

Environmental Monitoring Quarterly Report 2

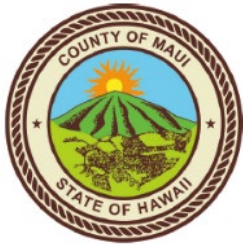
West Maui Temporary Debris Storage Site

July 2024

Pursuant to Ordinance 5596, Bill 120, CD1, FD2 (2023)

Monitoring Period: April 21–July 20, 2024

Prepared by:



The County of Maui Department of Environmental Management
The U.S. Army Corps of Engineers

Contents

1. Introduction and Overview	1
2. Requirements from Bill 120	2
3. Public Availability	4
3.1. Website	4
3.2. Public Meetings.....	4
4. Work Documents	4
4.1. Preconstruction Assessment.....	4
4.2. Nuisance Noise Assessment.....	5
4.3. Compliance with the National Historic Preservation Act (NHPA) and National Environmental Policy Act (NEPA).....	6
4.4. Design and Construction.....	7
4.5. Operations.....	7
4.5.1. Access and Traffic.....	7
4.5.2. Stormwater Pollution Prevention	7
4.5.3. Emergency Responses.....	8
4.6. Other Considerations	8
4.6.1. Archaeological Treatment.....	8
4.6.2. Biosecurity.....	8
5. Monitoring and Data	8
5.1. Air	9
5.2. Personnel	12
5.3. Leachate	13
5.3.1. Leachate Basin	13
5.3.2. Leachate Sampling	15
5.4. Soil.....	18
5.5. Surface Water	19
5.6. Groundwater.....	19



Tables

Table 1 — Bill 120 Provisions	2
Table 2 — Air Monitoring Measurements	10
Table 3 — Leachate Basin Level Monitoring Results	15
Table 4 — Leachate Sampling Analytical Results	16
Table 5 — Preconstruction Soil Sample Analysis Results	18
Table 6 — Sampling Parameters for TDS Site Groundwater Monitoring Wells.....	21

Figures

Figure 1 — Noise Assessment Decibel Meter	5
Figure 2 — Approximate Locations of Air Monitors	9
Figure 3 — Air Monitoring Data for Particulate Matter (PM) Compared to Action Level	11
Figure 4 — Locations of PurpleAir Sensors in Olowalu.....	12
Figure 5 — Leachate Basin Adjacent to Ash and Debris Storage Area	14
Figure 6 — Locations of Groundwater Monitoring Wells.....	20
Figure 7 — Drill Rig Installing Groundwater Monitoring Well at TDS Site	20

Attachments

- Attachment 1. Dust Monitoring Reports
- Attachment 2. Leachate Analysis Laboratory Data Reports



Abbreviations

Abbreviation	Definition
AMSP	air monitoring and surveillance plan
ATP	archaeological treatment plan
DLNR	Hawai'i Department of Land and Natural Resources
DOH	Hawai'i Department of Health
ECC	Environmental Chemical Corporation
ERP	emergency response plan
FEMA	Federal Emergency Management Agency
MCDEM	Maui County Department of Environmental Management
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
OSHA	Occupational Safety and Health Administration
SHPO	state historic preservation officer
SWPPP	storm water pollution prevention plan
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency



1. Introduction and Overview

On October 27, 2023, the Hawai'i Department of Land and Natural Resources (DLNR) approved an immediate management right-of-entry permit the County of Maui. This permit applied to land parcels in West Maui that were to be occupied by a temporary debris storage (TDS) site; subsequently, this site was subject to a license agreement between the County of Maui and Environmental Chemical Corporation (ECC), a contractor for the United States Army Corps of Engineers (USACE), on November 27, 2023. The agreement, with an initial 12-month term (beginning on November 24, 2023) was for the installation of the TDS site subject to terms and conditions for the design, construction, operation, and maintenance of the site.

Regarding the TDS site, on January 21, 2024, the County of Maui approved Bill 120 of Ordinance 5596. The bill authorized the mayor of the county to enter into an agreement with DLNR. Among other recordkeeping, operational, and planning requirements, the ordinance required environmental monitoring of the TDS site. USACE and ECC, which constructed and operate the TDS site, are therefore collaborating with the Maui County Department of Environmental Management (MCDEM) Solid Waste Division, the Hawai'i Department of Health (DOH), and the United States Environmental Protection Agency (USEPA) to comply with the ordinance. A weekly coordination meeting is facilitated by Maui County Solid Waste Division personnel to ensure ongoing dialogue, communication and coordination on all matters relating to the TDS site. In addition, USACE is working with their contractor, ECC, to ensure that best practices are being employed at the TDS site to ensure that there are no impacts to human health and the environment from TDS site operations.

Section 2.3.a of Bill 120 requires quarterly environmental monitoring reports for the TDS site. This document is second such report; it applies to the monitoring period beginning on April 21, 2024, and ending on July 20, 2024. After specifying the requirements from Bill 120, this report assesses the TDS site's public availability, work plans, and monitoring data.

Similar quarterly reports will be generated every 90 days (quarterly) for the duration of TDS site operations until (1) ash and debris at the site is transferred to the Central Maui Landfill (CML), (2) the TDS site is removed, and (3) the TDS site is restored.

Overall, over 1375 residential and commercial properties have been cleared of nearly 300,000 tons ash and debris in Lahaina. Additionally, over 17,000 truckloads of ash and debris have safely arrived from



Lahaina to the TDS site. There have been minimal reports or complaints received by the County of Maui regarding odors, dust, or environmental issues related to the management of ash and debris.

2. Requirements from Bill 120

Bill 120 requires recordkeeping as well as operational, planning, and environmental monitoring of the TDS site in West Maui. It specifies monitoring of the following:

- Leachate (liquids from the waste) quantity, quality, and treatment processes, if required
- Surface water runoff, including any impacts on nearby waterways
- Surrounding air quality regarding toxins and contaminants

Table 1 details provisions in Bill 120 that pertain to this report:

Table 1 — Bill 120 Provisions

Section	Description	Notes
2.3. a.	Recordkeeping and Reporting	Detailed records of leachate quantity, quality, and treatment processes be logged because these records are important for regulatory compliance and for making informed decisions about site management. All designs and construction documents, operating plans, stormwater pollution prevention plans, and sampling and analysis plans must be submitted to the county and made available to the public. The TDS site must be monitored for runoff, including nearby waterways and surrounding air quality for toxins and contaminants.
2.3. b	Compliance with Regulations	Leachate treatment and disposal will adhere to county, state, and federal environmental regulations to include the reuse of leachate as dust mitigation within the TDS site.



Section	Description	Notes
2.3. c.	Emergency Response Plan	<p>An emergency response plan will be in place to handle any unexpected leachate breaches or spills, including the following:</p> <ul style="list-style-type: none"> • Alerting relevant authorities and response teams as soon as the spill is identified • Implementing barriers, absorbents, or other containment methods to minimize environmental impact • Conducting a rapid assessment to understand potential environmental and health impacts • Monitoring for changes in water quality, soil contamination, and impacts on local wildlife and vegetation • Implementing cleanup procedures such as skimming, vacuuming, or neutralizing agents, as needed • Implementing immediate and long-term remediation to restore the affected area, such as soil remediation, water treatment, or habitat restoration, as needed • Keeping all stakeholders, including the public, informed about response measures • Documenting the incident and response actions in a report for the appropriate regulatory authorities, as required by law • Updating the emergency response plan following a review of the response based on new insights • Ensuring that all relevant personnel are trained in emergency response • Collaborating with local emergency services, environmental experts, and other relevant agencies to ensure a coordinated and effective response
2.3. d.	Preparation for Storm Events	<p>Develop a plan to prevent stormwater pollution and comply with Appendix B, “NPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP)” of Chapter 55, Title 11 of the <i>Hawai’i Administrative Rules</i>. Before heavy rain or extreme weather events, enhanced safety measures will be implemented to prevent flooding, mitigate potential overflow, and control erosion, including the following:</p> <ul style="list-style-type: none"> • Deploying stormwater BMPs, such as barriers, absorbents, or other containment measures • Converting and stabilizing materials within the cell • Implementing erosion control measures on loose soils and cinder around the containment area



3. Public Availability

Section 2.3.a. of Bill #120 requires detailed records, data, design and construction documents, operating plans and other pertinent documents be submitted to the County and made available to the public consistent with chapter 92F, *Hawai'i Revised Statutes*. In addition, Bill #120 requires that this information be presented in a public forum every 90 days for the duration of the right-of-entry agreement.

3.1. Website

A [website](#) currently communicates official information about the wildfire recovery. The website also includes a copy of this report on its [webpage for debris containment](#). Additionally, the website contains periodic data summaries that provide the public with updated information regarding the TDS site.

3.2. Public Meetings

On July 17, 2024, MCDEM Director Shayne Agawa attended the Lahaina community's weekly disaster recovery meeting. The meeting was held at the Lahaina Civic Center. Director Agawa made a presentation—available on the recovery [website](#)—summarizing the contents of this report.

The County of Maui will continue to provide quarterly updates at the weekly disaster recovery meetings to meet the requirements of Chapter 92F of the *Hawai'i Revised Statutes*.

4. Work Documents

The work documents for the TDS site address preconstruction, noise, compliance with the National Historic Preservation Act, site design and construction, and operation.

4.1. Preconstruction Assessment

Prior to construction of the TDS site, existing soil was sampled at the site according to a pre-characterization soil sampling program dated December 20, 2023. For the evaluation, the TDS area was divided into five decision units, with soil samples taken from each unit and sent to a Eurofins Scientific laboratory in Seattle for analysis. Samples underwent analysis for 22 metals via Methods 6020B and

7471B, total petroleum hydrocarbon (TPH) diesel range organics and residual range organics via Method 8015D, and TPH gasoline range organics via Method 8260. All sampling adhered to DOH’s technical guidance manual. Section 5.4 summarizes the results of this analysis, and the full sampling report is available in Attachment 3 of [Environmental Monitoring Quarterly Report 1 \(April 19, 2024\)](#).

4.2. Nuisance Noise Assessment

In December 2023, a noise assessment was conducted in the vicinity of the TDS site. The assessment was a response to concerns about nighttime noise affecting surrounding residential areas during heavy equipment operations while the site was under construction. One particular concern was noise related to backup alarms on heavy equipment, such as bulldozers, excavators, and loaders. The assessment involved the installation of noise monitoring stations (Figure 1) at three locations: (1) at the TDS site entrance, above the recycling drop-off center (Station 1); (2) in the North Olowalu residential area (Station 2); and (3) near Olowalu general stores (Station 3).

Results from the assessment found noise readings ranging from 32.2 to 59.7 decibels. For reference, noises above 70 decibels are usually considered disturbing. Additionally, the Occupational Safety and Health Administration (OSHA) permissible exposure limit for noise is 90 A-weighted decibels for all workers for an 8-hour day.

Figure 1 — Noise Assessment Decibel Meter



The full sampling report is available in Attachment 4 of [Environmental Monitoring Quarterly Report 1 \(April 19, 2024\)](#).

4.3. Compliance with the National Historic Preservation Act (NHPA) and National Environmental Policy Act (NEPA)

The National Historic Preservation Act (NHPA) and the National Environmental Policy Act (NEPA) are separate laws which require federal agencies to take into consideration potential impacts to historic properties and the human environment prior to taking actions. Consultations were made in planning, design and construction of the TDS in accordance with these laws as described in this section.

On March 20, 2024, the State of Hawai'i Historic Preservation Division received a letter from the Federal Emergency Management Agency (FEMA) requesting the state historic preservation officer's (SHPO) concurrence with a FEMA finding. The finding—pursuant to Stipulation II.C.4 of the 2016 programmatic agreement (as extended in 2023)—is that there are no historic properties affected by the TDS site. The agreement is between FEMA, the Hawai'i SHPO, the Office of Hawai'ian Affairs, and the State of Hawai'i Department of Defense as part of the National Historic Preservation Act. The SHPO submitted a letter of concurrence on March 25, 2024, which can be found in Attachment 5 of [Environmental Monitoring Quarterly Report 1 \(April 19, 2024\)](#).

Additionally, to comply with Bill 120, USACE installed temporary groundwater detection monitoring wells at the TDS site in June – July 2024. On March 25, 2024, the Hawai'i SHPO reviewed and provided concurrence with the 'U.S. Department of Homeland Security's Federal Emergency Management Agency's (FEMA) proposed Olowalu Temporary Debris Staging Site Water Monitoring Wells Project.'

Other consultations involved the State of Hawai'i Office of Planning and Sustainable Development related to compliance with the Coastal Zone Management Act (August 25, 2023), Hawai'i Department of Health related to permitting considerations for the TDS (September 9, 2023), US EPA related to the applicability of the household waste exemption (November 3, 2023) and FEMA related to Executive Order 12898 – Environmental Justice review.

Documentation related to NEPA and NHPA compliance is included in Attachment 5 of [Environmental Monitoring Quarterly Report 1 \(April 19, 2024\)](#).

4.4. Design and Construction

The West Maui TDS site is underlain by a thick (80-mil or 0.08-inch), plastic liner that protects the soil, groundwater, and ocean. ECC developed the site so that ash and debris do not impact the surrounding area or marine environment. The design also protects against leachate or rainwater runoff. The County of Maui, DOH, and USEPA also contributed to the design to incorporate standards that are protective of human health and the environment.

Full design plans for the TDS site are found in Attachment 6 of [Environmental Monitoring Quarterly Report 1 \(April 19, 2024\)](#).

4.5. Operations

To ensure safe, efficient, and environmentally protective operations at the TDS site, ECC and Tetra Tech, Inc. (Tetra Tech), a sub-contractor to ECC, developed a manual for operations in January 2024. A copy of the manual can be found in Attachment 7 of [Environmental Monitoring Quarterly Report 1 \(April 19, 2024\)](#).

4.5.1. Access and Traffic

ECC developed a traffic plan in coordination with the Hawai'i Department of Transportation and the Highways Division of the Maui County Department of Public Works. The plan's purpose is to mitigate disruption to local traffic and maximize safety precautions for highway users, particularly those on the Honoapi'ilani Highway. A copy of this plan, along with associated drawings and permits, can be found in Attachment 8 of [Environmental Monitoring Quarterly Report 1 \(April 19, 2024\)](#).

4.5.2. Stormwater Pollution Prevention

To protect the surrounding environment from stormwater runoff, Haley & Aldrich—on behalf of ECC—prepared a stormwater pollution prevention plan (SWPPP) for the TDS site in December 2023. A copy of this plan can be found in Attachment 9 of [Environmental Monitoring Quarterly Report 1 \(April 19, 2024\)](#). The SWPPP corresponds to the requirements contained in Chapter 11-55 of the *Hawai'i Administrative Rules*. Although the TDS site is exempt from permitting for a national pollutant discharge elimination system—following an emergency proclamation regarding the Lahaina Wildfires—the SWPPP follows the

format of such a permit and is intended to meet SWPPP requirements established in the *Hawai'i Administrative Rules*.

4.5.3. Emergency Responses

ECC developed an emergency response plan (ERP), which outlines procedures for unexpected leachate breaches or spills. It includes the practices listed in Table 1 regarding Section 2.3.c of Bill 120. The ERP can be found on the [webpage for debris containment](#).

4.6. Other Considerations

The TDS site also required an archaeological treatment plan and protocol for biosecurity.

4.6.1. Archaeological Treatment

On October 2, 2023, FEMA developed an archaeological treatment plan (ATP) for the TDS site as part of environmental and historic preservation efforts. A copy of this plan can be found in Attachment 10 of [Environmental Monitoring Quarterly Report 1 \(April 19, 2024\)](#). The ATP outlines a process to avoid, minimize, or mitigate anticipated adverse effects involved with activities for the TDS site while limiting unexpected and potentially extensive operational delays that could otherwise result without an established protocol. It provides a programmatic approach toward treatment measures for a historic property that may be encountered.

4.6.2. Biosecurity

TDS site contractors are following protocols outlined in an environmental compliance memorandum dated February 25, 2019, which can be found in Attachment 11 of [Environmental Monitoring Quarterly Report 1 \(April 19, 2024\)](#). The memorandum pertains to biosecurity for Hawai'i and establishes protocols, either required by statute or deemed appropriate, to prevent the introduction of harmful, invasive species into local natural areas and native habitats.

5. Monitoring and Data

In compliance with Bill 120, the TDS site is subject to monitoring of the air, personnel, leachate, soil, surface water, and groundwater. Monitoring applies to the entire life cycle of the project.

5.1. Air

Particulate matter (PM) in the air can penetrate the respiratory system, either causing or exacerbating respiratory health problems. (More information on the health effects of PM is provided by the [USEPA](#).) Considering the potential health effects, air monitoring for PM is required at the TDS site.

Air monitoring is conducted pursuant to an air monitoring and surveillance plan (AMSP) prepared by ECC for USACE. The AMSP, dated January 2024, can be found in Attachment 12 of [Environmental Monitoring Quarterly Report 1 \(April 19, 2024\)](#). Per the AMSP, air monitors, known as Dustrak monitors, are placed in the vicinity of the TDS site (Figure 2). Tetra Tech, as a USACE contractor, maintains and operates these monitors according to the AMSP that includes all debris removal work zones as well as the TDS site itself.

Figure 2 — Approximate Locations of Air Monitors



Table 2 summarizes the air monitoring readings collected to date at the TDS site:

Table 2 — Air Monitoring Measurements

Date	Average PM ₁₀ (µg/m ³)	Average PM _{2.5} (µg/m ³)	Monitor Identification Number
23-Jan-24	10.62	8.42	4, 5, 11
28-Jan-24	16.55	13.49	9, 10, 11
2-Feb-24	9.74	7.6	1, 10, 11
3-Feb-24	7.46	5.52	9
8-Feb-24	7.53	2.64	6, 11, 13
28-Feb-24	9.46	7.36	3, 4
6-Mar-24	4.33	6.06	3, 8
13-Mar-24	14.24	11.78	1, 4
14-Mar-24	5.75	3.24	1, 11
20-Mar-24	8.54	6.62	4, 10
27-Mar-24	10.24	8.35	5, 10
3-Apr-24	4.42	3.23	8, 14
10-Apr-24	8.87	6.95	8,14
17-Apr-24	11.54	8.52	1,6
24-Apr-24	5.18	3.89	11,14
1-May-24	8.76	5.72	4,12
8-May-24	12.26	9.53	1,13
15-May-24	9.47	8.87	9,10
22-May-24	11.27	8.64	10,11
29-May-24	8.36	6.38	3,16
5-Jun-24	14.61	12.62	6,9
12-Jun-24	6.08	5.74	6,15
19-Jun-24	7.95	6.84	9,14
26-Jun-24	5.97	5.13	3,9



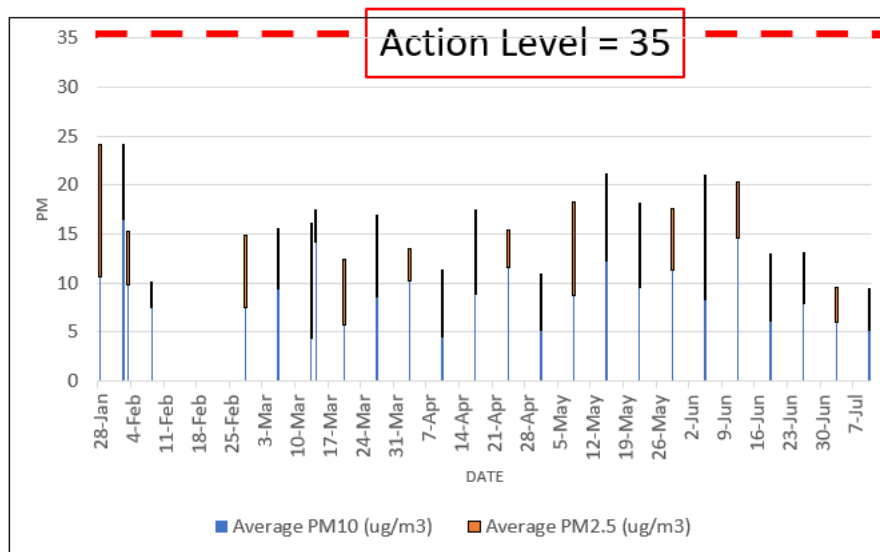
Date	Average PM ₁₀ (µg/m ³)	Average PM _{2.5} (µg/m ³)	Monitor Identification Number
3-Jul-24	5.2	3.53	15,16
10-Jul-24	8.02	4.15	6,15

Abbreviations:

- µg/m³: micrograms per cubic meter
- PM₁₀: particulate matter with diameters of 10 microns or less
- PM_{2.5}: particulate matter with diameters of 2.5 microns or less

USACE established an acceptable threshold, or “action level,” of 35 micrograms per cubic meter (µg/m³) for particulate matter at the TDS site. If measurements show concentrations of particulate matter in the air above the action level, engineering, or operating controls—such as water sprays and truck speed limits—are implemented to reduce the concentrations. Both Table 2 and Figure 3 show that there have been no measured readings of PM above the action level.

