:40	07/29/22 20:12	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1902914	1	07/30/22 14:00	07/31/22 01:21	JDG	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG1903192	1	07/30/22 16:10	07/30/22 22:18	JMB	Mt. Juliet, TN

# SAMPLE SUMMARY

## HA-SV-4-3 L1519177-10 Solid

Collected by Akash Cavenev      Collected date/time 07/22/22 14:45      Received date/time 07/27/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1902181	1	07/30/22 10:27	07/30/22 10:59	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1902729	1	07/30/22 10:17	07/31/22 11:59	MRW	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1902661	1	08/07/22 22:58	08/08/22 17:20	ZSA	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG1903321	41.5	07/22/22 14:45	07/31/22 00:21	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1903108	1.66	07/22/22 14:45	07/29/22 20:30	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1902914	1	07/30/22 14:00	07/30/22 22:49	JDG	Mt. Juliet, TN



## HA-SV-5-1 L1519177-11 Solid

Collected by Akash Cavenev      Collected date/time 07/25/22 09:45      Received date/time 07/27/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1902181	1	07/30/22 10:27	07/30/22 10:59	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1902729	1	07/30/22 10:17	07/31/22 12:01	MRW	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1902661	1	08/07/22 22:58	08/08/22 17:23	ZSA	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG1903321	29.3	07/25/22 09:45	07/31/22 00:44	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1903108	1.17	07/25/22 09:45	07/29/22 20:49	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1902914	1	07/30/22 14:00	07/31/22 03:52	JDG	Mt. Juliet, TN
Polychlorinated Biphenyls (GC) by Method 8082	WG1903192	1	07/30/22 16:10	07/31/22 00:19	JMB	Mt. Juliet, TN


## HA-SV-5-3 L1519177-12 Solid

Collected by Akash Cavenev      Collected date/time 07/25/22 09:50      Received date/time 07/27/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1902181	1	07/30/22 10:27	07/30/22 10:59	CMK	Mt. Juliet, TN
Mercury by Method 7471A	WG1902729	1	07/30/22 10:17	07/31/22 12:03	MRW	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1902661	1	08/07/22 22:58	08/08/22 17:26	ZSA	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015	WG1903321	29.3	07/25/22 09:50	07/31/22 01:07	MGF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1903108	1.17	07/25/22 09:50	07/29/22 21:07	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1902914	1	07/30/22 14:00	07/30/22 23:06	JDG	Mt. Juliet, TN

# CASE NARRATIVE

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



Brian Ford  
Project Manager

- <sup>1</sup> Cp
- <sup>2</sup> Tc
- <sup>3</sup> Ss
- <sup>4</sup> Cn
- <sup>5</sup> Ds
- <sup>6</sup> Sr
- <sup>7</sup> Qc
- <sup>8</sup> Gl
- <sup>9</sup> Al
- <sup>10</sup> Sc

# DETECTION SUMMARY

## Mercury by Method 7471A

Client ID	Lab Sample ID	Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
HA-SB-02-1	<a href="#">L1519177-05</a>	Mercury	0.0550		0.0209	0.0465	1	07/31/2022 11:51	<a href="#">WG1902729</a>
HA-SB-03-5	<a href="#">L1519177-07</a>	Mercury	0.0282	J	0.0231	0.0512	1	07/31/2022 11:55	<a href="#">WG1902729</a>
HA-SV-4-1	<a href="#">L1519177-09</a>	Mercury	0.118		0.0236	0.0524	1	07/31/2022 11:57	<a href="#">WG1902729</a>
HA-SV-5-1	<a href="#">L1519177-11</a>	Mercury	0.0829		0.0204	0.0454	1	07/31/2022 12:01	<a href="#">WG1902729</a>

1 Cp

2 Tc

3 Ss

4 Cn

## Metals (ICP) by Method 6010B

Client ID	Lab Sample ID	Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
HA-SB-01-GW	<a href="#">L1519177-04</a>	Barium,Dissolved	0.136		0.000736	0.00500	1	08/09/2022 12:48	<a href="#">WG1905920</a>
HA-SB-01-GW	<a href="#">L1519177-04</a>	Molybdenum,Dissolved	0.143		0.00116	0.00500	1	08/09/2022 12:48	<a href="#">WG1905920</a>
HA-SB-01-GW	<a href="#">L1519177-04</a>	Vanadium,Dissolved	0.00606	J	0.00499	0.0200	1	08/09/2022 12:48	<a href="#">WG1905920</a>
HA-SB-03-GW	<a href="#">L1519177-08</a>	Barium,Dissolved	0.0700		0.000736	0.00500	1	08/09/2022 12:50	<a href="#">WG1905920</a>
HA-SB-03-GW	<a href="#">L1519177-08</a>	Molybdenum,Dissolved	0.00233	J	0.00116	0.00500	1	08/09/2022 12:50	<a href="#">WG1905920</a>

5 Ds

6 Sr

7 Qc

8 Gl

## Metals (ICP) by Method 6010B

Client ID	Lab Sample ID	Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
HA-SB-01-1	<a href="#">L1519177-01</a>	Arsenic	2.38	J	0.709	2.74	1	08/08/2022 13:55	<a href="#">WG1902661</a>
HA-SB-01-1	<a href="#">L1519177-01</a>	Barium	186		0.117	0.684	1	08/08/2022 13:55	<a href="#">WG1902661</a>
HA-SB-01-1	<a href="#">L1519177-01</a>	Beryllium	0.661		0.0431	0.274	1	08/08/2022 13:55	<a href="#">WG1902661</a>
HA-SB-01-1	<a href="#">L1519177-01</a>	Cadmium	0.836		0.0645	0.684	1	08/08/2022 13:55	<a href="#">WG1902661</a>
HA-SB-01-1	<a href="#">L1519177-01</a>	Chromium	30.0		0.182	1.37	1	08/08/2022 13:55	<a href="#">WG1902661</a>
HA-SB-01-1	<a href="#">L1519177-01</a>	Cobalt	6.34		0.111	1.37	1	08/08/2022 13:55	<a href="#">WG1902661</a>
HA-SB-01-1	<a href="#">L1519177-01</a>	Copper	12.6		0.547	2.74	1	08/08/2022 13:55	<a href="#">WG1902661</a>
HA-SB-01-1	<a href="#">L1519177-01</a>	Lead	6.30		0.285	0.684	1	08/08/2022 13:55	<a href="#">WG1902661</a>
HA-SB-01-1	<a href="#">L1519177-01</a>	Molybdenum	1.29		0.149	0.684	1	08/08/2022 13:55	<a href="#">WG1902661</a>
HA-SB-01-1	<a href="#">L1519177-01</a>	Nickel	15.1		0.181	2.74	1	08/08/2022 13:55	<a href="#">WG1902661</a>
HA-SB-01-1	<a href="#">L1519177-01</a>	Vanadium	40.5		0.693	2.74	1	08/08/2022 13:55	<a href="#">WG1902661</a>
HA-SB-01-1	<a href="#">L1519177-01</a>	Zinc	52.1		1.14	6.84	1	08/08/2022 13:55	<a href="#">WG1902661</a>
HA-SB-01-3	<a href="#">L1519177-02</a>	Arsenic	3.70		0.703	2.72	1	08/08/2022 13:57	<a href="#">WG1902661</a>
HA-SB-01-3	<a href="#">L1519177-02</a>	Barium	164		0.116	0.679	1	08/08/2022 13:57	<a href="#">WG1902661</a>
HA-SB-01-3	<a href="#">L1519177-02</a>	Beryllium	0.743		0.0428	0.272	1	08/08/2022 13:57	<a href="#">WG1902661</a>
HA-SB-01-3	<a href="#">L1519177-02</a>	Cadmium	0.430	J	0.0640	0.679	1	08/08/2022 13:57	<a href="#">WG1902661</a>
HA-SB-01-3	<a href="#">L1519177-02</a>	Chromium	34.3		0.181	1.36	1	08/08/2022 13:57	<a href="#">WG1902661</a>
HA-SB-01-3	<a href="#">L1519177-02</a>	Cobalt	5.51		0.110	1.36	1	08/08/2022 13:57	<a href="#">WG1902661</a>
HA-SB-01-3	<a href="#">L1519177-02</a>	Copper	13.3		0.543	2.72	1	08/08/2022 13:57	<a href="#">WG1902661</a>
HA-SB-01-3	<a href="#">L1519177-02</a>	Lead	10.3		0.282	0.679	1	08/08/2022 13:57	<a href="#">WG1902661</a>
HA-SB-01-3	<a href="#">L1519177-02</a>	Molybdenum	1.32		0.148	0.679	1	08/08/2022 13:57	<a href="#">WG1902661</a>
HA-SB-01-3	<a href="#">L1519177-02</a>	Nickel	15.9		0.179	2.72	1	08/08/2022 13:57	<a href="#">WG1902661</a>
HA-SB-01-3	<a href="#">L1519177-02</a>	Vanadium	52.0		0.687	2.72	1	08/08/2022 13:57	<a href="#">WG1902661</a>
HA-SB-01-3	<a href="#">L1519177-02</a>	Zinc	56.7		1.13	6.79	1	08/08/2022 13:57	<a href="#">WG1902661</a>
HA-SB-01-4-5	<a href="#">L1519177-03</a>	Arsenic	1.74	J	0.626	2.42	1	08/08/2022 17:08	<a href="#">WG1902661</a>
HA-SB-01-4-5	<a href="#">L1519177-03</a>	Barium	172		0.103	0.604	1	08/08/2022 17:08	<a href="#">WG1902661</a>
HA-SB-01-4-5	<a href="#">L1519177-03</a>	Beryllium	0.416		0.0381	0.242	1	08/08/2022 17:08	<a href="#">WG1902661</a>
HA-SB-01-4-5	<a href="#">L1519177-03</a>	Cadmium	0.440	J	0.0569	0.604	1	08/08/2022 17:08	<a href="#">WG1902661</a>
HA-SB-01-4-5	<a href="#">L1519177-03</a>	Chromium	24.7		0.161	1.21	1	08/08/2022 17:08	<a href="#">WG1902661</a>
HA-SB-01-4-5	<a href="#">L1519177-03</a>	Cobalt	6.59		0.0980	1.21	1	08/08/2022 17:08	<a href="#">WG1902661</a>
HA-SB-01-4-5	<a href="#">L1519177-03</a>	Copper	11.0		0.484	2.42	1	08/08/2022 17:08	<a href="#">WG1902661</a>
HA-SB-01-4-5	<a href="#">L1519177-03</a>	Lead	7.38		0.251	0.604	1	08/08/2022 17:08	<a href="#">WG1902661</a>
HA-SB-01-4-5	<a href="#">L1519177-03</a>	Molybdenum	0.717		0.132	0.604	1	08/08/2022 17:08	<a href="#">WG1902661</a>
HA-SB-01-4-5	<a href="#">L1519177-03</a>	Nickel	14.7		0.160	2.42	1	08/08/2022 17:08	<a href="#">WG1902661</a>
HA-SB-01-4-5	<a href="#">L1519177-03</a>	Vanadium	34.8		0.612	2.42	1	08/08/2022 17:08	<a href="#">WG1902661</a>
HA-SB-01-4-5	<a href="#">L1519177-03</a>	Zinc	48.8		1.01	6.04	1	08/08/2022 17:08	<a href="#">WG1902661</a>

9 Al

10 Sc

# DETECTION SUMMARY

## Metals (ICP) by Method 6010B

Client ID	Lab Sample ID	Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
HA-SB-02-1	L1519177-05	Arsenic	4.83		0.602	2.32	1	08/08/2022 17:10	WG1902661
HA-SB-02-1	L1519177-05	Barium	200		0.0989	0.581	1	08/08/2022 17:10	WG1902661
HA-SB-02-1	L1519177-05	Beryllium	0.521		0.0366	0.232	1	08/08/2022 17:10	WG1902661
HA-SB-02-1	L1519177-05	Cadmium	0.562	J	0.0547	0.581	1	08/08/2022 17:10	WG1902661
HA-SB-02-1	L1519177-05	Chromium	29.0		0.154	1.16	1	08/08/2022 17:10	WG1902661
HA-SB-02-1	L1519177-05	Cobalt	4.98		0.0942	1.16	1	08/08/2022 17:10	WG1902661
HA-SB-02-1	L1519177-05	Copper	128		0.465	2.32	1	08/08/2022 17:10	WG1902661
HA-SB-02-1	L1519177-05	Lead	46.3		0.242	0.581	1	08/08/2022 17:10	WG1902661
HA-SB-02-1	L1519177-05	Molybdenum	1.20		0.127	0.581	1	08/08/2022 17:10	WG1902661
HA-SB-02-1	L1519177-05	Nickel	11.5		0.153	2.32	1	08/08/2022 17:10	WG1902661
HA-SB-02-1	L1519177-05	Silver	0.850	J	0.147	1.16	1	08/08/2022 17:10	WG1902661
HA-SB-02-1	L1519177-05	Vanadium	33.0		0.588	2.32	1	08/08/2022 17:10	WG1902661
HA-SB-02-1	L1519177-05	Zinc	120		0.966	5.81	1	08/08/2022 17:10	WG1902661
HA-SB-02-3	L1519177-06	Arsenic	3.02		0.664	2.57	1	08/08/2022 17:13	WG1902661
HA-SB-02-3	L1519177-06	Barium	265		0.109	0.641	1	08/08/2022 17:13	WG1902661
HA-SB-02-3	L1519177-06	Beryllium	0.844		0.0404	0.257	1	08/08/2022 17:13	WG1902661
HA-SB-02-3	L1519177-06	Cadmium	0.740		0.0604	0.641	1	08/08/2022 17:13	WG1902661
HA-SB-02-3	L1519177-06	Chromium	37.1		0.171	1.28	1	08/08/2022 17:13	WG1902661
HA-SB-02-3	L1519177-06	Cobalt	5.62		0.104	1.28	1	08/08/2022 17:13	WG1902661
HA-SB-02-3	L1519177-06	Copper	41.6		0.513	2.57	1	08/08/2022 17:13	WG1902661
HA-SB-02-3	L1519177-06	Lead	8.07		0.267	0.641	1	08/08/2022 17:13	WG1902661
HA-SB-02-3	L1519177-06	Molybdenum	1.20		0.140	0.641	1	08/08/2022 17:13	WG1902661
HA-SB-02-3	L1519177-06	Nickel	19.1		0.169	2.57	1	08/08/2022 17:13	WG1902661
HA-SB-02-3	L1519177-06	Vanadium	47.5		0.649	2.57	1	08/08/2022 17:13	WG1902661
HA-SB-02-3	L1519177-06	Zinc	66.8		1.07	6.41	1	08/08/2022 17:13	WG1902661
HA-SB-03-5	L1519177-07	Arsenic	4.21		0.663	2.56	1	08/08/2022 17:15	WG1902661
HA-SB-03-5	L1519177-07	Barium	184		0.109	0.640	1	08/08/2022 17:15	WG1902661
HA-SB-03-5	L1519177-07	Beryllium	0.961		0.0403	0.256	1	08/08/2022 17:15	WG1902661
HA-SB-03-5	L1519177-07	Cadmium	0.394	J	0.0603	0.640	1	08/08/2022 17:15	WG1902661
HA-SB-03-5	L1519177-07	Chromium	31.9		0.170	1.28	1	08/08/2022 17:15	WG1902661
HA-SB-03-5	L1519177-07	Cobalt	7.02		0.104	1.28	1	08/08/2022 17:15	WG1902661
HA-SB-03-5	L1519177-07	Copper	13.9		0.512	2.56	1	08/08/2022 17:15	WG1902661
HA-SB-03-5	L1519177-07	Lead	6.85		0.266	0.640	1	08/08/2022 17:15	WG1902661
HA-SB-03-5	L1519177-07	Molybdenum	1.42		0.140	0.640	1	08/08/2022 17:15	WG1902661
HA-SB-03-5	L1519177-07	Nickel	17.8		0.169	2.56	1	08/08/2022 17:15	WG1902661
HA-SB-03-5	L1519177-07	Vanadium	52.9		0.648	2.56	1	08/08/2022 17:15	WG1902661
HA-SB-03-5	L1519177-07	Zinc	67.5		1.07	6.40	1	08/08/2022 17:15	WG1902661
HA-SV-4-1	L1519177-09	Arsenic	5.73		0.679	2.62	1	08/08/2022 17:18	WG1902661
HA-SV-4-1	L1519177-09	Barium	184		0.112	0.655	1	08/08/2022 17:18	WG1902661
HA-SV-4-1	L1519177-09	Beryllium	0.441		0.0413	0.262	1	08/08/2022 17:18	WG1902661
HA-SV-4-1	L1519177-09	Cadmium	0.584	J	0.0617	0.655	1	08/08/2022 17:18	WG1902661
HA-SV-4-1	L1519177-09	Chromium	24.7		0.174	1.31	1	08/08/2022 17:18	WG1902661
HA-SV-4-1	L1519177-09	Cobalt	5.33		0.106	1.31	1	08/08/2022 17:18	WG1902661
HA-SV-4-1	L1519177-09	Copper	19.1		0.524	2.62	1	08/08/2022 17:18	WG1902661
HA-SV-4-1	L1519177-09	Lead	171		0.273	0.655	1	08/08/2022 17:18	WG1902661
HA-SV-4-1	L1519177-09	Molybdenum	1.22		0.143	0.655	1	08/08/2022 17:18	WG1902661
HA-SV-4-1	L1519177-09	Nickel	10.5		0.173	2.62	1	08/08/2022 17:18	WG1902661
HA-SV-4-1	L1519177-09	Vanadium	30.1		0.663	2.62	1	08/08/2022 17:18	WG1902661
HA-SV-4-1	L1519177-09	Zinc	170		1.09	6.55	1	08/08/2022 17:18	WG1902661

1 Cp

2 Tc

3 Ss

4 Cn

5 Ds

6 Sr

7 Qc

8 Gl

9 Al

10 Sc



# DETECTION SUMMARY

## Metals (ICP) by Method 6010B

Client ID	Lab Sample ID	Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
HA-SV-4-3	<a href="#">L1519177-10</a>	Arsenic	2.68	J	0.707	2.73	1	08/08/2022 17:20	<a href="#">WG1902661</a>
HA-SV-4-3	<a href="#">L1519177-10</a>	Barium	318		0.116	0.682	1	08/08/2022 17:20	<a href="#">WG1902661</a>
HA-SV-4-3	<a href="#">L1519177-10</a>	Beryllium	0.722		0.0430	0.273	1	08/08/2022 17:20	<a href="#">WG1902661</a>
HA-SV-4-3	<a href="#">L1519177-10</a>	Cadmium	1.00		0.0643	0.682	1	08/08/2022 17:20	<a href="#">WG1902661</a>
HA-SV-4-3	<a href="#">L1519177-10</a>	Chromium	30.9		0.181	1.36	1	08/08/2022 17:20	<a href="#">WG1902661</a>
HA-SV-4-3	<a href="#">L1519177-10</a>	Cobalt	6.73		0.111	1.36	1	08/08/2022 17:20	<a href="#">WG1902661</a>
HA-SV-4-3	<a href="#">L1519177-10</a>	Copper	13.9		0.546	2.73	1	08/08/2022 17:20	<a href="#">WG1902661</a>
HA-SV-4-3	<a href="#">L1519177-10</a>	Lead	5.97		0.284	0.682	1	08/08/2022 17:20	<a href="#">WG1902661</a>
HA-SV-4-3	<a href="#">L1519177-10</a>	Molybdenum	1.20		0.149	0.682	1	08/08/2022 17:20	<a href="#">WG1902661</a>
HA-SV-4-3	<a href="#">L1519177-10</a>	Nickel	17.4		0.180	2.73	1	08/08/2022 17:20	<a href="#">WG1902661</a>
HA-SV-4-3	<a href="#">L1519177-10</a>	Vanadium	44.1		0.690	2.73	1	08/08/2022 17:20	<a href="#">WG1902661</a>
HA-SV-4-3	<a href="#">L1519177-10</a>	Zinc	57.5		1.14	6.82	1	08/08/2022 17:20	<a href="#">WG1902661</a>
HA-SV-5-1	<a href="#">L1519177-11</a>	Arsenic	6.60		0.588	2.27	1	08/08/2022 17:23	<a href="#">WG1902661</a>
HA-SV-5-1	<a href="#">L1519177-11</a>	Barium	230		0.0967	0.567	1	08/08/2022 17:23	<a href="#">WG1902661</a>
HA-SV-5-1	<a href="#">L1519177-11</a>	Beryllium	0.345		0.0357	0.227	1	08/08/2022 17:23	<a href="#">WG1902661</a>
HA-SV-5-1	<a href="#">L1519177-11</a>	Cadmium	0.643		0.0534	0.567	1	08/08/2022 17:23	<a href="#">WG1902661</a>
HA-SV-5-1	<a href="#">L1519177-11</a>	Chromium	23.2		0.151	1.13	1	08/08/2022 17:23	<a href="#">WG1902661</a>
HA-SV-5-1	<a href="#">L1519177-11</a>	Cobalt	4.21		0.0920	1.13	1	08/08/2022 17:23	<a href="#">WG1902661</a>
HA-SV-5-1	<a href="#">L1519177-11</a>	Copper	67.4		0.454	2.27	1	08/08/2022 17:23	<a href="#">WG1902661</a>
HA-SV-5-1	<a href="#">L1519177-11</a>	Lead	118		0.236	0.567	1	08/08/2022 17:23	<a href="#">WG1902661</a>
HA-SV-5-1	<a href="#">L1519177-11</a>	Molybdenum	0.965		0.124	0.567	1	08/08/2022 17:23	<a href="#">WG1902661</a>
HA-SV-5-1	<a href="#">L1519177-11</a>	Nickel	9.31		0.150	2.27	1	08/08/2022 17:23	<a href="#">WG1902661</a>
HA-SV-5-1	<a href="#">L1519177-11</a>	Vanadium	26.3		0.574	2.27	1	08/08/2022 17:23	<a href="#">WG1902661</a>
HA-SV-5-1	<a href="#">L1519177-11</a>	Zinc	155		0.944	5.67	1	08/08/2022 17:23	<a href="#">WG1902661</a>
HA-SV-5-3	<a href="#">L1519177-12</a>	Arsenic	2.60	J	0.686	2.65	1	08/08/2022 17:26	<a href="#">WG1902661</a>
HA-SV-5-3	<a href="#">L1519177-12</a>	Barium	242		0.113	0.662	1	08/08/2022 17:26	<a href="#">WG1902661</a>
HA-SV-5-3	<a href="#">L1519177-12</a>	Beryllium	0.808		0.0417	0.265	1	08/08/2022 17:26	<a href="#">WG1902661</a>
HA-SV-5-3	<a href="#">L1519177-12</a>	Cadmium	0.613	J	0.0624	0.662	1	08/08/2022 17:26	<a href="#">WG1902661</a>
HA-SV-5-3	<a href="#">L1519177-12</a>	Chromium	39.4		0.176	1.32	1	08/08/2022 17:26	<a href="#">WG1902661</a>
HA-SV-5-3	<a href="#">L1519177-12</a>	Cobalt	6.35		0.107	1.32	1	08/08/2022 17:26	<a href="#">WG1902661</a>
HA-SV-5-3	<a href="#">L1519177-12</a>	Copper	25.5		0.530	2.65	1	08/08/2022 17:26	<a href="#">WG1902661</a>
HA-SV-5-3	<a href="#">L1519177-12</a>	Lead	8.19		0.276	0.662	1	08/08/2022 17:26	<a href="#">WG1902661</a>
HA-SV-5-3	<a href="#">L1519177-12</a>	Molybdenum	1.21		0.144	0.662	1	08/08/2022 17:26	<a href="#">WG1902661</a>
HA-SV-5-3	<a href="#">L1519177-12</a>	Nickel	18.5		0.175	2.65	1	08/08/2022 17:26	<a href="#">WG1902661</a>
HA-SV-5-3	<a href="#">L1519177-12</a>	Vanadium	51.9		0.670	2.65	1	08/08/2022 17:26	<a href="#">WG1902661</a>
HA-SV-5-3	<a href="#">L1519177-12</a>	Zinc	64.1		1.10	6.62	1	08/08/2022 17:26	<a href="#">WG1902661</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Ds

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

## Metals (ICPMS) by Method 6020

Client ID	Lab Sample ID	Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
HA-SB-01-GW	<a href="#">L1519177-04</a>	Arsenic,Dissolved	1.16	J	0.180	2.00	1	08/02/2022 13:38	<a href="#">WG1903521</a>
HA-SB-01-GW	<a href="#">L1519177-04</a>	Copper,Dissolved	2.16	J	1.51	5.00	1	08/02/2022 13:38	<a href="#">WG1903521</a>
HA-SB-01-GW	<a href="#">L1519177-04</a>	Nickel,Dissolved	3.04		0.816	2.00	1	08/02/2022 13:38	<a href="#">WG1903521</a>
HA-SB-01-GW	<a href="#">L1519177-04</a>	Selenium,Dissolved	0.528	J	0.300	2.00	1	08/02/2022 13:38	<a href="#">WG1903521</a>
HA-SB-01-GW	<a href="#">L1519177-04</a>	Zinc,Dissolved	5.88	J	3.02	25.0	1	08/02/2022 13:38	<a href="#">WG1903521</a>
HA-SB-03-GW	<a href="#">L1519177-08</a>	Arsenic,Dissolved	0.189	J	0.180	2.00	1	08/02/2022 14:06	<a href="#">WG1903521</a>
HA-SB-03-GW	<a href="#">L1519177-08</a>	Cadmium,Dissolved	0.800	J	0.150	1.00	1	08/02/2022 14:06	<a href="#">WG1903521</a>
HA-SB-03-GW	<a href="#">L1519177-08</a>	Copper,Dissolved	6.06		1.51	5.00	1	08/02/2022 14:06	<a href="#">WG1903521</a>
HA-SB-03-GW	<a href="#">L1519177-08</a>	Nickel,Dissolved	12.6		0.816	2.00	1	08/02/2022 14:06	<a href="#">WG1903521</a>
HA-SB-03-GW	<a href="#">L1519177-08</a>	Selenium,Dissolved	0.406	J	0.300	2.00	1	08/02/2022 14:06	<a href="#">WG1903521</a>
HA-SB-03-GW	<a href="#">L1519177-08</a>	Zinc,Dissolved	16.2	J	3.02	25.0	1	08/02/2022 14:06	<a href="#">WG1903521</a>

# DETECTION SUMMARY

## Volatile Organic Compounds (GC) by Method 8015

Client ID	Lab Sample ID	Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
HA-SB-01-GW	<a href="#">L1519177-04</a>	TPHG C5 - C12	147	<u>J</u>	60.8	200	2	07/29/2022 02:58	<a href="#">WG1902469</a>

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

## Volatile Organic Compounds (GC) by Method 8015

Client ID	Lab Sample ID	Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
HA-SB-01-1	<a href="#">L1519177-01</a>	TPHG C5 - C12	4.64	<u>B J</u>	2.07	6.26	39	08/01/2022 20:47	<a href="#">WG1903924</a>
HA-SB-01-4-5	<a href="#">L1519177-03</a>	TPHG C5 - C12	1260		15.2	45.8	344	08/02/2022 00:12	<a href="#">WG1903924</a>
HA-SB-02-1	<a href="#">L1519177-05</a>	TPHG C5 - C12	3.47	<u>B J</u>	1.66	4.99	39.5	08/01/2022 21:07	<a href="#">WG1903924</a>
HA-SB-02-3	<a href="#">L1519177-06</a>	TPHG C5 - C12	3.74	<u>B J</u>	1.43	4.32	28.2	07/31/2022 17:22	<a href="#">WG1903485</a>
HA-SB-03-5	<a href="#">L1519177-07</a>	TPHG C5 - C12	2.86	<u>B J J5</u>	1.96	5.93	40.8	07/31/2022 17:45	<a href="#">WG1903485</a>
HA-SV-4-1	<a href="#">L1519177-09</a>	TPHG C5 - C12	6.97		1.96	5.93	39.3	07/30/2022 23:58	<a href="#">WG1903321</a>
HA-SV-4-3	<a href="#">L1519177-10</a>	TPHG C5 - C12	6.34	<u>J</u>	2.19	6.57	41.5	07/31/2022 00:21	<a href="#">WG1903321</a>
HA-SV-5-1	<a href="#">L1519177-11</a>	TPHG C5 - C12	4.31		1.22	3.66	29.3	07/31/2022 00:44	<a href="#">WG1903321</a>
HA-SV-5-3	<a href="#">L1519177-12</a>	TPHG C5 - C12	4.56	<u>J</u>	1.56	4.69	29.3	07/31/2022 01:07	<a href="#">WG1903321</a>

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

Client ID	Lab Sample ID	Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
HA-SB-01-GW	<a href="#">L1519177-04</a>	Benzene	1.14	<u>J</u>	0.188	2.00	2	07/29/2022 16:52	<a href="#">WG1902815</a>
HA-SB-01-GW	<a href="#">L1519177-04</a>	n-Butylbenzene	1.05	<u>J</u>	0.314	2.00	2	07/29/2022 16:52	<a href="#">WG1902815</a>
HA-SB-01-GW	<a href="#">L1519177-04</a>	sec-Butylbenzene	1.84	<u>J</u>	0.250	2.00	2	07/29/2022 16:52	<a href="#">WG1902815</a>
HA-SB-01-GW	<a href="#">L1519177-04</a>	Methyl tert-butyl ether	1.50	<u>J</u>	0.202	2.00	2	07/29/2022 16:52	<a href="#">WG1902815</a>
HA-SB-01-GW	<a href="#">L1519177-04</a>	1,2,4-Trimethylbenzene	10.4		0.644	2.00	2	07/29/2022 16:52	<a href="#">WG1902815</a>
HA-SB-01-GW	<a href="#">L1519177-04</a>	Xylenes, Total	0.867	<u>J</u>	0.348	6.00	2	07/29/2022 16:52	<a href="#">WG1902815</a>