Figure 3 — Air Monitoring Data for Particulate Matter (PM) Compared to Action Level



Abbreviations:

- µg/m³: micrograms per cubic meter
- PM₁₀: particulate matter with diameters of 10 microns or less
- PM_{2.5}: particulate matter with diameters of 2.5 microns or less

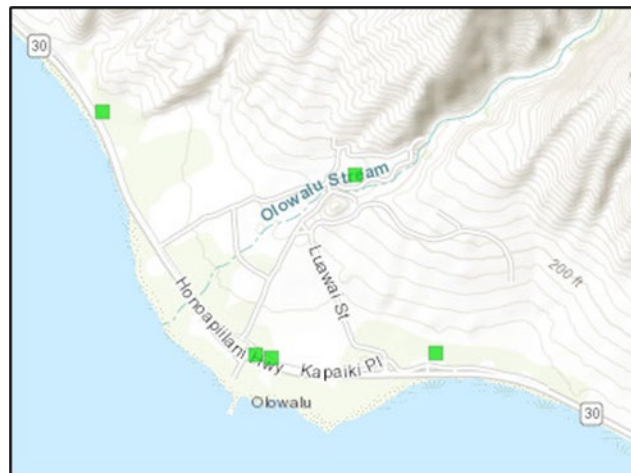
USACE has also implemented wind restrictions on operations at the TDS site: 25 miles per hour as sustained for 15 minutes. If wind speeds are faster than this limit, large truck dumping is restricted. This restriction is done for safety reasons, as the trucks are subject to tipping over. Additionally—with respect to particulate matter—high, sustained winds may blow dust or debris; ECC prepares dust



monitoring reports, included as Attachment 1, to document such circumstances. To date, wind-speed restrictions have occurred only on February 4, 2024, and April 4–6, 2024.

Lastly, DOH operates and maintains several other air monitoring stations at the locations shown in Figure 4. Specifically, DOH uses PurpleAir sensors. Data from these sensors are visualized on dashboards found on [AirNow](#) and the PurpleAir [website](#).

Figure 4 — Locations of PurpleAir Sensors in Olowalu



Both the PurpleAir and Dustrak monitoring systems provide data for particulate matter with diameters of (1) 10 microns or less, and (2) 2.5 microns or less. The measurement units are expressed as $\mu\text{g}/\text{m}^3$, which characterizes the weight of the matter (in microns) in a defined area of space (one cubic meter).

For additional information, USACE and DOH prepared a fact sheet to present and explain air monitoring around the TDS site. The fact sheet can be found in Attachment 14 of [Environmental Monitoring Quarterly Report 1 \(April 19, 2024\)](#). Additionally, DOH prepared and posted a different fact that explains air monitoring readings. This fact sheet can be found in Attachment 15 of [Environmental Monitoring Quarterly Report 1 \(April 19, 2024\)](#).

5.2. Personnel

Personnel monitoring adheres to the AMSP, which outlines air sampling procedures to assess the health and safety of ECC and contractor staff during activities that may disturb surface soil at the TDS site. The air sampling procedures apply to activities conducted by ECC and its subcontractors; they evaluate whether emission control measures are adequate to mitigate personal exposure risks. The monitoring

results also provide insight regarding whether (1) site workers are using the appropriate personal protective equipment, (2) the dust emission controls are adequate to eliminate hazardous concentrations of airborne particulate matter in the worker's breathing zone, and (3) the off-site migration of dust is mitigated.

The AMSP identifies sample collection and analytical methods and associated quality assurance and quality control procedures for personnel air monitoring. Sample analytical results are evaluated against OSHA's permissible exposure limits or threshold limit values established by the American Conference of Governmental Industrial Hygienists. The samples are analyzed by SGS Galson in Galson, New York.

ECC provided USACE with a daily air monitoring report for personnel at the TDS site until June 23, 2024. Since all air sampling results collected near excavator operators and laborers through June 23, 2024 had not detected any violations of health-based criteria established in the AMSP, this practice was discontinued.

5.3. Leachate

Leachate is a liquid, usually rainwater, that percolates through ash and debris within a lined area of working boundaries. It differs from rainwater or surface water runoff, which is diverted around the TDS working area from the surrounding hills. Stormwater is intentionally diverted around the TDS debris to minimize leachate generation.

For the TDS site, although most leachate is either absorbed into the waste mass or evaporates into the air, some may pass through ash and debris. There, the water may collect contaminants in the ash and debris—including heavy metals (such as arsenic, lead, and cobalt)—as detected by DOH ash samples collected in Lahaina.

5.3.1. Leachate Basin

All leachate collected within the TDS area is drained by gravity to a low spot in the ash and debris storage area, called a sump, where it is drained via a drainpipe to a leachate basin (Figure 5). This basin is directly below the TDS working area; it is constructed with a thick, plastic liner underneath it to prevent any infiltration into underlying soil. It differs from the percolation basin, which is below the TDS site. This percolation basin is designed to receive rainwater runoff, which is then diverted around the TDS working area. The water in this second basin does not contact ash or debris. The purpose of the

percolation basin is to allow rainwater runoff to percolate into the natural soils while avoiding the roadway and drainage channels.

Figure 5 — Leachate Basin Adjacent to Ash and Debris Storage Area



The leachate basin has a design capacity of 1.375 million gallons, which is more than is expected to be collected, even when accounting for a significant rain event in West Maui. As an example, during a rainstorm on January 9, 2024—during which over 3 inches of rain fell in less than 24 hours—the leachate basin successfully collected all the rainwater that fell directly into the empty TDS working area as well as the surrounding area (because construction was incomplete on the stormwater diversion canals). The leachate basin filled with approximately 500,000 gallons of rainwater, approximately one-third of its total holding capacity. A subsequent storm in early April – during which approximately 2 inches of rain fell in less than 24 hours – generated approximately 100,000 gallons of leachate.

For dust suppression, and to maintain capacity in the basin, leachate generated at the TDS site is being applied to debris via wet spray. During this process, most of the liquid evaporates. Personnel apply the spray throughout the workday, especially on drier days. The leachate basin continues to be mostly empty—as shown in Table 3—so fresh water is being used for dust control.

Table 3 — Leachate Basin Level Monitoring Results

Date	Water Level	Estimated Gallons
11-Jan-24	One-third of the total basin capacity	480,000
15-Feb-24	5 feet	100,000
22-Feb-24	Less than 1 foot	2,000
14-Mar-24	Less than 1 foot	2,000
24-Mar-24	0 feet	0
15-Apr-24	5 feet	100,000
15-May-24	5'	100,000
23-May-24	2'	40,000
20-Jun-24	2'	40,000
11-Jul-24	1'	25,000

5.3.2. Leachate Sampling

Because of dry conditions in West Maui, ECC collected baseline samples of runoff water directly from the leachate basin 2 days after the significant storm event on January 9, 2024 (see Section 5.3.1). At the time of the storm, no ash or debris had been placed in the TDS working area, so the runoff represented typical precipitation runoff that is unaffected by waste; therefore, it was exemplary of what normally runs off the natural soils in the area.

Since the preliminary, baseline sampling event, USACE has sampled the leachate basin periodically. USACE plans to continue sampling leachate monthly directly from the leachate basin if sufficient leachate is available in the basin to conduct the analysis. To date, USACE’s samples underwent analyses for the parameters shown in Table 4. Analyses were conducted wither by FQ Labs in Oahu or Eurofins Scientific in Seattle. The laboratories did not always analyze samples for all the parameters shown in the table, as additional parameters were added at the request of DOH and Maui County after the baseline sampling event. In addition, certain parameters were eliminated for analysis in subsequent sampling events if they were not detected in previous sampling events.



Table 4 — Leachate Sampling Analytical Results

Parameter	Method	11-Jan-24 (Baseline)	15-Apr-24 Sample	20-May-24 Sample	Unit
Ammonia	4500	NS	ND	0.11	mg/L
Antimony	6010D	< 0.010	ND	ND	mg/L
Arsenic	6010D	< 0.010	ND	ND	mg/L
Barium	6010D	0.251	0.037	0.025	mg/L
Beryllium	6010D	< 0.010	ND	ND	mg/L
Cadmium	6010D	< 0.010	ND	ND	mg/L
Carbonate	6010D	NS	6	5.6	mg/L
Chlorine	330.4	NS	ND	ND	mg/L
Chromium	6010D	0.136	0.024	0.0055	mg/L
Cobalt	6010D	0.026	0.0028	0.0020	mg/L
COD	410.4	NS	38	59	mg/L
Copper	6010D	0.042	ND	ND	mg/L
Dioxins and Furans (2,3,7,8- TCDD)	8290A	NS	ND	2.1	pg/L
Dissolved Oxygen	360.1	NS	6.5	5.0	mg/L
Herbicides	8151A	NS	0.78	ND	
Lead	6010D	< 0.010	ND	ND	mg/L
Mercury	7470A	< 0.0002	0.14	ND	mg/L
Molybdenum	6010D	< 0.010	0.0074	0.0061	mg/L
Nickel	6010D	0.078	0.0085	ND	mg/L
Nitrates	353.2	NS	21	15	mg/L
Nitrites	353.2	NS	0.32	1.5	mg/L
Oil & Grease	1664A	< 5.0	1.5	1.4	mg/L
Pesticides	8081B	NS	ND	ND	µg/L
pH	9040C	NS	7.4	8.5	



Parameter	Method	11-Jan-24 (Baseline)	15-Apr-24 Sample	20-May-24 Sample	Unit
Selenium	6010D	< 0.010	ND	ND	mg/L
Silver	6010D	< 0.010	ND	ND	mg/L
Sulfate	300	NS	230	240	mg/L
Sulfide	9034	NS	ND	ND	mg/L
SVOCs	8270D/E	NS	ND	ND	µg/L
TDS	2540C	NS	670	730	mg/L
Thallium	6010D	< 0.010	ND	ND	mg/L
TOC	5310C	NS	7.0	11.0	mg/L
Total Alkalinity	2320B	NS	44	42	mg/L
Total Nitrogen	351.2	NS	22	21	mg/L
Total PCBs	8082A	NS	ND	ND	mg/L
TPH	1664A	< 5.0	4.1	4.0	mg/L
TSS	SM 2450D	316	39	23	mg/L
Turbidity	180.1	650	80	11	NTU
Vanadium	6010D	0.13	0.017	0.011	mg/L
VOCs	8260D	NS	ND	ND	µg/L
Zinc	6010D	< 0.100	0.0048	ND	mg/L

Note: Laboratory methods may vary.

Abbreviations and Symbols:

- <: less than
- µg/L: micrograms per liter
- COD: chemical oxygen demand
- mg/L: milligrams per liter
- ND: nondetect
- NS: not sampled
- NTU: nephelometric turbidity unit
- PCB: polychlorinated biphenyl
- SVOC: semivolatile organic compound
- TCDD: Tetrachlorodibenzo-P-dioxin
- TOC: total organic carbon
- TDS: total dissolved solids
- TPH: total petroleum hydrocarbons – oil
- TSS: total suspended solids
- VOC: volatile organic compound



Attachment 2 contains the laboratory data reports for the samples analyzed during the current reporting period in Table 4.

5.4. Soil

A preconstruction assessment (see Section 4.1) divided the TDS site into five decision units—or set areas—to analyze preexisting soil conditions for contaminants. Analytical results from this assessment, summarized in Table 5, will be used once debris has been removed from the site, as the soil will be sampled at similar locations for the analysis of constituents; the preassessment measurements will serve as a data comparison. Both the preconstruction and postconstruction data will be evaluated by the County of Maui and DOH to conclude whether any action is necessary prior to grading the TDS area.

Table 5 — Preconstruction Soil Sample Analysis Results

Constituent (mg/kg)	DU -1 (mg/kg)	DU- 2 (mg/kg)	DU- 3 (mg/kg)	DU- 4 (mg/kg)	DU- 5 (mg/kg)
Antimony	0.18	0.19	0.19	0.19	0.19
Arsenic	1.4	1.5	0.73	0.584	0.94
Barium	15	15	32	40	39
Beryllium	0.56	0.66	0.6	0.75	0.66
Cadmium	0.093	0.13	0.094	0.099	0.1
Chromium	0.81	1	0.84	0.53	7
Cobalt	1.1	1.4	1.2	1.2	3
Copper	1.6	4.9	1.6	0.86	4.9
Diesel Range Organics	32	33	28	30	16
Gasoline Range Organics	2.9	1.1	1.6	1.7	1.5
Lead	2.1	1	1.1	0.97	2.2
Mercury	0.010	0.011	0.0096	0.010	0.011
Molybdenum	0.51	0.54	0.5	0.67	0.9
Nickel	0.79	1	0.92	0.53	9
Oil Range Organics	18	26	30	29	30
Selenium	4.9	5.4	3.6	3.2	3.7
Silver	0.046	0.021	0.047	0.048	0.047



Constituent (mg/kg)	DU -1 (mg/kg)	DU- 2 (mg/kg)	DU- 3 (mg/kg)	DU- 4 (mg/kg)	DU- 5 (mg/kg)
Thallium	0.14	0.15	0.14	0.14	0.14
Vanadium	1.2	1.4	1.2	1.0	8.5
Zinc	48	51	44	49	52

Abbreviations:

- DU: decision unit
- mg/kg: milligrams per kilogram

A summary of the sampling approach is included in Attachment 3 of [Environmental Monitoring Quarterly Report 1 \(April 19, 2024\)](#).

5.5. Surface Water

Because there have been no observable releases of leachate from the TDS site, there has been no need to sample surface water in creeks or drainage ditches adjacent to the TDS; however, DOH reviewed coastal water quality data from the University of Hawai'i and the Surfrider Foundation Maui. From the review, DOH affirms that these data show that there are no ash- or fire-related chemicals present in the surface water at concentrations that threaten human health.

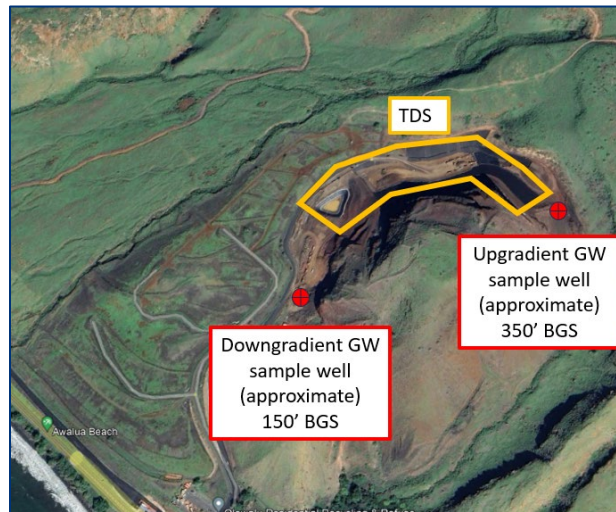
DOH initiated a water quality monitoring program that covers nearshore monitoring and includes eight locations from Olowalu to Kaanapali. Results are available on the DOH [website](#) as well as the [webpage for debris containment](#).

5.6. Groundwater

To comply with Bill 120, FEMA directed USACE to install temporary groundwater detection monitoring wells around the TDS site. In response, contractors to USACE installed one upgradient (uphill) and one downgradient (downhill), as shown in Figure 6. Groundwater monitoring wells are used to specifically to measure or monitor the level, quality, quantity, or movement of subsurface water. More information on the installation methods can be found at <https://www.epa.gov/quality/design-and-installation-monitoring-wells>.



Figure 6 — Locations of Groundwater Monitoring Wells



Abbreviations: GW: groundwater, BGS: below ground surface

The upgradient groundwater monitoring well was installed to a depth of approximately 350' below ground surface (BGS) and the downgradient groundwater monitoring well was installed to a depth of 150' BGS. The difference in drilling depths reflects the approximate difference in ground surface elevation. The installation of one of the wells is shown in Figure 7.

Figure 7 — Drill Rig Installing Groundwater Monitoring Well at TDS Site



The groundwater monitoring wells were installed using a hollow stem auger, which uses a series of hollow, interconnected augers to bore into the ground and create a hole, which is encased in impermeable grout and sealed to eliminate the infiltration of liquids into the casing above the target groundwater source being monitored. The bottom of the casing consists of a permeable screen which allows the groundwater to enter the well casing so it can be sampled at the desired depth.

USACE collected the first groundwater samples from these monitoring wells on July 7, 2024. The sampling parameters are found in the Table 6.

Table 6 — Sampling Parameters for TDS Site Groundwater Monitoring Wells

Major cations & anions	Symbol	Units
Magnesium	Mg	mg/L
Sodium	Na	mg/L
Calcium	Ca	mg/L
Potassium	K	mg/L
Chlorine	Cl	mg/L
Carbonate	CO ₃	mg/L
Sulfate	SO ₄	mg/L
Bicarbonate	HCO ₃	mg/L



Major Leachate Indicators	Symbol	Units
Total Dissolved Solids	TDS	mg/L
Total Organic Carbon	TOC	mg/L
Total Alkalinity		mg/L
Nitrogen-Ammonia		mg/L
Chlorine	Cl	mg/L
Iron	Fe	mg/L
Field Parameters	Symbol	Units
Electrical conductance	σ	S/m
pH		
Temperature		degrees
Turbidity		NTU
Metals	Symbol	Units
Arsenic	As	mg/L
Lead	Pb	mg/L
Antimony	An	mg/L
Cobalt	Co	mg/L
Copper	Cu	mg/L

Abbreviations and Symbols:

- <: less than
- mg/L: milligrams per liter
- S/M: Siemens/meter
- NTU: nephelometric turbidity unit



Sample were taken on July 7, 2024, and are currently being analyzed. Results will be posted in the Environmental Monitoring Summary posted on the [webpage for debris containment](#) as soon as possible. Samples will continue to be collected quarterly (every 3 months) for laboratory analysis; this is a typical frequency for waste storage and disposal facilities.



Attachment 1. Dust Monitoring Reports





Daily Dust Monitoring Report: April 24, 2024

Temporary Debris Storage

Summary:

The ECC field staff and field crews continued to follow the prescribed methods of dust suppression and notification procedures.

The crews continue to use water for dust suppression all day.

No exceedances occurred.

Weather Summary

Temperature (F range): 72.5-84.8

RH (% range): 55-70

Precipitation total (in):0

Avg. Wind Speed (mph): 4.05

Wind Direction: W SW

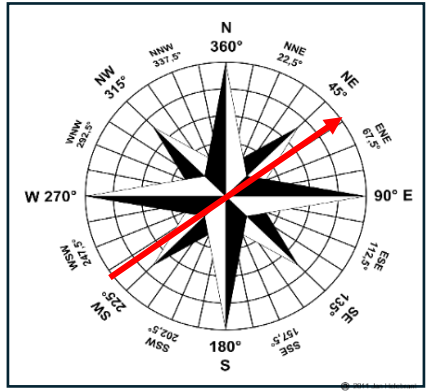
Station Location Summary:

Station 11 and Station 14 were set up around the **Temporary Debris Storage**

Station Data:

- Debris removal

		Envizor-11	Envizor-14	Exceedance Limit	Action Limit
PM 2.5	Avg. ug/M3	4.21	3.58	70	35
PM 10	Avg. ug/M3	5.42	4.94	300	150





Daily Dust Monitoring Report: May 1, 2024

Temporary Disposal Site

Summary:

The ECC field staff and field crews continued to follow the prescribed methods of dust suppression and notification procedures.

The crews continue to use water for dust suppression all day.

No exceedances occurred.

Weather Summary- Station 2

Temperature (F range): 74.7-83.8

RH (% range): 60-74

Precipitation total (in):0

Avg. Wind Speed (mph): 4.73

Wind Direction: W SW

Station Location Summary:

Station 4 +Sensitive Receptor and Station 12 were set up around the **Temporary Disposal Site**

Station Data:

- Debris removal

		Envizor-4	Envizor-12	Exceedance Limit	Action Limit
PM 2.5	Avg. ug/M3	7.77	3.66	70	35
PM 10	Avg. ug/M3	11.16	6.36	300	150



Temporary Debris Storage	
Envizor-4/SR	20.827, -156.6328
Envizor-12	20.8313, -156.6323



Daily Dust Monitoring Report: May 8, 2024

Lahaina Temporary Disposal Site

Summary:

The ECC field staff and field crews continued to follow the prescribed methods of dust suppression and notification procedures.