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

Client ID	Lab Sample ID	Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
HA-SB-01-1	<a href="#">L1519177-01</a>	Tetrachloroethene	0.00964		0.00225	0.00626	1.56	07/29/2022 18:20	<a href="#">WG1903108</a>
HA-SB-01-3	<a href="#">L1519177-02</a>	Acetone	0.159	<u>J3 J4</u>	0.107	0.147	1.9	07/29/2022 18:39	<a href="#">WG1903108</a>
HA-SB-01-3	<a href="#">L1519177-02</a>	Chloroethane	0.00499	<u>J</u>	0.00499	0.0147	1.9	07/29/2022 18:39	<a href="#">WG1903108</a>
HA-SB-01-3	<a href="#">L1519177-02</a>	Tetrachloroethene	0.00374	<u>J</u>	0.00263	0.00734	1.9	07/29/2022 18:39	<a href="#">WG1903108</a>
HA-SB-01-4-5	<a href="#">L1519177-03</a>	Acetone	0.169	<u>J3 J4</u>	0.0835	0.114	1.72	07/29/2022 18:57	<a href="#">WG1903108</a>
HA-SB-01-4-5	<a href="#">L1519177-03</a>	n-Butylbenzene	1.29		0.0120	0.0286	1.72	07/29/2022 18:57	<a href="#">WG1903108</a>
HA-SB-01-4-5	<a href="#">L1519177-03</a>	sec-Butylbenzene	1.44		0.00658	0.0286	1.72	07/29/2022 18:57	<a href="#">WG1903108</a>
HA-SB-01-4-5	<a href="#">L1519177-03</a>	tert-Butylbenzene	0.0785		0.00446	0.0114	1.72	07/29/2022 18:57	<a href="#">WG1903108</a>
HA-SB-01-4-5	<a href="#">L1519177-03</a>	Isopropylbenzene	0.0267		0.000972	0.00572	1.72	07/29/2022 18:57	<a href="#">WG1903108</a>
HA-SB-01-4-5	<a href="#">L1519177-03</a>	1,2,4-Trimethylbenzene	4.77		0.00362	0.0114	1.72	07/29/2022 18:57	<a href="#">WG1903108</a>
HA-SB-01-4-5	<a href="#">L1519177-03</a>	1,2,3-Trimethylbenzene	0.188		0.00362	0.0114	1.72	07/29/2022 18:57	<a href="#">WG1903108</a>
HA-SB-01-4-5	<a href="#">L1519177-03</a>	Xylenes, Total	0.00572	<u>J</u>	0.00201	0.0149	1.72	07/29/2022 18:57	<a href="#">WG1903108</a>
HA-SB-02-1	<a href="#">L1519177-05</a>	Tetrachloroethene	0.00788		0.00179	0.00499	1.58	07/29/2022 19:16	<a href="#">WG1903108</a>
HA-SB-02-1	<a href="#">L1519177-05</a>	Toluene	0.00335	<u>J</u>	0.00259	0.00998	1.58	07/29/2022 19:16	<a href="#">WG1903108</a>
HA-SB-02-1	<a href="#">L1519177-05</a>	1,2,4-Trimethylbenzene	0.0145		0.00316	0.00998	1.58	07/29/2022 19:16	<a href="#">WG1903108</a>
HA-SB-02-1	<a href="#">L1519177-05</a>	Xylenes, Total	0.00589	<u>J</u>	0.00176	0.0130	1.58	07/29/2022 19:16	<a href="#">WG1903108</a>
HA-SB-02-3	<a href="#">L1519177-06</a>	Tetrachloroethene	0.00190	<u>J</u>	0.00155	0.00434	1.13	07/29/2022 19:34	<a href="#">WG1903108</a>
HA-SV-4-1	<a href="#">L1519177-09</a>	Tetrachloroethene	0.00278	<u>J</u>	0.00213	0.00593	1.57	07/29/2022 20:12	<a href="#">WG1903108</a>
HA-SV-4-3	<a href="#">L1519177-10</a>	Methyl tert-butyl ether	0.000920	<u>J</u>	0.000920	0.00263	1.66	07/29/2022 20:30	<a href="#">WG1903108</a>
HA-SV-4-3	<a href="#">L1519177-10</a>	Tetrachloroethene	0.00722		0.00236	0.00657	1.66	07/29/2022 20:30	<a href="#">WG1903108</a>
HA-SV-4-3	<a href="#">L1519177-10</a>	Xylenes, Total	0.0126	<u>J</u>	0.00231	0.0171	1.66	07/29/2022 20:30	<a href="#">WG1903108</a>
HA-SV-5-1	<a href="#">L1519177-11</a>	Acetone	0.0890	<u>J3 J4</u>	0.0534	0.0731	1.17	07/29/2022 20:49	<a href="#">WG1903108</a>
HA-SV-5-1	<a href="#">L1519177-11</a>	Tetrachloroethene	0.00274	<u>J</u>	0.00131	0.00366	1.17	07/29/2022 20:49	<a href="#">WG1903108</a>
HA-SV-5-3	<a href="#">L1519177-12</a>	Methyl tert-butyl ether	0.000655	<u>J</u>	0.000655	0.00187	1.17	07/29/2022 21:07	<a href="#">WG1903108</a>

# DETECTION SUMMARY

## Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Client ID	Lab Sample ID	Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
HA-SB-01-GW	<a href="#">L1519177-04</a>	C12-C22 Hydrocarbons	413		66.0	200	2	08/01/2022 06:19	<a href="#">WG1903200</a>
HA-SB-01-GW	<a href="#">L1519177-04</a>	C22-C32 Hydrocarbons	161	J	66.0	200	2	08/01/2022 06:19	<a href="#">WG1903200</a>
HA-SB-03-GW	<a href="#">L1519177-08</a>	C12-C22 Hydrocarbons	203		34.7	105	1.05	08/01/2022 06:40	<a href="#">WG1903200</a>
HA-SB-03-GW	<a href="#">L1519177-08</a>	C22-C32 Hydrocarbons	239		34.7	105	1.05	08/01/2022 06:40	<a href="#">WG1903200</a>
HA-SB-03-GW	<a href="#">L1519177-08</a>	C32-C40 Hydrocarbons	109		34.7	105	1.05	08/01/2022 06:40	<a href="#">WG1903200</a>

## Semi-Volatile Organic Compounds (GC) by Method 8015

Client ID	Lab Sample ID	Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
HA-SB-01-1	<a href="#">L1519177-01</a>	C22-C32 Hydrocarbons	1.96	J	1.82	5.47	1	07/30/2022 22:15	<a href="#">WG1902914</a>
HA-SB-01-4-5	<a href="#">L1519177-03</a>	C12-C22 Hydrocarbons	25.3	J3 J5	0.886	4.84	1	07/31/2022 00:13	<a href="#">WG1902914</a>
HA-SB-01-4-5	<a href="#">L1519177-03</a>	C22-C32 Hydrocarbons	86.4	J3 J5	1.61	4.84	1	07/31/2022 00:13	<a href="#">WG1902914</a>
HA-SB-01-4-5	<a href="#">L1519177-03</a>	C32-C40 Hydrocarbons	19.8		1.61	4.84	1	07/31/2022 00:13	<a href="#">WG1902914</a>
HA-SB-02-1	<a href="#">L1519177-05</a>	C12-C22 Hydrocarbons	32.3		0.851	4.65	1	07/31/2022 03:35	<a href="#">WG1902914</a>
HA-SB-02-1	<a href="#">L1519177-05</a>	C22-C32 Hydrocarbons	190		7.72	23.2	5	08/01/2022 14:46	<a href="#">WG1902914</a>
HA-SB-02-1	<a href="#">L1519177-05</a>	C32-C40 Hydrocarbons	29.3		1.54	4.65	1	07/31/2022 03:35	<a href="#">WG1902914</a>
HA-SB-02-3	<a href="#">L1519177-06</a>	C12-C22 Hydrocarbons	5.41		0.940	5.13	1	07/30/2022 23:22	<a href="#">WG1902914</a>
HA-SB-02-3	<a href="#">L1519177-06</a>	C22-C32 Hydrocarbons	41.6		1.71	5.13	1	07/30/2022 23:22	<a href="#">WG1902914</a>
HA-SB-02-3	<a href="#">L1519177-06</a>	C32-C40 Hydrocarbons	5.45		1.71	5.13	1	07/30/2022 23:22	<a href="#">WG1902914</a>
HA-SB-03-5	<a href="#">L1519177-07</a>	C12-C22 Hydrocarbons	1.02	J	0.939	5.12	1	07/30/2022 23:39	<a href="#">WG1902914</a>
HA-SB-03-5	<a href="#">L1519177-07</a>	C22-C32 Hydrocarbons	1.96	J	1.70	5.12	1	07/30/2022 23:39	<a href="#">WG1902914</a>
HA-SV-4-1	<a href="#">L1519177-09</a>	C12-C22 Hydrocarbons	1.18	J	0.961	5.24	1	07/31/2022 01:21	<a href="#">WG1902914</a>
HA-SV-4-1	<a href="#">L1519177-09</a>	C22-C32 Hydrocarbons	3.04	J	1.74	5.24	1	07/31/2022 01:21	<a href="#">WG1902914</a>
HA-SV-4-1	<a href="#">L1519177-09</a>	C32-C40 Hydrocarbons	2.63	J	1.74	5.24	1	07/31/2022 01:21	<a href="#">WG1902914</a>
HA-SV-4-3	<a href="#">L1519177-10</a>	C12-C22 Hydrocarbons	1.14	J	1.00	5.46	1	07/30/2022 22:49	<a href="#">WG1902914</a>
HA-SV-4-3	<a href="#">L1519177-10</a>	C22-C32 Hydrocarbons	11.4		1.81	5.46	1	07/30/2022 22:49	<a href="#">WG1902914</a>
HA-SV-4-3	<a href="#">L1519177-10</a>	C32-C40 Hydrocarbons	3.75	J	1.81	5.46	1	07/30/2022 22:49	<a href="#">WG1902914</a>
HA-SV-5-1	<a href="#">L1519177-11</a>	C12-C22 Hydrocarbons	7.78		0.832	4.54	1	07/31/2022 03:52	<a href="#">WG1902914</a>
HA-SV-5-1	<a href="#">L1519177-11</a>	C22-C32 Hydrocarbons	93.1		1.51	4.54	1	07/31/2022 03:52	<a href="#">WG1902914</a>
HA-SV-5-1	<a href="#">L1519177-11</a>	C32-C40 Hydrocarbons	17.6		1.51	4.54	1	07/31/2022 03:52	<a href="#">WG1902914</a>
HA-SV-5-3	<a href="#">L1519177-12</a>	C12-C22 Hydrocarbons	1.01	J	0.971	5.30	1	07/30/2022 23:06	<a href="#">WG1902914</a>
HA-SV-5-3	<a href="#">L1519177-12</a>	C22-C32 Hydrocarbons	4.41	J	1.76	5.30	1	07/30/2022 23:06	<a href="#">WG1902914</a>

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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	73.1		1	07/30/2022 10:24	<a href="#">WG1902180</a>

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		0.0246	0.0547	1	07/31/2022 11:42	<a href="#">WG1902729</a>

Metals (ICP) by Method 6010B

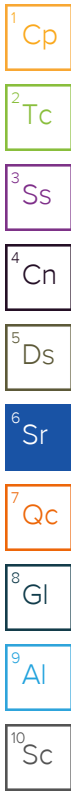
Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Antimony	U		0.745	2.74	1	08/08/2022 13:55	<a href="#">WG1902661</a>
Arsenic	2.38	J	0.709	2.74	1	08/08/2022 13:55	<a href="#">WG1902661</a>
Barium	186		0.117	0.684	1	08/08/2022 13:55	<a href="#">WG1902661</a>
Beryllium	0.661		0.0431	0.274	1	08/08/2022 13:55	<a href="#">WG1902661</a>
Cadmium	0.836		0.0645	0.684	1	08/08/2022 13:55	<a href="#">WG1902661</a>
Chromium	30.0		0.182	1.37	1	08/08/2022 13:55	<a href="#">WG1902661</a>
Cobalt	6.34		0.111	1.37	1	08/08/2022 13:55	<a href="#">WG1902661</a>
Copper	12.6		0.547	2.74	1	08/08/2022 13:55	<a href="#">WG1902661</a>
Lead	6.30		0.285	0.684	1	08/08/2022 13:55	<a href="#">WG1902661</a>
Molybdenum	1.29		0.149	0.684	1	08/08/2022 13:55	<a href="#">WG1902661</a>
Nickel	15.1		0.181	2.74	1	08/08/2022 13:55	<a href="#">WG1902661</a>
Selenium	U		1.05	2.74	1	08/08/2022 13:55	<a href="#">WG1902661</a>
Silver	U		0.174	1.37	1	08/08/2022 13:55	<a href="#">WG1902661</a>
Thallium	U		0.539	2.74	1	08/08/2022 13:55	<a href="#">WG1902661</a>
Vanadium	40.5		0.693	2.74	1	08/08/2022 13:55	<a href="#">WG1902661</a>
Zinc	52.1		1.14	6.84	1	08/08/2022 13:55	<a href="#">WG1902661</a>

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C5 - C12	4.64	B J	2.07	6.26	39	08/01/2022 20:47	<a href="#">WG1903924</a>
(S) a,a,a-Trifluorotoluene(FID)	97.3			77.0-120		08/01/2022 20:47	<a href="#">WG1903924</a>

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	J3 J4	0.0913	0.125	1.56	07/29/2022 18:20	<a href="#">WG1903108</a>
Acrylonitrile	U	J3 J4	0.00903	0.0313	1.56	07/29/2022 18:20	<a href="#">WG1903108</a>
Benzene	U		0.00117	0.00250	1.56	07/29/2022 18:20	<a href="#">WG1903108</a>
Bromobenzene	U		0.00225	0.0313	1.56	07/29/2022 18:20	<a href="#">WG1903108</a>
Bromodichloromethane	U		0.00181	0.00626	1.56	07/29/2022 18:20	<a href="#">WG1903108</a>
Bromoform	U		0.00294	0.0626	1.56	07/29/2022 18:20	<a href="#">WG1903108</a>
Bromomethane	U		0.00493	0.0313	1.56	07/29/2022 18:20	<a href="#">WG1903108</a>
n-Butylbenzene	U		0.0131	0.0313	1.56	07/29/2022 18:20	<a href="#">WG1903108</a>
sec-Butylbenzene	U		0.00721	0.0313	1.56	07/29/2022 18:20	<a href="#">WG1903108</a>
tert-Butylbenzene	U		0.00488	0.0125	1.56	07/29/2022 18:20	<a href="#">WG1903108</a>
Carbon tetrachloride	U		0.00225	0.0125	1.56	07/29/2022 18:20	<a href="#">WG1903108</a>
Chlorobenzene	U		0.000526	0.00626	1.56	07/29/2022 18:20	<a href="#">WG1903108</a>
Chlorodibromomethane	U		0.00153	0.00626	1.56	07/29/2022 18:20	<a href="#">WG1903108</a>
Chloroethane	U		0.00425	0.0125	1.56	07/29/2022 18:20	<a href="#">WG1903108</a>
Chloroform	U		0.00258	0.00626	1.56	07/29/2022 18:20	<a href="#">WG1903108</a>
Chloromethane	U		0.0109	0.0313	1.56	07/29/2022 18:20	<a href="#">WG1903108</a>
2-Chlorotoluene	U		0.00217	0.00626	1.56	07/29/2022 18:20	<a href="#">WG1903108</a>
4-Chlorotoluene	U		0.00113	0.0125	1.56	07/29/2022 18:20	<a href="#">WG1903108</a>



## 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
1,2-Dibromo-3-Chloropropane	U		0.00976	0.0626	1.56	07/29/2022 18:20	WG1903108
1,2-Dibromoethane	U		0.00162	0.00626	1.56	07/29/2022 18:20	WG1903108
Dibromomethane	U		0.00188	0.0125	1.56	07/29/2022 18:20	WG1903108
1,2-Dichlorobenzene	U		0.00106	0.0125	1.56	07/29/2022 18:20	WG1903108
1,3-Dichlorobenzene	U		0.00150	0.0125	1.56	07/29/2022 18:20	WG1903108
1,4-Dichlorobenzene	U		0.00175	0.0125	1.56	07/29/2022 18:20	WG1903108
Dichlorodifluoromethane	U		0.00403	0.00626	1.56	07/29/2022 18:20	WG1903108
1,1-Dichloroethane	U		0.00123	0.00626	1.56	07/29/2022 18:20	WG1903108
1,2-Dichloroethane	U		0.00162	0.00626	1.56	07/29/2022 18:20	WG1903108
1,1-Dichloroethene	U		0.00152	0.00626	1.56	07/29/2022 18:20	WG1903108
cis-1,2-Dichloroethene	U		0.00185	0.00626	1.56	07/29/2022 18:20	WG1903108
trans-1,2-Dichloroethene	U		0.00260	0.0125	1.56	07/29/2022 18:20	WG1903108
1,2-Dichloropropane	U		0.00356	0.0125	1.56	07/29/2022 18:20	WG1903108
1,1-Dichloropropene	U		0.00202	0.00626	1.56	07/29/2022 18:20	WG1903108
1,3-Dichloropropane	U		0.00125	0.0125	1.56	07/29/2022 18:20	WG1903108
cis-1,3-Dichloropropene	U		0.00189	0.00626	1.56	07/29/2022 18:20	WG1903108
trans-1,3-Dichloropropene	U		0.00286	0.0125	1.56	07/29/2022 18:20	WG1903108
2,2-Dichloropropane	U		0.00345	0.00626	1.56	07/29/2022 18:20	WG1903108
Di-isopropyl ether	U		0.00103	0.00250	1.56	07/29/2022 18:20	WG1903108
Ethylbenzene	U		0.00185	0.00626	1.56	07/29/2022 18:20	WG1903108
Hexachloro-1,3-butadiene	U		0.0150	0.0626	1.56	07/29/2022 18:20	WG1903108
Isopropylbenzene	U		0.00106	0.00626	1.56	07/29/2022 18:20	WG1903108
p-Isopropyltoluene	U		0.00639	0.0125	1.56	07/29/2022 18:20	WG1903108
2-Butanone (MEK)	U		0.159	0.250	1.56	07/29/2022 18:20	WG1903108
Methylene Chloride	U		0.0167	0.0626	1.56	07/29/2022 18:20	WG1903108
4-Methyl-2-pentanone (MIBK)	U		0.00571	0.0626	1.56	07/29/2022 18:20	WG1903108
Methyl tert-butyl ether	U		0.000876	0.00250	1.56	07/29/2022 18:20	WG1903108
Naphthalene	U		0.0122	0.0313	1.56	07/29/2022 18:20	WG1903108
n-Propylbenzene	U		0.00237	0.0125	1.56	07/29/2022 18:20	WG1903108
Styrene	U		0.000573	0.0313	1.56	07/29/2022 18:20	WG1903108
1,1,1,2-Tetrachloroethane	U		0.00237	0.00626	1.56	07/29/2022 18:20	WG1903108
1,1,2,2-Tetrachloroethane	U		0.00173	0.00626	1.56	07/29/2022 18:20	WG1903108
1,1,2-Trichlorotrifluoroethane	U		0.00189	0.00626	1.56	07/29/2022 18:20	WG1903108
Tetrachloroethene	0.00964		0.00225	0.00626	1.56	07/29/2022 18:20	WG1903108
Toluene	U		0.00326	0.0125	1.56	07/29/2022 18:20	WG1903108
1,2,3-Trichlorobenzene	U		0.0183	0.0313	1.56	07/29/2022 18:20	WG1903108
1,2,4-Trichlorobenzene	U		0.0110	0.0313	1.56	07/29/2022 18:20	WG1903108
1,1,1-Trichloroethane	U		0.00231	0.00626	1.56	07/29/2022 18:20	WG1903108
1,1,2-Trichloroethane	U		0.00149	0.00626	1.56	07/29/2022 18:20	WG1903108
Trichloroethene	U		0.00146	0.00250	1.56	07/29/2022 18:20	WG1903108
Trichlorofluoromethane	U		0.00207	0.00626	1.56	07/29/2022 18:20	WG1903108
1,2,3-Trichloropropane	U		0.00406	0.0313	1.56	07/29/2022 18:20	WG1903108
1,2,4-Trimethylbenzene	U		0.00395	0.0125	1.56	07/29/2022 18:20	WG1903108
1,2,3-Trimethylbenzene	U		0.00395	0.0125	1.56	07/29/2022 18:20	WG1903108
1,3,5-Trimethylbenzene	U		0.00501	0.0125	1.56	07/29/2022 18:20	WG1903108
Vinyl chloride	U		0.00290	0.00626	1.56	07/29/2022 18:20	WG1903108
Xylenes, Total	U		0.00220	0.0162	1.56	07/29/2022 18:20	WG1903108
(S) Toluene-d8	101			75.0-131		07/29/2022 18:20	WG1903108
(S) 4-Bromofluorobenzene	107			67.0-138		07/29/2022 18:20	WG1903108
(S) 1,2-Dichloroethane-d4	92.7			70.0-130		07/29/2022 18:20	WG1903108

1 Cp

2 Tc

3 Ss

4 Cn

5 Ds

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

## Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	U		1.00	5.47	1	07/30/2022 22:15	<a href="#">WG1902914</a>
C22-C32 Hydrocarbons	1.96	J	1.82	5.47	1	07/30/2022 22:15	<a href="#">WG1902914</a>
C32-C40 Hydrocarbons	U		1.82	5.47	1	07/30/2022 22:15	<a href="#">WG1902914</a>
(S) o-Terphenyl	65.2			18.0-148		07/30/2022 22:15	<a href="#">WG1902914</a>

## Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00515	0.0274	1	07/29/2022 17:03	<a href="#">WG1902320</a>
Alpha BHC	U		0.00504	0.0274	1	07/29/2022 17:03	<a href="#">WG1902320</a>
Beta BHC	U		0.00519	0.0274	1	07/29/2022 17:03	<a href="#">WG1902320</a>
Delta BHC	U		0.00474	0.0274	1	07/29/2022 17:03	<a href="#">WG1902320</a>
Gamma BHC	U		0.00471	0.0274	1	07/29/2022 17:03	<a href="#">WG1902320</a>
Chlordane	U		0.141	0.411	1	07/29/2022 17:03	<a href="#">WG1902320</a>
4,4-DDD	U		0.00506	0.0274	1	07/29/2022 17:03	<a href="#">WG1902320</a>
4,4-DDE	U		0.00501	0.0274	1	07/29/2022 17:03	<a href="#">WG1902320</a>
4,4-DDT	U		0.00858	0.0274	1	07/29/2022 17:03	<a href="#">WG1902320</a>
Dieldrin	U		0.00471	0.0274	1	07/29/2022 17:03	<a href="#">WG1902320</a>
Endosulfan I	U		0.00497	0.0274	1	07/29/2022 17:03	<a href="#">WG1902320</a>
Endosulfan II	U		0.00459	0.0274	1	07/29/2022 17:03	<a href="#">WG1902320</a>
Endosulfan sulfate	U		0.00498	0.0274	1	07/29/2022 17:03	<a href="#">WG1902320</a>
Endrin	U		0.00479	0.0274	1	07/29/2022 17:03	<a href="#">WG1902320</a>
Endrin aldehyde	U		0.00464	0.0274	1	07/29/2022 17:03	<a href="#">WG1902320</a>
Endrin ketone	U		0.00973	0.0274	1	07/29/2022 17:03	<a href="#">WG1902320</a>
Heptachlor	U		0.00586	0.0274	1	07/29/2022 17:03	<a href="#">WG1902320</a>
Heptachlor epoxide	U		0.00464	0.0274	1	07/29/2022 17:03	<a href="#">WG1902320</a>
Hexachlorobenzene	U		0.00474	0.0274	1	07/29/2022 17:03	<a href="#">WG1902320</a>
Methoxychlor	U		0.00662	0.0274	1	07/29/2022 17:03	<a href="#">WG1902320</a>
Toxaphene	U		0.170	0.547	1	07/29/2022 17:03	<a href="#">WG1902320</a>
(S) Decachlorobiphenyl	95.8			10.0-135		07/29/2022 17:03	<a href="#">WG1902320</a>
(S) Tetrachloro-m-xylene	76.2			10.0-139		07/29/2022 17:03	<a href="#">WG1902320</a>

## 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		0.0162	0.0465	1	07/29/2022 17:03	<a href="#">WG1902320</a>
PCB 1221	U		0.0162	0.0465	1	07/29/2022 17:03	<a href="#">WG1902320</a>
PCB 1232	U		0.0162	0.0465	1	07/29/2022 17:03	<a href="#">WG1902320</a>
PCB 1242	U		0.0162	0.0465	1	07/29/2022 17:03	<a href="#">WG1902320</a>
PCB 1248	U		0.0101	0.0233	1	07/29/2022 17:03	<a href="#">WG1902320</a>
PCB 1254	U		0.0101	0.0233	1	07/29/2022 17:03	<a href="#">WG1902320</a>
PCB 1260	U		0.0101	0.0233	1	07/29/2022 17:03	<a href="#">WG1902320</a>
(S) Decachlorobiphenyl	85.1			10.0-135		07/29/2022 17:03	<a href="#">WG1902320</a>
(S) Tetrachloro-m-xylene	81.7			10.0-139		07/29/2022 17:03	<a href="#">WG1902320</a>

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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	73.6		1	07/30/2022 10:24	<a href="#">WG1902180</a>

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Mercury	U		0.0244	0.0543	1	07/31/2022 11:47	<a href="#">WG1902729</a>

Metals (ICP) by Method 6010B

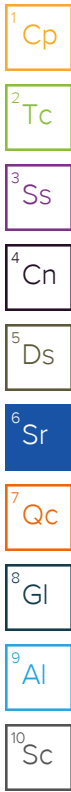
Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Antimony	U		0.739	2.72	1	08/08/2022 13:57	<a href="#">WG1902661</a>
Arsenic	3.70		0.703	2.72	1	08/08/2022 13:57	<a href="#">WG1902661</a>
Barium	164		0.116	0.679	1	08/08/2022 13:57	<a href="#">WG1902661</a>
Beryllium	0.743		0.0428	0.272	1	08/08/2022 13:57	<a href="#">WG1902661</a>
Cadmium	0.430	J	0.0640	0.679	1	08/08/2022 13:57	<a href="#">WG1902661</a>
Chromium	34.3		0.181	1.36	1	08/08/2022 13:57	<a href="#">WG1902661</a>
Cobalt	5.51		0.110	1.36	1	08/08/2022 13:57	<a href="#">WG1902661</a>
Copper	13.3		0.543	2.72	1	08/08/2022 13:57	<a href="#">WG1902661</a>
Lead	10.3		0.282	0.679	1	08/08/2022 13:57	<a href="#">WG1902661</a>
Molybdenum	1.32		0.148	0.679	1	08/08/2022 13:57	<a href="#">WG1902661</a>
Nickel	15.9		0.179	2.72	1	08/08/2022 13:57	<a href="#">WG1902661</a>
Selenium	U		1.04	2.72	1	08/08/2022 13:57	<a href="#">WG1902661</a>
Silver	U		0.172	1.36	1	08/08/2022 13:57	<a href="#">WG1902661</a>
Thallium	U		0.535	2.72	1	08/08/2022 13:57	<a href="#">WG1902661</a>
Vanadium	52.0		0.687	2.72	1	08/08/2022 13:57	<a href="#">WG1902661</a>
Zinc	56.7		1.13	6.79	1	08/08/2022 13:57	<a href="#">WG1902661</a>

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPHG C5 - C12	U		2.44	7.34	47.5	07/31/2022 16:11	<a href="#">WG1903485</a>
(S) a,a,a-Trifluorotoluene(FID)	96.1			77.0-120		07/31/2022 16:11	<a href="#">WG1903485</a>

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Acetone	0.159	J3 J4	0.107	0.147	1.9	07/29/2022 18:39	<a href="#">WG1903108</a>
Acrylonitrile	U	J3 J4	0.0106	0.0368	1.9	07/29/2022 18:39	<a href="#">WG1903108</a>
Benzene	U		0.00137	0.00294	1.9	07/29/2022 18:39	<a href="#">WG1903108</a>
Bromobenzene	U		0.00264	0.0368	1.9	07/29/2022 18:39	<a href="#">WG1903108</a>
Bromodichloromethane	U		0.00213	0.00734	1.9	07/29/2022 18:39	<a href="#">WG1903108</a>
Bromoform	U		0.00343	0.0734	1.9	07/29/2022 18:39	<a href="#">WG1903108</a>
Bromomethane	U		0.00578	0.0368	1.9	07/29/2022 18:39	<a href="#">WG1903108</a>
n-Butylbenzene	U		0.0154	0.0368	1.9	07/29/2022 18:39	<a href="#">WG1903108</a>
sec-Butylbenzene	U		0.00846	0.0368	1.9	07/29/2022 18:39	<a href="#">WG1903108</a>
tert-Butylbenzene	U		0.00573	0.0147	1.9	07/29/2022 18:39	<a href="#">WG1903108</a>
Carbon tetrachloride	U		0.00264	0.0147	1.9	07/29/2022 18:39	<a href="#">WG1903108</a>
Chlorobenzene	U		0.000617	0.00734	1.9	07/29/2022 18:39	<a href="#">WG1903108</a>
Chlorodibromomethane	U		0.00179	0.00734	1.9	07/29/2022 18:39	<a href="#">WG1903108</a>
Chloroethane	0.00499	J	0.00499	0.0147	1.9	07/29/2022 18:39	<a href="#">WG1903108</a>
Chloroform	U		0.00303	0.00734	1.9	07/29/2022 18:39	<a href="#">WG1903108</a>
Chloromethane	U		0.0128	0.0368	1.9	07/29/2022 18:39	<a href="#">WG1903108</a>
2-Chlorotoluene	U		0.00254	0.00734	1.9	07/29/2022 18:39	<a href="#">WG1903108</a>
4-Chlorotoluene	U		0.00132	0.0147	1.9	07/29/2022 18:39	<a href="#">WG1903108</a>



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
1,2-Dibromo-3-Chloropropane	U		0.0115	0.0734	1.9	07/29/2022 18:39	WG1903108
1,2-Dibromoethane	U		0.00190	0.00734	1.9	07/29/2022 18:39	WG1903108
Dibromomethane	U		0.00221	0.0147	1.9	07/29/2022 18:39	WG1903108
1,2-Dichlorobenzene	U		0.00125	0.0147	1.9	07/29/2022 18:39	WG1903108
1,3-Dichlorobenzene	U		0.00176	0.0147	1.9	07/29/2022 18:39	WG1903108
1,4-Dichlorobenzene	U		0.00206	0.0147	1.9	07/29/2022 18:39	WG1903108
Dichlorodifluoromethane	U		0.00473	0.00734	1.9	07/29/2022 18:39	WG1903108
1,1-Dichloroethane	U		0.00144	0.00734	1.9	07/29/2022 18:39	WG1903108
1,2-Dichloroethane	U		0.00190	0.00734	1.9	07/29/2022 18:39	WG1903108
1,1-Dichloroethene	U		0.00178	0.00734	1.9	07/29/2022 18:39	WG1903108
cis-1,2-Dichloroethene	U		0.00215	0.00734	1.9	07/29/2022 18:39	WG1903108
trans-1,2-Dichloroethene	U		0.00306	0.0147	1.9	07/29/2022 18:39	WG1903108
1,2-Dichloropropane	U		0.00417	0.0147	1.9	07/29/2022 18:39	WG1903108
1,1-Dichloropropene	U		0.00238	0.00734	1.9	07/29/2022 18:39	WG1903108
1,3-Dichloropropane	U		0.00147	0.0147	1.9	07/29/2022 18:39	WG1903108
cis-1,3-Dichloropropene	U		0.00223	0.00734	1.9	07/29/2022 18:39	WG1903108
trans-1,3-Dichloropropene	U		0.00335	0.0147	1.9	07/29/2022 18:39	WG1903108
2,2-Dichloropropane	U		0.00405	0.00734	1.9	07/29/2022 18:39	WG1903108
Di-isopropyl ether	U		0.00120	0.00294	1.9	07/29/2022 18:39	WG1903108
Ethylbenzene	U		0.00216	0.00734	1.9	07/29/2022 18:39	WG1903108
Hexachloro-1,3-butadiene	U		0.0176	0.0734	1.9	07/29/2022 18:39	WG1903108
Isopropylbenzene	U		0.00125	0.00734	1.9	07/29/2022 18:39	WG1903108
p-Isopropyltoluene	U		0.00750	0.0147	1.9	07/29/2022 18:39	WG1903108
2-Butanone (MEK)	U		0.187	0.294	1.9	07/29/2022 18:39	WG1903108
Methylene Chloride	U		0.0195	0.0734	1.9	07/29/2022 18:39	WG1903108
4-Methyl-2-pentanone (MIBK)	U		0.00669	0.0734	1.9	07/29/2022 18:39	WG1903108
Methyl tert-butyl ether	U		0.00103	0.00294	1.9	07/29/2022 18:39	WG1903108
Naphthalene	U		0.0143	0.0368	1.9	07/29/2022 18:39	WG1903108
n-Propylbenzene	U		0.00280	0.0147	1.9	07/29/2022 18:39	WG1903108
Styrene	U		0.000672	0.0368	1.9	07/29/2022 18:39	WG1903108
1,1,1,2-Tetrachloroethane	U		0.00278	0.00734	1.9	07/29/2022 18:39	WG1903108
1,1,2,2-Tetrachloroethane	U		0.00204	0.00734	1.9	07/29/2022 18:39	WG1903108
1,1,2-Trichlorotrifluoroethane	U		0.00221	0.00734	1.9	07/29/2022 18:39	WG1903108
Tetrachloroethene	0.00374	J	0.00263	0.00734	1.9	07/29/2022 18:39	WG1903108
Toluene	U		0.00382	0.0147	1.9	07/29/2022 18:39	WG1903108
1,2,3-Trichlorobenzene	U		0.0215	0.0368	1.9	07/29/2022 18:39	WG1903108
1,2,4-Trichlorobenzene	U		0.0129	0.0368	1.9	07/29/2022 18:39	WG1903108
1,1,1-Trichloroethane	U		0.00271	0.00734	1.9	07/29/2022 18:39	WG1903108
1,1,2-Trichloroethane	U		0.00175	0.00734	1.9	07/29/2022 18:39	WG1903108
Trichloroethene	U		0.00172	0.00294	1.9	07/29/2022 18:39	WG1903108
Trichlorofluoromethane	U		0.00243	0.00734	1.9	07/29/2022 18:39	WG1903108
1,2,3-Trichloropropane	U		0.00476	0.0368	1.9	07/29/2022 18:39	WG1903108
1,2,4-Trimethylbenzene	U		0.00464	0.0147	1.9	07/29/2022 18:39	WG1903108
1,2,3-Trimethylbenzene	U		0.00464	0.0147	1.9	07/29/2022 18:39	WG1903108
1,3,5-Trimethylbenzene	U		0.00587	0.0147	1.9	07/29/2022 18:39	WG1903108
Vinyl chloride	U		0.00340	0.00734	1.9	07/29/2022 18:39	WG1903108
Xylenes, Total	U		0.00258	0.0190	1.9	07/29/2022 18:39	WG1903108
(S) Toluene-d8	102			75.0-131		07/29/2022 18:39	WG1903108
(S) 4-Bromofluorobenzene	108			67.0-138		07/29/2022 18:39	WG1903108
(S) 1,2-Dichloroethane-d4	97.8			70.0-130		07/29/2022 18:39	WG1903108

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



Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	U		0.995	5.43	1	07/30/2022 22:32	<a href="#">WG1902914</a>
C22-C32 Hydrocarbons	U		1.81	5.43	1	07/30/2022 22:32	<a href="#">WG1902914</a>
C32-C40 Hydrocarbons	U		1.81	5.43	1	07/30/2022 22:32	<a href="#">WG1902914</a>
<i>(S) o-Terphenyl</i>	71.4			18.0-148		07/30/2022 22:32	<a href="#">WG1902914</a>

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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	82.7		1	07/30/2022 10:24	<a href="#">WG1902180</a>

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Mercury	U		0.0218	0.0484	1	07/31/2022 11:49	<a href="#">WG1902729</a>

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Antimony	U		0.658	2.42	1	08/08/2022 17:08	<a href="#">WG1902661</a>
Arsenic	1.74	J	0.626	2.42	1	08/08/2022 17:08	<a href="#">WG1902661</a>
Barium	172		0.103	0.604	1	08/08/2022 17:08	<a href="#">WG1902661</a>
Beryllium	0.416		0.0381	0.242	1	08/08/2022 17:08	<a href="#">WG1902661</a>
Cadmium	0.440	J	0.0569	0.604	1	08/08/2022 17:08	<a href="#">WG1902661</a>
Chromium	24.7		0.161	1.21	1	08/08/2022 17:08	<a href="#">WG1902661</a>
Cobalt	6.59		0.0980	1.21	1	08/08/2022 17:08	<a href="#">WG1902661</a>
Copper	11.0		0.484	2.42	1	08/08/2022 17:08	<a href="#">WG1902661</a>
Lead	7.38		0.251	0.604	1	08/08/2022 17:08	<a href="#">WG1902661</a>
Molybdenum	0.717		0.132	0.604	1	08/08/2022 17:08	<a href="#">WG1902661</a>
Nickel	14.7		0.160	2.42	1	08/08/2022 17:08	<a href="#">WG1902661</a>
Selenium	U		0.924	2.42	1	08/08/2022 17:08	<a href="#">WG1902661</a>
Silver	U		0.154	1.21	1	08/08/2022 17:08	<a href="#">WG1902661</a>
Thallium	U		0.476	2.42	1	08/08/2022 17:08	<a href="#">WG1902661</a>
Vanadium	34.8		0.612	2.42	1	08/08/2022 17:08	<a href="#">WG1902661</a>
Zinc	48.8		1.01	6.04	1	08/08/2022 17:08	<a href="#">WG1902661</a>

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPHG C5 - C12	1260		15.2	45.8	344	08/02/2022 00:12	<a href="#">WG1903924</a>
(S) a,a,a-Trifluorotoluene(FID)	94.7			77.0-120		08/02/2022 00:12	<a href="#">WG1903924</a>

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Acetone	0.169	J3 J4	0.0835	0.114	1.72	07/29/2022 18:57	<a href="#">WG1903108</a>
Acrylonitrile	U	J3 J4	0.00826	0.0286	1.72	07/29/2022 18:57	<a href="#">WG1903108</a>
Benzene	U		0.00107	0.00229	1.72	07/29/2022 18:57	<a href="#">WG1903108</a>
Bromobenzene	U		0.00206	0.0286	1.72	07/29/2022 18:57	<a href="#">WG1903108</a>
Bromodichloromethane	U		0.00166	0.00572	1.72	07/29/2022 18:57	<a href="#">WG1903108</a>
Bromoform	U		0.00267	0.0572	1.72	07/29/2022 18:57	<a href="#">WG1903108</a>
Bromomethane	U		0.00451	0.0286	1.72	07/29/2022 18:57	<a href="#">WG1903108</a>
n-Butylbenzene	1.29		0.0120	0.0286	1.72	07/29/2022 18:57	<a href="#">WG1903108</a>
sec-Butylbenzene	1.44		0.00658	0.0286	1.72	07/29/2022 18:57	<a href="#">WG1903108</a>
tert-Butylbenzene	0.0785		0.00446	0.0114	1.72	07/29/2022 18:57	<a href="#">WG1903108</a>
Carbon tetrachloride	U		0.00205	0.0114	1.72	07/29/2022 18:57	<a href="#">WG1903108</a>
Chlorobenzene	U		0.000480	0.00572	1.72	07/29/2022 18:57	<a href="#">WG1903108</a>
Chlorodibromomethane	U		0.00140	0.00572	1.72	07/29/2022 18:57	<a href="#">WG1903108</a>
Chloroethane	U		0.00388	0.0114	1.72	07/29/2022 18:57	<a href="#">WG1903108</a>
Chloroform	U		0.00235	0.00572	1.72	07/29/2022 18:57	<a href="#">WG1903108</a>
Chloromethane	U		0.00995	0.0286	1.72	07/29/2022 18:57	<a href="#">WG1903108</a>
2-Chlorotoluene	U		0.00198	0.00572	1.72	07/29/2022 18:57	<a href="#">WG1903108</a>
4-Chlorotoluene	U		0.00103	0.0114	1.72	07/29/2022 18:57	<a href="#">WG1903108</a>



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
1,2-Dibromo-3-Chloropropane	U		0.00892	0.0572	1.72	07/29/2022 18:57	WG1903108
1,2-Dibromoethane	U		0.00148	0.00572	1.72	07/29/2022 18:57	WG1903108
Dibromomethane	U		0.00172	0.0114	1.72	07/29/2022 18:57	WG1903108
1,2-Dichlorobenzene	U		0.000972	0.0114	1.72	07/29/2022 18:57	WG1903108
1,3-Dichlorobenzene	U		0.00137	0.0114	1.72	07/29/2022 18:57	WG1903108
1,4-Dichlorobenzene	U		0.00160	0.0114	1.72	07/29/2022 18:57	WG1903108
Dichlorodifluoromethane	U		0.00368	0.00572	1.72	07/29/2022 18:57	WG1903108
1,1-Dichloroethane	U		0.00112	0.00572	1.72	07/29/2022 18:57	WG1903108
1,2-Dichloroethane	U		0.00149	0.00572	1.72	07/29/2022 18:57	WG1903108
1,1-Dichloroethene	U		0.00138	0.00572	1.72	07/29/2022 18:57	WG1903108
cis-1,2-Dichloroethene	U		0.00168	0.00572	1.72	07/29/2022 18:57	WG1903108
trans-1,2-Dichloroethene	U		0.00238	0.0114	1.72	07/29/2022 18:57	WG1903108
1,2-Dichloropropane	U		0.00325	0.0114	1.72	07/29/2022 18:57	WG1903108
1,1-Dichloropropene	U		0.00185	0.00572	1.72	07/29/2022 18:57	WG1903108
1,3-Dichloropropane	U		0.00115	0.0114	1.72	07/29/2022 18:57	WG1903108
cis-1,3-Dichloropropene	U		0.00173	0.00572	1.72	07/29/2022 18:57	WG1903108
trans-1,3-Dichloropropene	U		0.00261	0.0114	1.72	07/29/2022 18:57	WG1903108
2,2-Dichloropropane	U		0.00315	0.00572	1.72	07/29/2022 18:57	WG1903108
Di-isopropyl ether	U		0.000938	0.00229	1.72	07/29/2022 18:57	WG1903108
Ethylbenzene	U		0.00169	0.00572	1.72	07/29/2022 18:57	WG1903108
Hexachloro-1,3-butadiene	U		0.0137	0.0572	1.72	07/29/2022 18:57	WG1903108
Isopropylbenzene	0.0267		0.000972	0.00572	1.72	07/29/2022 18:57	WG1903108
p-Isopropyltoluene	U		0.00584	0.0114	1.72	07/29/2022 18:57	WG1903108
2-Butanone (MEK)	U		0.145	0.229	1.72	07/29/2022 18:57	WG1903108
Methylene Chloride	U		0.0152	0.0572	1.72	07/29/2022 18:57	WG1903108
4-Methyl-2-pentanone (MIBK)	U		0.00521	0.0572	1.72	07/29/2022 18:57	WG1903108
Methyl tert-butyl ether	U		0.000801	0.00229	1.72	07/29/2022 18:57	WG1903108
Naphthalene	U		0.0112	0.0286	1.72	07/29/2022 18:57	WG1903108
n-Propylbenzene	U		0.00217	0.0114	1.72	07/29/2022 18:57	WG1903108
Styrene	U		0.000524	0.0286	1.72	07/29/2022 18:57	WG1903108
1,1,1,2-Tetrachloroethane	U		0.00217	0.00572	1.72	07/29/2022 18:57	WG1903108
1,1,2,2-Tetrachloroethane	U		0.00160	0.00572	1.72	07/29/2022 18:57	WG1903108
1,1,2-Trichlorotrifluoroethane	U		0.00173	0.00572	1.72	07/29/2022 18:57	WG1903108
Tetrachloroethene	U		0.00205	0.00572	1.72	07/29/2022 18:57	WG1903108
Toluene	U		0.00298	0.0114	1.72	07/29/2022 18:57	WG1903108
1,2,3-Trichlorobenzene	U		0.0168	0.0286	1.72	07/29/2022 18:57	WG1903108
1,2,4-Trichlorobenzene	U		0.0101	0.0286	1.72	07/29/2022 18:57	WG1903108
1,1,1-Trichloroethane	U		0.00211	0.00572	1.72	07/29/2022 18:57	WG1903108
1,1,2-Trichloroethane	U		0.00137	0.00572	1.72	07/29/2022 18:57	WG1903108
Trichloroethene	U		0.00133	0.00229	1.72	07/29/2022 18:57	WG1903108
Trichlorofluoromethane	U		0.00189	0.00572	1.72	07/29/2022 18:57	WG1903108
1,2,3-Trichloropropane	U		0.00371	0.0286	1.72	07/29/2022 18:57	WG1903108
1,2,4-Trimethylbenzene	4.77		0.00362	0.0114	1.72	07/29/2022 18:57	WG1903108
1,2,3-Trimethylbenzene	0.188		0.00362	0.0114	1.72	07/29/2022 18:57	WG1903108
1,3,5-Trimethylbenzene	U		0.00458	0.0114	1.72	07/29/2022 18:57	WG1903108
Vinyl chloride	U		0.00266	0.00572	1.72	07/29/2022 18:57	WG1903108
Xylenes, Total	0.00572	J	0.00201	0.0149	1.72	07/29/2022 18:57	WG1903108
(S) Toluene-d8	103			75.0-131		07/29/2022 18:57	WG1903108
(S) 4-Bromofluorobenzene	106			67.0-138		07/29/2022 18:57	WG1903108
(S) 1,2-Dichloroethane-d4	99.9			70.0-130		07/29/2022 18:57	WG1903108

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	25.3	<a href="#">J3 J5</a>	0.886	4.84	1	07/31/2022 00:13	<a href="#">WG1902914</a>
C22-C32 Hydrocarbons	86.4	<a href="#">J3 J5</a>	1.61	4.84	1	07/31/2022 00:13	<a href="#">WG1902914</a>
C32-C40 Hydrocarbons	19.8		1.61	4.84	1	07/31/2022 00:13	<a href="#">WG1902914</a>
<i>(S) o-Terphenyl</i>	53.8			18.0-148		07/31/2022 00:13	<a href="#">WG1902914</a>

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

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury,Dissolved	U		0.100	0.200	1	07/30/2022 12:13	<a href="#">WG1902168</a>

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Barium,Dissolved	0.136		0.000736	0.00500	1	08/09/2022 12:48	<a href="#">WG1905920</a>
Beryllium,Dissolved	U		0.000330	0.00200	1	08/09/2022 12:48	<a href="#">WG1905920</a>
Chromium,Dissolved	U		0.00140	0.0100	1	08/09/2022 12:48	<a href="#">WG1905920</a>
Cobalt,Dissolved	U		0.000840	0.0100	1	08/09/2022 12:48	<a href="#">WG1905920</a>
Molybdenum,Dissolved	0.143		0.00116	0.00500	1	08/09/2022 12:48	<a href="#">WG1905920</a>
Vanadium,Dissolved	0.00606	J	0.00499	0.0200	1	08/09/2022 12:48	<a href="#">WG1905920</a>

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony,Dissolved	U		1.03	4.00	1	08/02/2022 13:38	<a href="#">WG1903521</a>
Arsenic,Dissolved	1.16	J	0.180	2.00	1	08/02/2022 13:38	<a href="#">WG1903521</a>
Cadmium,Dissolved	U		0.150	1.00	1	08/02/2022 13:38	<a href="#">WG1903521</a>
Copper,Dissolved	2.16	J	1.51	5.00	1	08/02/2022 13:38	<a href="#">WG1903521</a>
Lead,Dissolved	U		0.849	2.00	1	08/02/2022 13:38	<a href="#">WG1903521</a>
Nickel,Dissolved	3.04		0.816	2.00	1	08/02/2022 13:38	<a href="#">WG1903521</a>
Selenium,Dissolved	0.528	J	0.300	2.00	1	08/02/2022 13:38	<a href="#">WG1903521</a>
Silver,Dissolved	U		0.0700	2.00	1	08/02/2022 13:38	<a href="#">WG1903521</a>
Thallium,Dissolved	U		0.121	2.00	1	08/02/2022 13:38	<a href="#">WG1903521</a>
Zinc,Dissolved	5.88	J	3.02	25.0	1	08/02/2022 13:38	<a href="#">WG1903521</a>

Volatile Organic Compounds (GC) by Method 8015

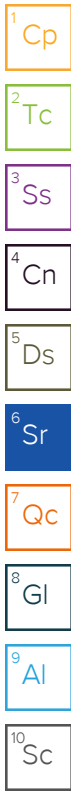
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPHG C5 - C12	147	J	60.8	200	2	07/29/2022 02:58	<a href="#">WG1902469</a>
(S) a,a,a-Trifluorotoluene(FID)	100			78.0-120		07/29/2022 02:58	<a href="#">WG1902469</a>

Sample Narrative:

L1519177-04 WG1902469: lowest possible dilution due to sediment in sample vial.

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	22.6	100	2	07/29/2022 16:52	<a href="#">WG1902815</a>
Acrolein	U		5.08	100	2	07/29/2022 16:52	<a href="#">WG1902815</a>
Acrylonitrile	U		1.34	20.0	2	07/29/2022 16:52	<a href="#">WG1902815</a>
Benzene	1.14	J	0.188	2.00	2	07/29/2022 16:52	<a href="#">WG1902815</a>
Bromobenzene	U		0.236	2.00	2	07/29/2022 16:52	<a href="#">WG1902815</a>
Bromodichloromethane	U		0.272	2.00	2	07/29/2022 16:52	<a href="#">WG1902815</a>
Bromoform	U		0.258	2.00	2	07/29/2022 16:52	<a href="#">WG1902815</a>
Bromomethane	U		1.21	10.0	2	07/29/2022 16:52	<a href="#">WG1902815</a>
n-Butylbenzene	1.05	J	0.314	2.00	2	07/29/2022 16:52	<a href="#">WG1902815</a>
sec-Butylbenzene	1.84	J	0.250	2.00	2	07/29/2022 16:52	<a href="#">WG1902815</a>
tert-Butylbenzene	U		0.254	2.00	2	07/29/2022 16:52	<a href="#">WG1902815</a>
Carbon tetrachloride	U		0.256	2.00	2	07/29/2022 16:52	<a href="#">WG1902815</a>
Chlorobenzene	U		0.232	2.00	2	07/29/2022 16:52	<a href="#">WG1902815</a>
Chlorodibromomethane	U		0.280	2.00	2	07/29/2022 16:52	<a href="#">WG1902815</a>
Chloroethane	U	J3	0.384	10.0	2	07/29/2022 16:52	<a href="#">WG1902815</a>



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloroform	U		0.222	10.0	2	07/29/2022 16:52	WG1902815
Chloromethane	U		1.92	5.00	2	07/29/2022 16:52	WG1902815
2-Chlorotoluene	U		0.212	2.00	2	07/29/2022 16:52	WG1902815
4-Chlorotoluene	U		0.228	2.00	2	07/29/2022 16:52	WG1902815
1,2-Dibromo-3-Chloropropane	U		0.552	10.0	2	07/29/2022 16:52	WG1902815
1,2-Dibromoethane	U		0.252	2.00	2	07/29/2022 16:52	WG1902815
Dibromomethane	U		0.244	2.00	2	07/29/2022 16:52	WG1902815
1,2-Dichlorobenzene	U		0.214	2.00	2	07/29/2022 16:52	WG1902815
1,3-Dichlorobenzene	U		0.220	2.00	2	07/29/2022 16:52	WG1902815
1,4-Dichlorobenzene	U		0.240	2.00	2	07/29/2022 16:52	WG1902815
Dichlorodifluoromethane	U		0.748	10.0	2	07/29/2022 16:52	WG1902815
1,1-Dichloroethane	U		0.200	2.00	2	07/29/2022 16:52	WG1902815
1,2-Dichloroethane	U		0.164	2.00	2	07/29/2022 16:52	WG1902815
1,1-Dichloroethene	U		0.376	2.00	2	07/29/2022 16:52	WG1902815
cis-1,2-Dichloroethene	U		0.252	2.00	2	07/29/2022 16:52	WG1902815
trans-1,2-Dichloroethene	U		0.298	2.00	2	07/29/2022 16:52	WG1902815
1,2-Dichloropropane	U		0.298	2.00	2	07/29/2022 16:52	WG1902815
1,1-Dichloropropene	U		0.284	2.00	2	07/29/2022 16:52	WG1902815
1,3-Dichloropropane	U		0.220	2.00	2	07/29/2022 16:52	WG1902815
cis-1,3-Dichloropropene	U		0.222	2.00	2	07/29/2022 16:52	WG1902815
trans-1,3-Dichloropropene	U		0.236	2.00	2	07/29/2022 16:52	WG1902815
2,2-Dichloropropane	U		0.322	2.00	2	07/29/2022 16:52	WG1902815
Di-isopropyl ether	U	J4	0.210	2.00	2	07/29/2022 16:52	WG1902815
Ethylbenzene	U		0.274	2.00	2	07/29/2022 16:52	WG1902815
Hexachloro-1,3-butadiene	U		0.674	2.00	2	07/29/2022 16:52	WG1902815
Isopropylbenzene	U		0.210	2.00	2	07/29/2022 16:52	WG1902815
p-Isopropyltoluene	U		0.240	2.00	2	07/29/2022 16:52	WG1902815
2-Butanone (MEK)	U		2.38	20.0	2	07/29/2022 16:52	WG1902815
Methylene Chloride	U		0.860	10.0	2	07/29/2022 16:52	WG1902815
4-Methyl-2-pentanone (MIBK)	U		0.956	20.0	2	07/29/2022 16:52	WG1902815
Methyl tert-butyl ether	1.50	J	0.202	2.00	2	07/29/2022 16:52	WG1902815
Naphthalene	U		2.00	10.0	2	07/29/2022 16:52	WG1902815
n-Propylbenzene	U		0.199	2.00	2	07/29/2022 16:52	WG1902815
Styrene	U		0.236	2.00	2	07/29/2022 16:52	WG1902815
1,1,1,2-Tetrachloroethane	U		0.294	2.00	2	07/29/2022 16:52	WG1902815
1,1,2,2-Tetrachloroethane	U		0.266	2.00	2	07/29/2022 16:52	WG1902815
1,1,2-Trichlorotrifluoroethane	U		0.360	2.00	2	07/29/2022 16:52	WG1902815
Tetrachloroethene	U		0.600	2.00	2	07/29/2022 16:52	WG1902815
Toluene	U		0.556	2.00	2	07/29/2022 16:52	WG1902815
1,2,3-Trichlorobenzene	U		0.460	2.00	2	07/29/2022 16:52	WG1902815
1,2,4-Trichlorobenzene	U		0.962	2.00	2	07/29/2022 16:52	WG1902815
1,1,1-Trichloroethane	U		0.298	2.00	2	07/29/2022 16:52	WG1902815
1,1,2-Trichloroethane	U		0.316	2.00	2	07/29/2022 16:52	WG1902815
Trichloroethene	U		0.380	2.00	2	08/01/2022 12:59	WG1903588
Trichlorofluoromethane	U		0.320	10.0	2	07/29/2022 16:52	WG1902815
1,2,3-Trichloropropane	U		0.474	5.00	2	07/29/2022 16:52	WG1902815
1,2,4-Trimethylbenzene	10.4		0.644	2.00	2	07/29/2022 16:52	WG1902815
1,2,3-Trimethylbenzene	U		0.208	2.00	2	07/29/2022 16:52	WG1902815
1,3,5-Trimethylbenzene	U		0.208	2.00	2	07/29/2022 16:52	WG1902815
Vinyl chloride	U		0.468	2.00	2	07/29/2022 16:52	WG1902815
Xylenes, Total	0.867	J	0.348	6.00	2	07/29/2022 16:52	WG1902815
(S) Toluene-d8	100			80.0-120		07/29/2022 16:52	WG1902815
(S) Toluene-d8	97.7			80.0-120		08/01/2022 12:59	WG1903588
(S) 4-Bromofluorobenzene	105			77.0-126		07/29/2022 16:52	WG1902815
(S) 4-Bromofluorobenzene	107			77.0-126		08/01/2022 12:59	WG1903588
(S) 1,2-Dichloroethane-d4	107			70.0-130		07/29/2022 16:52	WG1902815

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 1,2-Dichloroethane-d4	120			70.0-130		08/01/2022 12:59	<a href="#">WG1903588</a>

Sample Narrative:

L1519177-04 WG1902815, WG1903588: lowest possible dilution due to sediment in sample vial.