The crews continue to use water for dust suppression all day.

No exceedances occurred.

Weather Summary- Station 2

Temperature (F range): 72.3-82.1

RH (% range): 62-74

Precipitation total (in):0

Avg. Wind Speed (mph): 4.88

Wind Direction: W NW

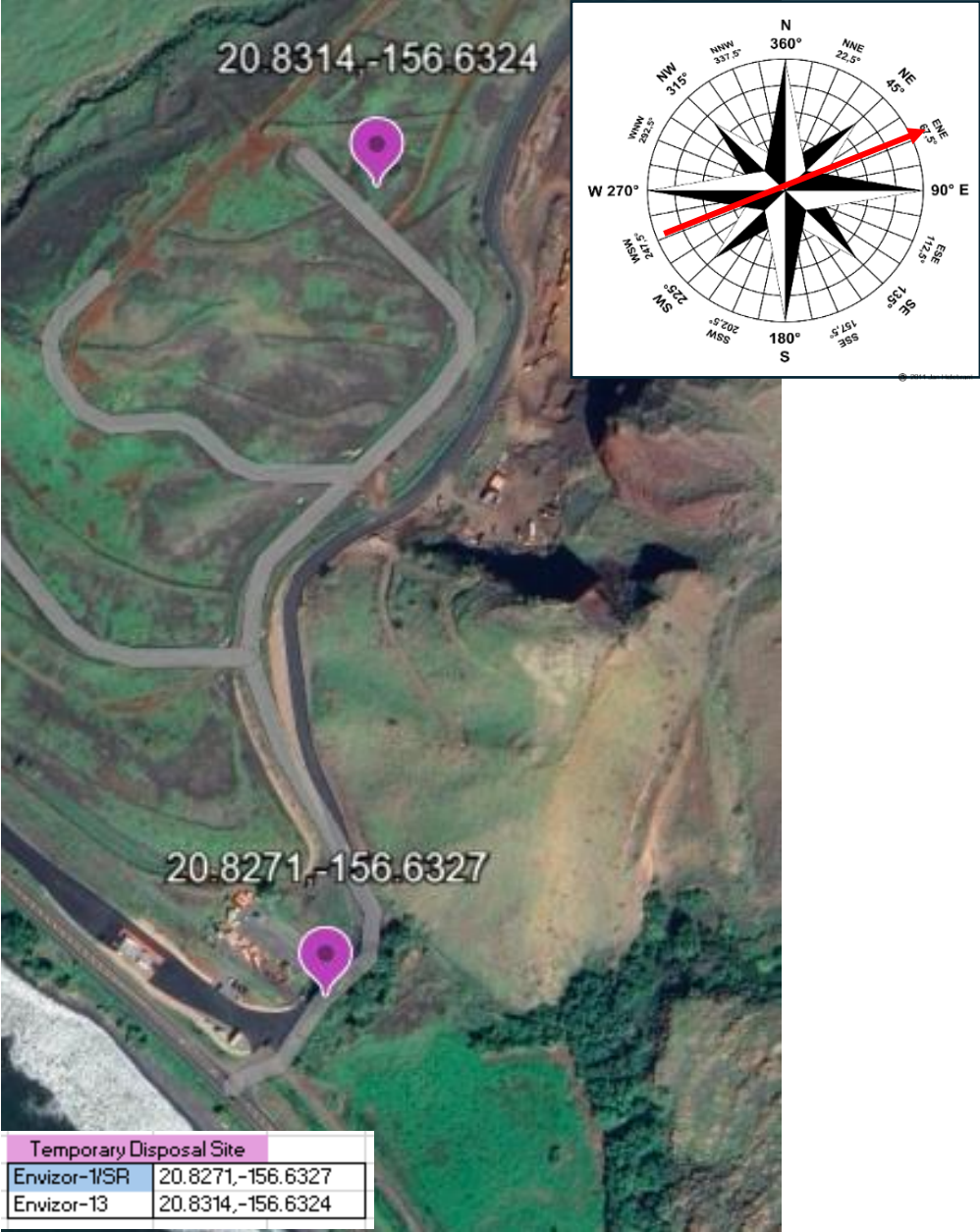
Station Location Summary:

Station 1 + Sensitive Receptor and Station 13 were set up around **the Temporary Disposal Site** for continued debris removal air monitoring.

Station Data:

Temporary Disposal Site

		Envizor-1	Envizor-13	Exceedance Limit	Action Limit
PM 2.5	Avg. ug/M3	13.34	5.72	70	35
PM 10	Avg. ug/M3	18.26	6.25	300	150





Daily Dust Monitoring Report: May 15, 2024

Temporary Disposal Site

Summary:

The ECC field staff and field crews continued to follow the prescribed methods of dust suppression and notification procedures.

The crews continue to use water for dust suppression all day.

No exceedances occurred.

Weather Summary- Station 2

Temperature (F range): 74.4-86.2

RH (% range): 64-84

Precipitation total (in):0

Avg. Wind Speed (mph): 4.35

Wind Direction: S SE

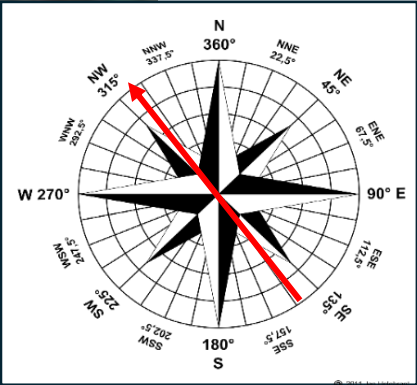
Station Location Summary:

Station 10 and Station 9+ Sensitive Receptor were set up around **the Temporary Disposal Site** for continued debris removal air monitoring.

Station Data:

- Disposal Site

		Envizor-9	Envizor-10	Exceedance Limit	Action Limit
PM2.5	Avg. ug/M3	7.29	10.45	70	35
PM10	Avg. ug/M3	8.11	10.82	300	150





Daily Dust Monitoring Report: May 22, 2024

Temporary Debris Storage

Summary:

The ECC field staff and field crews continued to follow the prescribed methods of dust suppression and notification procedures.

The crews continue to use water for dust suppression all day.

No exceedances occurred.

Weather Summary- Station 2

Temperature (F range): 78.3-86.6

RH (% range): 60-75

Precipitation total (in):0

Avg. Wind Speed (mph): 4.01

Wind Direction: S SW

Station Location Summary:

Station 10 +Sensitive Receptor and Station 11 were set up around **The Temporary Disposal Site** for continued debris removal air monitoring.

Station Data:

- Debris removal

		Envizor-10	Envizor-11	Exceedance Limit	Action Limit
PM 2.5	Avg, ug/M3	13.58	3.69	70	35
PM 10	Avg, ug/M3	16.71	5.83	300	150





Daily Dust Monitoring Report: May 29, 2024

Temporary Debris Storage

Summary:

The ECC field staff and field crews continued to follow the prescribed methods of dust suppression and notification procedures.

The crews continue to use water for dust suppression all day.

No exceedances occurred.

Weather Summary- Station 2

Temperature (F range): 76.2-87.4

RH (% range): 54-72

Precipitation total (in):0

Avg. Wind Speed (mph): 4.54

Wind Direction: W SW

Station Location Summary:

Station 3 + Sensitive Receptor and Station 16 were set up around **the Temporary Debris Storage** for continued debris removal air monitoring.

Station Data:

		Envizor-3	Envizor-16	Exceedance Limit	Action Limit
PM 2.5	Avg. ug/M3	8.36	4.39	70	35
PM 10	Avg. ug/M3	11.65	5.07	300	150





Daily Dust Monitoring Report: June 5, 2024

Temporary Disposal Site

Summary:

The ECC field staff and field crews continued to follow the prescribed methods of dust suppression and notification procedures.

The crews continue to use water for dust suppression all day.

No exceedances occurred.

Weather Summary- Station 2

Temperature (F range): 76.8-87.1

RH (% range): 55-74

Precipitation total (in):0

Avg. Wind Speed (mph): 3.38

Wind Direction: W SW

Station Location Summary:

Station 9 + Sensitive Receptor and Station 6 were set up around **the Temporary Disposal Site** for continued debris removal air monitoring.

Station Data:

- Debris removal

		Envizor-6	Envizor-9	Exceedance Limit	Action Limit
PM 2.5	Avg. ug/M3	11.43	13.82	70	35
PM 10	Avg. ug/M3	14.16	15.06	300	150





Daily Dust Monitoring Report: June 12, 2024

Temporary Disposal Site

Summary:

The ECC field staff and field crews continued to follow the prescribed methods of dust suppression and notification procedures.

The crews continue to use water for dust suppression all day.

No exceedances occurred.

Weather Summary- Station 2

Temperature (F range): 77.2-87.9

RH (% range): 55-77

Precipitation total (in):0

Avg. Wind Speed (mph): 3.38

Wind Direction: W SW

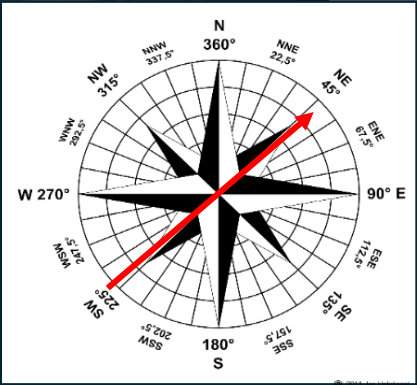
Station Location Summary:

Station 6 and Station 15 were set up around **the Temporary Disposal Site** for continued debris removal air monitoring.

Station Data:

- Debris removal

		Envizor-6	Envizor-15	Exceedance Limit	Action Limit
PM 2.5	Avg. ug/M3	5.99	5.50	70	35
PM 10	Avg. ug/M3	7.59	4.57	300	150





Daily Dust Monitoring Report: June 19, 2024

Temporary Disposal Site

Summary:

The ECC field staff and field crews continued to follow the prescribed methods of dust suppression and notification procedures.

The crews continue to use water for dust suppression all day.

No exceedances occurred.

Weather Summary- Station 2

Temperature (F range): 80.6-86.1

RH (% range): 56-66

Precipitation total (in):0

Avg. Wind Speed (mph): 5.17

Wind Direction: W SW

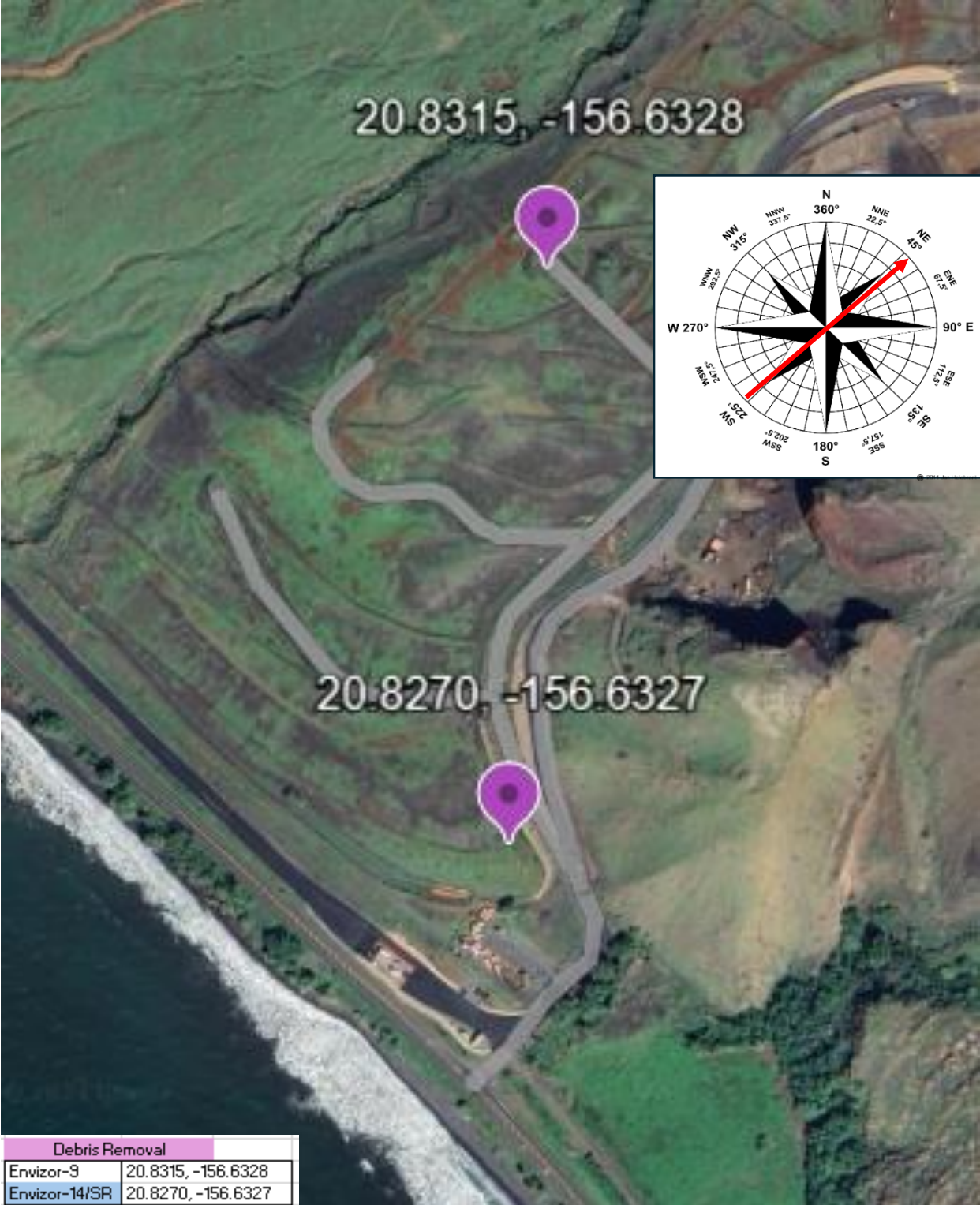
Station Location Summary:

Station 9 and Station 14+ Sensitive Receptor were set up around **the Temporary Disposal Site.** for continued debris removal air monitoring.

Station Data:

- Debris removal

		Envizor-9	Envizor-14	Exceedance Limit	Action Limit
PM 2.5	Avg. ug/M3	7.52	6.16	70	35
PM 10	Avg. ug/M3	7.91	7.99	300	150



Debris Removal	
Envizor-9	20.8315, -156.6328
Envizor-14/SR	20.8270, -156.6327



Daily Dust Monitoring Report: June 26, 2024

Temporary Disposal Site

Summary:

The ECC field staff and field crews continued to follow the prescribed methods of dust suppression and notification procedures.

The crews continue to use water for dust suppression all day.

No exceedances occurred.

Weather Summary- Station 2

Temperature (F range): 74.2-86.1

RH (% range): 59-78

Precipitation total (in):0

Avg. Wind Speed (mph): 4.63

Wind Direction: W SW

Station Location Summary:

Station 3 and Station 9 + Sensitive Receptor were set up around **the Temporary Disposal Site.** for continued debris removal air monitoring.

Station Data:

- Temporary Disposal Site

		Envizor-3	Envizor-9	Exceedance Limit	Action Limit
PM2.5	Avg. ug/M3	1.88	8.38	70	35
PM10	Avg. ug/M3	2.73	9.20	300	150



Temporary Disposal Site	
Envizor-3	20.8312, -156.6323
Envizor-9/SR	20.827, -156.6327



Daily Dust Monitoring Report: July 3, 2024

Temporary Disposal Site

Summary:

The ECC field staff and field crews continued to follow the prescribed methods of dust suppression and notification procedures.

The crews continue to use water for dust suppression all day.

No exceedances occurred.

Weather Summary- Station 2

Temperature (F range): 76.1-

RH (% range): 53-74

Precipitation total (in):0

Avg. Wind Speed (mph): 3.90

Wind Direction: W SW

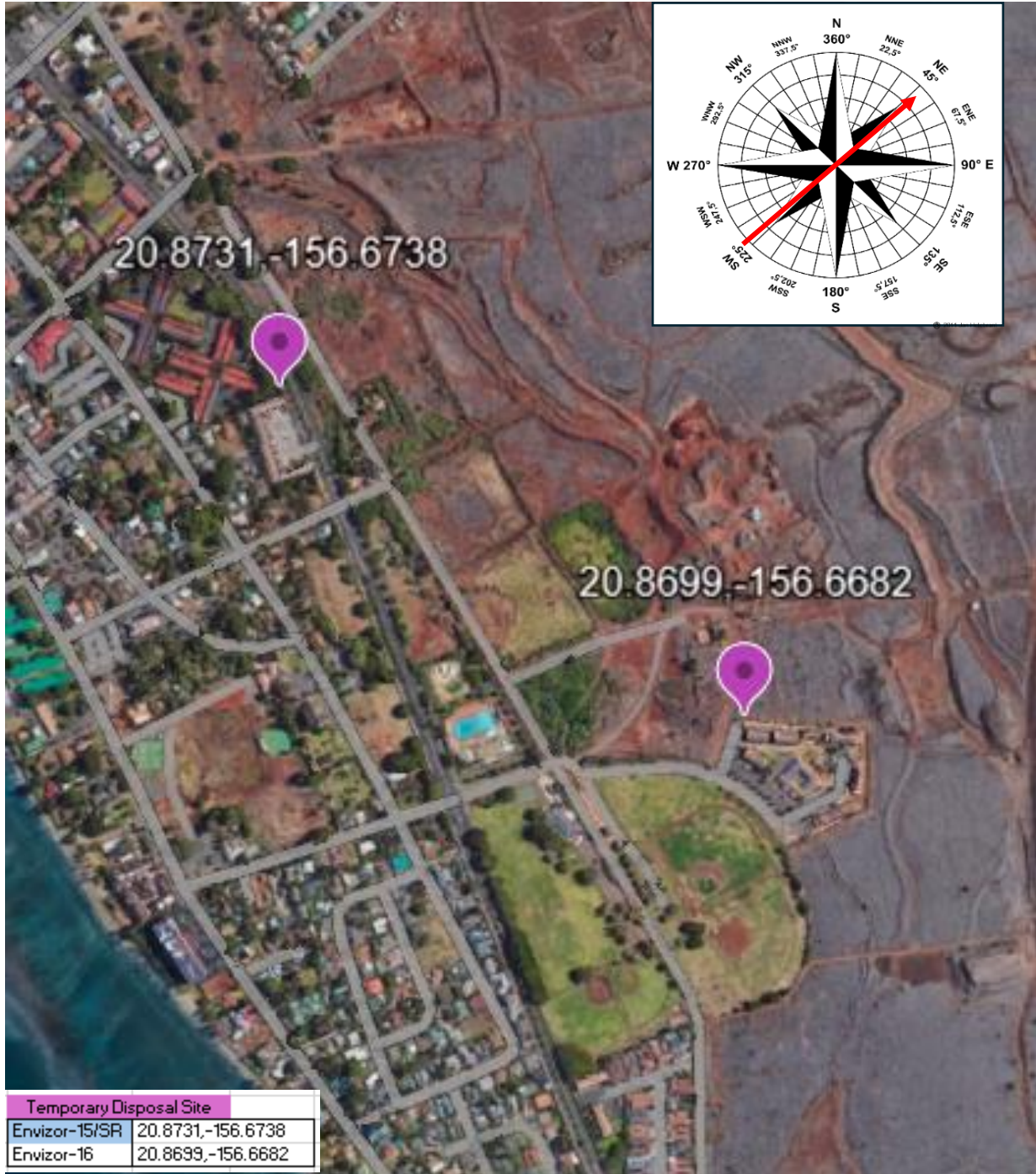
Station Location Summary:

Station 15+ Sensitive Receptor and Station 16 were set up around **the Temporary Disposal Site** for continued debris removal air monitoring.

Station Data:

- Temporary Disposal Site

		Envizor-15	Envizor-16	Exceedance Limit	Action Limit
PM 2.5	Avg. ug/M3	3.21	3.85	70	35
PM 10	Avg. ug/M3	5.95	4.44	300	150





Daily Dust Monitoring Report: July 10, 2024

Temporary Disposal Site

Summary:

The ECC field staff and field crews continued to follow the prescribed methods of dust suppression and notification procedures.

The crews continue to use water for dust suppression all day.

No exceedances occurred.

Weather Summary- Station 2

Temperature (F range): 77.5-88.6

RH (% range): 49-83

Precipitation total (in):0

Avg. Wind Speed (mph): 11.75

Wind Direction: W SW

Station Location Summary:

Station 6 +Sensitive Receptor and Station 15 were set up around the **Temporary Disposal Site** for continued debris removal air monitoring.