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
C12-C22 Hydrocarbons	413		66.0	200	2	08/01/2022 06:19	<a href="#">WG1903200</a>
C22-C32 Hydrocarbons	161	J	66.0	200	2	08/01/2022 06:19	<a href="#">WG1903200</a>
C32-C40 Hydrocarbons	U		66.0	200	2	08/01/2022 06:19	<a href="#">WG1903200</a>
(S) o-Terphenyl	54.5			52.0-156		08/01/2022 06:19	<a href="#">WG1903200</a>

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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	86.1		1	07/30/2022 10:24	<a href="#">WG1902180</a>

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Mercury	0.0550		0.0209	0.0465	1	07/31/2022 11:51	<a href="#">WG1902729</a>

Metals (ICP) by Method 6010B

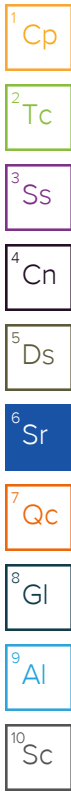
Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Antimony	U		0.632	2.32	1	08/08/2022 17:10	<a href="#">WG1902661</a>
Arsenic	4.83		0.602	2.32	1	08/08/2022 17:10	<a href="#">WG1902661</a>
Barium	200		0.0989	0.581	1	08/08/2022 17:10	<a href="#">WG1902661</a>
Beryllium	0.521		0.0366	0.232	1	08/08/2022 17:10	<a href="#">WG1902661</a>
Cadmium	0.562	J	0.0547	0.581	1	08/08/2022 17:10	<a href="#">WG1902661</a>
Chromium	29.0		0.154	1.16	1	08/08/2022 17:10	<a href="#">WG1902661</a>
Cobalt	4.98		0.0942	1.16	1	08/08/2022 17:10	<a href="#">WG1902661</a>
Copper	128		0.465	2.32	1	08/08/2022 17:10	<a href="#">WG1902661</a>
Lead	46.3		0.242	0.581	1	08/08/2022 17:10	<a href="#">WG1902661</a>
Molybdenum	1.20		0.127	0.581	1	08/08/2022 17:10	<a href="#">WG1902661</a>
Nickel	11.5		0.153	2.32	1	08/08/2022 17:10	<a href="#">WG1902661</a>
Selenium	U		0.887	2.32	1	08/08/2022 17:10	<a href="#">WG1902661</a>
Silver	0.850	J	0.147	1.16	1	08/08/2022 17:10	<a href="#">WG1902661</a>
Thallium	U		0.458	2.32	1	08/08/2022 17:10	<a href="#">WG1902661</a>
Vanadium	33.0		0.588	2.32	1	08/08/2022 17:10	<a href="#">WG1902661</a>
Zinc	120		0.966	5.81	1	08/08/2022 17:10	<a href="#">WG1902661</a>

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPHG C5 - C12	3.47	B J	1.66	4.99	39.5	08/01/2022 21:07	<a href="#">WG1903924</a>
(S) a,a,a-Trifluorotoluene(FID)	98.7			77.0-120		08/01/2022 21:07	<a href="#">WG1903924</a>

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Acetone	U	J3 J4	0.0729	0.0998	1.58	07/29/2022 19:16	<a href="#">WG1903108</a>
Acrylonitrile	U	J3 J4	0.00720	0.0250	1.58	07/29/2022 19:16	<a href="#">WG1903108</a>
Benzene	U		0.000933	0.00200	1.58	07/29/2022 19:16	<a href="#">WG1903108</a>
Bromobenzene	U		0.00179	0.0250	1.58	07/29/2022 19:16	<a href="#">WG1903108</a>
Bromodichloromethane	U		0.00145	0.00499	1.58	07/29/2022 19:16	<a href="#">WG1903108</a>
Bromoform	U		0.00234	0.0499	1.58	07/29/2022 19:16	<a href="#">WG1903108</a>
Bromomethane	U		0.00393	0.0250	1.58	07/29/2022 19:16	<a href="#">WG1903108</a>
n-Butylbenzene	U		0.0105	0.0250	1.58	07/29/2022 19:16	<a href="#">WG1903108</a>
sec-Butylbenzene	U		0.00575	0.0250	1.58	07/29/2022 19:16	<a href="#">WG1903108</a>
tert-Butylbenzene	U		0.00389	0.00998	1.58	07/29/2022 19:16	<a href="#">WG1903108</a>
Carbon tetrachloride	U		0.00179	0.00998	1.58	07/29/2022 19:16	<a href="#">WG1903108</a>
Chlorobenzene	U		0.000420	0.00499	1.58	07/29/2022 19:16	<a href="#">WG1903108</a>
Chlorodibromomethane	U		0.00122	0.00499	1.58	07/29/2022 19:16	<a href="#">WG1903108</a>
Chloroethane	U		0.00340	0.00998	1.58	07/29/2022 19:16	<a href="#">WG1903108</a>
Chloroform	U		0.00206	0.00499	1.58	07/29/2022 19:16	<a href="#">WG1903108</a>
Chloromethane	U		0.00868	0.0250	1.58	07/29/2022 19:16	<a href="#">WG1903108</a>
2-Chlorotoluene	U		0.00173	0.00499	1.58	07/29/2022 19:16	<a href="#">WG1903108</a>
4-Chlorotoluene	U		0.000898	0.00998	1.58	07/29/2022 19:16	<a href="#">WG1903108</a>





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
1,2-Dibromo-3-Chloropropane	U		0.00778	0.0499	1.58	07/29/2022 19:16	WG1903108
1,2-Dibromoethane	U		0.00129	0.00499	1.58	07/29/2022 19:16	WG1903108
Dibromomethane	U		0.00150	0.00998	1.58	07/29/2022 19:16	WG1903108
1,2-Dichlorobenzene	U		0.000849	0.00998	1.58	07/29/2022 19:16	WG1903108
1,3-Dichlorobenzene	U		0.00120	0.00998	1.58	07/29/2022 19:16	WG1903108
1,4-Dichlorobenzene	U		0.00140	0.00998	1.58	07/29/2022 19:16	WG1903108
Dichlorodifluoromethane	U		0.00321	0.00499	1.58	07/29/2022 19:16	WG1903108
1,1-Dichloroethane	U		0.000981	0.00499	1.58	07/29/2022 19:16	WG1903108
1,2-Dichloroethane	U		0.00130	0.00499	1.58	07/29/2022 19:16	WG1903108
1,1-Dichloroethene	U		0.00121	0.00499	1.58	07/29/2022 19:16	WG1903108
cis-1,2-Dichloroethene	U		0.00147	0.00499	1.58	07/29/2022 19:16	WG1903108
trans-1,2-Dichloroethene	U		0.00207	0.00998	1.58	07/29/2022 19:16	WG1903108
1,2-Dichloropropane	U		0.00283	0.00998	1.58	07/29/2022 19:16	WG1903108
1,1-Dichloropropene	U		0.00162	0.00499	1.58	07/29/2022 19:16	WG1903108
1,3-Dichloropropane	U		0.00100	0.00998	1.58	07/29/2022 19:16	WG1903108
cis-1,3-Dichloropropene	U		0.00152	0.00499	1.58	07/29/2022 19:16	WG1903108
trans-1,3-Dichloropropene	U		0.00227	0.00998	1.58	07/29/2022 19:16	WG1903108
2,2-Dichloropropane	U		0.00275	0.00499	1.58	07/29/2022 19:16	WG1903108
Di-isopropyl ether	U		0.000819	0.00200	1.58	07/29/2022 19:16	WG1903108
Ethylbenzene	U		0.00147	0.00499	1.58	07/29/2022 19:16	WG1903108
Hexachloro-1,3-butadiene	U		0.0120	0.0499	1.58	07/29/2022 19:16	WG1903108
Isopropylbenzene	U		0.000849	0.00499	1.58	07/29/2022 19:16	WG1903108
p-Isopropyltoluene	U		0.00509	0.00998	1.58	07/29/2022 19:16	WG1903108
2-Butanone (MEK)	U		0.126	0.200	1.58	07/29/2022 19:16	WG1903108
Methylene Chloride	U		0.0133	0.0499	1.58	07/29/2022 19:16	WG1903108
4-Methyl-2-pentanone (MIBK)	U		0.00455	0.0499	1.58	07/29/2022 19:16	WG1903108
Methyl tert-butyl ether	U		0.000699	0.00200	1.58	07/29/2022 19:16	WG1903108
Naphthalene	U		0.00974	0.0250	1.58	07/29/2022 19:16	WG1903108
n-Propylbenzene	U		0.00190	0.00998	1.58	07/29/2022 19:16	WG1903108
Styrene	U		0.000457	0.0250	1.58	07/29/2022 19:16	WG1903108
1,1,1,2-Tetrachloroethane	U		0.00190	0.00499	1.58	07/29/2022 19:16	WG1903108
1,1,2,2-Tetrachloroethane	U		0.00139	0.00499	1.58	07/29/2022 19:16	WG1903108
1,1,2-Trichlorotrifluoroethane	U		0.00150	0.00499	1.58	07/29/2022 19:16	WG1903108
Tetrachloroethene	0.00788		0.00179	0.00499	1.58	07/29/2022 19:16	WG1903108
Toluene	0.00335	J	0.00259	0.00998	1.58	07/29/2022 19:16	WG1903108
1,2,3-Trichlorobenzene	U		0.0147	0.0250	1.58	07/29/2022 19:16	WG1903108
1,2,4-Trichlorobenzene	U		0.00878	0.0250	1.58	07/29/2022 19:16	WG1903108
1,1,1-Trichloroethane	U		0.00184	0.00499	1.58	07/29/2022 19:16	WG1903108
1,1,2-Trichloroethane	U		0.00119	0.00499	1.58	07/29/2022 19:16	WG1903108
Trichloroethene	U		0.00117	0.00200	1.58	07/29/2022 19:16	WG1903108
Trichlorofluoromethane	U		0.00166	0.00499	1.58	07/29/2022 19:16	WG1903108
1,2,3-Trichloropropane	U		0.00323	0.0250	1.58	07/29/2022 19:16	WG1903108
1,2,4-Trimethylbenzene	0.0145		0.00316	0.00998	1.58	07/29/2022 19:16	WG1903108
1,2,3-Trimethylbenzene	U		0.00316	0.00998	1.58	07/29/2022 19:16	WG1903108
1,3,5-Trimethylbenzene	U		0.00399	0.00998	1.58	07/29/2022 19:16	WG1903108
Vinyl chloride	U		0.00231	0.00499	1.58	07/29/2022 19:16	WG1903108
Xylenes, Total	0.00589	J	0.00176	0.0130	1.58	07/29/2022 19:16	WG1903108
(S) Toluene-d8	104			75.0-131		07/29/2022 19:16	WG1903108
(S) 4-Bromofluorobenzene	107			67.0-138		07/29/2022 19:16	WG1903108
(S) 1,2-Dichloroethane-d4	90.1			70.0-130		07/29/2022 19:16	WG1903108

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

Semi-Volatile Organic Compounds (GC) by Method 8015

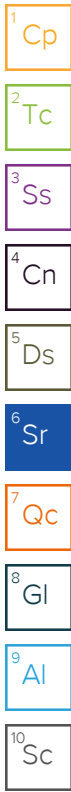
Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	32.3		0.851	4.65	1	07/31/2022 03:35	<a href="#">WG1902914</a>
C22-C32 Hydrocarbons	190		7.72	23.2	5	08/01/2022 14:46	<a href="#">WG1902914</a>
C32-C40 Hydrocarbons	29.3		1.54	4.65	1	07/31/2022 03:35	<a href="#">WG1902914</a>
(S) o-Terphenyl	68.7			18.0-148		07/31/2022 03:35	<a href="#">WG1902914</a>
(S) o-Terphenyl	92.7			18.0-148		08/01/2022 14:46	<a href="#">WG1902914</a>

Pesticides (GC) by Method 8081

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00437	0.0232	1	07/29/2022 17:15	<a href="#">WG1902320</a>
Alpha BHC	U		0.00427	0.0232	1	07/29/2022 17:15	<a href="#">WG1902320</a>
Beta BHC	U		0.00440	0.0232	1	07/29/2022 17:15	<a href="#">WG1902320</a>
Delta BHC	U		0.00402	0.0232	1	07/29/2022 17:15	<a href="#">WG1902320</a>
Gamma BHC	U		0.00399	0.0232	1	07/29/2022 17:15	<a href="#">WG1902320</a>
Chlordane	U		0.120	0.348	1	07/29/2022 17:15	<a href="#">WG1902320</a>
4,4-DDD	U		0.00430	0.0232	1	07/29/2022 17:15	<a href="#">WG1902320</a>
4,4-DDE	U		0.00425	0.0232	1	07/29/2022 17:15	<a href="#">WG1902320</a>
4,4-DDT	U		0.00728	0.0232	1	07/29/2022 17:15	<a href="#">WG1902320</a>
Dieldrin	U		0.00399	0.0232	1	07/29/2022 17:15	<a href="#">WG1902320</a>
Endosulfan I	U		0.00422	0.0232	1	07/29/2022 17:15	<a href="#">WG1902320</a>
Endosulfan II	U		0.00389	0.0232	1	07/29/2022 17:15	<a href="#">WG1902320</a>
Endosulfan sulfate	U		0.00423	0.0232	1	07/29/2022 17:15	<a href="#">WG1902320</a>
Endrin	U		0.00406	0.0232	1	07/29/2022 17:15	<a href="#">WG1902320</a>
Endrin aldehyde	U		0.00394	0.0232	1	07/29/2022 17:15	<a href="#">WG1902320</a>
Endrin ketone	U		0.00826	0.0232	1	07/29/2022 17:15	<a href="#">WG1902320</a>
Heptachlor	U		0.00497	0.0232	1	07/29/2022 17:15	<a href="#">WG1902320</a>
Heptachlor epoxide	U		0.00394	0.0232	1	07/29/2022 17:15	<a href="#">WG1902320</a>
Hexachlorobenzene	U		0.00402	0.0232	1	07/29/2022 17:15	<a href="#">WG1902320</a>
Methoxychlor	U		0.00562	0.0232	1	07/29/2022 17:15	<a href="#">WG1902320</a>
Toxaphene	U		0.144	0.465	1	07/29/2022 17:15	<a href="#">WG1902320</a>
(S) Decachlorobiphenyl	95.8			10.0-135		07/29/2022 17:15	<a href="#">WG1902320</a>
(S) Tetrachloro-m-xylene	72.2			10.0-139		07/29/2022 17:15	<a href="#">WG1902320</a>

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	07/29/2022 17:15	<a href="#">WG1902320</a>
PCB 1221	U		0.0137	0.0395	1	07/29/2022 17:15	<a href="#">WG1902320</a>
PCB 1232	U		0.0137	0.0395	1	07/29/2022 17:15	<a href="#">WG1902320</a>
PCB 1242	U		0.0137	0.0395	1	07/29/2022 17:15	<a href="#">WG1902320</a>
PCB 1248	U		0.00857	0.0197	1	07/29/2022 17:15	<a href="#">WG1902320</a>
PCB 1254	U		0.00857	0.0197	1	07/29/2022 17:15	<a href="#">WG1902320</a>
PCB 1260	U		0.00857	0.0197	1	07/29/2022 17:15	<a href="#">WG1902320</a>
(S) Decachlorobiphenyl	83.9			10.0-135		07/29/2022 17:15	<a href="#">WG1902320</a>
(S) Tetrachloro-m-xylene	72.9			10.0-139		07/29/2022 17:15	<a href="#">WG1902320</a>



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	78.0		1	07/30/2022 10:24	<a href="#">WG1902180</a>

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		0.0231	0.0513	1	07/31/2022 11:53	<a href="#">WG1902729</a>

Metals (ICP) by Method 6010B

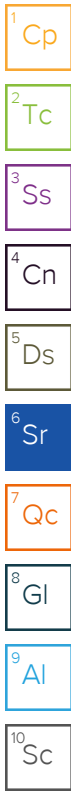
Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Antimony	U		0.698	2.57	1	08/08/2022 17:13	<a href="#">WG1902661</a>
Arsenic	3.02		0.664	2.57	1	08/08/2022 17:13	<a href="#">WG1902661</a>
Barium	265		0.109	0.641	1	08/08/2022 17:13	<a href="#">WG1902661</a>
Beryllium	0.844		0.0404	0.257	1	08/08/2022 17:13	<a href="#">WG1902661</a>
Cadmium	0.740		0.0604	0.641	1	08/08/2022 17:13	<a href="#">WG1902661</a>
Chromium	37.1		0.171	1.28	1	08/08/2022 17:13	<a href="#">WG1902661</a>
Cobalt	5.62		0.104	1.28	1	08/08/2022 17:13	<a href="#">WG1902661</a>
Copper	41.6		0.513	2.57	1	08/08/2022 17:13	<a href="#">WG1902661</a>
Lead	8.07		0.267	0.641	1	08/08/2022 17:13	<a href="#">WG1902661</a>
Molybdenum	1.20		0.140	0.641	1	08/08/2022 17:13	<a href="#">WG1902661</a>
Nickel	19.1		0.169	2.57	1	08/08/2022 17:13	<a href="#">WG1902661</a>
Selenium	U		0.980	2.57	1	08/08/2022 17:13	<a href="#">WG1902661</a>
Silver	U		0.163	1.28	1	08/08/2022 17:13	<a href="#">WG1902661</a>
Thallium	U		0.505	2.57	1	08/08/2022 17:13	<a href="#">WG1902661</a>
Vanadium	47.5		0.649	2.57	1	08/08/2022 17:13	<a href="#">WG1902661</a>
Zinc	66.8		1.07	6.41	1	08/08/2022 17:13	<a href="#">WG1902661</a>

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C5 - C12	3.74	<a href="#">B J</a>	1.43	4.32	28.2	07/31/2022 17:22	<a href="#">WG1903485</a>
(S) a,a,a-Trifluorotoluene(FID)	99.0			77.0-120		07/31/2022 17:22	<a href="#">WG1903485</a>

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	<a href="#">J3 J4</a>	0.0631	0.0866	1.13	07/29/2022 19:34	<a href="#">WG1903108</a>
Acrylonitrile	U	<a href="#">J3 J4</a>	0.00625	0.0216	1.13	07/29/2022 19:34	<a href="#">WG1903108</a>
Benzene	U		0.000809	0.00173	1.13	07/29/2022 19:34	<a href="#">WG1903108</a>
Bromobenzene	U		0.00156	0.0216	1.13	07/29/2022 19:34	<a href="#">WG1903108</a>
Bromodichloromethane	U		0.00126	0.00434	1.13	07/29/2022 19:34	<a href="#">WG1903108</a>
Bromoform	U		0.00202	0.0434	1.13	07/29/2022 19:34	<a href="#">WG1903108</a>
Bromomethane	U		0.00342	0.0216	1.13	07/29/2022 19:34	<a href="#">WG1903108</a>
n-Butylbenzene	U		0.00909	0.0216	1.13	07/29/2022 19:34	<a href="#">WG1903108</a>
sec-Butylbenzene	U		0.00498	0.0216	1.13	07/29/2022 19:34	<a href="#">WG1903108</a>
tert-Butylbenzene	U		0.00337	0.00866	1.13	07/29/2022 19:34	<a href="#">WG1903108</a>
Carbon tetrachloride	U		0.00155	0.00866	1.13	07/29/2022 19:34	<a href="#">WG1903108</a>
Chlorobenzene	U		0.000363	0.00434	1.13	07/29/2022 19:34	<a href="#">WG1903108</a>
Chlorodibromomethane	U		0.00106	0.00434	1.13	07/29/2022 19:34	<a href="#">WG1903108</a>
Chloroethane	U		0.00294	0.00866	1.13	07/29/2022 19:34	<a href="#">WG1903108</a>
Chloroform	U		0.00178	0.00434	1.13	07/29/2022 19:34	<a href="#">WG1903108</a>
Chloromethane	U		0.00754	0.0216	1.13	07/29/2022 19:34	<a href="#">WG1903108</a>
2-Chlorotoluene	U		0.00150	0.00434	1.13	07/29/2022 19:34	<a href="#">WG1903108</a>
4-Chlorotoluene	U		0.000780	0.00866	1.13	07/29/2022 19:34	<a href="#">WG1903108</a>



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
1,2-Dibromo-3-Chloropropane	U		0.00676	0.0434	1.13	07/29/2022 19:34	WG1903108
1,2-Dibromoethane	U		0.00112	0.00434	1.13	07/29/2022 19:34	WG1903108
Dibromomethane	U		0.00130	0.00866	1.13	07/29/2022 19:34	WG1903108
1,2-Dichlorobenzene	U		0.000736	0.00866	1.13	07/29/2022 19:34	WG1903108
1,3-Dichlorobenzene	U		0.00104	0.00866	1.13	07/29/2022 19:34	WG1903108
1,4-Dichlorobenzene	U		0.00121	0.00866	1.13	07/29/2022 19:34	WG1903108
Dichlorodifluoromethane	U		0.00279	0.00434	1.13	07/29/2022 19:34	WG1903108
1,1-Dichloroethane	U		0.000851	0.00434	1.13	07/29/2022 19:34	WG1903108
1,2-Dichloroethane	U		0.00112	0.00434	1.13	07/29/2022 19:34	WG1903108
1,1-Dichloroethene	U		0.00105	0.00434	1.13	07/29/2022 19:34	WG1903108
cis-1,2-Dichloroethene	U		0.00127	0.00434	1.13	07/29/2022 19:34	WG1903108
trans-1,2-Dichloroethene	U		0.00181	0.00866	1.13	07/29/2022 19:34	WG1903108
1,2-Dichloropropane	U		0.00245	0.00866	1.13	07/29/2022 19:34	WG1903108
1,1-Dichloropropene	U		0.00140	0.00434	1.13	07/29/2022 19:34	WG1903108
1,3-Dichloropropane	U		0.000867	0.00866	1.13	07/29/2022 19:34	WG1903108
cis-1,3-Dichloropropene	U		0.00131	0.00434	1.13	07/29/2022 19:34	WG1903108
trans-1,3-Dichloropropene	U		0.00198	0.00866	1.13	07/29/2022 19:34	WG1903108
2,2-Dichloropropane	U		0.00239	0.00434	1.13	07/29/2022 19:34	WG1903108
Di-isopropyl ether	U		0.000710	0.00173	1.13	07/29/2022 19:34	WG1903108
Ethylbenzene	U		0.00128	0.00434	1.13	07/29/2022 19:34	WG1903108
Hexachloro-1,3-butadiene	U		0.0104	0.0434	1.13	07/29/2022 19:34	WG1903108
Isopropylbenzene	U		0.000736	0.00434	1.13	07/29/2022 19:34	WG1903108
p-Isopropyltoluene	U		0.00441	0.00866	1.13	07/29/2022 19:34	WG1903108
2-Butanone (MEK)	U		0.110	0.173	1.13	07/29/2022 19:34	WG1903108
Methylene Chloride	U		0.0115	0.0434	1.13	07/29/2022 19:34	WG1903108
4-Methyl-2-pentanone (MIBK)	U		0.00395	0.0434	1.13	07/29/2022 19:34	WG1903108
Methyl tert-butyl ether	U		0.000607	0.00173	1.13	07/29/2022 19:34	WG1903108
Naphthalene	U		0.00844	0.0216	1.13	07/29/2022 19:34	WG1903108
n-Propylbenzene	U		0.00164	0.00866	1.13	07/29/2022 19:34	WG1903108
Styrene	U		0.000397	0.0216	1.13	07/29/2022 19:34	WG1903108
1,1,1,2-Tetrachloroethane	U		0.00164	0.00434	1.13	07/29/2022 19:34	WG1903108
1,1,2,2-Tetrachloroethane	U		0.00120	0.00434	1.13	07/29/2022 19:34	WG1903108
1,1,2-Trichlorotrifluoroethane	U		0.00131	0.00434	1.13	07/29/2022 19:34	WG1903108
Tetrachloroethene	0.00190	J	0.00155	0.00434	1.13	07/29/2022 19:34	WG1903108
Toluene	U		0.00225	0.00866	1.13	07/29/2022 19:34	WG1903108
1,2,3-Trichlorobenzene	U		0.0127	0.0216	1.13	07/29/2022 19:34	WG1903108
1,2,4-Trichlorobenzene	U		0.00762	0.0216	1.13	07/29/2022 19:34	WG1903108
1,1,1-Trichloroethane	U		0.00159	0.00434	1.13	07/29/2022 19:34	WG1903108
1,1,2-Trichloroethane	U		0.00103	0.00434	1.13	07/29/2022 19:34	WG1903108
Trichloroethene	U		0.00101	0.00173	1.13	07/29/2022 19:34	WG1903108
Trichlorofluoromethane	U		0.00143	0.00434	1.13	07/29/2022 19:34	WG1903108
1,2,3-Trichloropropane	U		0.00280	0.0216	1.13	07/29/2022 19:34	WG1903108
1,2,4-Trimethylbenzene	U		0.00274	0.00866	1.13	07/29/2022 19:34	WG1903108
1,2,3-Trimethylbenzene	U		0.00274	0.00866	1.13	07/29/2022 19:34	WG1903108
1,3,5-Trimethylbenzene	U		0.00346	0.00866	1.13	07/29/2022 19:34	WG1903108
Vinyl chloride	U		0.00201	0.00434	1.13	07/29/2022 19:34	WG1903108
Xylenes, Total	U		0.00152	0.0113	1.13	07/29/2022 19:34	WG1903108
(S) Toluene-d8	105			75.0-131		07/29/2022 19:34	WG1903108
(S) 4-Bromofluorobenzene	105			67.0-138		07/29/2022 19:34	WG1903108
(S) 1,2-Dichloroethane-d4	94.0			70.0-130		07/29/2022 19:34	WG1903108

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	5.41		0.940	5.13	1	07/30/2022 23:22	<a href="#">WG1902914</a>
C22-C32 Hydrocarbons	41.6		1.71	5.13	1	07/30/2022 23:22	<a href="#">WG1902914</a>
C32-C40 Hydrocarbons	5.45		1.71	5.13	1	07/30/2022 23:22	<a href="#">WG1902914</a>
(S) o-Terphenyl	60.0			18.0-148		07/30/2022 23:22	<a href="#">WG1902914</a>

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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	78.1		1	07/30/2022 10:24	<a href="#">WG1902180</a>

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.0282	J	0.0231	0.0512	1	07/31/2022 11:55	<a href="#">WG1902729</a>

Metals (ICP) by Method 6010B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Antimony	U		0.697	2.56	1	08/08/2022 17:15	<a href="#">WG1902661</a>
Arsenic	4.21		0.663	2.56	1	08/08/2022 17:15	<a href="#">WG1902661</a>
Barium	184		0.109	0.640	1	08/08/2022 17:15	<a href="#">WG1902661</a>
Beryllium	0.961		0.0403	0.256	1	08/08/2022 17:15	<a href="#">WG1902661</a>
Cadmium	0.394	J	0.0603	0.640	1	08/08/2022 17:15	<a href="#">WG1902661</a>
Chromium	31.9		0.170	1.28	1	08/08/2022 17:15	<a href="#">WG1902661</a>
Cobalt	7.02		0.104	1.28	1	08/08/2022 17:15	<a href="#">WG1902661</a>
Copper	13.9		0.512	2.56	1	08/08/2022 17:15	<a href="#">WG1902661</a>
Lead	6.85		0.266	0.640	1	08/08/2022 17:15	<a href="#">WG1902661</a>
Molybdenum	1.42		0.140	0.640	1	08/08/2022 17:15	<a href="#">WG1902661</a>
Nickel	17.8		0.169	2.56	1	08/08/2022 17:15	<a href="#">WG1902661</a>
Selenium	U		0.978	2.56	1	08/08/2022 17:15	<a href="#">WG1902661</a>
Silver	U		0.163	1.28	1	08/08/2022 17:15	<a href="#">WG1902661</a>
Thallium	U		0.505	2.56	1	08/08/2022 17:15	<a href="#">WG1902661</a>
Vanadium	52.9		0.648	2.56	1	08/08/2022 17:15	<a href="#">WG1902661</a>
Zinc	67.5		1.07	6.40	1	08/08/2022 17:15	<a href="#">WG1902661</a>

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C5 - C12	2.86	B J J5	1.96	5.93	40.8	07/31/2022 17:45	<a href="#">WG1903485</a>
(S) a,a,a-Trifluorotoluene(FID)	100			77.0-120		07/31/2022 17:45	<a href="#">WG1903485</a>

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	J3 J4	0.0864	0.118	1.63	07/29/2022 19:53	<a href="#">WG1903108</a>
Acrylonitrile	U	J3 J4	0.00854	0.0296	1.63	07/29/2022 19:53	<a href="#">WG1903108</a>
Benzene	U		0.00111	0.00237	1.63	07/29/2022 19:53	<a href="#">WG1903108</a>
Bromobenzene	U		0.00214	0.0296	1.63	07/29/2022 19:53	<a href="#">WG1903108</a>
Bromodichloromethane	U		0.00171	0.00593	1.63	07/29/2022 19:53	<a href="#">WG1903108</a>
Bromoform	U		0.00277	0.0593	1.63	07/29/2022 19:53	<a href="#">WG1903108</a>
Bromomethane	U		0.00466	0.0296	1.63	07/29/2022 19:53	<a href="#">WG1903108</a>
n-Butylbenzene	U		0.0124	0.0296	1.63	07/29/2022 19:53	<a href="#">WG1903108</a>
sec-Butylbenzene	U		0.00681	0.0296	1.63	07/29/2022 19:53	<a href="#">WG1903108</a>
tert-Butylbenzene	U		0.00462	0.0118	1.63	07/29/2022 19:53	<a href="#">WG1903108</a>
Carbon tetrachloride	U		0.00212	0.0118	1.63	07/29/2022 19:53	<a href="#">WG1903108</a>
Chlorobenzene	U		0.000497	0.00593	1.63	07/29/2022 19:53	<a href="#">WG1903108</a>
Chlorodibromomethane	U		0.00145	0.00593	1.63	07/29/2022 19:53	<a href="#">WG1903108</a>
Chloroethane	U		0.00402	0.0118	1.63	07/29/2022 19:53	<a href="#">WG1903108</a>
Chloroform	U		0.00244	0.00593	1.63	07/29/2022 19:53	<a href="#">WG1903108</a>
Chloromethane	U		0.0103	0.0296	1.63	07/29/2022 19:53	<a href="#">WG1903108</a>
2-Chlorotoluene	U		0.00205	0.00593	1.63	07/29/2022 19:53	<a href="#">WG1903108</a>
4-Chlorotoluene	U		0.00107	0.0118	1.63	07/29/2022 19:53	<a href="#">WG1903108</a>