Station Data:

- Debris removal

		Envizor-6	Envizor-15	Exceedance Limit	Action Limit
PM 2.5	Avg, ug/M3	7.29	5.02	70	35
PM 10	Avg, ug/M3	10.50	5.53	300	150



Attachment 2. Leachate Analysis Laboratory Data Reports



 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Mr. Jackson Kiker
Environmental Chemical Corp.
43 Broad St
Suite A301
Hudson, Massachusetts 01749

Generated 4/30/2024 11:10:04 AM

JOB DESCRIPTION

2023 Maui Fires - Lahaina, Maui

JOB NUMBER

580-138970-1

Eurofins Seattle

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



Authorized for release by
Katie Grant, Project Manager I
Katie.Grant@et.eurofinsus.com
(253)922-2310

Generated
4/30/2024 11:10:04 AM



Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Definitions	8
Client Sample Results	10
QC Sample Results	16
Chronicle	40
Certification Summary	42
Sample Summary	44
Chain of Custody	45
Receipt Checklists	49
Isotope Dilution Summary	51

Case Narrative

Client: Environmental Chemical Corp.
Project: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Job ID: 580-138970-1

Eurofins Seattle

Job Narrative 580-138970-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Receipt

The samples were received on 4/18/2024 9:05 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 3.6°C and 5.1°C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

Receipt Exceptions

The following sample was collected in an improper container: TDS-RP-15APR24 (580-138970-1). The containers for analyses NH3, CN, TKN, TOC, and COD were received unpreserved. These containers were preserved at the laboratory.

Method 8260D - Volatile Organic Compounds (GC/MS)

Samples TDS-RP-15APR24 (580-138970-1) and Trip Blank (580-138970-2) were analyzed for Volatile Organic Compounds (GC/MS). The samples were analyzed on 4/23/2024, 4/24/2024 and 4/25/2024.

The response for Acrolein in the continuing calibration verification (CCV) marginally exceeds, low-biased, the DoD acceptance criteria on batch 410-497729. Due to the marginal nature of the outlier(s), the data is reported.

The preservative used in the sample containers provided is not compatible with the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TDS-RP-15APR24 (580-138970-1) and Trip Blank (580-138970-2). The requested target analyte list includes Acrolein and Acrylonitrile, acid-labile compounds that degrade in an acidic medium.

Method 8270D - Semivolatile Organic Compounds (GC/MS)

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Semivolatile Organic Compounds (GC/MS). The sample was prepared on 4/22/2024 and analyzed on 4/23/2024.

Method 8015D DRO - Diesel Range Organics (DRO) (GC)

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Diesel Range Organics (DRO) (GC). The sample was prepared on 4/19/2024 and analyzed on 4/20/2024.

The laboratory control sample (LCS) for preparation batch 410-496441 and analytical batch 410-496536 recovered below control limits for the following analytes: ORO (>C28-C40). The associated sample(s) was re-prepared and re-analyzed outside holding time and the QC is again outside control limits for the following analytes: DRO (C10-C28) and ORO (>C28-C40). Since holding time expired prior to re-analysis, data from the first trial is reported.

Method 8151A DOD - Herbicides (GC)

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Herbicides (GC). The sample was prepared on 4/21/2024 and analyzed on 4/23/2024.

Method 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Polychlorinated Biphenyls (PCBs) by Gas Chromatography. The sample was prepared on 4/19/2024 and analyzed on 4/22/2024.

Eurofins Seattle

Case Narrative

Client: Environmental Chemical Corp.
Project: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Job ID: 580-138970-1 (Continued)

Eurofins Seattle

Method 8081B - Organochlorine Pesticides (GC)

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Organochlorine Pesticides (GC). The sample was prepared on 4/19/2024 and analyzed on 4/22/2024.

The following sample was diluted due to the nature of the sample matrix: TDS-RP-15APR24 (580-138970-1). Elevated reporting limits (RLs) are provided.

The continuing calibration verification (CCV) associated with batch 410-496782 recovered above the upper control limit for Tetrachloro-m-xylene on one column. Result is reported from the passing column. TDS-RP-15APR24 (580-138970-1).

The continuing calibration verification (CCV) associated with batch 410-496782 recovered above the upper control limit for Toxaphene, Toxaphene Peak 2, Toxaphene Peak 3, Toxaphene Peak 4 and Toxaphene Peak 5. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is : TDS-RP-15APR24 (580-138970-1).

Method EPA 300.0 R2.1 - Anions, Ion Chromatography

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Anions, Ion Chromatography. The sample was analyzed on 4/20/2024.

Sample TDS-RP-15APR24 (580-138970-1)[20x] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Method 9056A - Anions, Ion Chromatography

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Anions, Ion Chromatography. The sample was analyzed on 4/19/2024 and 4/20/2024.

Samples TDS-RP-15APR24 (580-138970-1)[20x] and TDS-RP-15APR24 (580-138970-1)[5x] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Method 8290A - Dioxins and Furans (HRGC/HRMS)

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Dioxins and Furans (HRGC/HRMS). The sample was prepared on 4/22/2024 and analyzed on 4/24/2024.

The Isotope Dilution Analyte (IDA) recovery associated with the following Quality Control sample is above the method recommended limit: (MB 410-496862/1-A). IDA passes ion ratio and signal to noise criteria. There are no detections above the MDL in this method blank.

Method 6010D - Metals (ICP)

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Metals (ICP). The sample was prepared on 4/22/2024 and analyzed on 4/25/2024.

Method 6010D - Metals (ICP) - TCLP

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Metals (ICP) - TCLP. The sample was leached on 4/19/2024, prepared on 4/22/2024 and analyzed on 4/23/2024.

Method 7470A - Mercury (CVAA)

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Mercury (CVAA). The sample was prepared and analyzed on 4/23/2024.

Method 7470A - Mercury (CVAA) - TCLP

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Mercury (CVAA) - TCLP. The sample was leached on 4/19/2024 and prepared and analyzed on 4/22/2024.

Method 1010B - Ignitability, Pensky-Martens Closed-Cup Method

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Ignitability, Pensky-Martens Closed-Cup Method. The sample was analyzed on 4/19/2024 and 4/20/2024.

Method 1664B - HEM and SGT-HEM

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for HEM and SGT-HEM. The sample was analyzed on 4/22/2024.

Eurofins Seattle

Case Narrative

Client: Environmental Chemical Corp.
Project: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Job ID: 580-138970-1 (Continued)

Eurofins Seattle

Method 180.1 - Turbidity, Nephelometric

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Turbidity, Nephelometric. The sample was analyzed on 4/21/2024.

Sample TDS-RP-15APR24 (580-138970-1)[5x] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Method 2320B-2011 - Alkalinity, Total

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Alkalinity, Total. The sample was analyzed on 4/23/2024.

Method 2340C-2011 - Hardness, Total

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Hardness, Total. The sample was analyzed on 4/20/2024 and 4/23/2024.

Sample TDS-RP-15APR24 (580-138970-1)[10x] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Method 2540C - 2015 - Solids, Total Dissolved (TDS)

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Solids, Total Dissolved (TDS). The sample was analyzed on 4/19/2024.

Method 2540D-2015 - Solids, Total Suspended (TSS)

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Solids, Total Suspended (TSS). The sample was analyzed on 4/19/2024.

Method 330.4 - Chlorine, Total Residual

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Chlorine, Total Residual. The sample was analyzed on 4/23/2024.

Method 351.2 - Nitrogen, Total Kjeldahl

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Nitrogen, Total Kjeldahl. The sample was prepared on 4/23/2024 and analyzed on 4/24/2024.

The reference method requires samples to be preserved to a pH of <2. The following sample was received with insufficient preservation at a pH of 7: TDS-RP-15APR24 (580-138970-1). The sample(s) were preserved to the appropriate pH in the laboratory.

This does not meet regulatory requirements.

Method 360.1 - Oxygen, Dissolved

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Oxygen, Dissolved. The sample was analyzed on 4/23/2024.

Method 410.4 - COD

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for COD. The sample was analyzed on 4/22/2024.

The reference method requires samples to be preserved to a pH of <2. The following sample was received with insufficient preservation at a pH of 7: TDS-RP-15APR24 (580-138970-1) and could not be adjusted. This does not meet regulatory requirements.

Method 5310 C-2014 - Total Organic Carbon/Persulfate - Ultrav

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Total Organic Carbon/Persulfate - Ultrav. The sample was analyzed on 4/27/2024.

Method 9012 - Cyanide, Reactive

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Cyanide, Reactive. The sample was prepared and analyzed on 4/23/2024.

Method 9012A - Cyanide, Total and/or Amenable

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Cyanide, Total and/or Amenable. The sample was prepared and analyzed on 4/24/2024.

Method 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric)

Eurofins Seattle

Case Narrative

Client: Environmental Chemical Corp.
Project: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Job ID: 580-138970-1 (Continued)

Eurofins Seattle

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Sulfide, Acid Soluble and Insoluble (Titrimetric). The sample was analyzed on 4/22/2024.

The container for sulfide is not preserved with zinc acetate.

TDS-RP-15APR24 (580-138970-1)

Method 9034 - Sulfide, Reactive

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Sulfide, Reactive. The sample was prepared and analyzed on 4/23/2024.

Method 9040C - pH

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for pH. The sample was analyzed on 4/23/2024.

Method Nitrogen,Org - Nitrogen, Organic

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Nitrogen, Organic. The sample was analyzed on 4/24/2024.

Method Total Nitrogen - Nitrogen, Total

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Nitrogen, Total. The sample was analyzed on 4/25/2024.

Method 4500 NH3 D-2011 - Ammonia

Sample TDS-RP-15APR24 (580-138970-1) was analyzed for Ammonia. The sample was analyzed on 4/23/2024.

Sample TDS-RP-15APR24 (580-138970-1)[5x] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The reference method requires samples to be preserved to a pH of <2. The following sample was received with insufficient preservation at a pH of 7: TDS-RP-15APR24 (580-138970-1) and could not be adjusted. This does not meet regulatory requirements.

The following sample was diluted due to the nature of the sample matrix: TDS-RP-15APR24 (580-138970-1). Elevated reporting limits (RLs) are provided.

Eurofins Seattle

Definitions/Glossary

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
M	Manual integrated compound.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

GC/MS VOA TICs

Qualifier	Qualifier Description
N	Nontarget analyte: The analyte is a tentatively identified compound (using mass spectroscopy).

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
M	Manual integrated compound.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
N	Nontarget analyte: The analyte is a tentatively identified compound (using mass spectroscopy).

GC Semi VOA

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
M	Manual integrated compound.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

HPLC/IC

Qualifier	Qualifier Description
D	The reported value is from a dilution.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
U	Undetected at the Limit of Detection.

Dioxin

Qualifier	Qualifier Description
M	Manual integrated compound.
U	Undetected at the Limit of Detection.

Metals

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

General Chemistry

Qualifier	Qualifier Description
D	The reported value is from a dilution.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
U	Undetected at the Limit of Detection.

Definitions/Glossary

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Client Sample ID: TDS-RP-15APR24

Lab Sample ID: 580-138970-1

Date Collected: 04/15/24 14:45

Matrix: Water

Date Received: 04/18/24 09:05

Method: SW846 8260D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	6.0	U Q	100	3.0	ug/L			04/24/24 01:36	1
Acrylonitrile	3.2	U	20	1.6	ug/L			04/24/24 01:36	1
Benzene	0.60	U	1.0	0.30	ug/L			04/24/24 01:36	1
Carbon tetrachloride	0.60	U	1.0	0.30	ug/L			04/24/24 01:36	1
Chloroethane	0.60	U	1.0	0.30	ug/L			04/24/24 01:36	1
Chloroform	0.60	U	1.0	0.30	ug/L			04/24/24 01:36	1
Chloromethane	1.1	U	2.0	0.55	ug/L			04/24/24 01:36	1
1,2-Dichlorobenzene	0.50	U	5.0	0.20	ug/L			04/24/24 01:36	1
1,3-Dichlorobenzene	1.4	U	5.0	0.68	ug/L			04/24/24 01:36	1
1,4-Dichlorobenzene	0.60	U	5.0	0.30	ug/L			04/24/24 01:36	1
1,2-Dichloroethane	0.60	U	1.0	0.30	ug/L			04/24/24 01:36	1
1,1-Dichloroethene	0.60	U	1.0	0.30	ug/L			04/24/24 01:36	1
trans-1,2-Dichloroethene	1.4	U	2.0	0.70	ug/L			04/24/24 01:36	1
1,2-Dichloropropane	0.60	U	1.0	0.30	ug/L			04/24/24 01:36	1
1,3-Dichloropropane	0.60	U	1.0	0.30	ug/L			04/24/24 01:36	1
2,2-Dichloropropane	0.60	U	1.0	0.30	ug/L			04/24/24 01:36	1
trans-1,3-Dichloropropene	0.50	U	1.0	0.20	ug/L			04/24/24 01:36	1
Ethylbenzene	0.80	U	1.0	0.40	ug/L			04/24/24 01:36	1
Hexachlorobutadiene	4.0	U	5.0	2.0	ug/L			04/24/24 01:36	1
1,1,1,2-Tetrachloroethane	0.60	U	1.0	0.30	ug/L			04/24/24 01:36	1
1,1,2,2-Tetrachloroethane	0.60	U	1.0	0.30	ug/L			04/24/24 01:36	1
Tetrachloroethene	0.60	U	1.0	0.30	ug/L			04/24/24 01:36	1
Toluene	0.60	U	1.0	0.30	ug/L			04/24/24 01:36	1
1,1,1-Trichloroethane	0.60	U	1.0	0.30	ug/L			04/24/24 01:36	1
1,1,2-Trichloroethane	0.60	U	1.0	0.30	ug/L			04/24/24 01:36	1
Trichloroethene	0.60	U	1.0	0.30	ug/L			04/24/24 01:36	1
Vinyl chloride	0.60	U	1.0	0.30	ug/L			04/24/24 01:36	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A		04/24/24 01:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		89 - 112		04/24/24 01:36	1
1,2-Dichloroethane-d4 (Surr)	96	Q	81 - 118		04/24/24 01:36	1
4-Bromofluorobenzene (Surr)	100		85 - 114		04/24/24 01:36	1
Dibromofluoromethane (Surr)	102		80 - 119		04/24/24 01:36	1

Method: SW846 8260D - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachloroethane	4.1	U	5.0	2.1	ug/L			04/25/24 22:21	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	27	N	ug/L		0.96	N/A		04/25/24 22:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		89 - 112		04/25/24 22:21	1
1,2-Dichloroethane-d4 (Surr)	96	Q	81 - 118		04/25/24 22:21	1
4-Bromofluorobenzene (Surr)	96		85 - 114		04/25/24 22:21	1
Dibromofluoromethane (Surr)	96		80 - 119		04/25/24 22:21	1

Client Sample Results

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Client Sample ID: TDS-RP-15APR24

Lab Sample ID: 580-138970-1

Date Collected: 04/15/24 14:45

Matrix: Water

Date Received: 04/18/24 09:05

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzidine	54	U Q	82	27	ug/L		04/22/24 15:30	04/23/24 09:19	1
Bis(2-chloroethyl)ether	1.4	U	2.7	0.68	ug/L		04/22/24 15:30	04/23/24 09:19	1
Bis(2-ethylhexyl) phthalate	5.4	U	6.8	2.7	ug/L		04/22/24 15:30	04/23/24 09:19	1
2-Chlorophenol	1.4	U	2.7	0.68	ug/L		04/22/24 15:30	04/23/24 09:19	1
3,3'-Dichlorobenzidine	11	U	14	5.4	ug/L		04/22/24 15:30	04/23/24 09:19	1
2,4-Dichlorophenol	1.4	U	2.7	0.68	ug/L		04/22/24 15:30	04/23/24 09:19	1
Diethyl phthalate	5.4	U	6.8	2.7	ug/L		04/22/24 15:30	04/23/24 09:19	1
2,4-Dimethylphenol	12	U	14	4.1	ug/L		04/22/24 15:30	04/23/24 09:19	1
Dimethyl phthalate	5.4	U	6.8	2.7	ug/L		04/22/24 15:30	04/23/24 09:19	1
Di-n-butyl phthalate	5.4	U Q	6.8	2.7	ug/L		04/22/24 15:30	04/23/24 09:19	1
2,4-Dinitrophenol	38	U	41	19	ug/L		04/22/24 15:30	04/23/24 09:19	1
2,4-Dinitrotoluene	2.7	U	6.8	1.4	ug/L		04/22/24 15:30	04/23/24 09:19	1
2,6-Dinitrotoluene	1.4	U M Q	2.7	0.68	ug/L		04/22/24 15:30	04/23/24 09:19	1
Hexachlorobenzene	0.30	U	0.68	0.15	ug/L		04/22/24 15:30	04/23/24 09:19	1
Hexachlorocyclopentadiene	14	U	15	6.8	ug/L		04/22/24 15:30	04/23/24 09:19	1
Hexachloroethane	1.4	U	6.8	0.68	ug/L		04/22/24 15:30	04/23/24 09:19	1
Isophorone	1.4	U Q	2.7	0.68	ug/L		04/22/24 15:30	04/23/24 09:19	1
4,6-Dinitro-o-cresol	27	U M Q	29	11	ug/L		04/22/24 15:30	04/23/24 09:19	1
Nitrobenzene	1.4	U M Q	2.7	0.68	ug/L		04/22/24 15:30	04/23/24 09:19	1
2-Nitrophenol	2.7	U Q	6.8	1.4	ug/L		04/22/24 15:30	04/23/24 09:19	1
4-Nitrophenol	27	U	41	14	ug/L		04/22/24 15:30	04/23/24 09:19	1
N-Nitrosodimethylamine	5.4	U	6.8	2.7	ug/L		04/22/24 15:30	04/23/24 09:19	1
N-Nitrosodiphenylamine	1.4	U	2.7	0.68	ug/L		04/22/24 15:30	04/23/24 09:19	1
bis(chloroisopropyl) ether	1.4	U	2.7	0.68	ug/L		04/22/24 15:30	04/23/24 09:19	1
Pentachlorophenol	5.4	U M	6.8	1.4	ug/L		04/22/24 15:30	04/23/24 09:19	1
Phenol	1.4	U	2.7	0.68	ug/L		04/22/24 15:30	04/23/24 09:19	1
1,2,4,5-Tetrachlorobenzene	1.4	U	2.7	0.68	ug/L		04/22/24 15:30	04/23/24 09:19	1
2,4,6-Trichlorophenol	1.4	U	2.7	0.68	ug/L		04/22/24 15:30	04/23/24 09:19	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	6.8	N	ug/L		2.21	N/A	04/22/24 15:30	04/23/24 09:19	1
Unknown	7.2	N	ug/L		9.15	N/A	04/22/24 15:30	04/23/24 09:19	1
Unknown	5.7	N	ug/L		12.96	N/A	04/22/24 15:30	04/23/24 09:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol (Surr)	55		19 - 119	04/22/24 15:30	04/23/24 09:19	1
2,4,6-Tribromophenol (Surr)	72		43 - 140	04/22/24 15:30	04/23/24 09:19	1
Nitrobenzene-d5 (Surr)	78		44 - 120	04/22/24 15:30	04/23/24 09:19	1
Phenol-d5 (Surr)	40		10 - 120	04/22/24 15:30	04/23/24 09:19	1
p-Terphenyl-d14 (Surr)	69		50 - 134	04/22/24 15:30	04/23/24 09:19	1
2-Fluorobiphenyl (Surr)	86		44 - 119	04/22/24 15:30	04/23/24 09:19	1

Method: SW846 8015D DRO - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	250	M	110	47	ug/L		04/19/24 15:23	04/20/24 11:27	1
ORO (>C28-C40)	95	U M Q	110	47	ug/L		04/19/24 15:23	04/20/24 11:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	80		56 - 125	04/19/24 15:23	04/20/24 11:27	1

Client Sample Results

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Client Sample ID: TDS-RP-15APR24

Lab Sample ID: 580-138970-1

Date Collected: 04/15/24 14:45

Matrix: Water

Date Received: 04/18/24 09:05

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	0.036	U	0.12	0.018	ug/L		04/19/24 15:31	04/22/24 22:30	5
gamma-BHC (Lindane)	0.024	U M	0.12	0.012	ug/L		04/19/24 15:31	04/22/24 22:30	5
beta-BHC	0.13	U	0.18	0.067	ug/L		04/19/24 15:31	04/22/24 22:30	5
delta-BHC	0.041	U	0.12	0.021	ug/L		04/19/24 15:31	04/22/24 22:30	5
Heptachlor	0.024	U M	0.12	0.012	ug/L		04/19/24 15:31	04/22/24 22:30	5
Aldrin	0.024	U M	0.12	0.012	ug/L		04/19/24 15:31	04/22/24 22:30	5
Heptachlor epoxide	0.028	U M	0.12	0.014	ug/L		04/19/24 15:31	04/22/24 22:30	5
trans-Chlordane	0.085	U	0.24	0.042	ug/L		04/19/24 15:31	04/22/24 22:30	5
cis-Chlordane	0.036	U	0.12	0.018	ug/L		04/19/24 15:31	04/22/24 22:30	5
Endosulfan I	0.052	U	0.12	0.026	ug/L		04/19/24 15:31	04/22/24 22:30	5
4,4'-DDE	0.12	U	0.18	0.030	ug/L		04/19/24 15:31	04/22/24 22:30	5
Dieldrin	0.12	U	0.18	0.032	ug/L		04/19/24 15:31	04/22/24 22:30	5
Endrin	0.12	U	0.18	0.049	ug/L		04/19/24 15:31	04/22/24 22:30	5
4,4'-DDD	0.061	U	0.18	0.030	ug/L		04/19/24 15:31	04/22/24 22:30	5
Endosulfan II	0.18	U	0.24	0.091	ug/L		04/19/24 15:31	04/22/24 22:30	5
4,4'-DDT	0.12	U	0.18	0.032	ug/L		04/19/24 15:31	04/22/24 22:30	5
Endrin aldehyde	0.24	U	0.61	0.12	ug/L		04/19/24 15:31	04/22/24 22:30	5
Endosulfan sulfate	0.12	U	0.18	0.035	ug/L		04/19/24 15:31	04/22/24 22:30	5
Methoxychlor	0.36	U	0.67	0.18	ug/L		04/19/24 15:31	04/22/24 22:30	5
Endrin ketone	0.061	U	0.18	0.030	ug/L		04/19/24 15:31	04/22/24 22:30	5
Toxaphene	3.6	U M Q	6.1	1.8	ug/L		04/19/24 15:31	04/22/24 22:30	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	80		44 - 124	04/19/24 15:31	04/22/24 22:30	5
Tetrachloro-m-xylene	64	Q	44 - 124	04/19/24 15:31	04/22/24 22:30	5
DCB Decachlorobiphenyl (Surr)	35		20 - 148	04/19/24 15:31	04/22/24 22:30	5
DCB Decachlorobiphenyl (Surr)	28		20 - 148	04/19/24 15:31	04/22/24 22:30	5

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.24	U	0.61	0.12	ug/L		04/19/24 15:34	04/22/24 16:58	1
PCB-1221	0.24	U	0.61	0.12	ug/L		04/19/24 15:34	04/22/24 16:58	1
PCB-1232	0.24	U	0.61	0.12	ug/L		04/19/24 15:34	04/22/24 16:58	1
PCB-1242	0.24	U	0.61	0.12	ug/L		04/19/24 15:34	04/22/24 16:58	1
PCB-1248	0.24	U	0.61	0.12	ug/L		04/19/24 15:34	04/22/24 16:58	1
PCB-1254	0.24	U	0.61	0.095	ug/L		04/19/24 15:34	04/22/24 16:58	1
PCB-1260	0.24	U	0.61	0.095	ug/L		04/19/24 15:34	04/22/24 16:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	54		33 - 137	04/19/24 15:34	04/22/24 16:58	1
Tetrachloro-m-xylene	58		33 - 137	04/19/24 15:34	04/22/24 16:58	1
DCB Decachlorobiphenyl (Surr)	29		10 - 148	04/19/24 15:34	04/22/24 16:58	1
DCB Decachlorobiphenyl (Surr)	27		10 - 148	04/19/24 15:34	04/22/24 16:58	1

Method: SW846 8151A DOD - Herbicides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	0.15	U	0.17	0.073	ug/L		04/21/24 09:05	04/23/24 07:14	1
Silvex (2,4,5-TP)	0.050	U	0.056	0.025	ug/L		04/21/24 09:05	04/23/24 07:14	1
2,4-D	0.78		0.68	0.28	ug/L		04/21/24 09:05	04/23/24 07:14	1
2,4-DB	1.5	U	1.7	0.71	ug/L		04/21/24 09:05	04/23/24 07:14	1

Eurofins Seattle

Client Sample Results

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Client Sample ID: TDS-RP-15APR24

Lab Sample ID: 580-138970-1

Date Collected: 04/15/24 14:45

Matrix: Water

Date Received: 04/18/24 09:05

Method: SW846 8151A DOD - Herbicides (GC) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorprop	0.18	J J1	0.56	0.18	ug/L		04/21/24 09:05	04/23/24 07:14	1
Dalapon	13	U	14	6.4	ug/L		04/21/24 09:05	04/23/24 07:14	1
Dicamba	0.61	U	0.62	0.30	ug/L		04/21/24 09:05	04/23/24 07:14	1
MCPPP	110	U	230	56	ug/L		04/21/24 09:05	04/23/24 07:14	1
MCPA	110	U	230	56	ug/L		04/21/24 09:05	04/23/24 07:14	1
Pentachlorophenol	0.062	J	0.079	0.030	ug/L		04/21/24 09:05	04/23/24 07:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid (Surr)	114		32 - 138	04/21/24 09:05	04/23/24 07:14	1

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	0.32	J D H H3	0.55	0.25	mg/L			04/19/24 07:07	5
Nitrate as N	23	D J1 H H3	0.55	0.25	mg/L			04/19/24 07:07	5
Nitrate as N	21	D H H3 J1	2.2	1.0	mg/L			04/20/24 15:23	20
Nitrate Nitrite as N	23	D J1 H H3	5.5	0.25	mg/L			04/19/24 07:07	5
Nitrate Nitrite as N	21	J D H H3	22	1.0	mg/L			04/20/24 15:23	20

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	230	D J1	30	10	mg/L			04/20/24 15:23	20

Method: SW846 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	2.0	U M	4.9	0.86	pg/L		04/22/24 08:27	04/24/24 04:53	1
Total TCDD	2.0	U	4.9	0.86	pg/L		04/22/24 08:27	04/24/24 04:53	1
Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
¹³ C-2,3,7,8-TCDD	101		40 - 135	04/22/24 08:27	04/24/24 04:53	1			

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.032	U Q	0.050	0.016	mg/L		04/22/24 08:30	04/25/24 04:34	1
Arsenic	0.032	U	0.050	0.016	mg/L		04/22/24 08:30	04/25/24 04:34	1
Barium	0.037		0.0050	0.0010	mg/L		04/22/24 08:30	04/25/24 04:34	1
Beryllium	0.0020	U	0.0050	0.0010	mg/L		04/22/24 08:30	04/25/24 04:34	1
Cadmium	0.0020	U	0.0050	0.0010	mg/L		04/22/24 08:30	04/25/24 06:50	1
Calcium	46		0.50	0.23	mg/L		04/22/24 08:30	04/25/24 04:34	1
Chromium	0.024		0.015	0.0030	mg/L		04/22/24 08:30	04/25/24 04:34	1
Cobalt	0.0028	J	0.0050	0.0015	mg/L		04/22/24 08:30	04/25/24 04:34	1
Copper	0.016	U	0.020	0.0080	mg/L		04/22/24 08:30	04/25/24 04:34	1
Lead	0.014	U	0.015	0.0071	mg/L		04/22/24 08:30	04/25/24 04:34	1
Molybdenum	0.0074	J	0.010	0.0020	mg/L		04/22/24 08:30	04/25/24 04:34	1
Nickel	0.0085	J	0.010	0.0021	mg/L		04/22/24 08:30	04/25/24 04:34	1
Selenium	0.032	U	0.050	0.016	mg/L		04/22/24 08:30	04/25/24 06:50	1
Silver	0.0080	U	0.010	0.0040	mg/L		04/22/24 08:30	04/25/24 04:34	1
Thallium	0.024	U	0.030	0.012	mg/L		04/22/24 08:30	04/25/24 04:34	1
Vanadium	0.017		0.010	0.0019	mg/L		04/22/24 08:30	04/25/24 06:50	1
Zinc	0.0048	J	0.020	0.0037	mg/L		04/22/24 08:30	04/25/24 04:34	1

Client Sample Results

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Client Sample ID: TDS-RP-15APR24

Lab Sample ID: 580-138970-1

Date Collected: 04/15/24 14:45

Matrix: Water

Date Received: 04/18/24 09:05

Method: SW846 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.32	U	0.50	0.16	mg/L		04/22/24 09:25	04/23/24 00:23	1
Barium	0.027	J	0.050	0.010	mg/L		04/22/24 09:25	04/23/24 00:23	1
Cadmium	0.020	U	0.050	0.010	mg/L		04/22/24 09:25	04/23/24 06:17	1
Chromium	0.060	U	0.15	0.030	mg/L		04/22/24 09:25	04/23/24 00:23	1
Lead	0.14	U	0.15	0.071	mg/L		04/22/24 09:25	04/23/24 00:23	1
Selenium	0.32	U	0.50	0.16	mg/L		04/22/24 09:25	04/23/24 00:23	1
Silver	0.080	U	0.10	0.040	mg/L		04/22/24 09:25	04/23/24 00:23	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.14	J	0.20	0.079	ug/L		04/23/24 06:30	04/23/24 12:21	1

Method: SW846 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.16	U	0.20	0.079	ug/L		04/22/24 06:15	04/22/24 13:53	1

General Chemistry

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint (SW846 1010B)	>180		50	50	Degrees F			04/19/24 14:00	1
HEM (Oil & Grease) (1664B)	1.5	J	5.2	1.4	mg/L			04/22/24 18:39	1
SGT-HEM (TPH) (1664B)	4.1	U	5.2	1.4	mg/L			04/22/24 18:39	1
Turbidity (EPA 180.1)	80	H H3 D	5.0	5.0	NTU			04/21/24 04:03	5
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	44		8.0	2.6	mg/L			04/23/24 22:48	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	6.0	U	8.0	2.6	mg/L			04/23/24 22:48	1
Hydroxide Alkalinity (SM 2320B-2011)	6.0	U	8.0	2.6	mg/L			04/23/24 22:48	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	44		8.0	2.6	mg/L			04/23/24 22:48	1
Total Hardness (SM 2340C-2011)	350	D	100	30	mg/L			04/23/24 06:31	10
Total Dissolved Solids (SM 2540C - 2015)	670		60	24	mg/L			04/19/24 06:47	1
Total Suspended Solids (SM 2540D-2015)	39		4.0	1.3	mg/L			04/19/24 18:12	1
Residual Chlorine (EPA 330.4)	0.15	U HF	0.20	0.060	mg/L			04/23/24 01:38	1
Nitrogen, Kjeldahl (EPA 351.2)	1.0	J	1.5	0.50	mg/L		04/23/24 13:30	04/24/24 12:07	1
Oxygen, Dissolved (EPA 360.1)	6.5	HF	0.40	0.40	mg/L			04/23/24 13:38	1
Chemical Oxygen Demand (EPA 410.4)	38	J	75	25	mg/L			04/22/24 11:32	1
Ammonia-N (SM 4500 NH3 D-2011)	1.0	U	1.2	0.40	mg/L			04/23/24 12:20	5
Total Organic Carbon (SM 5310 C-2014)	7.0		1.0	0.50	mg/L			04/27/24 06:23	1
Cyanide, Reactive (SW846 9012)	48	U	58	19	mg/Kg		04/23/24 08:34	04/23/24 18:36	1
Cyanide, Total (SW846 9012A)	0.021		0.017	0.0083	mg/L		04/24/24 10:00	04/24/24 15:55	1
Sulfide (SW846 9034)	1.5	U	2.0	0.70	mg/L			04/22/24 08:25	1
Sulfide, Reactive (SW846 9034)	140	U	150	52	mg/Kg		04/23/24 08:34	04/23/24 12:49	1
pH (SW846 9040C)	7.4	HF	0.01	0.01	S.U.			04/23/24 22:48	1
Temperature (SW846 9040C)	22.5	HF	0.01	0.01	Degrees C			04/23/24 22:48	1
Nitrogen, Organic (EPA Nitrogen,Org)	0.90	U	1.0	0.50	mg/L			04/24/24 16:37	1
Nitrogen, Total (EPA Total Nitrogen)	22		1.0	0.50	mg/L			04/25/24 09:58	1

Eurofins Seattle

Client Sample Results

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Client Sample ID: Trip Blank

Lab Sample ID: 580-138970-2

Date Collected: 04/15/24 00:00

Matrix: Water

Date Received: 04/18/24 09:05

Method: SW846 8260D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	6.0	U Q	100	3.0	ug/L			04/23/24 23:37	1
Acrylonitrile	3.2	U	20	1.6	ug/L			04/23/24 23:37	1
Benzene	0.60	U	1.0	0.30	ug/L			04/23/24 23:37	1
Carbon tetrachloride	0.60	U	1.0	0.30	ug/L			04/23/24 23:37	1
Chloroethane	0.60	U	1.0	0.30	ug/L			04/23/24 23:37	1
Chloroform	0.60	U	1.0	0.30	ug/L			04/23/24 23:37	1
Chloromethane	1.1	U	2.0	0.55	ug/L			04/23/24 23:37	1
1,2-Dichlorobenzene	0.50	U	5.0	0.20	ug/L			04/23/24 23:37	1
1,3-Dichlorobenzene	1.4	U	5.0	0.68	ug/L			04/23/24 23:37	1
1,4-Dichlorobenzene	0.60	U	5.0	0.30	ug/L			04/23/24 23:37	1
1,2-Dichloroethane	0.60	U	1.0	0.30	ug/L			04/23/24 23:37	1
1,1-Dichloroethene	0.60	U	1.0	0.30	ug/L			04/23/24 23:37	1
trans-1,2-Dichloroethene	1.4	U	2.0	0.70	ug/L			04/23/24 23:37	1
1,2-Dichloropropane	0.60	U	1.0	0.30	ug/L			04/23/24 23:37	1
1,3-Dichloropropane	0.60	U	1.0	0.30	ug/L			04/23/24 23:37	1
2,2-Dichloropropane	0.60	U	1.0	0.30	ug/L			04/23/24 23:37	1
trans-1,3-Dichloropropene	0.50	U	1.0	0.20	ug/L			04/23/24 23:37	1
Ethylbenzene	0.80	U	1.0	0.40	ug/L			04/23/24 23:37	1
Hexachlorobutadiene	4.0	U	5.0	2.0	ug/L			04/23/24 23:37	1
1,1,1,2-Tetrachloroethane	0.60	U	1.0	0.30	ug/L			04/23/24 23:37	1
1,1,2,2-Tetrachloroethane	0.60	U	1.0	0.30	ug/L			04/23/24 23:37	1
Tetrachloroethene	0.60	U	1.0	0.30	ug/L			04/23/24 23:37	1
Toluene	0.60	U	1.0	0.30	ug/L			04/23/24 23:37	1
1,1,1-Trichloroethane	0.60	U	1.0	0.30	ug/L			04/23/24 23:37	1
1,1,2-Trichloroethane	0.60	U	1.0	0.30	ug/L			04/23/24 23:37	1
Trichloroethene	0.60	U	1.0	0.30	ug/L			04/23/24 23:37	1
Vinyl chloride	0.60	U	1.0	0.30	ug/L			04/23/24 23:37	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A		04/23/24 23:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		89 - 112		04/23/24 23:37	1
1,2-Dichloroethane-d4 (Surr)	95	Q	81 - 118		04/23/24 23:37	1
4-Bromofluorobenzene (Surr)	98		85 - 114		04/23/24 23:37	1
Dibromofluoromethane (Surr)	99		80 - 119		04/23/24 23:37	1

Method: SW846 8260D - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachloroethane	4.1	U	5.0	2.1	ug/L			04/25/24 22:01	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	5.6	N	ug/L		0.96	N/A		04/25/24 22:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		89 - 112		04/25/24 22:01	1
1,2-Dichloroethane-d4 (Surr)	95	Q	81 - 118		04/25/24 22:01	1
4-Bromofluorobenzene (Surr)	96		85 - 114		04/25/24 22:01	1
Dibromofluoromethane (Surr)	94		80 - 119		04/25/24 22:01	1

Eurolins Seattle

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Method: 8260D - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 410-497729/10
Matrix: Water
Analysis Batch: 497729

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acrolein	6.0	U	100	3.0	ug/L			04/23/24 22:57	1
Acrylonitrile	3.2	U	20	1.6	ug/L			04/23/24 22:57	1
Benzene	0.60	U	1.0	0.30	ug/L			04/23/24 22:57	1
Carbon tetrachloride	0.60	U	1.0	0.30	ug/L			04/23/24 22:57	1
Chloroethane	0.60	U	1.0	0.30	ug/L			04/23/24 22:57	1
Chloroform	0.60	U	1.0	0.30	ug/L			04/23/24 22:57	1
Chloromethane	1.1	U	2.0	0.55	ug/L			04/23/24 22:57	1
1,2-Dichlorobenzene	0.50	U	5.0	0.20	ug/L			04/23/24 22:57	1
1,3-Dichlorobenzene	1.4	U	5.0	0.68	ug/L			04/23/24 22:57	1
1,4-Dichlorobenzene	0.60	U	5.0	0.30	ug/L			04/23/24 22:57	1
1,2-Dichloroethane	0.60	U	1.0	0.30	ug/L			04/23/24 22:57	1
1,1-Dichloroethene	0.60	U	1.0	0.30	ug/L			04/23/24 22:57	1
trans-1,2-Dichloroethene	1.4	U	2.0	0.70	ug/L			04/23/24 22:57	1
1,2-Dichloropropane	0.60	U	1.0	0.30	ug/L			04/23/24 22:57	1
1,3-Dichloropropane	0.60	U	1.0	0.30	ug/L			04/23/24 22:57	1
2,2-Dichloropropane	0.60	U	1.0	0.30	ug/L			04/23/24 22:57	1
trans-1,3-Dichloropropene	0.50	U	1.0	0.20	ug/L			04/23/24 22:57	1
Ethylbenzene	0.80	U	1.0	0.40	ug/L			04/23/24 22:57	1
Hexachlorobutadiene	4.0	U	5.0	2.0	ug/L			04/23/24 22:57	1
1,1,1,2-Tetrachloroethane	0.60	U	1.0	0.30	ug/L			04/23/24 22:57	1
1,1,2,2-Tetrachloroethane	0.60	U	1.0	0.30	ug/L			04/23/24 22:57	1
Tetrachloroethene	0.60	U	1.0	0.30	ug/L			04/23/24 22:57	1
Toluene	0.60	U	1.0	0.30	ug/L			04/23/24 22:57	1
1,1,1-Trichloroethane	0.60	U	1.0	0.30	ug/L			04/23/24 22:57	1
1,1,2-Trichloroethane	0.60	U	1.0	0.30	ug/L			04/23/24 22:57	1
Trichloroethene	0.60	U	1.0	0.30	ug/L			04/23/24 22:57	1
Vinyl chloride	0.60	U	1.0	0.30	ug/L			04/23/24 22:57	1
Pentachloroethane	4.1	U	5.0	2.1	ug/L			04/23/24 22:57	1

Tentatively Identified Compound	MB	MB	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
	Est. Result	Qualifier							
Tentatively Identified Compound	None		ug/L			N/A		04/23/24 22:57	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	96		89 - 112		04/23/24 22:57	1
1,2-Dichloroethane-d4 (Surr)	96		81 - 118		04/23/24 22:57	1
4-Bromofluorobenzene (Surr)	99		85 - 114		04/23/24 22:57	1
Dibromofluoromethane (Surr)	98		80 - 119		04/23/24 22:57	1

Lab Sample ID: LCS 410-497729/5
Matrix: Water
Analysis Batch: 497729

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Acrolein	150	121		ug/L		80	39 - 155
Acrylonitrile	100	104		ug/L		104	63 - 135
Benzene	20.0	20.8		ug/L		104	79 - 120
Carbon tetrachloride	20.0	19.8		ug/L		99	72 - 136
Chloroethane	20.0	19.1		ug/L		96	60 - 138

Eurofins Seattle

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Method: 8260D - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-497729/5
Matrix: Water
Analysis Batch: 497729