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
1,2-Dibromo-3-Chloropropane	U		0.00924	0.0593	1.63	07/29/2022 19:53	WG1903108
1,2-Dibromoethane	U		0.00154	0.00593	1.63	07/29/2022 19:53	WG1903108
Dibromomethane	U		0.00177	0.0118	1.63	07/29/2022 19:53	WG1903108
1,2-Dichlorobenzene	U		0.00101	0.0118	1.63	07/29/2022 19:53	WG1903108
1,3-Dichlorobenzene	U		0.00142	0.0118	1.63	07/29/2022 19:53	WG1903108
1,4-Dichlorobenzene	U		0.00166	0.0118	1.63	07/29/2022 19:53	WG1903108
Dichlorodifluoromethane	U		0.00381	0.00593	1.63	07/29/2022 19:53	WG1903108
1,1-Dichloroethane	U		0.00116	0.00593	1.63	07/29/2022 19:53	WG1903108
1,2-Dichloroethane	U		0.00154	0.00593	1.63	07/29/2022 19:53	WG1903108
1,1-Dichloroethene	U		0.00144	0.00593	1.63	07/29/2022 19:53	WG1903108
cis-1,2-Dichloroethene	U		0.00174	0.00593	1.63	07/29/2022 19:53	WG1903108
trans-1,2-Dichloroethene	U		0.00247	0.0118	1.63	07/29/2022 19:53	WG1903108
1,2-Dichloropropane	U		0.00336	0.0118	1.63	07/29/2022 19:53	WG1903108
1,1-Dichloropropene	U		0.00192	0.00593	1.63	07/29/2022 19:53	WG1903108
1,3-Dichloropropane	U		0.00119	0.0118	1.63	07/29/2022 19:53	WG1903108
cis-1,3-Dichloropropene	U		0.00179	0.00593	1.63	07/29/2022 19:53	WG1903108
trans-1,3-Dichloropropene	U		0.00270	0.0118	1.63	07/29/2022 19:53	WG1903108
2,2-Dichloropropane	U		0.00327	0.00593	1.63	07/29/2022 19:53	WG1903108
Di-isopropyl ether	U		0.000971	0.00237	1.63	07/29/2022 19:53	WG1903108
Ethylbenzene	U		0.00174	0.00593	1.63	07/29/2022 19:53	WG1903108
Hexachloro-1,3-butadiene	U		0.0142	0.0593	1.63	07/29/2022 19:53	WG1903108
Isopropylbenzene	U		0.00101	0.00593	1.63	07/29/2022 19:53	WG1903108
p-Isopropyltoluene	U		0.00604	0.0118	1.63	07/29/2022 19:53	WG1903108
2-Butanone (MEK)	U		0.151	0.237	1.63	07/29/2022 19:53	WG1903108
Methylene Chloride	U		0.0157	0.0593	1.63	07/29/2022 19:53	WG1903108
4-Methyl-2-pentanone (MIBK)	U		0.00540	0.0593	1.63	07/29/2022 19:53	WG1903108
Methyl tert-butyl ether	U		0.000830	0.00237	1.63	07/29/2022 19:53	WG1903108
Naphthalene	U		0.0116	0.0296	1.63	07/29/2022 19:53	WG1903108
n-Propylbenzene	U		0.00225	0.0118	1.63	07/29/2022 19:53	WG1903108
Styrene	U		0.000542	0.0296	1.63	07/29/2022 19:53	WG1903108
1,1,1,2-Tetrachloroethane	U		0.00225	0.00593	1.63	07/29/2022 19:53	WG1903108
1,1,2,2-Tetrachloroethane	U		0.00164	0.00593	1.63	07/29/2022 19:53	WG1903108
1,1,2-Trichlorotrifluoroethane	U		0.00179	0.00593	1.63	07/29/2022 19:53	WG1903108
Tetrachloroethene	U		0.00212	0.00593	1.63	07/29/2022 19:53	WG1903108
Toluene	U		0.00308	0.0118	1.63	07/29/2022 19:53	WG1903108
1,2,3-Trichlorobenzene	U		0.0173	0.0296	1.63	07/29/2022 19:53	WG1903108
1,2,4-Trichlorobenzene	U		0.0104	0.0296	1.63	07/29/2022 19:53	WG1903108
1,1,1-Trichloroethane	U		0.00218	0.00593	1.63	07/29/2022 19:53	WG1903108
1,1,2-Trichloroethane	U		0.00141	0.00593	1.63	07/29/2022 19:53	WG1903108
Trichloroethene	U		0.00138	0.00237	1.63	07/29/2022 19:53	WG1903108
Trichlorofluoromethane	U		0.00196	0.00593	1.63	07/29/2022 19:53	WG1903108
1,2,3-Trichloropropane	U		0.00384	0.0296	1.63	07/29/2022 19:53	WG1903108
1,2,4-Trimethylbenzene	U		0.00375	0.0118	1.63	07/29/2022 19:53	WG1903108
1,2,3-Trimethylbenzene	U		0.00375	0.0118	1.63	07/29/2022 19:53	WG1903108
1,3,5-Trimethylbenzene	U		0.00474	0.0118	1.63	07/29/2022 19:53	WG1903108
Vinyl chloride	U		0.00275	0.00593	1.63	07/29/2022 19:53	WG1903108
Xylenes, Total	U		0.00208	0.0154	1.63	07/29/2022 19:53	WG1903108
(S) Toluene-d8	102			75.0-131		07/29/2022 19:53	WG1903108
(S) 4-Bromofluorobenzene	107			67.0-138		07/29/2022 19:53	WG1903108
(S) 1,2-Dichloroethane-d4	96.2			70.0-130		07/29/2022 19:53	WG1903108

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

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	1.02	J	0.939	5.12	1	07/30/2022 23:39	<a href="#">WG1902914</a>
C22-C32 Hydrocarbons	1.96	J	1.70	5.12	1	07/30/2022 23:39	<a href="#">WG1902914</a>
C32-C40 Hydrocarbons	U		1.70	5.12	1	07/30/2022 23:39	<a href="#">WG1902914</a>
(S) o-Terphenyl	52.7			18.0-148		07/30/2022 23:39	<a href="#">WG1902914</a>

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



## Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Mercury,Dissolved	U		0.100	0.200	1	07/30/2022 12:15	<a href="#">WG1902168</a>

## Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Barium,Dissolved	0.0700		0.000736	0.00500	1	08/09/2022 12:50	<a href="#">WG1905920</a>
Beryllium,Dissolved	U		0.000330	0.00200	1	08/09/2022 12:50	<a href="#">WG1905920</a>
Chromium,Dissolved	U		0.00140	0.0100	1	08/09/2022 12:50	<a href="#">WG1905920</a>
Cobalt,Dissolved	U		0.000840	0.0100	1	08/09/2022 12:50	<a href="#">WG1905920</a>
Molybdenum,Dissolved	0.00233	J	0.00116	0.00500	1	08/09/2022 12:50	<a href="#">WG1905920</a>
Vanadium,Dissolved	U		0.00499	0.0200	1	08/09/2022 12:50	<a href="#">WG1905920</a>

## Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Antimony,Dissolved	U		1.03	4.00	1	08/02/2022 14:06	<a href="#">WG1903521</a>
Arsenic,Dissolved	0.189	J	0.180	2.00	1	08/02/2022 14:06	<a href="#">WG1903521</a>
Cadmium,Dissolved	0.800	J	0.150	1.00	1	08/02/2022 14:06	<a href="#">WG1903521</a>
Copper,Dissolved	6.06		1.51	5.00	1	08/02/2022 14:06	<a href="#">WG1903521</a>
Lead,Dissolved	U		0.849	2.00	1	08/02/2022 14:06	<a href="#">WG1903521</a>
Nickel,Dissolved	12.6		0.816	2.00	1	08/02/2022 14:06	<a href="#">WG1903521</a>
Selenium,Dissolved	0.406	J	0.300	2.00	1	08/02/2022 14:06	<a href="#">WG1903521</a>
Silver,Dissolved	U		0.0700	2.00	1	08/02/2022 14:06	<a href="#">WG1903521</a>
Thallium,Dissolved	U		0.121	2.00	1	08/02/2022 14:06	<a href="#">WG1903521</a>
Zinc,Dissolved	16.2	J	3.02	25.0	1	08/02/2022 14:06	<a href="#">WG1903521</a>

## Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPHG C5 - C12	U		30.4	100	1	07/29/2022 03:20	<a href="#">WG1902469</a>
(S) a,a,a-Trifluorotoluene(FID)	99.4			78.0-120		07/29/2022 03:20	<a href="#">WG1902469</a>

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	11.3	50.0	1	07/29/2022 13:36	<a href="#">WG1902815</a>
Acrolein	U		2.54	50.0	1	07/29/2022 13:36	<a href="#">WG1902815</a>
Acrylonitrile	U		0.671	10.0	1	07/29/2022 13:36	<a href="#">WG1902815</a>
Benzene	U		0.0941	1.00	1	07/29/2022 13:36	<a href="#">WG1902815</a>
Bromobenzene	U		0.118	1.00	1	07/29/2022 13:36	<a href="#">WG1902815</a>
Bromodichloromethane	U		0.136	1.00	1	07/29/2022 13:36	<a href="#">WG1902815</a>
Bromoform	U		0.129	1.00	1	07/29/2022 13:36	<a href="#">WG1902815</a>
Bromomethane	U		0.605	5.00	1	07/29/2022 13:36	<a href="#">WG1902815</a>
n-Butylbenzene	U		0.157	1.00	1	07/29/2022 13:36	<a href="#">WG1902815</a>
sec-Butylbenzene	U		0.125	1.00	1	07/29/2022 13:36	<a href="#">WG1902815</a>
tert-Butylbenzene	U		0.127	1.00	1	07/29/2022 13:36	<a href="#">WG1902815</a>
Carbon tetrachloride	U		0.128	1.00	1	07/29/2022 13:36	<a href="#">WG1902815</a>
Chlorobenzene	U		0.116	1.00	1	07/29/2022 13:36	<a href="#">WG1902815</a>
Chlorodibromomethane	U		0.140	1.00	1	07/29/2022 13:36	<a href="#">WG1902815</a>
Chloroethane	U	J3	0.192	5.00	1	07/29/2022 13:36	<a href="#">WG1902815</a>
Chloroform	U		0.111	5.00	1	07/29/2022 13:36	<a href="#">WG1902815</a>
Chloromethane	U		0.960	2.50	1	07/29/2022 13:36	<a href="#">WG1902815</a>
2-Chlorotoluene	U		0.106	1.00	1	07/29/2022 13:36	<a href="#">WG1902815</a>

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
4-Chlorotoluene	U		0.114	1.00	1	07/29/2022 13:36	WG1902815
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	07/29/2022 13:36	WG1902815
1,2-Dibromoethane	U		0.126	1.00	1	07/29/2022 13:36	WG1902815
Dibromomethane	U		0.122	1.00	1	07/29/2022 13:36	WG1902815
1,2-Dichlorobenzene	U		0.107	1.00	1	07/29/2022 13:36	WG1902815
1,3-Dichlorobenzene	U		0.110	1.00	1	07/29/2022 13:36	WG1902815
1,4-Dichlorobenzene	U		0.120	1.00	1	07/29/2022 13:36	WG1902815
Dichlorodifluoromethane	U		0.374	5.00	1	07/29/2022 13:36	WG1902815
1,1-Dichloroethane	U		0.100	1.00	1	07/29/2022 13:36	WG1902815
1,2-Dichloroethane	U		0.0819	1.00	1	07/29/2022 13:36	WG1902815
1,1-Dichloroethene	U		0.188	1.00	1	07/29/2022 13:36	WG1902815
cis-1,2-Dichloroethene	U		0.126	1.00	1	07/29/2022 13:36	WG1902815
trans-1,2-Dichloroethene	U		0.149	1.00	1	07/29/2022 13:36	WG1902815
1,2-Dichloropropane	U		0.149	1.00	1	07/29/2022 13:36	WG1902815
1,1-Dichloropropene	U		0.142	1.00	1	07/29/2022 13:36	WG1902815
1,3-Dichloropropane	U		0.110	1.00	1	07/29/2022 13:36	WG1902815
cis-1,3-Dichloropropene	U		0.111	1.00	1	07/29/2022 13:36	WG1902815
trans-1,3-Dichloropropene	U		0.118	1.00	1	07/29/2022 13:36	WG1902815
2,2-Dichloropropane	U		0.161	1.00	1	07/29/2022 13:36	WG1902815
Di-isopropyl ether	U	J4	0.105	1.00	1	07/29/2022 13:36	WG1902815
Ethylbenzene	U		0.137	1.00	1	07/29/2022 13:36	WG1902815
Hexachloro-1,3-butadiene	U		0.337	1.00	1	07/29/2022 13:36	WG1902815
Isopropylbenzene	U		0.105	1.00	1	07/29/2022 13:36	WG1902815
p-Isopropyltoluene	U		0.120	1.00	1	07/29/2022 13:36	WG1902815
2-Butanone (MEK)	U		1.19	10.0	1	07/29/2022 13:36	WG1902815
Methylene Chloride	U		0.430	5.00	1	07/29/2022 13:36	WG1902815
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	07/29/2022 13:36	WG1902815
Methyl tert-butyl ether	U		0.101	1.00	1	07/29/2022 13:36	WG1902815
Naphthalene	U		1.00	5.00	1	07/29/2022 13:36	WG1902815
n-Propylbenzene	U		0.0993	1.00	1	07/29/2022 13:36	WG1902815
Styrene	U		0.118	1.00	1	07/29/2022 13:36	WG1902815
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	07/29/2022 13:36	WG1902815
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	07/29/2022 13:36	WG1902815
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	07/29/2022 13:36	WG1902815
Tetrachloroethene	U		0.300	1.00	1	07/29/2022 13:36	WG1902815
Toluene	U		0.278	1.00	1	07/29/2022 13:36	WG1902815
1,2,3-Trichlorobenzene	U		0.230	1.00	1	07/29/2022 13:36	WG1902815
1,2,4-Trichlorobenzene	U		0.481	1.00	1	07/29/2022 13:36	WG1902815
1,1,1-Trichloroethane	U		0.149	1.00	1	07/29/2022 13:36	WG1902815
1,1,2-Trichloroethane	U		0.158	1.00	1	07/29/2022 13:36	WG1902815
Trichloroethene	U		0.190	1.00	1	07/29/2022 13:36	WG1902815
Trichlorofluoromethane	U		0.160	5.00	1	07/29/2022 13:36	WG1902815
1,2,3-Trichloropropane	U		0.237	2.50	1	07/29/2022 13:36	WG1902815
1,2,4-Trimethylbenzene	U		0.322	1.00	1	07/29/2022 13:36	WG1902815
1,2,3-Trimethylbenzene	U		0.104	1.00	1	07/29/2022 13:36	WG1902815
1,3,5-Trimethylbenzene	U		0.104	1.00	1	07/29/2022 13:36	WG1902815
Vinyl chloride	U		0.234	1.00	1	07/29/2022 13:36	WG1902815
Xylenes, Total	U		0.174	3.00	1	07/29/2022 13:36	WG1902815
(S) Toluene-d8	105			80.0-120		07/29/2022 13:36	WG1902815
(S) 4-Bromofluorobenzene	101			77.0-126		07/29/2022 13:36	WG1902815
(S) 1,2-Dichloroethane-d4	108			70.0-130		07/29/2022 13:36	WG1902815



Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	203		34.7	105	1.05	08/01/2022 06:40	<a href="#">WG1903200</a>
C22-C32 Hydrocarbons	239		34.7	105	1.05	08/01/2022 06:40	<a href="#">WG1903200</a>
C32-C40 Hydrocarbons	109		34.7	105	1.05	08/01/2022 06:40	<a href="#">WG1903200</a>
(S) o-Terphenyl	72.4			52.0-156		08/01/2022 06:40	<a href="#">WG1903200</a>

- <sup>1</sup>Cp
- <sup>2</sup>Tc
- <sup>3</sup>Ss
- <sup>4</sup>Cn
- <sup>5</sup>Ds
- <sup>6</sup>Sr
- <sup>7</sup>Qc
- <sup>8</sup>Gl
- <sup>9</sup>Al
- <sup>10</sup>Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	76.3		1	07/30/2022 10:59	<a href="#">WG1902181</a>

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.118		0.0236	0.0524	1	07/31/2022 11:57	<a href="#">WG1902729</a>

Metals (ICP) by Method 6010B

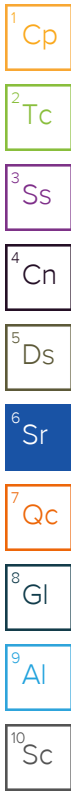
Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Antimony	U		0.713	2.62	1	08/08/2022 17:18	<a href="#">WG1902661</a>
Arsenic	5.73		0.679	2.62	1	08/08/2022 17:18	<a href="#">WG1902661</a>
Barium	184		0.112	0.655	1	08/08/2022 17:18	<a href="#">WG1902661</a>
Beryllium	0.441		0.0413	0.262	1	08/08/2022 17:18	<a href="#">WG1902661</a>
Cadmium	0.584	J	0.0617	0.655	1	08/08/2022 17:18	<a href="#">WG1902661</a>
Chromium	24.7		0.174	1.31	1	08/08/2022 17:18	<a href="#">WG1902661</a>
Cobalt	5.33		0.106	1.31	1	08/08/2022 17:18	<a href="#">WG1902661</a>
Copper	19.1		0.524	2.62	1	08/08/2022 17:18	<a href="#">WG1902661</a>
Lead	171		0.273	0.655	1	08/08/2022 17:18	<a href="#">WG1902661</a>
Molybdenum	1.22		0.143	0.655	1	08/08/2022 17:18	<a href="#">WG1902661</a>
Nickel	10.5		0.173	2.62	1	08/08/2022 17:18	<a href="#">WG1902661</a>
Selenium	U		1.00	2.62	1	08/08/2022 17:18	<a href="#">WG1902661</a>
Silver	U		0.166	1.31	1	08/08/2022 17:18	<a href="#">WG1902661</a>
Thallium	U		0.516	2.62	1	08/08/2022 17:18	<a href="#">WG1902661</a>
Vanadium	30.1		0.663	2.62	1	08/08/2022 17:18	<a href="#">WG1902661</a>
Zinc	170		1.09	6.55	1	08/08/2022 17:18	<a href="#">WG1902661</a>

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C5 - C12	6.97		1.96	5.93	39.3	07/30/2022 23:58	<a href="#">WG1903321</a>
(S) a,a,a-Trifluorotoluene(FID)	96.7			77.0-120		07/30/2022 23:58	<a href="#">WG1903321</a>

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	J3 J4	0.0864	0.118	1.57	07/29/2022 20:12	<a href="#">WG1903108</a>
Acrylonitrile	U	J3 J4	0.00855	0.0296	1.57	07/29/2022 20:12	<a href="#">WG1903108</a>
Benzene	U		0.00111	0.00237	1.57	07/29/2022 20:12	<a href="#">WG1903108</a>
Bromobenzene	U		0.00213	0.0296	1.57	07/29/2022 20:12	<a href="#">WG1903108</a>
Bromodichloromethane	U		0.00172	0.00593	1.57	07/29/2022 20:12	<a href="#">WG1903108</a>
Bromoform	U		0.00278	0.0593	1.57	07/29/2022 20:12	<a href="#">WG1903108</a>
Bromomethane	U		0.00466	0.0296	1.57	07/29/2022 20:12	<a href="#">WG1903108</a>
n-Butylbenzene	U		0.0124	0.0296	1.57	07/29/2022 20:12	<a href="#">WG1903108</a>
sec-Butylbenzene	U		0.00682	0.0296	1.57	07/29/2022 20:12	<a href="#">WG1903108</a>
tert-Butylbenzene	U		0.00462	0.0118	1.57	07/29/2022 20:12	<a href="#">WG1903108</a>
Carbon tetrachloride	U		0.00213	0.0118	1.57	07/29/2022 20:12	<a href="#">WG1903108</a>
Chlorobenzene	U		0.000498	0.00593	1.57	07/29/2022 20:12	<a href="#">WG1903108</a>
Chlorodibromomethane	U		0.00145	0.00593	1.57	07/29/2022 20:12	<a href="#">WG1903108</a>
Chloroethane	U		0.00403	0.0118	1.57	07/29/2022 20:12	<a href="#">WG1903108</a>
Chloroform	U		0.00244	0.00593	1.57	07/29/2022 20:12	<a href="#">WG1903108</a>
Chloromethane	U		0.0103	0.0296	1.57	07/29/2022 20:12	<a href="#">WG1903108</a>
2-Chlorotoluene	U		0.00205	0.00593	1.57	07/29/2022 20:12	<a href="#">WG1903108</a>
4-Chlorotoluene	U		0.00107	0.0118	1.57	07/29/2022 20:12	<a href="#">WG1903108</a>



## 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
1,2-Dibromo-3-Chloropropane	U		0.00923	0.0593	1.57	07/29/2022 20:12	WG1903108
1,2-Dibromoethane	U		0.00154	0.00593	1.57	07/29/2022 20:12	WG1903108
Dibromomethane	U		0.00178	0.0118	1.57	07/29/2022 20:12	WG1903108
1,2-Dichlorobenzene	U		0.00101	0.0118	1.57	07/29/2022 20:12	WG1903108
1,3-Dichlorobenzene	U		0.00142	0.0118	1.57	07/29/2022 20:12	WG1903108
1,4-Dichlorobenzene	U		0.00166	0.0118	1.57	07/29/2022 20:12	WG1903108
Dichlorodifluoromethane	U		0.00382	0.00593	1.57	07/29/2022 20:12	WG1903108
1,1-Dichloroethane	U		0.00116	0.00593	1.57	07/29/2022 20:12	WG1903108
1,2-Dichloroethane	U		0.00154	0.00593	1.57	07/29/2022 20:12	WG1903108
1,1-Dichloroethene	U		0.00143	0.00593	1.57	07/29/2022 20:12	WG1903108
cis-1,2-Dichloroethene	U		0.00173	0.00593	1.57	07/29/2022 20:12	WG1903108
trans-1,2-Dichloroethene	U		0.00246	0.0118	1.57	07/29/2022 20:12	WG1903108
1,2-Dichloropropane	U		0.00336	0.0118	1.57	07/29/2022 20:12	WG1903108
1,1-Dichloropropene	U		0.00192	0.00593	1.57	07/29/2022 20:12	WG1903108
1,3-Dichloropropane	U		0.00119	0.0118	1.57	07/29/2022 20:12	WG1903108
cis-1,3-Dichloropropene	U		0.00179	0.00593	1.57	07/29/2022 20:12	WG1903108
trans-1,3-Dichloropropene	U		0.00270	0.0118	1.57	07/29/2022 20:12	WG1903108
2,2-Dichloropropane	U		0.00327	0.00593	1.57	07/29/2022 20:12	WG1903108
Di-isopropyl ether	U		0.000971	0.00237	1.57	07/29/2022 20:12	WG1903108
Ethylbenzene	U		0.00175	0.00593	1.57	07/29/2022 20:12	WG1903108
Hexachloro-1,3-butadiene	U		0.0142	0.0593	1.57	07/29/2022 20:12	WG1903108
Isopropylbenzene	U		0.00101	0.00593	1.57	07/29/2022 20:12	WG1903108
p-Isopropyltoluene	U		0.00603	0.0118	1.57	07/29/2022 20:12	WG1903108
2-Butanone (MEK)	U		0.150	0.237	1.57	07/29/2022 20:12	WG1903108
Methylene Chloride	U		0.0157	0.0593	1.57	07/29/2022 20:12	WG1903108
4-Methyl-2-pentanone (MIBK)	U		0.00540	0.0593	1.57	07/29/2022 20:12	WG1903108
Methyl tert-butyl ether	U		0.000830	0.00237	1.57	07/29/2022 20:12	WG1903108
Naphthalene	U		0.0116	0.0296	1.57	07/29/2022 20:12	WG1903108
n-Propylbenzene	U		0.00225	0.0118	1.57	07/29/2022 20:12	WG1903108
Styrene	U		0.000543	0.0296	1.57	07/29/2022 20:12	WG1903108
1,1,1,2-Tetrachloroethane	U		0.00225	0.00593	1.57	07/29/2022 20:12	WG1903108
1,1,2,2-Tetrachloroethane	U		0.00164	0.00593	1.57	07/29/2022 20:12	WG1903108
1,1,2-Trichlorotrifluoroethane	U		0.00178	0.00593	1.57	07/29/2022 20:12	WG1903108
Tetrachloroethene	0.00278	J	0.00213	0.00593	1.57	07/29/2022 20:12	WG1903108
Toluene	U		0.00308	0.0118	1.57	07/29/2022 20:12	WG1903108
1,2,3-Trichlorobenzene	U		0.0173	0.0296	1.57	07/29/2022 20:12	WG1903108
1,2,4-Trichlorobenzene	U		0.0104	0.0296	1.57	07/29/2022 20:12	WG1903108
1,1,1-Trichloroethane	U		0.00219	0.00593	1.57	07/29/2022 20:12	WG1903108
1,1,2-Trichloroethane	U		0.00141	0.00593	1.57	07/29/2022 20:12	WG1903108
Trichloroethene	U		0.00138	0.00237	1.57	07/29/2022 20:12	WG1903108
Trichlorofluoromethane	U		0.00196	0.00593	1.57	07/29/2022 20:12	WG1903108
1,2,3-Trichloropropane	U		0.00383	0.0296	1.57	07/29/2022 20:12	WG1903108
1,2,4-Trimethylbenzene	U		0.00374	0.0118	1.57	07/29/2022 20:12	WG1903108
1,2,3-Trimethylbenzene	U		0.00374	0.0118	1.57	07/29/2022 20:12	WG1903108
1,3,5-Trimethylbenzene	U		0.00474	0.0118	1.57	07/29/2022 20:12	WG1903108
Vinyl chloride	U		0.00275	0.00593	1.57	07/29/2022 20:12	WG1903108
Xylenes, Total	U		0.00208	0.0154	1.57	07/29/2022 20:12	WG1903108
(S) Toluene-d8	102			75.0-131		07/29/2022 20:12	WG1903108
(S) 4-Bromofluorobenzene	104			67.0-138		07/29/2022 20:12	WG1903108
(S) 1,2-Dichloroethane-d4	96.8			70.0-130		07/29/2022 20:12	WG1903108

1 Cp

2 Tc

3 Ss

4 Cn

5 Ds

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	1.18	U	0.961	5.24	1	07/31/2022 01:21	<a href="#">WG1902914</a>
C22-C32 Hydrocarbons	3.04	U	1.74	5.24	1	07/31/2022 01:21	<a href="#">WG1902914</a>
C32-C40 Hydrocarbons	2.63	U	1.74	5.24	1	07/31/2022 01:21	<a href="#">WG1902914</a>
(S) o-Terphenyl	51.5			18.0-148		07/31/2022 01:21	<a href="#">WG1902914</a>

1 Cp

2 Tc

3 Ss

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		0.0155	0.0446	1	07/30/2022 22:18	<a href="#">WG1903192</a>
PCB 1221	U		0.0155	0.0446	1	07/30/2022 22:18	<a href="#">WG1903192</a>
PCB 1232	U		0.0155	0.0446	1	07/30/2022 22:18	<a href="#">WG1903192</a>
PCB 1242	U		0.0155	0.0446	1	07/30/2022 22:18	<a href="#">WG1903192</a>
PCB 1248	U		0.00967	0.0223	1	07/30/2022 22:18	<a href="#">WG1903192</a>
PCB 1254	U		0.00967	0.0223	1	07/30/2022 22:18	<a href="#">WG1903192</a>
PCB 1260	U		0.00967	0.0223	1	07/30/2022 22:18	<a href="#">WG1903192</a>
(S) Decachlorobiphenyl	41.5			10.0-135		07/30/2022 22:18	<a href="#">WG1903192</a>
(S) Tetrachloro-m-xylene	55.1			10.0-139		07/30/2022 22:18	<a href="#">WG1903192</a>

4 Cn

5 Ds

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	73.3		1	07/30/2022 10:59	<a href="#">WG1902181</a>

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Mercury	U		0.0246	0.0546	1	07/31/2022 11:59	<a href="#">WG1902729</a>

Metals (ICP) by Method 6010B

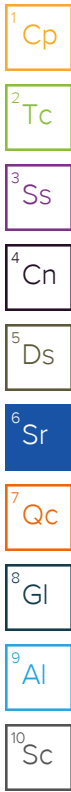
Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Antimony	U		0.742	2.73	1	08/08/2022 17:20	<a href="#">WG1902661</a>
Arsenic	2.68	J	0.707	2.73	1	08/08/2022 17:20	<a href="#">WG1902661</a>
Barium	318		0.116	0.682	1	08/08/2022 17:20	<a href="#">WG1902661</a>
Beryllium	0.722		0.0430	0.273	1	08/08/2022 17:20	<a href="#">WG1902661</a>
Cadmium	1.00		0.0643	0.682	1	08/08/2022 17:20	<a href="#">WG1902661</a>
Chromium	30.9		0.181	1.36	1	08/08/2022 17:20	<a href="#">WG1902661</a>
Cobalt	6.73		0.111	1.36	1	08/08/2022 17:20	<a href="#">WG1902661</a>
Copper	13.9		0.546	2.73	1	08/08/2022 17:20	<a href="#">WG1902661</a>
Lead	5.97		0.284	0.682	1	08/08/2022 17:20	<a href="#">WG1902661</a>
Molybdenum	1.20		0.149	0.682	1	08/08/2022 17:20	<a href="#">WG1902661</a>
Nickel	17.4		0.180	2.73	1	08/08/2022 17:20	<a href="#">WG1902661</a>
Selenium	U		1.04	2.73	1	08/08/2022 17:20	<a href="#">WG1902661</a>
Silver	U		0.173	1.36	1	08/08/2022 17:20	<a href="#">WG1902661</a>
Thallium	U		0.538	2.73	1	08/08/2022 17:20	<a href="#">WG1902661</a>
Vanadium	44.1		0.690	2.73	1	08/08/2022 17:20	<a href="#">WG1902661</a>
Zinc	57.5		1.14	6.82	1	08/08/2022 17:20	<a href="#">WG1902661</a>

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPHG C5 - C12	6.34	J	2.19	6.57	41.5	07/31/2022 00:21	<a href="#">WG1903321</a>
(S) a, a, a-Trifluorotoluene(FID)	96.8			77.0-120		07/31/2022 00:21	<a href="#">WG1903321</a>