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	20.0	20.6		ug/L		103	79 - 124
Chloromethane	20.0	19.2	M	ug/L		96	50 - 139
1,2-Dichlorobenzene	20.0	18.6		ug/L		93	80 - 119
1,3-Dichlorobenzene	20.0	18.8		ug/L		94	80 - 119
1,4-Dichlorobenzene	20.0	18.7		ug/L		94	79 - 118
1,2-Dichloroethane	20.0	19.8		ug/L		99	73 - 128
1,1-Dichloroethene	20.0	21.5		ug/L		108	71 - 131
trans-1,2-Dichloroethene	20.0	20.7		ug/L		103	75 - 124
1,2-Dichloropropane	20.0	20.5		ug/L		102	78 - 122
1,3-Dichloropropane	20.0	19.8		ug/L		99	80 - 119
2,2-Dichloropropane	20.0	19.6		ug/L		98	60 - 139
trans-1,3-Dichloropropene	20.0	18.8		ug/L		94	73 - 127
Ethylbenzene	20.0	19.4		ug/L		97	79 - 121
Hexachlorobutadiene	20.0	17.7		ug/L		89	66 - 134
1,1,1,2-Tetrachloroethane	20.0	19.2		ug/L		96	78 - 124
1,1,2,2-Tetrachloroethane	20.0	18.7		ug/L		93	71 - 121
Tetrachloroethene	20.0	19.2		ug/L		96	74 - 129
Toluene	20.0	19.6		ug/L		98	80 - 121
1,1,1-Trichloroethane	20.0	20.5		ug/L		103	74 - 131
1,1,2-Trichloroethane	20.0	19.7		ug/L		99	80 - 119
Trichloroethene	20.0	20.1		ug/L		101	79 - 123
Vinyl chloride	20.0	18.2		ug/L		91	58 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	98		89 - 112
1,2-Dichloroethane-d4 (Surr)	93		81 - 118
4-Bromofluorobenzene (Surr)	100		85 - 114
Dibromofluoromethane (Surr)	98		80 - 119

Lab Sample ID: LCS 410-497729/7
Matrix: Water
Analysis Batch: 497729

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Pentachloroethane	20.0	18.4		ug/L		92	69 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	98		89 - 112
1,2-Dichloroethane-d4 (Surr)	93		81 - 118
4-Bromofluorobenzene (Surr)	101		85 - 114
Dibromofluoromethane (Surr)	97		80 - 119

Lab Sample ID: LCSD 410-497729/6
Matrix: Water
Analysis Batch: 497729

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acrolein	150	115		ug/L		77	39 - 155	5	20

Eurofins Seattle

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Method: 8260D - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 410-497729/6
Matrix: Water
Analysis Batch: 497729

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acrylonitrile	100	105		ug/L		105	63 - 135	1	20
Benzene	20.0	21.1		ug/L		105	79 - 120	1	20
Carbon tetrachloride	20.0	19.8		ug/L		99	72 - 136	0	20
Chloroethane	20.0	19.6		ug/L		98	60 - 138	2	20
Chloroform	20.0	21.1		ug/L		105	79 - 124	2	20
Chloromethane	20.0	19.0	M	ug/L		95	50 - 139	2	20
1,2-Dichlorobenzene	20.0	19.3		ug/L		96	80 - 119	4	20
1,3-Dichlorobenzene	20.0	19.7		ug/L		98	80 - 119	5	20
1,4-Dichlorobenzene	20.0	19.4		ug/L		97	79 - 118	4	20
1,2-Dichloroethane	20.0	20.0		ug/L		100	73 - 128	1	20
1,1-Dichloroethene	20.0	21.2		ug/L		106	71 - 131	2	20
trans-1,2-Dichloroethene	20.0	20.7		ug/L		103	75 - 124	0	20
1,2-Dichloropropane	20.0	21.1		ug/L		105	78 - 122	3	20
1,3-Dichloropropane	20.0	19.6		ug/L		98	80 - 119	1	20
2,2-Dichloropropane	20.0	19.9		ug/L		99	60 - 139	2	20
trans-1,3-Dichloropropene	20.0	18.6		ug/L		93	73 - 127	1	20
Ethylbenzene	20.0	19.5		ug/L		98	79 - 121	1	20
Hexachlorobutadiene	20.0	17.6		ug/L		88	66 - 134	1	20
1,1,1,2-Tetrachloroethane	20.0	19.4		ug/L		97	78 - 124	1	20
1,1,2,2-Tetrachloroethane	20.0	19.5		ug/L		97	71 - 121	4	20
Tetrachloroethene	20.0	19.4		ug/L		97	74 - 129	1	20
Toluene	20.0	19.8		ug/L		99	80 - 121	1	20
1,1,1-Trichloroethane	20.0	20.5		ug/L		102	74 - 131	0	20
1,1,2-Trichloroethane	20.0	20.0		ug/L		100	80 - 119	1	20
Trichloroethene	20.0	20.4		ug/L		102	79 - 123	1	20
Vinyl chloride	20.0	18.2		ug/L		91	58 - 137	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
Toluene-d8 (Surr)	97		89 - 112
1,2-Dichloroethane-d4 (Surr)	96		81 - 118
4-Bromofluorobenzene (Surr)	100		85 - 114
Dibromofluoromethane (Surr)	98		80 - 119

Lab Sample ID: LCSD 410-497729/8
Matrix: Water
Analysis Batch: 497729

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Pentachloroethane	20.0	18.2		ug/L		91	69 - 133	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
Toluene-d8 (Surr)	97		89 - 112
1,2-Dichloroethane-d4 (Surr)	94		81 - 118
4-Bromofluorobenzene (Surr)	99		85 - 114
Dibromofluoromethane (Surr)	98		80 - 119

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Method: 8260D - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 410-498786/8
Matrix: Water
Analysis Batch: 498786

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acrolein	6.0	U	100	3.0	ug/L			04/25/24 21:41	1
Acrylonitrile	3.2	U	20	1.6	ug/L			04/25/24 21:41	1
Benzene	0.60	U	1.0	0.30	ug/L			04/25/24 21:41	1
Carbon tetrachloride	0.60	U	1.0	0.30	ug/L			04/25/24 21:41	1
Chloroethane	0.60	U	1.0	0.30	ug/L			04/25/24 21:41	1
Chloroform	0.60	U	1.0	0.30	ug/L			04/25/24 21:41	1
Chloromethane	1.1	U	2.0	0.55	ug/L			04/25/24 21:41	1
1,2-Dichlorobenzene	0.50	U	5.0	0.20	ug/L			04/25/24 21:41	1
1,3-Dichlorobenzene	1.4	U	5.0	0.68	ug/L			04/25/24 21:41	1
1,4-Dichlorobenzene	0.60	U	5.0	0.30	ug/L			04/25/24 21:41	1
1,2-Dichloroethane	0.60	U	1.0	0.30	ug/L			04/25/24 21:41	1
1,1-Dichloroethene	0.60	U	1.0	0.30	ug/L			04/25/24 21:41	1
trans-1,2-Dichloroethene	1.4	U	2.0	0.70	ug/L			04/25/24 21:41	1
1,2-Dichloropropane	0.60	U	1.0	0.30	ug/L			04/25/24 21:41	1
1,3-Dichloropropane	0.60	U	1.0	0.30	ug/L			04/25/24 21:41	1
2,2-Dichloropropane	0.60	U	1.0	0.30	ug/L			04/25/24 21:41	1
trans-1,3-Dichloropropene	0.50	U	1.0	0.20	ug/L			04/25/24 21:41	1
Ethylbenzene	0.80	U	1.0	0.40	ug/L			04/25/24 21:41	1
Hexachlorobutadiene	4.0	U	5.0	2.0	ug/L			04/25/24 21:41	1
1,1,1,2-Tetrachloroethane	0.60	U	1.0	0.30	ug/L			04/25/24 21:41	1
1,1,2,2-Tetrachloroethane	0.60	U	1.0	0.30	ug/L			04/25/24 21:41	1
Tetrachloroethene	0.60	U	1.0	0.30	ug/L			04/25/24 21:41	1
Toluene	0.60	U	1.0	0.30	ug/L			04/25/24 21:41	1
1,1,1-Trichloroethane	0.60	U	1.0	0.30	ug/L			04/25/24 21:41	1
1,1,2-Trichloroethane	0.60	U	1.0	0.30	ug/L			04/25/24 21:41	1
Trichloroethene	0.60	U	1.0	0.30	ug/L			04/25/24 21:41	1
Vinyl chloride	0.60	U	1.0	0.30	ug/L			04/25/24 21:41	1
Pentachloroethane	4.1	U	5.0	2.1	ug/L			04/25/24 21:41	1

Tentatively Identified Compound	MB	MB	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
	Est. Result	Qualifier							
Tentatively Identified Compound	None		ug/L			N/A		04/25/24 21:41	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	100		89 - 112		04/25/24 21:41	1
1,2-Dichloroethane-d4 (Surr)	94		81 - 118		04/25/24 21:41	1
4-Bromofluorobenzene (Surr)	97		85 - 114		04/25/24 21:41	1
Dibromofluoromethane (Surr)	94		80 - 119		04/25/24 21:41	1

Lab Sample ID: LCS 410-498786/5
Matrix: Water
Analysis Batch: 498786

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Acrolein	150	173		ug/L		115	39 - 155
Acrylonitrile	100	104		ug/L		104	63 - 135
Benzene	20.0	21.6		ug/L		108	79 - 120
Carbon tetrachloride	20.0	20.1		ug/L		101	72 - 136
Chloroethane	20.0	20.2		ug/L		101	60 - 138

Eurofins Seattle

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Method: 8260D - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-498786/5
Matrix: Water
Analysis Batch: 498786

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	20.0	21.4		ug/L		107	79 - 124
Chloromethane	20.0	19.5		ug/L		97	50 - 139
1,2-Dichlorobenzene	20.0	20.9		ug/L		105	80 - 119
1,3-Dichlorobenzene	20.0	20.7		ug/L		104	80 - 119
1,4-Dichlorobenzene	20.0	20.9		ug/L		105	79 - 118
1,2-Dichloroethane	20.0	20.0		ug/L		100	73 - 128
1,1-Dichloroethene	20.0	21.2		ug/L		106	71 - 131
trans-1,2-Dichloroethene	20.0	21.4		ug/L		107	75 - 124
1,2-Dichloropropane	20.0	21.6		ug/L		108	78 - 122
1,3-Dichloropropane	20.0	21.6		ug/L		108	80 - 119
2,2-Dichloropropane	20.0	20.1		ug/L		100	60 - 139
trans-1,3-Dichloropropene	20.0	20.4		ug/L		102	73 - 127
Ethylbenzene	20.0	21.2		ug/L		106	79 - 121
Hexachlorobutadiene	20.0	19.6		ug/L		98	66 - 134
1,1,1,2-Tetrachloroethane	20.0	20.2		ug/L		101	78 - 124
1,1,2,2-Tetrachloroethane	20.0	20.8		ug/L		104	71 - 121
Tetrachloroethene	20.0	21.0		ug/L		105	74 - 129
Toluene	20.0	21.4		ug/L		107	80 - 121
1,1,1-Trichloroethane	20.0	20.7		ug/L		103	74 - 131
1,1,2-Trichloroethane	20.0	21.0		ug/L		105	80 - 119
Trichloroethene	20.0	20.8		ug/L		104	79 - 123
Vinyl chloride	20.0	20.0		ug/L		100	58 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	100		89 - 112
1,2-Dichloroethane-d4 (Surr)	94		81 - 118
4-Bromofluorobenzene (Surr)	99		85 - 114
Dibromofluoromethane (Surr)	96		80 - 119

Lab Sample ID: LCS 410-498786/6
Matrix: Water
Analysis Batch: 498786

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Pentachloroethane	20.0	18.7		ug/L		93	69 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	100		89 - 112
1,2-Dichloroethane-d4 (Surr)	93		81 - 118
4-Bromofluorobenzene (Surr)	97		85 - 114
Dibromofluoromethane (Surr)	95		80 - 119

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 410-497151/1-A
Matrix: Water
Analysis Batch: 497304

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 497151

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzidine	40	U	60	20	ug/L		04/22/24 15:30	04/23/24 08:18	1
Bis(2-chloroethyl)ether	1.0	U	2.0	0.50	ug/L		04/22/24 15:30	04/23/24 08:18	1
Bis(2-ethylhexyl) phthalate	4.0	U	5.0	2.0	ug/L		04/22/24 15:30	04/23/24 08:18	1
2-Chlorophenol	1.0	U	2.0	0.50	ug/L		04/22/24 15:30	04/23/24 08:18	1
3,3'-Dichlorobenzidine	8.0	U	10	4.0	ug/L		04/22/24 15:30	04/23/24 08:18	1
2,4-Dichlorophenol	1.0	U	2.0	0.50	ug/L		04/22/24 15:30	04/23/24 08:18	1
Diethyl phthalate	4.0	U	5.0	2.0	ug/L		04/22/24 15:30	04/23/24 08:18	1
2,4-Dimethylphenol	9.0	U	10	3.0	ug/L		04/22/24 15:30	04/23/24 08:18	1
Dimethyl phthalate	4.0	U	5.0	2.0	ug/L		04/22/24 15:30	04/23/24 08:18	1
Di-n-butyl phthalate	4.0	U	5.0	2.0	ug/L		04/22/24 15:30	04/23/24 08:18	1
2,4-Dinitrophenol	28	U	30	14	ug/L		04/22/24 15:30	04/23/24 08:18	1
2,4-Dinitrotoluene	2.0	U	5.0	1.0	ug/L		04/22/24 15:30	04/23/24 08:18	1
2,6-Dinitrotoluene	1.0	U M	2.0	0.50	ug/L		04/22/24 15:30	04/23/24 08:18	1
Hexachlorobenzene	0.22	U	0.50	0.11	ug/L		04/22/24 15:30	04/23/24 08:18	1
Hexachlorocyclopentadiene	10	U	11	5.0	ug/L		04/22/24 15:30	04/23/24 08:18	1
Hexachloroethane	1.0	U	5.0	0.50	ug/L		04/22/24 15:30	04/23/24 08:18	1
Isophorone	1.0	U	2.0	0.50	ug/L		04/22/24 15:30	04/23/24 08:18	1
4,6-Dinitro-o-cresol	20	U M	21	8.0	ug/L		04/22/24 15:30	04/23/24 08:18	1
Nitrobenzene	1.0	U M	2.0	0.50	ug/L		04/22/24 15:30	04/23/24 08:18	1
2-Nitrophenol	2.0	U	5.0	1.0	ug/L		04/22/24 15:30	04/23/24 08:18	1
4-Nitrophenol	20	U	30	10	ug/L		04/22/24 15:30	04/23/24 08:18	1
N-Nitrosodimethylamine	4.0	U	5.0	2.0	ug/L		04/22/24 15:30	04/23/24 08:18	1
N-Nitrosodiphenylamine	1.0	U	2.0	0.50	ug/L		04/22/24 15:30	04/23/24 08:18	1
bis(chloroisopropyl) ether	1.0	U	2.0	0.50	ug/L		04/22/24 15:30	04/23/24 08:18	1
Pentachlorophenol	4.0	U M	5.0	1.0	ug/L		04/22/24 15:30	04/23/24 08:18	1
Phenol	1.0	U	2.0	0.50	ug/L		04/22/24 15:30	04/23/24 08:18	1
1,2,4,5-Tetrachlorobenzene	1.0	U	2.0	0.50	ug/L		04/22/24 15:30	04/23/24 08:18	1
2,4,6-Trichlorophenol	1.0	U	2.0	0.50	ug/L		04/22/24 15:30	04/23/24 08:18	1

Tentatively Identified Compound	MB	MB	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
	Est. Result	Qualifier							
Unknown	4.84	N	ug/L		2.21	N/A	04/22/24 15:30	04/23/24 08:18	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorophenol (Surr)	37		19 - 119	04/22/24 15:30	04/23/24 08:18	1
2,4,6-Tribromophenol (Surr)	51		43 - 140	04/22/24 15:30	04/23/24 08:18	1
Nitrobenzene-d5 (Surr)	61		44 - 120	04/22/24 15:30	04/23/24 08:18	1
Phenol-d5 (Surr)	24		10 - 120	04/22/24 15:30	04/23/24 08:18	1
p-Terphenyl-d14 (Surr)	78		50 - 134	04/22/24 15:30	04/23/24 08:18	1
2-Fluorobiphenyl (Surr)	61		44 - 119	04/22/24 15:30	04/23/24 08:18	1

Lab Sample ID: LCS 410-497151/2-A
Matrix: Water
Analysis Batch: 497304

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 497151

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Benzidine	100	27.9	J	ug/L		28	10 - 53
Bis(2-chloroethyl)ether	50.0	41.1		ug/L		82	43 - 118
Bis(2-ethylhexyl) phthalate	50.0	39.2		ug/L		78	55 - 135

Eurofins Seattle

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-497151/2-A
Matrix: Water
Analysis Batch: 497304

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 497151

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Chlorophenol	50.0	38.7		ug/L		77	38 - 117
3,3'-Dichlorobenzidine	100	64.7		ug/L		65	27 - 129
2,4-Dichlorophenol	50.0	40.9		ug/L		82	47 - 121
Diethyl phthalate	50.0	41.2		ug/L		82	56 - 125
2,4-Dimethylphenol	50.0	39.9		ug/L		80	31 - 124
Dimethyl phthalate	50.0	38.2		ug/L		76	45 - 127
Di-n-butyl phthalate	50.0	43.8		ug/L		88	59 - 127
2,4-Dinitrophenol	100	82.5		ug/L		83	23 - 143
2,4-Dinitrotoluene	50.0	42.7		ug/L		85	57 - 128
2,6-Dinitrotoluene	50.0	41.8		ug/L		84	57 - 124
Hexachlorobenzene	50.0	42.9		ug/L		86	53 - 125
Hexachlorocyclopentadiene	50.0	18.7		ug/L		37	10 - 82
Hexachloroethane	50.0	30.4		ug/L		61	21 - 115
Isophorone	50.0	38.8		ug/L		78	42 - 124
4,6-Dinitro-o-cresol	100	78.3		ug/L		78	44 - 137
Nitrobenzene	50.0	38.5		ug/L		77	45 - 121
2-Nitrophenol	50.0	38.4		ug/L		77	47 - 123
4-Nitrophenol	100	45.3		ug/L		45	17 - 120
N-Nitrosodimethylamine	50.0	23.2		ug/L		46	34 - 77
N-Nitrosodiphenylamine	42.5	39.1		ug/L		92	51 - 123
bis(chloroisopropyl) ether	50.0	41.5		ug/L		83	37 - 130
Pentachlorophenol	100	83.3		ug/L		83	35 - 138
Phenol	50.0	21.3		ug/L		43	22 - 69
1,2,4,5-Tetrachlorobenzene	50.0	33.2		ug/L		66	35 - 121
2,4,6-Trichlorophenol	50.0	42.8		ug/L		86	50 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol (Surr)	48		19 - 119
2,4,6-Tribromophenol (Surr)	63		43 - 140
Nitrobenzene-d5 (Surr)	63		44 - 120
Phenol-d5 (Surr)	34		10 - 120
p-Terphenyl-d14 (Surr)	79		50 - 134
2-Fluorobiphenyl (Surr)	66		44 - 119

Lab Sample ID: LCSD 410-497151/3-A
Matrix: Water
Analysis Batch: 497304

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 497151

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzidine	100	40	U Q	ug/L		15	10 - 53	58	30
Bis(2-chloroethyl)ether	50.0	45.6		ug/L		91	43 - 118	10	20
Bis(2-ethylhexyl) phthalate	50.0	45.8		ug/L		92	55 - 135	15	20
2-Chlorophenol	50.0	41.9		ug/L		84	38 - 117	8	20
3,3'-Dichlorobenzidine	100	69.0		ug/L		69	27 - 129	6	20
2,4-Dichlorophenol	50.0	48.5		ug/L		97	47 - 121	17	20
Diethyl phthalate	50.0	50.0		ug/L		100	56 - 125	19	20
2,4-Dimethylphenol	50.0	45.1		ug/L		90	31 - 124	12	20
Dimethyl phthalate	50.0	46.8		ug/L		94	45 - 127	20	20

Eurofins Seattle

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 410-497151/3-A
Matrix: Water
Analysis Batch: 497304

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 497151

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Di-n-butyl phthalate	50.0	54.1	Q	ug/L		108	59 - 127	21	20
2,4-Dinitrophenol	100	96.5		ug/L		96	23 - 143	16	20
2,4-Dinitrotoluene	50.0	50.4		ug/L		101	57 - 128	17	20
2,6-Dinitrotoluene	50.0	51.7	Q	ug/L		103	57 - 124	21	20
Hexachlorobenzene	50.0	49.8		ug/L		100	53 - 125	15	20
Hexachlorocyclopentadiene	50.0	21.2		ug/L		42	10 - 82	13	30
Hexachloroethane	50.0	32.9		ug/L		66	21 - 115	8	20
Isophorone	50.0	49.1	Q	ug/L		98	42 - 124	24	20
4,6-Dinitro-o-cresol	100	97.1	Q	ug/L		97	44 - 137	21	20
Nitrobenzene	50.0	47.5	Q	ug/L		95	45 - 121	21	20
2-Nitrophenol	50.0	48.4	Q	ug/L		97	47 - 123	23	20
4-Nitrophenol	100	54.9		ug/L		55	17 - 120	19	30
N-Nitrosodimethylamine	50.0	25.7		ug/L		51	34 - 77	11	30
N-Nitrosodiphenylamine	42.5	47.5		ug/L		112	51 - 123	19	20
bis(chloroisopropyl) ether	50.0	46.3		ug/L		93	37 - 130	11	20
Pentachlorophenol	100	102		ug/L		102	35 - 138	20	20
Phenol	50.0	22.9		ug/L		46	22 - 69	7	30
1,2,4,5-Tetrachlorobenzene	50.0	39.2		ug/L		78	35 - 121	17	20
2,4,6-Trichlorophenol	50.0	49.2		ug/L		98	50 - 125	14	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
2-Fluorophenol (Surr)	52		19 - 119
2,4,6-Tribromophenol (Surr)	73		43 - 140
Nitrobenzene-d5 (Surr)	78		44 - 120
Phenol-d5 (Surr)	37		10 - 120
p-Terphenyl-d14 (Surr)	90		50 - 134
2-Fluorobiphenyl (Surr)	79		44 - 119

Method: 8015D DRO - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 410-496441/1-A
Matrix: Water
Analysis Batch: 496536

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 496441

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	90	U M	100	45	ug/L		04/19/24 15:23	04/20/24 02:22	1
ORO (>C28-C40)	90	U M	100	45	ug/L		04/19/24 15:23	04/20/24 02:22	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	76		56 - 125	04/19/24 15:23	04/20/24 02:22	1

Lab Sample ID: LCS 410-496441/2-A
Matrix: Water
Analysis Batch: 496536

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 496441

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
DRO (C10-C28)	601	406	M	ug/L		68	36 - 132

Eurofins Seattle

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Method: 8015D DRO - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 410-496441/2-A
Matrix: Water
Analysis Batch: 496536

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 496441

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
<i>o-terphenyl (Surr)</i>	77		56 - 125

Lab Sample ID: LCS 410-496441/4-A
Matrix: Water
Analysis Batch: 496536

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 496441

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits	%Rec
		Result	Qualifier					
ORO (>C28-C40)	806	378	M	ug/L		47	41 - 113	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
<i>o-terphenyl (Surr)</i>	99		56 - 125

Lab Sample ID: LCSD 410-496441/3-A
Matrix: Water
Analysis Batch: 496536

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 496441

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	Limits	RPD	Limit
		Result	Qualifier						
DRO (C10-C28)	601	349	M	ug/L		58	36 - 132	15	20

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
<i>o-terphenyl (Surr)</i>	77		56 - 125

Lab Sample ID: LCSD 410-496441/5-A
Matrix: Water
Analysis Batch: 496536

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 496441

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	Limits	RPD	Limit
		Result	Qualifier						
ORO (>C28-C40)	806	312	M Q	ug/L		39	41 - 113	19	20

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
<i>o-terphenyl (Surr)</i>	78	M	56 - 125

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 410-496449/1-A
Matrix: Water
Analysis Batch: 496782

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 496449

Analyte	MB MB		LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
alpha-BHC	0.0060	U	0.020	0.0030	ug/L		04/19/24 15:31	04/22/24 16:19	1
gamma-BHC (Lindane)	0.0040	U	0.020	0.0020	ug/L		04/19/24 15:31	04/22/24 16:19	1
beta-BHC	0.022	U	0.030	0.011	ug/L		04/19/24 15:31	04/22/24 16:19	1
delta-BHC	0.0068	U	0.020	0.0034	ug/L		04/19/24 15:31	04/22/24 16:19	1
Heptachlor	0.0040	U	0.020	0.0020	ug/L		04/19/24 15:31	04/22/24 16:19	1
Aldrin	0.0040	U	0.020	0.0020	ug/L		04/19/24 15:31	04/22/24 16:19	1
Heptachlor epoxide	0.0046	U	0.020	0.0023	ug/L		04/19/24 15:31	04/22/24 16:19	1
trans-Chlordane	0.014	U	0.040	0.0070	ug/L		04/19/24 15:31	04/22/24 16:19	1
cis-Chlordane	0.0060	U	0.020	0.0030	ug/L		04/19/24 15:31	04/22/24 16:19	1

Eurofins Seattle

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 410-496449/1-A
Matrix: Water
Analysis Batch: 496782

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 496449

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Endosulfan I	0.0086	U	0.020	0.0043	ug/L		04/19/24 15:31	04/22/24 16:19	1
4,4'-DDE	0.020	U	0.030	0.0050	ug/L		04/19/24 15:31	04/22/24 16:19	1
Dieldrin	0.020	U	0.030	0.0053	ug/L		04/19/24 15:31	04/22/24 16:19	1
Endrin	0.020	U	0.030	0.0081	ug/L		04/19/24 15:31	04/22/24 16:19	1
4,4'-DDD	0.010	U	0.030	0.0050	ug/L		04/19/24 15:31	04/22/24 16:19	1
Endosulfan II	0.030	U	0.040	0.015	ug/L		04/19/24 15:31	04/22/24 16:19	1
4,4'-DDT	0.020	U	0.030	0.0052	ug/L		04/19/24 15:31	04/22/24 16:19	1
Endrin aldehyde	0.040	U	0.10	0.020	ug/L		04/19/24 15:31	04/22/24 16:19	1
Endosulfan sulfate	0.020	U	0.030	0.0058	ug/L		04/19/24 15:31	04/22/24 16:19	1
Methoxychlor	0.060	U	0.11	0.030	ug/L		04/19/24 15:31	04/22/24 16:19	1
Endrin ketone	0.010	U	0.030	0.0050	ug/L		04/19/24 15:31	04/22/24 16:19	1
Toxaphene	0.60	U M	1.0	0.30	ug/L		04/19/24 15:31	04/22/24 16:19	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	72		44 - 124	04/19/24 15:31	04/22/24 16:19	1
Tetrachloro-m-xylene	67		44 - 124	04/19/24 15:31	04/22/24 16:19	1
DCB Decachlorobiphenyl (Surr)	92		20 - 148	04/19/24 15:31	04/22/24 16:19	1
DCB Decachlorobiphenyl (Surr)	79		20 - 148	04/19/24 15:31	04/22/24 16:19	1

Lab Sample ID: LCS 410-496449/2-A
Matrix: Water
Analysis Batch: 496782

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 496449

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
gamma-BHC (Lindane)	0.100	0.0985		ug/L		99	59 - 134
beta-BHC	0.100	0.105		ug/L		105	56 - 136
delta-BHC	0.100	0.0958		ug/L		96	52 - 142
Heptachlor	0.100	0.0785		ug/L		79	54 - 130
Aldrin	0.100	0.0642		ug/L		64	45 - 134
Heptachlor epoxide	0.100	0.0978		ug/L		98	61 - 133
trans-Chlordane	0.100	0.0870		ug/L		87	56 - 136
cis-Chlordane	0.100	0.0951		ug/L		95	60 - 129
Endosulfan I	0.100	0.0957		ug/L		96	62 - 126
4,4'-DDE	0.200	0.172		ug/L		86	57 - 135
Dieldrin	0.200	0.195		ug/L		98	60 - 136
Endrin	0.200	0.191		ug/L		96	60 - 138
4,4'-DDD	0.200	0.197		ug/L		98	56 - 143
Endosulfan II	0.200	0.196		ug/L		98	52 - 135
4,4'-DDT	0.200	0.221		ug/L		111	51 - 143
Endrin aldehyde	0.200	0.186		ug/L		93	51 - 132
Endosulfan sulfate	0.200	0.200		ug/L		100	62 - 133
Methoxychlor	1.00	1.14		ug/L		114	54 - 145
Endrin ketone	0.200	0.211		ug/L		105	58 - 134

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	69		44 - 124
Tetrachloro-m-xylene	65		44 - 124

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 410-496449/2-A
Matrix: Water
Analysis Batch: 496782

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 496449

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl (Surr)	81		20 - 148
DCB Decachlorobiphenyl (Surr)	76		20 - 148

Lab Sample ID: LCSD 410-496449/3-A
Matrix: Water
Analysis Batch: 496782

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 496449

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
alpha-BHC	0.100	0.0888		ug/L		89	54 - 138	5	30	
gamma-BHC (Lindane)	0.100	0.0926		ug/L		93	59 - 134	6	30	
beta-BHC	0.100	0.104		ug/L		104	56 - 136	2	30	
delta-BHC	0.100	0.0934		ug/L		93	52 - 142	3	30	
Heptachlor	0.100	0.0832		ug/L		83	54 - 130	6	30	
Aldrin	0.100	0.0745		ug/L		74	45 - 134	15	30	
Heptachlor epoxide	0.100	0.0955		ug/L		96	61 - 133	2	30	
trans-Chlordane	0.100	0.0942		ug/L		94	56 - 136	8	30	
cis-Chlordane	0.100	0.0958		ug/L		96	60 - 129	1	30	
Endosulfan I	0.100	0.0932		ug/L		93	62 - 126	3	30	
4,4'-DDE	0.200	0.185		ug/L		92	57 - 135	7	30	
Dieldrin	0.200	0.190		ug/L		95	60 - 136	3	30	
Endrin	0.200	0.185		ug/L		93	60 - 138	3	30	
4,4'-DDD	0.200	0.192		ug/L		96	56 - 143	3	30	
Endosulfan II	0.200	0.189		ug/L		94	52 - 135	4	30	
4,4'-DDT	0.200	0.200		ug/L		100	51 - 143	10	30	
Endrin aldehyde	0.200	0.178		ug/L		89	51 - 132	4	30	
Endosulfan sulfate	0.200	0.191		ug/L		96	62 - 133	5	30	
Methoxychlor	1.00	1.01		ug/L		101	54 - 145	13	30	
Endrin ketone	0.200	0.201		ug/L		100	58 - 134	5	30	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	64		44 - 124
Tetrachloro-m-xylene	60		44 - 124
DCB Decachlorobiphenyl (Surr)	76		20 - 148
DCB Decachlorobiphenyl (Surr)	69		20 - 148

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 410-496451/1-A
Matrix: Water
Analysis Batch: 497071

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 496451

Analyte	MB MB		LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	0.20	U	0.50	0.10	ug/L		04/19/24 15:34	04/22/24 14:21	1
PCB-1221	0.20	U	0.50	0.10	ug/L		04/19/24 15:34	04/22/24 14:21	1
PCB-1232	0.20	U	0.50	0.10	ug/L		04/19/24 15:34	04/22/24 14:21	1
PCB-1242	0.20	U	0.50	0.10	ug/L		04/19/24 15:34	04/22/24 14:21	1
PCB-1248	0.20	U	0.50	0.10	ug/L		04/19/24 15:34	04/22/24 14:21	1
PCB-1254	0.20	U M	0.50	0.078	ug/L		04/19/24 15:34	04/22/24 14:21	1

Eurofins Seattle

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 410-496451/1-A
Matrix: Water
Analysis Batch: 497071

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 496451

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1260	0.20	U	0.50	0.078	ug/L	-	04/19/24 15:34	04/22/24 14:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Tetrachloro-m-xylene	69		33 - 137			04/19/24 15:34	04/22/24 14:21	1	
Tetrachloro-m-xylene	76		33 - 137			04/19/24 15:34	04/22/24 14:21	1	
DCB Decachlorobiphenyl (Surr)	86		10 - 148			04/19/24 15:34	04/22/24 14:21	1	
DCB Decachlorobiphenyl (Surr)	92		10 - 148			04/19/24 15:34	04/22/24 14:21	1	

Lab Sample ID: LCS 410-496451/2-A
Matrix: Water
Analysis Batch: 497071

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 496451

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
PCB-1016	5.01	3.68		ug/L	-	73	46 - 129
PCB-1260	5.02	3.21		ug/L	-	64	45 - 134
Surrogate	%Recovery	Qualifier	Limits			%Rec	
Tetrachloro-m-xylene	62		33 - 137				
Tetrachloro-m-xylene	65		33 - 137				
DCB Decachlorobiphenyl (Surr)	65		10 - 148				
DCB Decachlorobiphenyl (Surr)	67		10 - 148				

Lab Sample ID: LCSD 410-496451/3-A
Matrix: Water
Analysis Batch: 497071

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 496451

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
PCB-1016	5.01	4.24		ug/L	-	85	46 - 129	14	30
PCB-1260	5.02	3.71		ug/L	-	74	45 - 134	14	30
Surrogate	%Recovery	Qualifier	Limits			%Rec	RPD	Limit	
Tetrachloro-m-xylene	72		33 - 137						
Tetrachloro-m-xylene	76		33 - 137						
DCB Decachlorobiphenyl (Surr)	80		10 - 148						
DCB Decachlorobiphenyl (Surr)	86		10 - 148						

Method: 8151A DOD - Herbicides (GC)

Lab Sample ID: MB 410-496682/1-A
Matrix: Water
Analysis Batch: 496757

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 496682

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	0.13	U	0.15	0.065	ug/L	-	04/21/24 09:05	04/22/24 05:09	1
Silvex (2,4,5-TP)	0.044	U	0.050	0.022	ug/L	-	04/21/24 09:05	04/22/24 05:09	1
2,4-D	0.50	U	0.60	0.25	ug/L	-	04/21/24 09:05	04/22/24 05:09	1
2,4-DB	1.3	U	1.5	0.63	ug/L	-	04/21/24 09:05	04/22/24 05:09	1
Dichlorprop	0.32	U	0.50	0.16	ug/L	-	04/21/24 09:05	04/22/24 05:09	1

Eurofins Seattle

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Method: 8151A DOD - Herbicides (GC) (Continued)

Lab Sample ID: MB 410-496682/1-A
Matrix: Water
Analysis Batch: 496757

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 496682

Analyte	MB MB		LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Dalapon	11	U	12	5.7	ug/L		04/21/24 09:05	04/22/24 05:09	1
Dicamba	0.54	U	0.55	0.27	ug/L		04/21/24 09:05	04/22/24 05:09	1
MCPP	100	U	200	50	ug/L		04/21/24 09:05	04/22/24 05:09	1
MCPA	100	U	200	50	ug/L		04/21/24 09:05	04/22/24 05:09	1
Pentachlorophenol	0.060	U	0.070	0.027	ug/L		04/21/24 09:05	04/22/24 05:09	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2,4-Dichlorophenylacetic acid (Surr)	102		32 - 138	04/21/24 09:05	04/22/24 05:09	1
2,4-Dichlorophenylacetic acid (Surr)	97		32 - 138	04/21/24 09:05	04/22/24 05:09	1

Lab Sample ID: LCS 410-496682/2-A
Matrix: Water
Analysis Batch: 496757

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 496682

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
2,4,5-T	0.250	0.182		ug/L		73	42 - 147
Silvex (2,4,5-TP)	0.250	0.176		ug/L		70	51 - 134
2,4-D	2.51	1.93		ug/L		77	45 - 152
2,4-DB	2.51	1.79		ug/L		71	35 - 153
Dichlorprop	2.50	2.00		ug/L		80	46 - 159
Dalapon	6.25	11	U	ug/L		53	19 - 139
Dicamba	0.250	0.54	U	ug/L		65	50 - 141
MCPP	251	223	J1	ug/L		89	33 - 157
MCPA	496	412		ug/L		83	35 - 144
Pentachlorophenol	0.199	0.154		ug/L		77	56 - 139

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2,4-Dichlorophenylacetic acid (Surr)	72		32 - 138
2,4-Dichlorophenylacetic acid (Surr)	67		32 - 138

Lab Sample ID: LCSD 410-496682/3-A
Matrix: Water
Analysis Batch: 496757

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 496682

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	Limits	RPD	
		Result	Qualifier					RPD	Limit
2,4,5-T	0.250	0.186		ug/L		74	42 - 147	2	30
Silvex (2,4,5-TP)	0.250	0.175		ug/L		70	51 - 134	1	30
2,4-D	2.51	1.81		ug/L		72	45 - 152	6	30
2,4-DB	2.51	1.88		ug/L		75	35 - 153	5	30
Dichlorprop	2.50	1.90		ug/L		76	46 - 159	5	30
Dalapon	6.25	11	U	ug/L		55	19 - 139	5	30
Dicamba	0.250	0.54	U	ug/L		61	50 - 141	6	30
MCPP	251	209	J1	ug/L		83	33 - 157	6	30
MCPA	496	365		ug/L		74	35 - 144	12	30
Pentachlorophenol	0.199	0.151		ug/L		76	56 - 139	2	30

QC Sample Results

Client: Environmental Chemical Corp.
 Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Method: 8151A DOD - Herbicides (GC) (Continued)

Lab Sample ID: LCSD 410-496682/3-A
Matrix: Water
Analysis Batch: 496757

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 496682

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
2,4-Dichlorophenylacetic acid (Surr)	68		32 - 138
2,4-Dichlorophenylacetic acid (Surr)	66		32 - 138

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 410-495984/36
Matrix: Water
Analysis Batch: 495984

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB		LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Nitrite as N	0.10	U	0.11	0.050	mg/L			04/19/24 10:23	1
Nitrate as N	0.10	U	0.11	0.050	mg/L			04/19/24 10:23	1
Nitrate Nitrite as N	0.10	U	1.1	0.050	mg/L			04/19/24 10:23	1

Lab Sample ID: LCS 410-495984/34
Matrix: Water
Analysis Batch: 495984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	0.750	0.704		mg/L		94	88 - 111

Lab Sample ID: LCSD 410-495984/35
Matrix: Water
Analysis Batch: 495984

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	0.750	0.705		mg/L		94	88 - 111	0	15

Lab Sample ID: MB 410-496649/5
Matrix: Water
Analysis Batch: 496649

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB		LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Nitrite as N	0.10	U	0.11	0.050	mg/L			04/20/24 10:09	1
Nitrate as N	0.10	U	0.11	0.050	mg/L			04/20/24 10:09	1
Nitrate Nitrite as N	0.10	U	1.1	0.050	mg/L			04/20/24 10:09	1

Lab Sample ID: LCS 410-496649/3
Matrix: Water
Analysis Batch: 496649

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	0.750	0.697		mg/L		93	88 - 111

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 410-496649/4
Matrix: Water
Analysis Batch: 496649

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrite as N	0.750	0.691		mg/L		92	87 - 111	0	15
Nitrate as N	0.750	0.696		mg/L		93	88 - 111	0	15

Lab Sample ID: 580-138970-1 MS
Matrix: Water
Analysis Batch: 496649

Client Sample ID: TDS-RP-15APR24
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	21	D H H3 J1	10.0	32.9	D J1	mg/L		118	88 - 111

Lab Sample ID: 580-138970-1 DU
Matrix: Water
Analysis Batch: 496649

Client Sample ID: TDS-RP-15APR24
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate as N	21	D H H3 J1	21.7	D	mg/L		3	15
Nitrate Nitrite as N	21	J D H H3	21.7	J D	mg/L		3	15

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 410-496650/5
Matrix: Water
Analysis Batch: 496650

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	1.0	U	1.5	0.50	mg/L			04/20/24 10:09	1

Lab Sample ID: LCS 410-496650/3
Matrix: Water
Analysis Batch: 496650

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	7.50	7.04		mg/L		94	90 - 110

Lab Sample ID: LCSD 410-496650/4
Matrix: Water
Analysis Batch: 496650

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	7.50	7.05		mg/L		94	90 - 110	0	20

Lab Sample ID: 580-138970-1 MS
Matrix: Water
Analysis Batch: 496650

Client Sample ID: TDS-RP-15APR24
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	230	D J1	100	342	D J1	mg/L		114	90 - 110

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 580-138970-1 DU
Matrix: Water
Analysis Batch: 496650

Client Sample ID: TDS-RP-15APR24
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	230	D J1	237	D	mg/L		3	15

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Lab Sample ID: MB 410-496862/1-A
Matrix: Water
Analysis Batch: 496425

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 496862

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	2.0	U M	5.0	0.87	pg/L		04/22/24 08:27	04/24/24 02:13	1
Total TCDD	2.0	U	5.0	0.87	pg/L		04/22/24 08:27	04/24/24 02:13	1
Isotope Dilution	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C-2,3,7,8-TCDD	132		40 - 135				04/22/24 08:27	04/24/24 02:13	1