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Acetone	U	J3 J4	0.0960	0.131	1.66	07/29/2022 20:30	<a href="#">WG1903108</a>
Acrylonitrile	U	J3 J4	0.00949	0.0330	1.66	07/29/2022 20:30	<a href="#">WG1903108</a>
Benzene	U		0.00123	0.00263	1.66	07/29/2022 20:30	<a href="#">WG1903108</a>
Bromobenzene	U		0.00236	0.0330	1.66	07/29/2022 20:30	<a href="#">WG1903108</a>
Bromodichloromethane	U		0.00190	0.00657	1.66	07/29/2022 20:30	<a href="#">WG1903108</a>
Bromoform	U		0.00307	0.0657	1.66	07/29/2022 20:30	<a href="#">WG1903108</a>
Bromomethane	U		0.00518	0.0330	1.66	07/29/2022 20:30	<a href="#">WG1903108</a>
n-Butylbenzene	U		0.0138	0.0330	1.66	07/29/2022 20:30	<a href="#">WG1903108</a>
sec-Butylbenzene	U		0.00757	0.0330	1.66	07/29/2022 20:30	<a href="#">WG1903108</a>
tert-Butylbenzene	U		0.00513	0.0131	1.66	07/29/2022 20:30	<a href="#">WG1903108</a>
Carbon tetrachloride	U		0.00236	0.0131	1.66	07/29/2022 20:30	<a href="#">WG1903108</a>
Chlorobenzene	U		0.000553	0.00657	1.66	07/29/2022 20:30	<a href="#">WG1903108</a>
Chlorodibromomethane	U		0.00162	0.00657	1.66	07/29/2022 20:30	<a href="#">WG1903108</a>
Chloroethane	U		0.00447	0.0131	1.66	07/29/2022 20:30	<a href="#">WG1903108</a>
Chloroform	U		0.00271	0.00657	1.66	07/29/2022 20:30	<a href="#">WG1903108</a>
Chloromethane	U		0.0114	0.0330	1.66	07/29/2022 20:30	<a href="#">WG1903108</a>
2-Chlorotoluene	U		0.00228	0.00657	1.66	07/29/2022 20:30	<a href="#">WG1903108</a>
4-Chlorotoluene	U		0.00118	0.0131	1.66	07/29/2022 20:30	<a href="#">WG1903108</a>



## 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
1,2-Dibromo-3-Chloropropane	U		0.0102	0.0657	1.66	07/29/2022 20:30	WG1903108
1,2-Dibromoethane	U		0.00171	0.00657	1.66	07/29/2022 20:30	WG1903108
Dibromomethane	U		0.00198	0.0131	1.66	07/29/2022 20:30	WG1903108
1,2-Dichlorobenzene	U		0.00112	0.0131	1.66	07/29/2022 20:30	WG1903108
1,3-Dichlorobenzene	U		0.00158	0.0131	1.66	07/29/2022 20:30	WG1903108
1,4-Dichlorobenzene	U		0.00184	0.0131	1.66	07/29/2022 20:30	WG1903108
Dichlorodifluoromethane	U		0.00423	0.00657	1.66	07/29/2022 20:30	WG1903108
1,1-Dichloroethane	U		0.00129	0.00657	1.66	07/29/2022 20:30	WG1903108
1,2-Dichloroethane	U		0.00171	0.00657	1.66	07/29/2022 20:30	WG1903108
1,1-Dichloroethene	U		0.00160	0.00657	1.66	07/29/2022 20:30	WG1903108
cis-1,2-Dichloroethene	U		0.00193	0.00657	1.66	07/29/2022 20:30	WG1903108
trans-1,2-Dichloroethene	U		0.00274	0.0131	1.66	07/29/2022 20:30	WG1903108
1,2-Dichloropropane	U		0.00374	0.0131	1.66	07/29/2022 20:30	WG1903108
1,1-Dichloropropene	U		0.00212	0.00657	1.66	07/29/2022 20:30	WG1903108
1,3-Dichloropropane	U		0.00132	0.0131	1.66	07/29/2022 20:30	WG1903108
cis-1,3-Dichloropropene	U		0.00200	0.00657	1.66	07/29/2022 20:30	WG1903108
trans-1,3-Dichloropropene	U		0.00299	0.0131	1.66	07/29/2022 20:30	WG1903108
2,2-Dichloropropane	U		0.00363	0.00657	1.66	07/29/2022 20:30	WG1903108
Di-isopropyl ether	U		0.00108	0.00263	1.66	07/29/2022 20:30	WG1903108
Ethylbenzene	U		0.00193	0.00657	1.66	07/29/2022 20:30	WG1903108
Hexachloro-1,3-butadiene	U		0.0158	0.0657	1.66	07/29/2022 20:30	WG1903108
Isopropylbenzene	U		0.00112	0.00657	1.66	07/29/2022 20:30	WG1903108
p-Isopropyltoluene	U		0.00670	0.0131	1.66	07/29/2022 20:30	WG1903108
2-Butanone (MEK)	U		0.166	0.263	1.66	07/29/2022 20:30	WG1903108
Methylene Chloride	U		0.0174	0.0657	1.66	07/29/2022 20:30	WG1903108
4-Methyl-2-pentanone (MIBK)	U		0.00599	0.0657	1.66	07/29/2022 20:30	WG1903108
Methyl tert-butyl ether	0.000920	J	0.000920	0.00263	1.66	07/29/2022 20:30	WG1903108
Naphthalene	U		0.0128	0.0330	1.66	07/29/2022 20:30	WG1903108
n-Propylbenzene	U		0.00250	0.0131	1.66	07/29/2022 20:30	WG1903108
Styrene	U		0.000602	0.0330	1.66	07/29/2022 20:30	WG1903108
1,1,1,2-Tetrachloroethane	U		0.00249	0.00657	1.66	07/29/2022 20:30	WG1903108
1,1,2,2-Tetrachloroethane	U		0.00182	0.00657	1.66	07/29/2022 20:30	WG1903108
1,1,2-Trichlorotrifluoroethane	U		0.00198	0.00657	1.66	07/29/2022 20:30	WG1903108
Tetrachloroethene	0.00722		0.00236	0.00657	1.66	07/29/2022 20:30	WG1903108
Toluene	U		0.00342	0.0131	1.66	07/29/2022 20:30	WG1903108
1,2,3-Trichlorobenzene	U		0.0193	0.0330	1.66	07/29/2022 20:30	WG1903108
1,2,4-Trichlorobenzene	U		0.0116	0.0330	1.66	07/29/2022 20:30	WG1903108
1,1,1-Trichloroethane	U		0.00242	0.00657	1.66	07/29/2022 20:30	WG1903108
1,1,2-Trichloroethane	U		0.00157	0.00657	1.66	07/29/2022 20:30	WG1903108
Trichloroethene	U		0.00154	0.00263	1.66	07/29/2022 20:30	WG1903108
Trichlorofluoromethane	U		0.00217	0.00657	1.66	07/29/2022 20:30	WG1903108
1,2,3-Trichloropropane	U		0.00426	0.0330	1.66	07/29/2022 20:30	WG1903108
1,2,4-Trimethylbenzene	U		0.00415	0.0131	1.66	07/29/2022 20:30	WG1903108
1,2,3-Trimethylbenzene	U		0.00415	0.0131	1.66	07/29/2022 20:30	WG1903108
1,3,5-Trimethylbenzene	U		0.00526	0.0131	1.66	07/29/2022 20:30	WG1903108
Vinyl chloride	U		0.00306	0.00657	1.66	07/29/2022 20:30	WG1903108
Xylenes, Total	0.0126	J	0.00231	0.0171	1.66	07/29/2022 20:30	WG1903108
(S) Toluene-d8	102			75.0-131		07/29/2022 20:30	WG1903108
(S) 4-Bromofluorobenzene	104			67.0-138		07/29/2022 20:30	WG1903108
(S) 1,2-Dichloroethane-d4	92.3			70.0-130		07/29/2022 20:30	WG1903108

1 Cp

2 Tc

3 Ss

4 Cn

5 Ds

6 Sr

7 Qc

8 Gl

9 Al

10 Sc



Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	1.14	J	1.00	5.46	1	07/30/2022 22:49	<a href="#">WG1902914</a>
C22-C32 Hydrocarbons	11.4		1.81	5.46	1	07/30/2022 22:49	<a href="#">WG1902914</a>
C32-C40 Hydrocarbons	3.75	J	1.81	5.46	1	07/30/2022 22:49	<a href="#">WG1902914</a>
(S) o-Terphenyl	50.3			18.0-148		07/30/2022 22:49	<a href="#">WG1902914</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Ds

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.1		1	07/30/2022 10:59	<a href="#">WG1902181</a>

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Mercury	0.0829		0.0204	0.0454	1	07/31/2022 12:01	<a href="#">WG1902729</a>

Metals (ICP) by Method 6010B

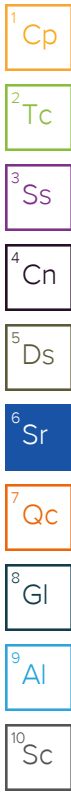
Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Antimony	U		0.617	2.27	1	08/08/2022 17:23	<a href="#">WG1902661</a>
Arsenic	6.60		0.588	2.27	1	08/08/2022 17:23	<a href="#">WG1902661</a>
Barium	230		0.0967	0.567	1	08/08/2022 17:23	<a href="#">WG1902661</a>
Beryllium	0.345		0.0357	0.227	1	08/08/2022 17:23	<a href="#">WG1902661</a>
Cadmium	0.643		0.0534	0.567	1	08/08/2022 17:23	<a href="#">WG1902661</a>
Chromium	23.2		0.151	1.13	1	08/08/2022 17:23	<a href="#">WG1902661</a>
Cobalt	4.21		0.0920	1.13	1	08/08/2022 17:23	<a href="#">WG1902661</a>
Copper	67.4		0.454	2.27	1	08/08/2022 17:23	<a href="#">WG1902661</a>
Lead	118		0.236	0.567	1	08/08/2022 17:23	<a href="#">WG1902661</a>
Molybdenum	0.965		0.124	0.567	1	08/08/2022 17:23	<a href="#">WG1902661</a>
Nickel	9.31		0.150	2.27	1	08/08/2022 17:23	<a href="#">WG1902661</a>
Selenium	U		0.867	2.27	1	08/08/2022 17:23	<a href="#">WG1902661</a>
Silver	U		0.144	1.13	1	08/08/2022 17:23	<a href="#">WG1902661</a>
Thallium	U		0.447	2.27	1	08/08/2022 17:23	<a href="#">WG1902661</a>
Vanadium	26.3		0.574	2.27	1	08/08/2022 17:23	<a href="#">WG1902661</a>
Zinc	155		0.944	5.67	1	08/08/2022 17:23	<a href="#">WG1902661</a>

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
TPHG C5 - C12	4.31		1.22	3.66	29.3	07/31/2022 00:44	<a href="#">WG1903321</a>
(S) a,a,a-Trifluorotoluene(FID)	96.4			77.0-120		07/31/2022 00:44	<a href="#">WG1903321</a>

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	0.0890	<a href="#">J3 J4</a>	0.0534	0.0731	1.17	07/29/2022 20:49	<a href="#">WG1903108</a>
Acrylonitrile	U	<a href="#">J3 J4</a>	0.00527	0.0182	1.17	07/29/2022 20:49	<a href="#">WG1903108</a>
Benzene	U		0.000682	0.00146	1.17	07/29/2022 20:49	<a href="#">WG1903108</a>
Bromobenzene	U		0.00131	0.0182	1.17	07/29/2022 20:49	<a href="#">WG1903108</a>
Bromodichloromethane	U		0.00106	0.00366	1.17	07/29/2022 20:49	<a href="#">WG1903108</a>
Bromoform	U		0.00171	0.0366	1.17	07/29/2022 20:49	<a href="#">WG1903108</a>
Bromomethane	U		0.00287	0.0182	1.17	07/29/2022 20:49	<a href="#">WG1903108</a>
n-Butylbenzene	U		0.00767	0.0182	1.17	07/29/2022 20:49	<a href="#">WG1903108</a>
sec-Butylbenzene	U		0.00421	0.0182	1.17	07/29/2022 20:49	<a href="#">WG1903108</a>
tert-Butylbenzene	U		0.00285	0.00731	1.17	07/29/2022 20:49	<a href="#">WG1903108</a>
Carbon tetrachloride	U		0.00131	0.00731	1.17	07/29/2022 20:49	<a href="#">WG1903108</a>
Chlorobenzene	U		0.000307	0.00366	1.17	07/29/2022 20:49	<a href="#">WG1903108</a>
Chlorodibromomethane	U		0.000895	0.00366	1.17	07/29/2022 20:49	<a href="#">WG1903108</a>
Chloroethane	U		0.00249	0.00731	1.17	07/29/2022 20:49	<a href="#">WG1903108</a>
Chloroform	U		0.00151	0.00366	1.17	07/29/2022 20:49	<a href="#">WG1903108</a>
Chloromethane	U		0.00636	0.0182	1.17	07/29/2022 20:49	<a href="#">WG1903108</a>
2-Chlorotoluene	U		0.00126	0.00366	1.17	07/29/2022 20:49	<a href="#">WG1903108</a>
4-Chlorotoluene	U		0.000659	0.00731	1.17	07/29/2022 20:49	<a href="#">WG1903108</a>



## 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
1,2-Dibromo-3-Chloropropane	U		0.00570	0.0366	1.17	07/29/2022 20:49	WG1903108
1,2-Dibromoethane	U		0.000947	0.00366	1.17	07/29/2022 20:49	WG1903108
Dibromomethane	U		0.00110	0.00731	1.17	07/29/2022 20:49	WG1903108
1,2-Dichlorobenzene	U		0.000621	0.00731	1.17	07/29/2022 20:49	WG1903108
1,3-Dichlorobenzene	U		0.000877	0.00731	1.17	07/29/2022 20:49	WG1903108
1,4-Dichlorobenzene	U		0.00102	0.00731	1.17	07/29/2022 20:49	WG1903108
Dichlorodifluoromethane	U		0.00235	0.00366	1.17	07/29/2022 20:49	WG1903108
1,1-Dichloroethane	U		0.000717	0.00366	1.17	07/29/2022 20:49	WG1903108
1,2-Dichloroethane	U		0.000949	0.00366	1.17	07/29/2022 20:49	WG1903108
1,1-Dichloroethene	U		0.000886	0.00366	1.17	07/29/2022 20:49	WG1903108
cis-1,2-Dichloroethene	U		0.00107	0.00366	1.17	07/29/2022 20:49	WG1903108
trans-1,2-Dichloroethene	U		0.00152	0.00731	1.17	07/29/2022 20:49	WG1903108
1,2-Dichloropropane	U		0.00207	0.00731	1.17	07/29/2022 20:49	WG1903108
1,1-Dichloropropene	U		0.00118	0.00366	1.17	07/29/2022 20:49	WG1903108
1,3-Dichloropropane	U		0.000732	0.00731	1.17	07/29/2022 20:49	WG1903108
cis-1,3-Dichloropropene	U		0.00111	0.00366	1.17	07/29/2022 20:49	WG1903108
trans-1,3-Dichloropropene	U		0.00166	0.00731	1.17	07/29/2022 20:49	WG1903108
2,2-Dichloropropane	U		0.00201	0.00366	1.17	07/29/2022 20:49	WG1903108
Di-isopropyl ether	U		0.000600	0.00146	1.17	07/29/2022 20:49	WG1903108
Ethylbenzene	U		0.00108	0.00366	1.17	07/29/2022 20:49	WG1903108
Hexachloro-1,3-butadiene	U		0.00877	0.0366	1.17	07/29/2022 20:49	WG1903108
Isopropylbenzene	U		0.000621	0.00366	1.17	07/29/2022 20:49	WG1903108
p-Isopropyltoluene	U		0.00372	0.00731	1.17	07/29/2022 20:49	WG1903108
2-Butanone (MEK)	U		0.0929	0.146	1.17	07/29/2022 20:49	WG1903108
Methylene Chloride	U		0.00971	0.0366	1.17	07/29/2022 20:49	WG1903108
4-Methyl-2-pentanone (MIBK)	U		0.00334	0.0366	1.17	07/29/2022 20:49	WG1903108
Methyl tert-butyl ether	U		0.000511	0.00146	1.17	07/29/2022 20:49	WG1903108
Naphthalene	U		0.00714	0.0182	1.17	07/29/2022 20:49	WG1903108
n-Propylbenzene	U		0.00139	0.00731	1.17	07/29/2022 20:49	WG1903108
Styrene	U		0.000335	0.0182	1.17	07/29/2022 20:49	WG1903108
1,1,1,2-Tetrachloroethane	U		0.00139	0.00366	1.17	07/29/2022 20:49	WG1903108
1,1,2,2-Tetrachloroethane	U		0.00102	0.00366	1.17	07/29/2022 20:49	WG1903108
1,1,2-Trichlorotrifluoroethane	U		0.00110	0.00366	1.17	07/29/2022 20:49	WG1903108
Tetrachloroethene	0.00274	J	0.00131	0.00366	1.17	07/29/2022 20:49	WG1903108
Toluene	U		0.00190	0.00731	1.17	07/29/2022 20:49	WG1903108
1,2,3-Trichlorobenzene	U		0.0107	0.0182	1.17	07/29/2022 20:49	WG1903108
1,2,4-Trichlorobenzene	U		0.00644	0.0182	1.17	07/29/2022 20:49	WG1903108
1,1,1-Trichloroethane	U		0.00135	0.00366	1.17	07/29/2022 20:49	WG1903108
1,1,2-Trichloroethane	U		0.000872	0.00366	1.17	07/29/2022 20:49	WG1903108
Trichloroethene	U		0.000854	0.00146	1.17	07/29/2022 20:49	WG1903108
Trichlorofluoromethane	U		0.00121	0.00366	1.17	07/29/2022 20:49	WG1903108
1,2,3-Trichloropropane	U		0.00237	0.0182	1.17	07/29/2022 20:49	WG1903108
1,2,4-Trimethylbenzene	U		0.00231	0.00731	1.17	07/29/2022 20:49	WG1903108
1,2,3-Trimethylbenzene	U		0.00231	0.00731	1.17	07/29/2022 20:49	WG1903108
1,3,5-Trimethylbenzene	U		0.00292	0.00731	1.17	07/29/2022 20:49	WG1903108
Vinyl chloride	U		0.00170	0.00366	1.17	07/29/2022 20:49	WG1903108
Xylenes, Total	U		0.00129	0.00950	1.17	07/29/2022 20:49	WG1903108
(S) Toluene-d8	102			75.0-131		07/29/2022 20:49	WG1903108
(S) 4-Bromofluorobenzene	114			67.0-138		07/29/2022 20:49	WG1903108
(S) 1,2-Dichloroethane-d4	105			70.0-130		07/29/2022 20:49	WG1903108

1 Cp

2 Tc

3 Ss

4 Cn

5 Ds

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	7.78		0.832	4.54	1	07/31/2022 03:52	<a href="#">WG1902914</a>
C22-C32 Hydrocarbons	93.1		1.51	4.54	1	07/31/2022 03:52	<a href="#">WG1902914</a>
C32-C40 Hydrocarbons	17.6		1.51	4.54	1	07/31/2022 03:52	<a href="#">WG1902914</a>
(S) o-Terphenyl	72.7			18.0-148		07/31/2022 03:52	<a href="#">WG1902914</a>

1 Cp

2 Tc

3 Ss

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		0.0134	0.0386	1	07/31/2022 00:19	<a href="#">WG1903192</a>
PCB 1221	U		0.0134	0.0386	1	07/31/2022 00:19	<a href="#">WG1903192</a>
PCB 1232	U		0.0134	0.0386	1	07/31/2022 00:19	<a href="#">WG1903192</a>
PCB 1242	U		0.0134	0.0386	1	07/31/2022 00:19	<a href="#">WG1903192</a>
PCB 1248	U		0.00837	0.0193	1	07/31/2022 00:19	<a href="#">WG1903192</a>
PCB 1254	U		0.00837	0.0193	1	07/31/2022 00:19	<a href="#">WG1903192</a>
PCB 1260	U		0.00837	0.0193	1	07/31/2022 00:19	<a href="#">WG1903192</a>
(S) Decachlorobiphenyl	70.4			10.0-135		07/31/2022 00:19	<a href="#">WG1903192</a>
(S) Tetrachloro-m-xylene	65.0			10.0-139		07/31/2022 00:19	<a href="#">WG1903192</a>

4 Cn

5 Ds

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	75.5		1	07/30/2022 10:59	<a href="#">WG1902181</a>

Mercury by Method 7471A

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Mercury	U		0.0238	0.0530	1	07/31/2022 12:03	<a href="#">WG1902729</a>

Metals (ICP) by Method 6010B

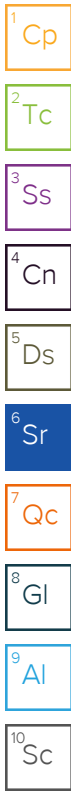
Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Antimony	U		0.721	2.65	1	08/08/2022 17:26	<a href="#">WG1902661</a>
Arsenic	2.60	J	0.686	2.65	1	08/08/2022 17:26	<a href="#">WG1902661</a>
Barium	242		0.113	0.662	1	08/08/2022 17:26	<a href="#">WG1902661</a>
Beryllium	0.808		0.0417	0.265	1	08/08/2022 17:26	<a href="#">WG1902661</a>
Cadmium	0.613	J	0.0624	0.662	1	08/08/2022 17:26	<a href="#">WG1902661</a>
Chromium	39.4		0.176	1.32	1	08/08/2022 17:26	<a href="#">WG1902661</a>
Cobalt	6.35		0.107	1.32	1	08/08/2022 17:26	<a href="#">WG1902661</a>
Copper	25.5		0.530	2.65	1	08/08/2022 17:26	<a href="#">WG1902661</a>
Lead	8.19		0.276	0.662	1	08/08/2022 17:26	<a href="#">WG1902661</a>
Molybdenum	1.21		0.144	0.662	1	08/08/2022 17:26	<a href="#">WG1902661</a>
Nickel	18.5		0.175	2.65	1	08/08/2022 17:26	<a href="#">WG1902661</a>
Selenium	U		1.01	2.65	1	08/08/2022 17:26	<a href="#">WG1902661</a>
Silver	U		0.168	1.32	1	08/08/2022 17:26	<a href="#">WG1902661</a>
Thallium	U		0.522	2.65	1	08/08/2022 17:26	<a href="#">WG1902661</a>
Vanadium	51.9		0.670	2.65	1	08/08/2022 17:26	<a href="#">WG1902661</a>
Zinc	64.1		1.10	6.62	1	08/08/2022 17:26	<a href="#">WG1902661</a>

Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
TPHG C5 - C12	4.56	J	1.56	4.69	29.3	07/31/2022 01:07	<a href="#">WG1903321</a>
(S) a,a,a-Trifluorotoluene(FID)	96.4			77.0-120		07/31/2022 01:07	<a href="#">WG1903321</a>

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
Acetone	U	J3 J4	0.0684	0.0937	1.17	07/29/2022 21:07	<a href="#">WG1903108</a>
Acrylonitrile	U	J3 J4	0.00676	0.0234	1.17	07/29/2022 21:07	<a href="#">WG1903108</a>
Benzene	U		0.000874	0.00187	1.17	07/29/2022 21:07	<a href="#">WG1903108</a>
Bromobenzene	U		0.00168	0.0234	1.17	07/29/2022 21:07	<a href="#">WG1903108</a>
Bromodichloromethane	U		0.00136	0.00469	1.17	07/29/2022 21:07	<a href="#">WG1903108</a>
Bromoform	U		0.00219	0.0469	1.17	07/29/2022 21:07	<a href="#">WG1903108</a>
Bromomethane	U		0.00368	0.0234	1.17	07/29/2022 21:07	<a href="#">WG1903108</a>
n-Butylbenzene	U		0.00983	0.0234	1.17	07/29/2022 21:07	<a href="#">WG1903108</a>
sec-Butylbenzene	U		0.00540	0.0234	1.17	07/29/2022 21:07	<a href="#">WG1903108</a>
tert-Butylbenzene	U		0.00365	0.00937	1.17	07/29/2022 21:07	<a href="#">WG1903108</a>
Carbon tetrachloride	U		0.00168	0.00937	1.17	07/29/2022 21:07	<a href="#">WG1903108</a>
Chlorobenzene	U		0.000394	0.00469	1.17	07/29/2022 21:07	<a href="#">WG1903108</a>
Chlorodibromomethane	U		0.00115	0.00469	1.17	07/29/2022 21:07	<a href="#">WG1903108</a>
Chloroethane	U		0.00319	0.00937	1.17	07/29/2022 21:07	<a href="#">WG1903108</a>
Chloroform	U		0.00194	0.00469	1.17	07/29/2022 21:07	<a href="#">WG1903108</a>
Chloromethane	U		0.00815	0.0234	1.17	07/29/2022 21:07	<a href="#">WG1903108</a>
2-Chlorotoluene	U		0.00162	0.00469	1.17	07/29/2022 21:07	<a href="#">WG1903108</a>
4-Chlorotoluene	U		0.000844	0.00937	1.17	07/29/2022 21:07	<a href="#">WG1903108</a>



## 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
1,2-Dibromo-3-Chloropropane	U		0.00730	0.0469	1.17	07/29/2022 21:07	WG1903108
1,2-Dibromoethane	U		0.00121	0.00469	1.17	07/29/2022 21:07	WG1903108
Dibromomethane	U		0.00140	0.00937	1.17	07/29/2022 21:07	WG1903108
1,2-Dichlorobenzene	U		0.000796	0.00937	1.17	07/29/2022 21:07	WG1903108
1,3-Dichlorobenzene	U		0.00112	0.00937	1.17	07/29/2022 21:07	WG1903108
1,4-Dichlorobenzene	U		0.00131	0.00937	1.17	07/29/2022 21:07	WG1903108
Dichlorodifluoromethane	U		0.00301	0.00469	1.17	07/29/2022 21:07	WG1903108
1,1-Dichloroethane	U		0.000919	0.00469	1.17	07/29/2022 21:07	WG1903108
1,2-Dichloroethane	U		0.00122	0.00469	1.17	07/29/2022 21:07	WG1903108
1,1-Dichloroethene	U		0.00114	0.00469	1.17	07/29/2022 21:07	WG1903108
cis-1,2-Dichloroethene	U		0.00138	0.00469	1.17	07/29/2022 21:07	WG1903108
trans-1,2-Dichloroethene	U		0.00195	0.00937	1.17	07/29/2022 21:07	WG1903108
1,2-Dichloropropane	U		0.00266	0.00937	1.17	07/29/2022 21:07	WG1903108
1,1-Dichloropropene	U		0.00152	0.00469	1.17	07/29/2022 21:07	WG1903108
1,3-Dichloropropane	U		0.000938	0.00937	1.17	07/29/2022 21:07	WG1903108
cis-1,3-Dichloropropene	U		0.00142	0.00469	1.17	07/29/2022 21:07	WG1903108
trans-1,3-Dichloropropene	U		0.00213	0.00937	1.17	07/29/2022 21:07	WG1903108
2,2-Dichloropropane	U		0.00258	0.00469	1.17	07/29/2022 21:07	WG1903108
Di-isopropyl ether	U		0.000769	0.00187	1.17	07/29/2022 21:07	WG1903108
Ethylbenzene	U		0.00138	0.00469	1.17	07/29/2022 21:07	WG1903108
Hexachloro-1,3-butadiene	U		0.0112	0.0469	1.17	07/29/2022 21:07	WG1903108
Isopropylbenzene	U		0.000796	0.00469	1.17	07/29/2022 21:07	WG1903108
p-Isopropyltoluene	U		0.00477	0.00937	1.17	07/29/2022 21:07	WG1903108
2-Butanone (MEK)	U		0.119	0.187	1.17	07/29/2022 21:07	WG1903108
Methylene Chloride	U		0.0124	0.0469	1.17	07/29/2022 21:07	WG1903108
4-Methyl-2-pentanone (MIBK)	U		0.00428	0.0469	1.17	07/29/2022 21:07	WG1903108
Methyl tert-butyl ether	0.000655	J	0.000655	0.00187	1.17	07/29/2022 21:07	WG1903108
Naphthalene	U		0.00914	0.0234	1.17	07/29/2022 21:07	WG1903108
n-Propylbenzene	U		0.00178	0.00937	1.17	07/29/2022 21:07	WG1903108
Styrene	U		0.000429	0.0234	1.17	07/29/2022 21:07	WG1903108
1,1,1,2-Tetrachloroethane	U		0.00178	0.00469	1.17	07/29/2022 21:07	WG1903108
1,1,2,2-Tetrachloroethane	U		0.00130	0.00469	1.17	07/29/2022 21:07	WG1903108
1,1,2-Trichlorotrifluoroethane	U		0.00141	0.00469	1.17	07/29/2022 21:07	WG1903108
Tetrachloroethene	U		0.00168	0.00469	1.17	07/29/2022 21:07	WG1903108
Toluene	U		0.00243	0.00937	1.17	07/29/2022 21:07	WG1903108
1,2,3-Trichlorobenzene	U		0.0137	0.0234	1.17	07/29/2022 21:07	WG1903108
1,2,4-Trichlorobenzene	U		0.00825	0.0234	1.17	07/29/2022 21:07	WG1903108
1,1,1-Trichloroethane	U		0.00173	0.00469	1.17	07/29/2022 21:07	WG1903108
1,1,2-Trichloroethane	U		0.00112	0.00469	1.17	07/29/2022 21:07	WG1903108
Trichloroethene	U		0.00109	0.00187	1.17	07/29/2022 21:07	WG1903108
Trichlorofluoromethane	U		0.00155	0.00469	1.17	07/29/2022 21:07	WG1903108
1,2,3-Trichloropropane	U		0.00304	0.0234	1.17	07/29/2022 21:07	WG1903108
1,2,4-Trimethylbenzene	U		0.00296	0.00937	1.17	07/29/2022 21:07	WG1903108
1,2,3-Trimethylbenzene	U		0.00296	0.00937	1.17	07/29/2022 21:07	WG1903108
1,3,5-Trimethylbenzene	U		0.00375	0.00937	1.17	07/29/2022 21:07	WG1903108
Vinyl chloride	U		0.00218	0.00469	1.17	07/29/2022 21:07	WG1903108
Xylenes, Total	U		0.00165	0.0122	1.17	07/29/2022 21:07	WG1903108
(S) Toluene-d8	103			75.0-131		07/29/2022 21:07	WG1903108
(S) 4-Bromofluorobenzene	110			67.0-138		07/29/2022 21:07	WG1903108
(S) 1,2-Dichloroethane-d4	96.6			70.0-130		07/29/2022 21:07	WG1903108

1 Cp

2 Tc

3 Ss

4 Cn

5 Ds

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C12-C22 Hydrocarbons	1.01	J	0.971	5.30	1	07/30/2022 23:06	<a href="#">WG1902914</a>
C22-C32 Hydrocarbons	4.41	J	1.76	5.30	1	07/30/2022 23:06	<a href="#">WG1902914</a>
C32-C40 Hydrocarbons	U		1.76	5.30	1	07/30/2022 23:06	<a href="#">WG1902914</a>
(S) o-Terphenyl	52.7			18.0-148		07/30/2022 23:06	<a href="#">WG1902914</a>

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Ds

<sup>6</sup> Sr

<sup>7</sup> Qc

<sup>8</sup> Gl

<sup>9</sup> Al

<sup>10</sup> Sc

Method Blank (MB)

(MB) R3821355-1 07/30/22 10:24

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

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

L1519177-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1519177-07 07/30/22 10:24 • (DUP) R3821355-3 07/30/22 10:24

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	78.1	79.3	1	1.58		10

<sup>4</sup>Cn

<sup>5</sup>Ds

Laboratory Control Sample (LCS)

(LCS) R3821355-2 07/30/22 10:24

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

<sup>6</sup>Sr

<sup>7</sup>Qc

<sup>8</sup>Gl

<sup>9</sup>Al

<sup>10</sup>Sc



Method Blank (MB)

(MB) R3821361-1 07/30/22 10:59

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

1 Cp

2 Tc

3 Ss

L1519201-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1519201-08 07/30/22 10:59 • (DUP) R3821361-3 07/30/22 10:59

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	96.3	95.2	1	1.23		10

4 Cn

5 Ds

Laboratory Control Sample (LCS)

(LCS) R3821361-2 07/30/22 10:59

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Method Blank (MB)

(MB) R3820932-1 07/30/22 11:55

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Mercury,Dissolved	U		0.100	0.200

Laboratory Control Sample (LCS)

(LCS) R3820932-2 07/30/22 12:01

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury,Dissolved	3.00	3.26	109	80.0-120	

L1519286-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1519286-02 07/30/22 12:03 • (MS) R3820932-3 07/30/22 12:05 • (MSD) R3820932-4 07/30/22 12:07

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury,Dissolved	3.00	U	3.14	2.95	105	98.2	1	75.0-125			6.31	20

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Ds

<sup>6</sup>Sr

<sup>7</sup>Qc

<sup>8</sup>Gl

<sup>9</sup>Al

<sup>10</sup>Sc

Method Blank (MB)

(MB) R3821015-1 07/31/22 11:24

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Mercury	U		0.0180	0.0400

Laboratory Control Sample (LCS)

(LCS) R3821015-2 07/31/22 11:26

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Mercury	0.500	0.516	103	80.0-120	

L1519310-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1519310-11 07/31/22 11:30 • (MS) R3821015-3 07/31/22 11:32 • (MSD) R3821015-4 07/31/22 11:34

Analyte	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
Mercury	0.556	U	0.504	0.536	90.8	96.4	1	75.0-125			5.98	20

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

Method Blank (MB)

(MB) R3823866-1 08/08/22 13:38

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Antimony	U		0.544	2.00
Arsenic	U		0.518	2.00
Barium	U		0.0852	0.500
Beryllium	U		0.0315	0.200
Cadmium	U		0.0471	0.500
Chromium	U		0.133	1.00
Cobalt	U		0.0811	1.00
Copper	U		0.400	2.00
Lead	U		0.208	0.500
Molybdenum	U		0.109	0.500
Nickel	U		0.132	2.00
Selenium	U		0.764	2.00
Silver	U		0.127	1.00
Thallium	U		0.394	2.00
Vanadium	U		0.506	2.00
Zinc	U		0.832	5.00

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Ds

<sup>6</sup>Sr

<sup>7</sup>Qc

<sup>8</sup>Gl

<sup>9</sup>Al

<sup>10</sup>Sc

Laboratory Control Sample (LCS)

(LCS) R3823866-2 08/08/22 13:40

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony	100	97.0	97.0	80.0-120	
Arsenic	100	94.8	94.8	80.0-120	
Barium	100	100	100	80.0-120	
Beryllium	100	98.9	98.9	80.0-120	
Cadmium	100	97.0	97.0	80.0-120	
Chromium	100	97.1	97.1	80.0-120	
Cobalt	100	100	100	80.0-120	
Copper	100	99.9	99.9	80.0-120	
Lead	100	97.3	97.3	80.0-120	
Molybdenum	100	102	102	80.0-120	
Nickel	100	98.3	98.3	80.0-120	
Selenium	100	98.0	98.0	80.0-120	
Silver	20.0	18.8	93.8	80.0-120	
Thallium	100	97.0	97.0	80.0-120	
Vanadium	100	100	100	80.0-120	
Zinc	100	95.4	95.4	80.0-120	

L1522220-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1522220-05 08/08/22 13:42 • (MS) R3823866-5 08/08/22 13:50 • (MSD) R3823866-6 08/08/22 13:52

Analyte	Spike Amount (dry) mg/kg	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony	120	1.24	47.7	45.1	38.8	36.7	1	75.0-125	J6	J6	5.53	20
Arsenic	120	8.94	134	128	105	99.2	1	75.0-125			5.09	20
Barium	120	259	416	409	131	125	1	75.0-125	J5		1.61	20
Beryllium	120	1.09	128	121	106	99.9	1	75.0-125			6.17	20
Cadmium	120	0.367	127	120	106	100	1	75.0-125			5.41	20
Chromium	120	29.4	158	151	108	102	1	75.0-125			4.63	20
Cobalt	120	8.92	136	129	106	100	1	75.0-125			4.98	20
Copper	120	23.1	156	149	111	105	1	75.0-125			4.74	20
Lead	120	13.1	137	132	104	99.2	1	75.0-125			3.98	20
Molybdenum	120	1.92	125	118	103	96.8	1	75.0-125			5.71	20
Nickel	120	31.4	157	150	105	99.4	1	75.0-125			4.30	20
Selenium	120	1.15	129	121	107	101	1	75.0-125			6.07	20
Silver	23.9	U	25.0	23.7	105	99.1	1	75.0-125			5.51	20
Thallium	120	U	118	113	99.0	94.1	1	75.0-125			5.08	20
Vanadium	120	76.3	220	210	120	112	1	75.0-125			4.39	20
Zinc	120	100	220	215	100	96.4	1	75.0-125			1.97	20

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

Method Blank (MB)

(MB) R3824478-1 08/09/22 12:32

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Barium,Dissolved	U		0.000736	0.00500
Beryllium,Dissolved	U		0.000330	0.00200
Chromium,Dissolved	U		0.00140	0.0100
Cobalt,Dissolved	U		0.000840	0.0100
Molybdenum,Dissolved	U		0.00116	0.00500
Vanadium,Dissolved	U		0.00499	0.0200

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Ds

<sup>6</sup>Sr

<sup>7</sup>Qc

<sup>8</sup>Gl

<sup>9</sup>Al

<sup>10</sup>Sc

Laboratory Control Sample (LCS)

(LCS) R3824478-2 08/09/22 12:34

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Barium,Dissolved	1.00	1.00	100	80.0-120	
Beryllium,Dissolved	1.00	0.985	98.5	80.0-120	
Chromium,Dissolved	1.00	0.961	96.1	80.0-120	
Cobalt,Dissolved	1.00	0.975	97.5	80.0-120	
Molybdenum,Dissolved	1.00	0.997	99.7	80.0-120	
Vanadium,Dissolved	1.00	0.989	98.9	80.0-120	

L1519731-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1519731-05 08/09/22 12:37 • (MS) R3824478-4 08/09/22 12:42 • (MSD) R3824478-5 08/09/22 12:45

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 %
Barium,Dissolved	1.00	0.0578	1.08	1.08	102	102	1	75.0-125			0.224	20
Beryllium,Dissolved	1.00	U	1.01	1.01	101	101	1	75.0-125			0.684	20
Chromium,Dissolved	1.00	U	0.978	0.974	97.8	97.4	1	75.0-125			0.493	20
Cobalt,Dissolved	1.00	U	0.996	0.993	99.6	99.3	1	75.0-125			0.311	20
Molybdenum,Dissolved	1.00	0.00633	1.03	1.03	103	102	1	75.0-125			0.707	20
Vanadium,Dissolved	1.00	U	1.01	1.00	101	100	1	75.0-125			0.736	20

Method Blank (MB)

(MB) R3821727-1 08/02/22 13:07

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Antimony,Dissolved	U		1.03	4.00
Arsenic,Dissolved	U		0.180	2.00
Cadmium,Dissolved	U		0.150	1.00
Copper,Dissolved	U		1.51	5.00
Lead,Dissolved	U		0.849	2.00
Nickel,Dissolved	U		0.816	2.00
Selenium,Dissolved	U		0.300	2.00
Silver,Dissolved	U		0.0700	2.00
Thallium,Dissolved	U		0.121	2.00
Zinc,Dissolved	U		3.02	25.0

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Ds

<sup>6</sup>Sr

<sup>7</sup>Qc

<sup>8</sup>Gl

<sup>9</sup>Al

<sup>10</sup>Sc

Laboratory Control Sample (LCS)

(LCS) R3821727-2 08/02/22 13:10

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Antimony,Dissolved	50.0	49.0	97.9	80.0-120	
Arsenic,Dissolved	50.0	49.7	99.4	80.0-120	
Cadmium,Dissolved	50.0	50.2	100	80.0-120	
Copper,Dissolved	50.0	49.6	99.1	80.0-120	
Lead,Dissolved	50.0	49.9	99.7	80.0-120	
Nickel,Dissolved	50.0	50.0	99.9	80.0-120	
Selenium,Dissolved	50.0	51.3	103	80.0-120	
Silver,Dissolved	50.0	47.6	95.2	80.0-120	
Thallium,Dissolved	50.0	49.9	99.8	80.0-120	
Zinc,Dissolved	50.0	51.1	102	80.0-120	

L1519551-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1519551-09 08/02/22 13:13 • (MS) R3821727-4 08/02/22 13:20 • (MSD) R3821727-5 08/02/22 13:24

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Antimony,Dissolved	50.0	U	50.9	51.4	102	103	1	75.0-125			1.03	20
Arsenic,Dissolved	50.0	0.401	49.9	49.8	99.0	98.8	1	75.0-125			0.217	20
Cadmium,Dissolved	50.0	U	51.7	51.4	103	103	1	75.0-125			0.435	20
Copper,Dissolved	50.0	U	49.2	48.7	98.3	97.5	1	75.0-125			0.855	20
Lead,Dissolved	50.0	U	47.2	47.2	94.5	94.3	1	75.0-125			0.174	20
Nickel,Dissolved	50.0	1.85	49.6	50.5	95.4	97.3	1	75.0-125			1.89	20
Selenium,Dissolved	50.0	U	51.2	51.0	102	102	1	75.0-125			0.520	20

L1519551-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1519551-09 08/02/22 13:13 • (MS) R3821727-4 08/02/22 13:20 • (MSD) R3821727-5 08/02/22 13:24

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Silver,Dissolved	50.0	U	49.1	49.1	98.1	98.1	1	75.0-125			0.00917	20
Thallium,Dissolved	50.0	U	46.6	46.7	93.2	93.4	1	75.0-125			0.288	20
Zinc,Dissolved	50.0	6.18	52.3	54.8	92.3	97.2	1	75.0-125			4.53	20

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Ds

<sup>6</sup>Sr

<sup>7</sup>Qc

<sup>8</sup>Gl

<sup>9</sup>Al

<sup>10</sup>Sc



Method Blank (MB)

(MB) R3823619-2 07/28/22 18:43

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TPHG C5 - C12	U		30.4	100
<sup>(S)</sup> a,a,a-Trifluorotoluene(FID)	101			78.0-120

Laboratory Control Sample (LCS)

(LCS) R3823619-1 07/28/22 17:46

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPHG C5 - C12	5500	4830	87.8	71.0-127	
<sup>(S)</sup> a,a,a-Trifluorotoluene(FID)			96.9	78.0-120	

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

Method Blank (MB)

(MB) R3821535-2 07/30/22 23:01

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
TPHG C5 - C12	U		0.830	2.50
(S) a,a,a-Trifluorotoluene(FID)	96.4			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3821535-1 07/30/22 20:40

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
TPHG C5 - C12	5.50	5.68	103	72.0-125	
(S) a,a,a-Trifluorotoluene(FID)			107	77.0-120	

L1519077-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1519077-03 07/30/22 23:36 • (MS) R3821535-3 07/31/22 04:55 • (MSD) R3821535-4 07/31/22 05:17

Analyte	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
TPHG C5 - C12	144	4.48	98.1	112	65.2	74.7	25	10.0-141			13.1	29
(S) a,a,a-Trifluorotoluene(FID)					99.0	99.4		77.0-120				

1 Cp

2 Tc

3 Ss

4 Cn

5 Ds

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Method Blank (MB)

(MB) R3821300-2 07/31/22 14:55

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
TPHG C5 - C12	2.22	<u>J</u>	0.830	2.50
(S) a,a,a-Trifluorotoluene(FID)	98.0			77.0-120

1 Cp

2 Tc

3 Ss

4 Cn

Laboratory Control Sample (LCS)

(LCS) R3821300-1 07/31/22 14:09

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
TPHG C5 - C12	5.50	4.66	84.7	72.0-125	
(S) a,a,a-Trifluorotoluene(FID)			102	77.0-120	

5 Ds

6 Sr

7 Qc

L1519177-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1519177-07 07/31/22 17:45 • (MS) R3821300-3 07/31/22 23:08 • (MSD) R3821300-4 08/01/22 00:06

Analyte	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
TPHG C5 - C12	325	2.86	567	524	173	160	40.8	10.0-141	<u>J5</u>	<u>J5</u>	7.72	29
(S) a,a,a-Trifluorotoluene(FID)					125	122		77.0-120	<u>J1</u>	<u>J1</u>		

8 Gl

9 Al

10 Sc

Method Blank (MB)

(MB) R3822332-2 08/01/22 20:06

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPHG C5 - C12	1.48	↓	0.830	2.50
(S) a,a,a-Trifluorotoluene(FID)	98.3			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3822332-1 08/01/22 19:04

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPHG C5 - C12	5.50	6.27	114	72.0-125	
(S) a,a,a-Trifluorotoluene(FID)			114	77.0-120	

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

Method Blank (MB)

(MB) R3821073-3 07/29/22 11:26

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		11.3	50.0
Acrolein	U		2.54	50.0
Acrylonitrile	U		0.671	10.0
Benzene	U		0.0941	1.00
Bromobenzene	U		0.118	1.00
Bromodichloromethane	U		0.136	1.00
Bromoform	U		0.129	1.00
Bromomethane	U		0.605	5.00
n-Butylbenzene	U		0.157	1.00
sec-Butylbenzene	U		0.125	1.00
tert-Butylbenzene	U		0.127	1.00
Carbon tetrachloride	U		0.128	1.00
Chlorobenzene	U		0.116	1.00
Chlorodibromomethane	U		0.140	1.00
Chloroethane	U		0.192	5.00
Chloroform	U		0.111	5.00
Chloromethane	U		0.960	2.50
2-Chlorotoluene	U		0.106	1.00
4-Chlorotoluene	U		0.114	1.00
1,2-Dibromo-3-Chloropropane	U		0.276	5.00
1,2-Dibromoethane	U		0.126	1.00
Dibromomethane	U		0.122	1.00
1,2-Dichlorobenzene	U		0.107	1.00
1,3-Dichlorobenzene	U		0.110	1.00
1,4-Dichlorobenzene	U		0.120	1.00
Dichlorodifluoromethane	U		0.374	5.00
1,1-Dichloroethane	U		0.100	1.00
1,2-Dichloroethane	U		0.0819	1.00
1,1-Dichloroethene	U		0.188	1.00
cis-1,2-Dichloroethene	U		0.126	1.00
trans-1,2-Dichloroethene	U		0.149	1.00
1,2-Dichloropropane	U		0.149	1.00
1,1-Dichloropropene	U		0.142	1.00
1,3-Dichloropropane	U		0.110	1.00
cis-1,3-Dichloropropene	U		0.111	1.00
trans-1,3-Dichloropropene	U		0.118	1.00
2,2-Dichloropropane	U		0.161	1.00
Di-isopropyl ether	U		0.105	1.00
Ethylbenzene	U		0.137	1.00
Hexachloro-1,3-butadiene	U		0.337	1.00

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Ds

<sup>6</sup>Sr

<sup>7</sup>Qc

<sup>8</sup>Gl

<sup>9</sup>Al

<sup>10</sup>Sc

Method Blank (MB)

(MB) R3821073-3 07/29/22 11:26

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Isopropylbenzene	U		0.105	1.00
p-Isopropyltoluene	U		0.120	1.00
2-Butanone (MEK)	U		1.19	10.0
Methylene Chloride	U		0.430	5.00
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0
Methyl tert-butyl ether	U		0.101	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.0993	1.00
Styrene	U		0.118	1.00
1,1,1,2-Tetrachloroethane	U		0.147	1.00
1,1,2,2-Tetrachloroethane	U		0.133	1.00
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00
Tetrachloroethene	U		0.300	1.00
Toluene	U		0.278	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.481	1.00
1,1,1-Trichloroethane	U		0.149	1.00
1,1,2-Trichloroethane	U		0.158	1.00
Trichloroethene	U		0.190	1.00
Trichlorofluoromethane	U		0.160	5.00
1,2,3-Trichloropropane	U		0.237	2.50
1,2,4-Trimethylbenzene	U		0.322	1.00
1,2,3-Trimethylbenzene	U		0.104	1.00
1,3,5-Trimethylbenzene	U		0.104	1.00
Vinyl chloride	U		0.234	1.00
Xylenes, Total	U		0.174	3.00
(S) Toluene-d8	102			80.0-120
(S) 4-Bromofluorobenzene	96.1			77.0-126
(S) 1,2-Dichloroethane-d4	104			70.0-130



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3821073-1 07/29/22 10:20 • (LCSD) R3821073-2 07/29/22 10:42

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Acetone	25.0	37.2	42.8	149	171	19.0-160		J4	14.0	27
Acrolein	25.0	34.5	36.7	138	147	10.0-160			6.18	26
Acrylonitrile	25.0	33.9	35.3	136	141	55.0-149			4.05	20
Benzene	5.00	4.73	5.04	94.6	101	70.0-123			6.35	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3821073-1 07/29/22 10:20 • (LCSD) R3821073-2 07/29/22 10:42

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Bromobenzene	5.00	4.54	4.78	90.8	95.6	73.0-121			5.15	20
Bromodichloromethane	5.00	4.62	5.03	92.4	101	75.0-120			8.50	20
Bromoform	5.00	4.13	4.60	82.6	92.0	68.0-132			10.8	20
Bromomethane	5.00	2.53	3.16	50.6	63.2	10.0-160			22.1	25
n-Butylbenzene	5.00	3.84	4.09	76.8	81.8	73.0-125			6.31	20
sec-Butylbenzene	5.00	3.98	4.36	79.6	87.2	75.0-125			9.11	20
tert-Butylbenzene	5.00	4.03	4.33	80.6	86.6	76.0-124			7.18	20
Carbon tetrachloride	5.00	4.32	5.06	86.4	101	68.0-126			15.8	20
Chlorobenzene	5.00	4.89	5.17	97.8	103	80.0-121			5.57	20
Chlorodibromomethane	5.00	4.62	5.10	92.4	102	77.0-125			9.88	20
Chloroethane	5.00	3.60	4.68	72.0	93.6	47.0-150		J3	26.1	20
Chloroform	5.00	4.65	5.25	93.0	105	73.0-120			12.1	20
Chloromethane	5.00	2.97	3.45	59.4	69.0	41.0-142			15.0	20
2-Chlorotoluene	5.00	4.64	4.87	92.8	97.4	76.0-123			4.84	20
4-Chlorotoluene	5.00	4.22	4.52	84.4	90.4	75.0-122			6.86	20
1,2-Dibromo-3-Chloropropane	5.00	4.09	4.18	81.8	83.6	58.0-134			2.18	20
1,2-Dibromoethane	5.00	4.76	5.01	95.2	100	80.0-122			5.12	20
Dibromomethane	5.00	5.01	5.10	100	102	80.0-120			1.78	20
1,2-Dichlorobenzene	5.00	4.49	4.70	89.8	94.0	79.0-121			4.57	20
1,3-Dichlorobenzene	5.00	4.41	4.82	88.2	96.4	79.0-120			8.88	20
1,4-Dichlorobenzene	5.00	4.56	4.90	91.2	98.0	79.0-120			7.19	20
Dichlorodifluoromethane	5.00	4.30	4.87	86.0	97.4	51.0-149			12.4	20
1,1-Dichloroethane	5.00	5.26	5.44	105	109	70.0-126			3.36	20
1,2-Dichloroethane	5.00	5.63	6.05	113	121	70.0-128			7.19	20
1,1-Dichloroethene	5.00	4.29	4.82	85.8	96.4	71.0-124			11.6	20
cis-1,2-Dichloroethene	5.00	4.64	5.03	92.8	101	73.0-120			8.07	20
trans-1,2-Dichloroethene	5.00	4.48	5.06	89.6	101	73.0-120			12.2	20
1,2-Dichloropropane	5.00	5.65	6.06	113	121	77.0-125			7.00	20
1,1-Dichloropropene	5.00	4.43	4.68	88.6	93.6	74.0-126			5.49	20
1,3-Dichloropropane	5.00	5.13	5.34	103	107	80.0-120			4.01	20
cis-1,3-Dichloropropene	5.00	4.75	4.83	95.0	96.6	80.0-123			1.67	20
trans-1,3-Dichloropropene	5.00	4.41	4.51	88.2	90.2	78.0-124			2.24	20
2,2-Dichloropropane	5.00	3.97	4.39	79.4	87.8	58.0-130			10.0	20
Di-isopropyl ether	5.00	6.41	6.98	128	140	58.0-138		J4	8.51	20
Ethylbenzene	5.00	4.47	4.81	89.4	96.2	79.0-123			7.33	20
Hexachloro-1,3-butadiene	5.00	3.06	3.52	61.2	70.4	54.0-138			14.0	20
Isopropylbenzene	5.00	4.29	4.64	85.8	92.8	76.0-127			7.84	20
p-Isopropyltoluene	5.00	4.01	4.26	80.2	85.2	76.0-125			6.05	20
2-Butanone (MEK)	25.0	36.0	35.7	144	143	44.0-160			0.837	20
Methylene Chloride	5.00	5.13	5.30	103	106	67.0-120			3.26	20

1 Cp

2 Tc

3 Ss

4 Cn

5 Ds

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3821073-1 07/29/22 10:20 • (LCSD) R3821073-2 07/29/22 10:42

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
4-Methyl-2-pentanone (MIBK)	25.0	32.8	34.5	131	138	68.0-142			5.05	20
Methyl tert-butyl ether	5.00	4.85	5.09	97.0	102	68.0-125			4.83	20
Naphthalene	5.00	3.27	3.26	65.4	65.2	54.0-135			0.306	20
n-Propylbenzene	5.00	4.21	4.39	84.2	87.8	77.0-124			4.19	20
Styrene	5.00	4.63	4.71	92.6	94.2	73.0-130			1.71	20
1,1,1,2-Tetrachloroethane	5.00	4.85	4.94	97.0	98.8	75.0-125			1.84	20
1,1,2,2-Tetrachloroethane	5.00	4.53	4.57	90.6	91.4	65.0-130			0.879	20
1,1,2-Trichlorotrifluoroethane	5.00	4.41	5.01	88.2	100	69.0-132			12.7	20
Tetrachloroethene	5.00	4.45	4.56	89.0	91.2	72.0-132			2.44	20
Toluene	5.00	4.62	4.80	92.4	96.0	79.0-120			3.82	20
1,2,3-Trichlorobenzene	5.00	3.67	3.82	73.4	76.4	50.0-138			4.01	20
1,2,4-Trichlorobenzene	5.00	3.50	3.79	70.0	75.8	57.0-137			7.96	20
1,1,1-Trichloroethane	5.00	4.43	4.79	88.6	95.8	73.0-124			7.81	20
1,1,2-Trichloroethane	5.00	4.80	4.98	96.0	99.6	80.0-120			3.68	20
Trichloroethene	5.00	4.96	5.74	99.2	115	78.0-124			14.6	20
Trichlorofluoromethane	5.00	4.43	4.98	88.6	99.6	59.0-147			11.7	20
1,2,3-Trichloropropane	5.00	5.71	4.91	114	98.2	73.0-130			15.1	20
1,2,4-Trimethylbenzene	5.00	4.13	4.45	82.6	89.0	76.0-121			7.46	20
1,2,3-Trimethylbenzene	5.00	4.16	4.44	83.2	88.8	77.0-120			6.51	20
1,3,5-Trimethylbenzene	5.00	4.07	4.45	81.4	89.0	76.0-122			8.92	20
Vinyl chloride	5.00	4.40	4.91	88.0	98.2	67.0-131			11.0	20
Xylenes, Total	15.0	13.4	14.4	89.3	96.0	79.0-123			7.19	20
(S) Toluene-d8				104	105	80.0-120				
(S) 4-Bromofluorobenzene				101	99.4	77.0-126				
(S) 1,2-Dichloroethane-d4				104	106	70.0-130				

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Ds

<sup>6</sup> Sr

<sup>7</sup> Qc

<sup>8</sup> Gl

<sup>9</sup> Al

<sup>10</sup> Sc



Method Blank (MB)

(MB) R3823752-3 08/01/22 11:45

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Trichloroethene	U		0.190	1.00
(S) Toluene-d8	100			80.0-120
(S) 4-Bromofluorobenzene	103			77.0-126
(S) 1,2-Dichloroethane-d4	119			70.0-130

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3823752-1 08/01/22 10:48 • (LCSD) R3823752-2 08/01/22 11:07

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Trichloroethene	5.00	5.10	5.15	102	103	78.0-124			0.976	20
(S) Toluene-d8				101	102	80.0-120				
(S) 4-Bromofluorobenzene				106	106	77.0-126				
(S) 1,2-Dichloroethane-d4				116	117	70.0-130				

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

Method Blank (MB)

(MB) R3822967-3 07/29/22 17:43

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0365	0.0500
Acrylonitrile	U		0.00361	0.0125
Benzene	U		0.000467	0.00100
Bromobenzene	U		0.000900	0.0125
Bromodichloromethane	U		0.000725	0.00250
Bromoform	U		0.00117	0.0250
Bromomethane	U		0.00197	0.0125
n-Butylbenzene	U		0.00525	0.0125
sec-Butylbenzene	U		0.00288	0.0125
tert-Butylbenzene	U		0.00195	0.00500
Carbon tetrachloride	U		0.000898	0.00500
Chlorobenzene	U		0.000210	0.00250
Chlorodibromomethane	U		0.000612	0.00250
Chloroethane	U		0.00170	0.00500
Chloroform	0.00170	U	0.00103	0.00250
Chloromethane	U		0.00435	0.0125
2-Chlorotoluene	U		0.000865	0.00250
4-Chlorotoluene	U		0.000450	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00390	0.0250
1,2-Dibromoethane	U		0.000648	0.00250
Dibromomethane	U		0.000750	0.00500
1,2-Dichlorobenzene	U		0.000425	0.00500
1,3-Dichlorobenzene	U		0.000600	0.00500
1,4-Dichlorobenzene	U		0.000700	0.00500
Dichlorodifluoromethane	U		0.00161	0.00250
1,1-Dichloroethane	U		0.000491	0.00250
1,2-Dichloroethane	U		0.000649	0.00250
1,1-Dichloroethene	U		0.000606	0.00250
cis-1,2-Dichloroethene	U		0.000734	0.00250
trans-1,2-Dichloroethene	U		0.00104	0.00500
1,2-Dichloropropane	U		0.00142	0.00500
1,1-Dichloropropene	U		0.000809	0.00250
1,3-Dichloropropane	U		0.000501	0.00500
cis-1,3-Dichloropropene	U		0.000757	0.00250
trans-1,3-Dichloropropene	U		0.00114	0.00500
2,2-Dichloropropane	U		0.00138	0.00250
Di-isopropyl ether	U		0.000410	0.00100
Ethylbenzene	U		0.000737	0.00250
Hexachloro-1,3-butadiene	U		0.00600	0.0250
Isopropylbenzene	U		0.000425	0.00250

1 Cp

2 Tc

3 Ss

4 Cn

5 Ds

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Method Blank (MB)

(MB) R3822967-3 07/29/22 17:43

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00255	0.00500
2-Butanone (MEK)	U		0.0635	0.100
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.00228	0.0250
Methyl tert-butyl ether	U		0.000350	0.00100
Naphthalene	U		0.00488	0.0125
n-Propylbenzene	U		0.000950	0.00500
Styrene	U		0.000229	0.0125
1,1,1,2-Tetrachloroethane	U		0.000948	0.00250
1,1,2,2-Tetrachloroethane	U		0.000695	0.00250
1,1,2-Trichlorotrifluoroethane	U		0.000754	0.00250
Tetrachloroethene	U		0.000896	0.00250
Toluene	U		0.00130	0.00500
1,2,3-Trichlorobenzene	U		0.00733	0.0125
1,2,4-Trichlorobenzene	U		0.00440	0.0125
1,1,1-Trichloroethane	U		0.000923	0.00250
1,1,2-Trichloroethane	U		0.000597	0.00250
Trichloroethene	U		0.000584	0.00100
Trichlorofluoromethane	U		0.000827	0.00250
1,2,3-Trichloropropane	U		0.00162	0.0125
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,2,3-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
Vinyl chloride	U		0.00116	0.00250
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	103			75.0-131
(S) 4-Bromofluorobenzene	107			67.0-138
(S) 1,2-Dichloroethane-d4	99.9			70.0-130

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Ds

<sup>6</sup>Sr

<sup>7</sup>Qc

<sup>8</sup>Gl

<sup>9</sup>Al

<sup>10</sup>Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3822967-1 07/29/22 16:29 • (LCSD) R3822967-2 07/29/22 16:47

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	0.625	0.643	1.33	103	213	10.0-160		J3 J4	69.6	31
Acrylonitrile	0.625	0.657	0.989	105	158	45.0-153		J3 J4	40.3	22
Benzene	0.125	0.131	0.126	105	101	70.0-123			3.89	20
Bromobenzene	0.125	0.122	0.115	97.6	92.0	73.0-121			5.91	20
Bromodichloromethane	0.125	0.127	0.130	102	104	73.0-121			2.33	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3822967-1 07/29/22 16:29 • (LCSD) R3822967-2 07/29/22 16:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Bromoform	0.125	0.120	0.129	96.0	103	64.0-132			7.23	20
Bromomethane	0.125	0.132	0.133	106	106	56.0-147			0.755	20
n-Butylbenzene	0.125	0.136	0.129	109	103	68.0-135			5.28	20
sec-Butylbenzene	0.125	0.129	0.118	103	94.4	74.0-130			8.91	20
tert-Butylbenzene	0.125	0.129	0.117	103	93.6	75.0-127			9.76	20
Carbon tetrachloride	0.125	0.151	0.141	121	113	66.0-128			6.85	20
Chlorobenzene	0.125	0.130	0.123	104	98.4	76.0-128			5.53	20
Chlorodibromomethane	0.125	0.121	0.127	96.8	102	74.0-127			4.84	20
Chloroethane	0.125	0.160	0.146	128	117	61.0-134			9.15	20
Chloroform	0.125	0.126	0.131	101	105	72.0-123			3.89	20
Chloromethane	0.125	0.148	0.135	118	108	51.0-138			9.19	20
2-Chlorotoluene	0.125	0.124	0.116	99.2	92.8	75.0-124			6.67	20
4-Chlorotoluene	0.125	0.127	0.120	102	96.0	75.0-124			5.67	20
1,2-Dibromo-3-Chloropropane	0.125	0.134	0.146	107	117	59.0-130			8.57	20
1,2-Dibromoethane	0.125	0.129	0.130	103	104	74.0-128			0.772	20
Dibromomethane	0.125	0.130	0.135	104	108	75.0-122			3.77	20
1,2-Dichlorobenzene	0.125	0.126	0.132	101	106	76.0-124			4.65	20
1,3-Dichlorobenzene	0.125	0.123	0.121	98.4	96.8	76.0-125			1.64	20
1,4-Dichlorobenzene	0.125	0.128	0.125	102	100	77.0-121			2.37	20
Dichlorodifluoromethane	0.125	0.132	0.134	106	107	43.0-156			1.50	20
1,1-Dichloroethane	0.125	0.141	0.139	113	111	70.0-127			1.43	20
1,2-Dichloroethane	0.125	0.122	0.126	97.6	101	65.0-131			3.23	20
1,1-Dichloroethene	0.125	0.128	0.115	102	92.0	65.0-131			10.7	20
cis-1,2-Dichloroethene	0.125	0.130	0.130	104	104	73.0-125			0.000	20
trans-1,2-Dichloroethene	0.125	0.140	0.139	112	111	71.0-125			0.717	20
1,2-Dichloropropane	0.125	0.130	0.128	104	102	74.0-125			1.55	20
1,1-Dichloropropene	0.125	0.143	0.137	114	110	73.0-125			4.29	20
1,3-Dichloropropane	0.125	0.128	0.125	102	100	80.0-125			2.37	20
cis-1,3-Dichloropropene	0.125	0.131	0.132	105	106	76.0-127			0.760	20
trans-1,3-Dichloropropene	0.125	0.127	0.129	102	103	73.0-127			1.56	20
2,2-Dichloropropane	0.125	0.152	0.149	122	119	59.0-135			1.99	20
Di-isopropyl ether	0.125	0.137	0.137	110	110	60.0-136			0.000	20
Ethylbenzene	0.125	0.139	0.132	111	106	74.0-126			5.17	20
Hexachloro-1,3-butadiene	0.125	0.126	0.134	101	107	57.0-150			6.15	20
Isopropylbenzene	0.125	0.130	0.124	104	99.2	72.0-127			4.72	20
p-Isopropyltoluene	0.125	0.128	0.119	102	95.2	72.0-133			7.29	20
2-Butanone (MEK)	0.625	0.684	0.777	109	124	30.0-160			12.7	24
Methylene Chloride	0.125	0.123	0.135	98.4	108	68.0-123			9.30	20
4-Methyl-2-pentanone (MIBK)	0.625	0.724	0.781	116	125	56.0-143			7.57	20
Methyl tert-butyl ether	0.125	0.127	0.139	102	111	66.0-132			9.02	20

1 Cp

2 Tc

3 Ss

4 Cn

5 Ds

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3822967-1 07/29/22 16:29 • (LCSD) R3822967-2 07/29/22 16:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Naphthalene	0.125	0.133	0.152	106	122	59.0-130			13.3	20
n-Propylbenzene	0.125	0.130	0.119	104	95.2	74.0-126			8.84	20
Styrene	0.125	0.132	0.135	106	108	72.0-127			2.25	20
1,1,1,2-Tetrachloroethane	0.125	0.129	0.131	103	105	74.0-129			1.54	20
1,1,2,2-Tetrachloroethane	0.125	0.123	0.127	98.4	102	68.0-128			3.20	20
1,1,2-Trichlorotrifluoroethane	0.125	0.131	0.130	105	104	61.0-139			0.766	20
Tetrachloroethene	0.125	0.144	0.138	115	110	70.0-136			4.26	20
Toluene	0.125	0.129	0.121	103	96.8	75.0-121			6.40	20
1,2,3-Trichlorobenzene	0.125	0.133	0.142	106	114	59.0-139			6.55	20
1,2,4-Trichlorobenzene	0.125	0.130	0.140	104	112	62.0-137			7.41	20
1,1,1-Trichloroethane	0.125	0.141	0.133	113	106	69.0-126			5.84	20
1,1,2-Trichloroethane	0.125	0.128	0.125	102	100	78.0-123			2.37	20
Trichloroethene	0.125	0.123	0.119	98.4	95.2	76.0-126			3.31	20
Trichlorofluoromethane	0.125	0.120	0.110	96.0	88.0	61.0-142			8.70	20
1,2,3-Trichloropropane	0.125	0.129	0.140	103	112	67.0-129			8.18	20
1,2,4-Trimethylbenzene	0.125	0.126	0.123	101	98.4	70.0-126			2.41	20
1,2,3-Trimethylbenzene	0.125	0.130	0.122	104	97.6	74.0-124			6.35	20
1,3,5-Trimethylbenzene	0.125	0.128	0.117	102	93.6	73.0-127			8.98	20
Vinyl chloride	0.125	0.121	0.116	96.8	92.8	63.0-134			4.22	20
Xylenes, Total	0.375	0.404	0.385	108	103	72.0-127			4.82	20
<i>(S) Toluene-d8</i>				100	99.6	75.0-131				
<i>(S) 4-Bromofluorobenzene</i>				108	112	67.0-138				
<i>(S) 1,2-Dichloroethane-d4</i>				100	113	70.0-130				

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Ds

<sup>6</sup> Sr

<sup>7</sup> Qc

<sup>8</sup> Gl

<sup>9</sup> Al

<sup>10</sup> Sc

Method Blank (MB)

(MB) R3821250-1 08/01/22 03:54

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
C12-C22 Hydrocarbons	U		33.0	100
C22-C32 Hydrocarbons	U		33.0	100
C32-C40 Hydrocarbons	U		33.0	100
(S) o-Terphenyl	85.0			52.0-156

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3821250-2 08/01/22 04:15 • (LCSD) R3821250-3 08/01/22 04:35

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
C12-C22 Hydrocarbons	750	905	875	121	117	50.0-150			3.37	20
C22-C32 Hydrocarbons	750	947	911	126	121	50.0-150			3.88	20
(S) o-Terphenyl				98.5	94.5	52.0-156				

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

Method Blank (MB)

(MB) R3820976-2 07/30/22 16:56

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C12-C22 Hydrocarbons	U		0.733	4.00
C22-C32 Hydrocarbons	U		1.33	4.00
C32-C40 Hydrocarbons	U		1.33	4.00
<i>(S) o-Terphenyl</i>	89.6			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3820976-1 07/30/22 16:39

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C12-C22 Hydrocarbons	25.0	21.3	85.2	50.0-150	
C22-C32 Hydrocarbons	25.0	21.4	85.6	50.0-150	
<i>(S) o-Terphenyl</i>			85.9	18.0-148	

L1519177-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1519177-03 07/31/22 00:13 • (MS) R3820976-3 07/31/22 00:30 • (MSD) R3820976-4 07/31/22 00:47

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 %
C12-C22 Hydrocarbons	30.2	25.3	44.6	128	64.0	340	1	50.0-150		J3 J5	96.7	20
C22-C32 Hydrocarbons	30.2	86.4	111	345	80.8	854	1	50.0-150		E J3 J5	103	20
<i>(S) o-Terphenyl</i>					42.9	51.7		18.0-148				

1 Cp

2 Tc

3 Ss

4 Cn

5 Ds

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Method Blank (MB)

(MB) R3821642-1 07/29/22 12:09

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Aldrin	U		0.00376	0.0200
Alpha BHC	U		0.00368	0.0200
Beta BHC	U		0.00379	0.0200
Delta BHC	U		0.00346	0.0200
Gamma BHC	U		0.00344	0.0200
Chlordane	U		0.103	0.300
4,4-DDD	U		0.00370	0.0200
4,4-DDE	U		0.00366	0.0200
4,4-DDT	U		0.00627	0.0200
Dieldrin	U		0.00344	0.0200
Endosulfan I	U		0.00363	0.0200
Endosulfan II	U		0.00335	0.0200
Endosulfan sulfate	U		0.00364	0.0200
Endrin	U		0.00350	0.0200
Endrin aldehyde	U		0.00339	0.0200
Endrin ketone	U		0.00711	0.0200
Heptachlor	U		0.00428	0.0200
Heptachlor epoxide	U		0.00339	0.0200
Hexachlorobenzene	U		0.00346	0.0200
Methoxychlor	U		0.00484	0.0200
Toxaphene	U		0.124	0.400
<i>(S) Decachlorobiphenyl</i>	119			10.0-135
<i>(S) Tetrachloro-m-xylene</i>	97.6			10.0-139

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Ds

<sup>6</sup>Sr

<sup>7</sup>Qc

<sup>8</sup>Gl

<sup>9</sup>Al

<sup>10</sup>Sc

Laboratory Control Sample (LCS)

(LCS) R3821642-5 07/29/22 12:21

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aldrin	0.0666	0.0567	85.1	34.0-136	
Alpha BHC	0.0666	0.0672	101	34.0-139	
Beta BHC	0.0666	0.0602	90.4	34.0-133	
Delta BHC	0.0666	0.0578	86.8	34.0-135	
Gamma BHC	0.0666	0.0594	89.2	34.0-136	
4,4-DDD	0.0666	0.0545	81.8	33.0-141	
4,4-DDE	0.0666	0.0671	101	34.0-134	
4,4-DDT	0.0666	0.0523	78.5	30.0-143	
Dieldrin	0.0666	0.0573	86.0	35.0-137	
Endosulfan I	0.0666	0.0583	87.5	34.0-134	



Laboratory Control Sample (LCS)

(LCS) R3821642-5 07/29/22 12:21

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Endosulfan II	0.0666	0.0577	86.6	35.0-132	
Endosulfan sulfate	0.0666	0.0575	86.3	35.0-132	
Endrin	0.0666	0.0569	85.4	34.0-137	
Endrin aldehyde	0.0666	0.0507	76.1	23.0-121	
Endrin ketone	0.0666	0.0433	65.0	35.0-144	
Heptachlor	0.0666	0.0549	82.4	36.0-141	
Heptachlor epoxide	0.0666	0.0570	85.6	36.0-134	
Hexachlorobenzene	0.0666	0.0632	94.9	33.0-129	
Methoxychlor	0.0666	0.0499	74.9	28.0-150	
<i>(S) Decachlorobiphenyl</i>			105	10.0-135	
<i>(S) Tetrachloro-m-xylene</i>			92.0	10.0-139	

L1518246-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1518246-01 07/29/22 12:58 • (MS) R3821642-6 07/29/22 13:10 • (MSD) R3821642-7 07/29/22 13:22

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 %
Aldrin	0.0804	U	0.0738	0.0705	91.7	87.7	1	20.0-135			4.52	37
Alpha BHC	0.0804	U	0.0793	0.0808	98.6	100	1	27.0-140			1.81	35
Beta BHC	0.0804	U	0.0763	0.0751	94.9	93.4	1	23.0-141			1.59	37
Delta BHC	0.0804	U	0.0765	0.0750	95.2	93.2	1	21.0-138			2.07	35
Gamma BHC	0.0804	U	0.0792	0.0791	98.5	98.3	1	27.0-137			0.153	36
4,4-DDD	0.0804	U	0.0671	0.0649	83.5	80.8	1	15.0-152			3.29	39
4,4-DDE	0.0804	U	0.0779	0.0751	96.8	93.4	1	10.0-152			3.63	40
4,4-DDT	0.0804	U	0.0649	0.0616	80.8	76.6	1	10.0-151			5.34	40
Dieldrin	0.0804	U	0.0709	0.0689	88.1	85.7	1	17.0-145			2.76	37
Endosulfan I	0.0804	U	0.0748	0.0725	93.1	90.2	1	20.0-137			3.11	36
Endosulfan II	0.0804	U	0.0751	0.0730	93.4	90.8	1	15.0-141			2.77	37
Endosulfan sulfate	0.0804	U	0.0745	0.0712	92.6	88.6	1	15.0-143			4.47	38
Endrin	0.0804	U	0.0724	0.0705	90.1	87.7	1	19.0-143			2.70	37
Endrin aldehyde	0.0804	U	0.0668	0.0655	83.0	81.5	1	10.0-139			1.82	40
Endrin ketone	0.0804	U	0.0549	0.0532	68.3	66.2	1	17.0-149			3.12	38
Heptachlor	0.0804	U	0.0653	0.0648	81.2	80.6	1	22.0-138			0.742	37
Heptachlor epoxide	0.0804	U	0.0745	0.0721	92.6	89.6	1	22.0-138			3.29	36
Hexachlorobenzene	0.0804	U	0.0668	0.0660	83.0	82.1	1	25.0-126			1.09	35
Methoxychlor	0.0804	U	0.0589	0.0581	73.3	72.2	1	10.0-159			1.44	40
<i>(S) Decachlorobiphenyl</i>					97.0	91.9		10.0-135				
<i>(S) Tetrachloro-m-xylene</i>					77.0	74.3		10.0-139				

1 Cp

2 Tc

3 Ss

4 Cn

5 Ds

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Method Blank (MB)

(MB) R3821642-1 07/29/22 12:09

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	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	105			10.0-135
(S) Tetrachloro-m-xylene	98.3			10.0-139

Laboratory Control Sample (LCS)

(LCS) R3821642-2 07/29/22 12:33

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
PCB 1016	0.167	0.183	110	36.0-141	
PCB 1260	0.167	0.165	98.8	37.0-145	
(S) Decachlorobiphenyl			95.6	10.0-135	
(S) Tetrachloro-m-xylene			92.2	10.0-139	

L1518246-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1518246-01 07/29/22 12:58 • (MS) R3821642-3 07/29/22 13:34 • (MSD) R3821642-4 07/29/22 13:47

Analyte	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
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
PCB 1016	0.202	U	0.225	0.182	111	90.4	1	10.0-160			20.8	37
PCB 1260	0.202	U	0.158	0.175	78.4	86.8	1	10.0-160			10.1	38
(S) Decachlorobiphenyl					83.6	83.9		10.0-135				
(S) Tetrachloro-m-xylene					79.9	76.3		10.0-139				

1 Cp

2 Tc

3 Ss

4 Cn

5 Ds

6 Sr

7 Qc

8 Gl

9 Al

10 Sc

Method Blank (MB)

(MB) R3820997-1 07/30/22 20:17

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	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	65.6			10.0-135
(S) Tetrachloro-m-xylene	58.1			10.0-139

Laboratory Control Sample (LCS)

(LCS) R3820997-2 07/30/22 20:27

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/kg	mg/kg	%	%	
PCB 1016	0.167	0.112	67.1	36.0-141	
PCB 1260	0.167	0.126	75.4	37.0-145	
(S) Decachlorobiphenyl			69.1	10.0-135	
(S) Tetrachloro-m-xylene			59.2	10.0-139	

L1507205-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1507205-02 07/30/22 20:36 • (MS) R3820997-3 07/30/22 20:45 • (MSD) R3820997-4 07/30/22 20:55

Analyte	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
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
PCB 1016	0.172	U	0.102	0.111	59.3	63.0	1	10.0-160			8.52	37
PCB 1260	0.172	U	0.116	0.120	67.1	67.9	1	10.0-160			3.64	38
(S) Decachlorobiphenyl					67.2	69.7		10.0-135				
(S) Tetrachloro-m-xylene					61.4	62.2		10.0-139				



# GLOSSARY OF TERMS

## Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

### Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper 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.
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.



# 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 <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	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 <sup>1,6</sup>	KY90010	South Carolina	84004002
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1,4</sup>	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas <sup>5</sup>	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 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> 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.



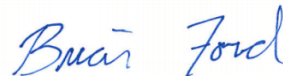


**Haley & Aldrich - Walnut Creek, CA**

Sample Delivery Group: L1523625  
Samples Received: 07/27/2022  
Project Number: 0205738-000-002-02  
Description: TCC-Santa Cruz

Report To: Jason Grant  
2033 N Main Street  
Suite 309  
Walnut Creek, CA 94596

Entire Report Reviewed By:



Brian Ford  
Project Manager

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

**Pace Analytical National**12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 [www.pacenational.com](http://www.pacenational.com)

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# SAMPLE SUMMARY

## HA-SV-4-1 L1523625-01 GW

Collected by Akash Caveney      Collected date/time 07/22/22 14:40      Received date/time 07/27/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 22CCRA2	WG1908060	1	08/10/22 15:10	08/10/22 15:10	JTM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1910744	9	08/15/22 14:51	08/16/22 18:04	ZSA	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

## HA-SV-4-1 L1523625-02 Waste

Collected by Akash Caveney      Collected date/time 07/22/22 14:40      Received date/time 07/27/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1908821	1	08/10/22 15:59	08/10/22 15:59	JWS	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1909953	1	08/12/22 12:27	08/12/22 17:34	KMG	Mt. Juliet, TN

4 Cn

5 Ds

6 Sr

## HA-SV-5-1 L1523625-03 GW

Collected by Akash Caveney      Collected date/time 07/25/22 09:45      Received date/time 07/27/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 22CCRA2	WG1908060	1	08/10/22 15:10	08/10/22 15:10	JTM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1910744	9	08/15/22 14:51	08/16/22 18:07	ZSA	Mt. Juliet, TN

7 Qc

8 Gl

9 Al

## HA-SV-5-1 L1523625-04 Waste


Collected by Akash Caveney      Collected date/time 07/25/22 09:45      Received date/time 07/27/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1908821	1	08/10/22 15:59	08/10/22 15:59	JWS	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1909953	1	08/12/22 12:27	08/12/22 17:37	KMG	Mt. Juliet, TN

10 Sc

# CASE NARRATIVE

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



Brian Ford  
Project Manager

- <sup>1</sup> Cp
- <sup>2</sup> Tc
- <sup>3</sup> Ss
- <sup>4</sup> Cn
- <sup>5</sup> Ds
- <sup>6</sup> Sr
- <sup>7</sup> Qc
- <sup>8</sup> Gl
- <sup>9</sup> Al
- <sup>10</sup> Sc

# DETECTION SUMMARY

## Metals (ICP) by Method 6010B

Client ID	Lab Sample ID	Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
HA-SV-4-1	<a href="#">L1523625-01</a>	Lead	5.46		0.0269	0.0540	9	08/16/2022 18:04	<a href="#">WG1910744</a>
HA-SV-5-1	<a href="#">L1523625-03</a>	Lead	1.56		0.0269	0.0540	9	08/16/2022 18:07	<a href="#">WG1910744</a>

- 1  
Cp
- 2  
Tc
- 3  
Ss
- 4  
Cn
- 5  
Ds
- 6  
Sr
- 7  
Qc
- 8  
Gl
- 9  
Al
- 10  
Sc

## Metals (ICP) by Method 6010B

Client ID	Lab Sample ID	Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
HA-SV-4-1	<a href="#">L1523625-02</a>	Lead	0.200		0.100	5	1	08/12/2022 17:34	<a href="#">WG1909953</a>

Preparation by Method 1311/22CCRA2

Analyte	Result	Qualifier	Prep date / time	Batch
STLC Extraction	-		8/10/2022 3:10:51 PM	WG1908060
Final pH	5.36		8/10/2022 3:10:51 PM	WG1908060

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Lead	5.46		0.0269	0.0540	9	08/16/2022 18:04	<a href="#">WG1910744</a>

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

Preparation by Method 1311/22CCRA2

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		8/10/2022 3:59:13 PM	WG1908821
Fluid	1		8/10/2022 3:59:13 PM	WG1908821
Initial pH	6.50		8/10/2022 3:59:13 PM	WG1908821
Final pH	4.92		8/10/2022 3:59:13 PM	WG1908821

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Lead	0.200		0.100	5	1	08/12/2022 17:34	<a href="#">WG1909953</a>

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

Preparation by Method 1311/22CCRA2

Analyte	Result	Qualifier	Prep date / time	Batch
STLC Extraction	-		8/10/2022 3:10:51 PM	WG1908060
Final pH	6.73		8/10/2022 3:10:51 PM	WG1908060

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Lead	1.56		0.0269	0.0540	9	08/16/2022 18:07	<a href="#">WG1910744</a>

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

Preparation by Method 1311/22CCRA2

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		8/10/2022 3:59:13 PM	WG1908821
Fluid	1		8/10/2022 3:59:13 PM	WG1908821
Initial pH	6.92		8/10/2022 3:59:13 PM	WG1908821
Final pH	4.96		8/10/2022 3:59:13 PM	WG1908821

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Lead	ND		0.100	5	1	08/12/2022 17:37	<a href="#">WG1909953</a>

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

Method Blank (MB)

(MB) R3825789-1 08/12/22 16:05

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Lead	U		0.0330	0.100

Laboratory Control Sample (LCS)

(LCS) R3825789-2 08/12/22 16:08

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Lead	10.0	9.53	95.3	80.0-120	

L1523352-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1523352-03 08/12/22 16:10 • (MS) R3825789-4 08/12/22 16:16 • (MSD) R3825789-5 08/12/22 16:19

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Lead	10.0	ND	9.37	9.51	93.7	95.1	1	75.0-125			1.50	20

L1523714-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1523714-02 08/12/22 16:22 • (MS) R3825789-6 08/12/22 16:24 • (MSD) R3825789-7 08/12/22 16:27

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Lead	10.0	ND	9.65	9.48	96.5	94.8	1	75.0-125			1.79	20

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Ds

<sup>6</sup>Sr

<sup>7</sup>Qc

<sup>8</sup>Gl

<sup>9</sup>Al

<sup>10</sup>Sc



Method Blank (MB)

(MB) R3826977-1 08/16/22 17:45

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Lead	U		0.0269	0.0540

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

Laboratory Control Sample (LCS)

(LCS) R3826977-2 08/16/22 17:47

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Lead	1.00	1.04	104	80.0-120	

<sup>4</sup>Cn

<sup>5</sup>Ds

L1523129-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1523129-02 08/16/22 17:50 • (MS) R3826977-4 08/16/22 17:56 • (MSD) R3826977-5 08/16/22 17:58

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 %
Lead	9.00	1.18	10.5	10.3	103	102	9	75.0-125			1.13	20

<sup>6</sup>Sr

<sup>7</sup>Qc

<sup>8</sup>Gl

<sup>9</sup>Al

<sup>10</sup>Sc

# 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.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.



### Qualifier Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

# ACCREDITATIONS & LOCATIONS

## Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	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 <sup>1,6</sup>	KY90010	South Carolina	84004002
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1,4</sup>	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas <sup>5</sup>	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 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> 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.



Section A

Required Client Information:  
Company: Haley & Aldrich  
Address: 2033 North Main Street | Suite 309  
Walnut Creek, CA 94596  
Email To: JGrant@haleyaldrich.com  
Phone: (925) 949-1012 Fax: (925) 979-1456  
Requested Due Date/TAT: Standard

Section B

Required Project Information:  
Report To: Jason Grant JGrant@haleyaldrich.com  
Copy To: Bmelin@haleyaldrich.com, Vgodard@haleyaldrich.com  
acaveney@haleyaldrich.com  
BSA #: 2022-24-Pace  
H&A Client Name: TCC  
H&A Project #: 0205738-000-002-02

Section C

Invoice Information:  
Attention: accounts payable@haleyaldrich.com  
Company Name:  
Address:  
Pace Quote Reference:  
Pace Project Manager: Brian Ford  
Pace Profile #:

39 Spruce Street, East Longmeadow, MA 01028  
1700 Elm Street SE - Minneapolis, MN 55414  
7726 Moller Road - Indianapolis, IN 46268  
REGULATORY AGENCY  
 NPDES  GROUND WATER  DRINKING WATER  
 UST  RCRA   
Site Location  
STATE:

Pace's services under this Chain of Custody shall be performed in accordance with terms and conditions within Blanket Service Agreement #2022-24-Pace by and between Haley & Aldrich, Inc. its subsidiaries and affiliates and Pace Analytical Services, Inc.

Section D

Required Client Information

Matrix Codes

- Drinking Water DW
- Water WT
- Waste Water WW
- Product P
- Soil/Solid SL
- Oil OL
- Wipe WP
- Air AR
- Tissue TS
- Other OT

SAMPLE ID

(A-Z 0-9 / -)  
Sample IDs MUST BE UNIQUE

COLLECTED

COMPOSITE START COMPOSITE END/GRAB

SAMPLE TEMP AT COLLECTION  
# OF CONTAINERS

Preservatives

- Unpreserved
- H<sub>2</sub>SO<sub>4</sub>
- HNO<sub>3</sub>
- HCl
- NaOH
- Na<sub>2</sub>S<sub>2</sub>O<sub>8</sub>
- Methanol
- Other

Requested Analysis Filtered (Y/N)

Analysis Test

- VOCs B260B
- TPH-g/d/mo B015
- Lab Filtered Dissolved CCR T22
- Metals 6010B/2471A\*\*
- PCBs Method 8082

Residual Chlorine (Y/N)

L1523625  
L1519177<sup>NV</sup> 8/10/22  
Pace Project No./ Lab I.D.

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Analysis Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	
				DATE	TIME			DATE	TIME	Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	NaOH				Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub>
1	HA-SB-01-1	SL	G	07/22/22	1205	-	-											
2	HA-SB-01-3	SL	G	07/22/22	1200	-	-	3	X					X	X	X	X	X
3	HA-SB-01-4-5	SL	G	07/22/22	1200	-	-	3	X					X	X	X	X	X
4	HA-SB-01-GW	WT	G	07/22/22	1155	-	-	3	X					X	X	X		
5	HA-SB-02-1	SL	G	07/22/22	1310	-	-	6	X		X			X	X	X		
6	HA-SB-02-3	SL	G	07/25/22	1010	-	-	3	X					X	X	X	X	X
7	HA-SB-02	SL	G	07/25/22	1015	-	-	3	X					X	X	X	X	X
8	HA-SB-03-5	SL	G	07/22/22	1055	-	-	3	X					X	X	X		
9	HA-SB-03	SL	G	07/22/22	1055	-	-	3	X					X	X	X		
10	HA-SB-03-GW	WT	G	07/22/22	1126	-	-	3	X					X	X	X		
11	HA-SV-4-1	SL	G	07/22/22	1440	-	-	8	X	X				X	X	X		
12	HA-SV-5-1	SL	G	07/22/22	1445	-	-	3	X					X	X	X	X	X
13	HA-SV-5-3	SL	G	07/25/22	0945	-	-	3	X					X	X	X	X	X
		SL	G	07/25/22	0950	-	-	3	X					X	X	X	X	X

ADDITIONAL COMMENTS

\*\*Filter GW samples for metals. Samples collected in unpreserved containers.

H&A Equip EDD required. Samples for 457 May Avenue.

RELINQUISHED BY / AFFILIATION

Akash Ganguly H&A 7/25/22

DATE TIME

ACCEPTED BY / AFFILIATION

DATE TIME

SAMPLE CONDITIONS

OPER NAME AND SIGNATURE

PRINT Name of SAMPLER: Akash Caveney

SIGNATURE of SAMPLER: [Signature] DATE Signed (MM/DD/YY): 07/25/22

Temp in °C

Received on Ice (Y/N)

Custody Sealed Cooler (Y/N)

Samples Intact (Y/N)

Sample Receipt Checklist  
COC Seal Present/Intact:  Y  N  
COC Signed/Accurate:  Y  N IF Applicable  
Bottles arrive intact:  Y  N VOA Zero Headspace:  
Correct bottles used:  Y  N Pres. Correct/Check:  Y  N  
Sufficient volume sent:  Y  N  
P&N Screen on S&M:  Y  N

Fed ex 51071 5378 5086

RAB 1.3+0=1.3

### L1519177 HALALDWCCA re-log

R5

Please re-log the following for TCLP PBICP and STLC PBICP as R5 due 08/17.

L1519177-09 HA-SV-4-1

L1519177-11 HA-SV-5-1

**Time estimate:** oh

**Time spent:** oh

#### Members



Brian Ford