Lab Sample ID: LCS 410-496862/2-A
Matrix: Water
Analysis Batch: 496425

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 496862

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,3,7,8-TCDD	200	190		pg/L		95	71 - 125
Isotope Dilution	%Recovery	LCS Qualifier	Limits				
13C-2,3,7,8-TCDD	116		40 - 135				

Lab Sample ID: LCSD 410-496862/3-A
Matrix: Water
Analysis Batch: 496425

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 496862

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,3,7,8-TCDD	200	191		pg/L		95	71 - 125	0	20
Isotope Dilution	%Recovery	LCSD Qualifier	Limits						
13C-2,3,7,8-TCDD	106		40 - 135						

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 410-496838/1-A
Matrix: Water
Analysis Batch: 498346

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 496838

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.032	U	0.050	0.016	mg/L		04/22/24 08:30	04/25/24 04:04	1
Arsenic	0.032	U	0.050	0.016	mg/L		04/22/24 08:30	04/25/24 04:04	1
Barium	0.0020	U	0.0050	0.0010	mg/L		04/22/24 08:30	04/25/24 04:04	1
Beryllium	0.0020	U	0.0050	0.0010	mg/L		04/22/24 08:30	04/25/24 04:04	1
Calcium	0.46	U	0.50	0.23	mg/L		04/22/24 08:30	04/25/24 04:04	1
Chromium	0.0060	U	0.015	0.0030	mg/L		04/22/24 08:30	04/25/24 04:04	1
Cobalt	0.0030	U	0.0050	0.0015	mg/L		04/22/24 08:30	04/25/24 04:04	1
Copper	0.016	U	0.020	0.0080	mg/L		04/22/24 08:30	04/25/24 04:04	1

Eurofins Seattle

QC Sample Results

Client: Environmental Chemical Corp.
 Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: MB 410-496838/1-A
Matrix: Water
Analysis Batch: 498346

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 496838

Analyte	MB MB		LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Lead	0.014	U	0.015	0.0071	mg/L		04/22/24 08:30	04/25/24 04:04	1
Molybdenum	0.0040	U	0.010	0.0020	mg/L		04/22/24 08:30	04/25/24 04:04	1
Nickel	0.0040	U	0.010	0.0021	mg/L		04/22/24 08:30	04/25/24 04:04	1
Silver	0.0080	U	0.010	0.0040	mg/L		04/22/24 08:30	04/25/24 04:04	1
Thallium	0.024	U	0.030	0.012	mg/L		04/22/24 08:30	04/25/24 04:04	1
Zinc	0.0074	U	0.020	0.0037	mg/L		04/22/24 08:30	04/25/24 04:04	1

Lab Sample ID: MB 410-496838/1-A
Matrix: Water
Analysis Batch: 498479

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 496838

Analyte	MB MB		LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Cadmium	0.0020	U	0.0050	0.0010	mg/L		04/22/24 08:30	04/25/24 06:44	1
Selenium	0.032	U	0.050	0.016	mg/L		04/22/24 08:30	04/25/24 06:44	1
Vanadium	0.0038	U	0.010	0.0019	mg/L		04/22/24 08:30	04/25/24 06:44	1

Lab Sample ID: LCS 410-496838/2-A
Matrix: Water
Analysis Batch: 498346

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 496838

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Antimony	0.100	0.114	Q	mg/L		114	88 - 113
Arsenic	0.500	0.542		mg/L		108	87 - 113
Barium	0.500	0.526		mg/L		105	88 - 113
Beryllium	0.0500	0.0551		mg/L		110	89 - 112
Calcium	5.00	5.54		mg/L		111	87 - 113
Chromium	0.500	0.553		mg/L		111	90 - 113
Cobalt	0.500	0.511		mg/L		102	89 - 114
Copper	0.500	0.545		mg/L		109	86 - 114
Lead	0.0500	0.0556		mg/L		111	86 - 113
Molybdenum	0.0500	0.0531		mg/L		106	89 - 113
Nickel	0.500	0.532		mg/L		106	88 - 113
Silver	0.0500	0.0544		mg/L		109	84 - 115
Thallium	0.100	0.104		mg/L		104	85 - 114
Zinc	0.500	0.512		mg/L		102	87 - 115

Lab Sample ID: LCS 410-496838/2-A
Matrix: Water
Analysis Batch: 498479

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 496838

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Cadmium	0.0500	0.0534		mg/L		107	88 - 113
Selenium	0.100	0.106		mg/L		106	83 - 114
Vanadium	0.500	0.528		mg/L		106	90 - 111

QC Sample Results

Client: Environmental Chemical Corp.
 Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: MB 410-496581/1-A
Matrix: Water
Analysis Batch: 497280

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 496581

Analyte	MB MB		LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	0.32	U	0.50	0.16	mg/L		04/22/24 09:25	04/22/24 23:43	1
Barium	0.020	U	0.050	0.010	mg/L		04/22/24 09:25	04/22/24 23:43	1
Chromium	0.060	U	0.15	0.030	mg/L		04/22/24 09:25	04/22/24 23:43	1
Lead	0.14	U	0.15	0.071	mg/L		04/22/24 09:25	04/22/24 23:43	1
Selenium	0.32	U	0.50	0.16	mg/L		04/22/24 09:25	04/22/24 23:43	1
Silver	0.080	U	0.10	0.040	mg/L		04/22/24 09:25	04/22/24 23:43	1

Lab Sample ID: MB 410-496581/1-A
Matrix: Water
Analysis Batch: 497547

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 496581

Analyte	MB MB		LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Cadmium	0.020	U	0.050	0.010	mg/L		04/22/24 09:25	04/23/24 06:07	1

Lab Sample ID: LCS 410-496581/2-A
Matrix: Water
Analysis Batch: 497280

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 496581

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	5.00	5.27		mg/L		105	88 - 113
Chromium	5.00	5.40		mg/L		108	90 - 113
Lead	0.500	0.525		mg/L		105	86 - 113
Selenium	1.00	1.10		mg/L		110	83 - 114
Silver	0.500	0.564		mg/L		113	84 - 115

Lab Sample ID: LCS 410-496581/2-A
Matrix: Water
Analysis Batch: 497547

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 496581

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 410-496582/1-A
Matrix: Water
Analysis Batch: 497375

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 496582

Analyte	MB MB		LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	0.16	U	0.20	0.079	ug/L		04/22/24 06:15	04/22/24 13:30	1

Lab Sample ID: LCS 410-496582/2-A
Matrix: Water
Analysis Batch: 497375

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 496582

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: MB 410-497286/1-A
Matrix: Water
Analysis Batch: 497622

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 497286

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.16	U	0.20	0.079	ug/L		04/23/24 06:30	04/23/24 11:28	1

Lab Sample ID: LCS 410-497286/2-A
Matrix: Water
Analysis Batch: 497622

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 497286

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	0.876		ug/L		88	82 - 119

Method: 1010B - Ignitability, Pensky-Martens Closed-Cup Method

Lab Sample ID: LCS 410-496364/1
Matrix: Water
Analysis Batch: 496364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Flashpoint	81.0	81.0		Degrees F		100	96.9 - 103.1

Lab Sample ID: LCSD 410-496364/2
Matrix: Water
Analysis Batch: 496364

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Flashpoint	81.0	81.0		Degrees F		100	96.9 - 103.1	0	4

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 410-497211/1
Matrix: Water
Analysis Batch: 497211

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	4.0	U	5.0	1.4	mg/L			04/22/24 18:39	1
SGT-HEM (TPH)	4.0	U	5.0	1.4	mg/L			04/22/24 18:39	1

Lab Sample ID: LCS 410-497211/2
Matrix: Water
Analysis Batch: 497211

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
HEM (Oil & Grease)	40.0	34.7		mg/L		87	78 - 114
SGT-HEM (TPH)	20.0	13.3		mg/L		67	64 - 132

Lab Sample ID: LCSD 410-497211/3
Matrix: Water
Analysis Batch: 497211

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HEM (Oil & Grease)	40.0	33.8		mg/L		85	78 - 114	3	13

Eurofins Seattle

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Method: 1664B - HEM and SGT-HEM (Continued)

Lab Sample ID: LCSD 410-497211/3
Matrix: Water
Analysis Batch: 497211

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
SGT-HEM (TPH)	20.0	15.2		mg/L		76	64 - 132	13	23

Method: 180.1 - Turbidity, Nephelometric

Lab Sample ID: MB 410-496677/3
Matrix: Water
Analysis Batch: 496677

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Turbidity	0.70	U	1.0	1.0	NTU			04/21/24 04:03	1

Lab Sample ID: LCS 410-496677/4
Matrix: Water
Analysis Batch: 496677

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Turbidity	1.00	1.0		NTU		104	90 - 130

Method: 2320B-2011 - Alkalinity, Total

Lab Sample ID: MB 410-498016/36
Matrix: Water
Analysis Batch: 498016

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	6.0	U	8.0	2.6	mg/L			04/23/24 22:12	1

Lab Sample ID: LCS 410-498016/37
Matrix: Water
Analysis Batch: 498016

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity as CaCO3 to pH 4.5	189	182		mg/L		96	66 - 110

Lab Sample ID: 580-138970-1 DU
Matrix: Water
Analysis Batch: 498016

Client Sample ID: TDS-RP-15APR24
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity as CaCO3 to pH 4.5	44		43.8		mg/L		1	10

Method: 2340C-2011 - Hardness, Total

Lab Sample ID: MB 410-497451/4
Matrix: Water
Analysis Batch: 497451

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Total Hardness	8.0	U	10	3.0	mg/L			04/23/24 06:11	1

Eurofins Seattle

QC Sample Results

Client: Environmental Chemical Corp.
 Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Method: 2340C-2011 - Hardness, Total (Continued)

Lab Sample ID: LCS 410-497451/5
 Matrix: Water
 Analysis Batch: 497451

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Hardness	40.0	39.4		mg/L		99	90 - 110

Method: 2540C - 2015 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 410-496089/1
 Matrix: Water
 Analysis Batch: 496089

Client Sample ID: Method Blank
 Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	25	U	30	12	mg/L			04/19/24 06:47	1

Lab Sample ID: LCS 410-496089/2
 Matrix: Water
 Analysis Batch: 496089

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	200	188		mg/L		94	90 - 110

Method: 2540D-2015 - Solids, Total Suspended (TSS)

Lab Sample ID: MB 410-496501/1
 Matrix: Water
 Analysis Batch: 496501

Client Sample ID: Method Blank
 Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	2.5	U	3.0	1.0	mg/L			04/19/24 18:12	1

Lab Sample ID: LCS 410-496501/2
 Matrix: Water
 Analysis Batch: 496501

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	151	144		mg/L		95	89 - 105

Method: 330.4 - Chlorine, Total Residual

Lab Sample ID: MB 410-497259/1
 Matrix: Water
 Analysis Batch: 497259

Client Sample ID: Method Blank
 Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Residual Chlorine	0.15	U	0.20	0.060	mg/L			04/23/24 01:38	1

Lab Sample ID: LCS 410-497259/2
 Matrix: Water
 Analysis Batch: 497259

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Residual Chlorine	1.00	1.00		mg/L		100	95 - 105

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Method: 330.4 - Chlorine, Total Residual (Continued)

Lab Sample ID: LCSD 410-497259/3
Matrix: Water
Analysis Batch: 497259

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Residual Chlorine	1.00	1.02		mg/L		102	95 - 105	2	10

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 410-497585/2-A
Matrix: Water
Analysis Batch: 498131

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 497585

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Kjeldahl	1.0	U	1.5	0.50	mg/L		04/23/24 13:30	04/24/24 11:50	1

Lab Sample ID: LCS 410-497585/1-A
Matrix: Water
Analysis Batch: 498131

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 497585

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrogen, Kjeldahl	4.00	4.34		mg/L		108	90 - 110

Method: 410.4 - COD

Lab Sample ID: MB 410-497079/35
Matrix: Water
Analysis Batch: 497079

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	60	U	75	25	mg/L			04/22/24 10:20	1

Lab Sample ID: LCS 410-497079/36
Matrix: Water
Analysis Batch: 497079

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	500	513		mg/L		102	90 - 110

Method: 4500 NH3 D-2011 - Ammonia

Lab Sample ID: MB 410-497566/3
Matrix: Water
Analysis Batch: 497566

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia-N	0.20	U	0.24	0.080	mg/L			04/23/24 10:50	1

Lab Sample ID: LCS 410-497566/4
Matrix: Water
Analysis Batch: 497566

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia-N	5.00	5.60		mg/L		112	88 - 122

QC Sample Results

Client: Environmental Chemical Corp.
 Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Method: 5310 C-2014 - Total Organic Carbon/Persulfate - Ultrav

Lab Sample ID: MB 410-499467/7
 Matrix: Water
 Analysis Batch: 499467

Client Sample ID: Method Blank
 Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	0.90	U	1.0	0.50	mg/L			04/26/24 14:04	1

Lab Sample ID: LCS 410-499467/6
 Matrix: Water
 Analysis Batch: 499467

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	50.0	50.8		mg/L		102	90 - 110

Lab Sample ID: MRL 410-499467/3
 Matrix: Water
 Analysis Batch: 499467

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	1.00	0.909	J	mg/L		91	50 - 150

Method: 9012 - Cyanide, Reactive

Lab Sample ID: MB 410-497402/1-A
 Matrix: Water
 Analysis Batch: 497724

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 497402

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	50	U	60	20	mg/Kg		04/23/24 08:34	04/23/24 18:25	1

Lab Sample ID: LCS 410-497402/2-A
 Matrix: Water
 Analysis Batch: 497724

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 497402

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Reactive	1000	500	U	mg/Kg		2	0 - 5.14

Method: 9012A - Cyanide, Total and/or Amenable

Lab Sample ID: MB 410-497819/1-A
 Matrix: Water
 Analysis Batch: 498260

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 497819

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0090	U	0.010	0.0050	mg/L		04/24/24 10:00	04/24/24 15:47	1

Lab Sample ID: LCS 410-497819/2-A
 Matrix: Water
 Analysis Batch: 498260

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 497819

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.248		mg/L		99	85 - 115

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Method: 9034 - Sulfide, Reactive

Lab Sample ID: MB 410-497402/1-A
Matrix: Water
Analysis Batch: 497558

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 497402

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Reactive	140	U	160	54	mg/Kg		04/23/24 08:34	04/23/24 12:49	1

Lab Sample ID: LCS 410-497402/20-A
Matrix: Water
Analysis Batch: 497558

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 497402

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide, Reactive	538	388		mg/Kg		72	62 - 104

Method: 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 410-496860/1
Matrix: Water
Analysis Batch: 496860

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.5	U	2.0	0.70	mg/L			04/22/24 08:25	1

Lab Sample ID: LCS 410-496860/2
Matrix: Water
Analysis Batch: 496860

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	20.1	17.0		mg/L		85	77 - 110

Lab Sample ID: LCSD 410-496860/3
Matrix: Water
Analysis Batch: 496860

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	20.1	17.0		mg/L		85	77 - 110	0	10

Method: 9040C - pH

Lab Sample ID: LCS 410-498017/38
Matrix: Water
Analysis Batch: 498017

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.1		S.U.		101	95 - 105

Lab Sample ID: 580-138970-1 DU
Matrix: Water
Analysis Batch: 498017

Client Sample ID: TDS-RP-15APR24
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.4	HF	7.4		S.U.		0.1	4
Temperature	22.5	HF	22.6		Degrees C		0.4	4

Lab Chronicle

Client: Environmental Chemical Corp.
 Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Client Sample ID: TDS-RP-15APR24
Date Collected: 04/15/24 14:45
Date Received: 04/18/24 09:05

Lab Sample ID: 580-138970-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	497729	K4WN	ELLE	04/24/24 01:36
Total/NA	Analysis	8260D	RA	1	498786	K4WN	ELLE	04/25/24 22:21
Total/NA	Prep	3510C			497151	L2FU	ELLE	04/22/24 15:30
Total/NA	Analysis	8270D		1	497304	SJ89	ELLE	04/23/24 09:19
Total/NA	Prep	3510C			496441	QJZ6	ELLE	04/19/24 15:23
Total/NA	Analysis	8015D DRO		1	496536	KP5X	ELLE	04/20/24 11:27
Total/NA	Prep	3510C			496449	QJZ6	ELLE	04/19/24 15:31
Total/NA	Analysis	8081B		5	496782	UAMZ	ELLE	04/22/24 22:30
Total/NA	Prep	3510C			496451	QJZ6	ELLE	04/19/24 15:34
Total/NA	Analysis	8082A		1	497071	A2VL	ELLE	04/22/24 16:58
Total/NA	Prep	8151A			496682	QJZ6	ELLE	04/21/24 09:05
Total/NA	Analysis	8151A DOD		1	497290	UAMZ	ELLE	04/23/24 07:14
Total/NA	Analysis	9056A		5	495984	L4QM	ELLE	04/19/24 07:07
Total/NA	Analysis	9056A		20	496649	L4QM	ELLE	04/20/24 15:23
Total/NA	Analysis	EPA 300.0 R2.1		20	496650	L4QM	ELLE	04/20/24 15:23
Total/NA	Prep	8290A			496862	UDPW	ELLE	04/22/24 08:27
Total/NA	Analysis	8290A		1	496425	UC8F	ELLE	04/24/24 04:53
TCLP	Leach	1311			496126	HA8T	ELLE	04/19/24 08:15 - 04/19/24 08:25 ¹
TCLP	Prep	3005A			496581	X3ZX	ELLE	04/22/24 09:25
TCLP	Analysis	6010D		1	497280	MT26	ELLE	04/23/24 00:23
TCLP	Leach	1311			496126	HA8T	ELLE	04/19/24 08:15 - 04/19/24 08:25 ¹
TCLP	Prep	3005A			496581	X3ZX	ELLE	04/22/24 09:25
TCLP	Analysis	6010D		1	497547	MT26	ELLE	04/23/24 06:17
Total/NA	Prep	3005A			496838	X3ZX	ELLE	04/22/24 08:30
Total/NA	Analysis	6010D		1	498346	MT26	ELLE	04/25/24 04:34
Total/NA	Prep	3005A			496838	X3ZX	ELLE	04/22/24 08:30
Total/NA	Analysis	6010D		1	498479	MT26	ELLE	04/25/24 06:50
TCLP	Leach	1311			496126	HA8T	ELLE	04/19/24 08:15 - 04/19/24 08:25 ¹
TCLP	Prep	7470A			496582	UAMX	ELLE	04/22/24 06:15
TCLP	Analysis	7470A		1	497375	UEFS	ELLE	04/22/24 13:53
Total/NA	Prep	7470A			497286	UAMX	ELLE	04/23/24 06:30
Total/NA	Analysis	7470A		1	497622	UEFS	ELLE	04/23/24 12:21
Total/NA	Analysis	1010B		1	496364	DI9Q	ELLE	04/19/24 14:00 - 04/19/24 14:00 ¹
Total/NA	Analysis	1664B		1	497211	QT6L	ELLE	04/22/24 18:39
Total/NA	Analysis	180.1		5	496677	UDS7	ELLE	04/21/24 04:03
Total/NA	Analysis	2320B-2011		1	498016	DI9Q	ELLE	04/23/24 22:48
Total/NA	Analysis	2340C-2011		10	497451	USAE	ELLE	04/23/24 06:31
Total/NA	Analysis	2540C - 2015		1	496089	M98K	ELLE	04/19/24 06:47
Total/NA	Analysis	2540D-2015		1	496501	UOCA	ELLE	04/19/24 18:12 - 04/21/24 17:54 ¹
Total/NA	Analysis	330.4		1	497259	UDS7	ELLE	04/23/24 01:38
Total/NA	Prep	351.2			497585	NLE3	ELLE	04/23/24 13:30 - 04/23/24 16:30 ¹
Total/NA	Analysis	351.2		1	498131	JCG7	ELLE	04/24/24 12:07
Total/NA	Analysis	360.1		1	497587	B6LN	ELLE	04/23/24 13:38

Lab Chronicle

Client: Environmental Chemical Corp.
 Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Client Sample ID: TDS-RP-15APR24
Date Collected: 04/15/24 14:45
Date Received: 04/18/24 09:05

Lab Sample ID: 580-138970-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	410.4		1	497079	USAE	ELLE	04/22/24 11:32
Total/NA	Analysis	4500 NH3 D-2011		5	497566	UML5	ELLE	04/23/24 12:20
Total/NA	Analysis	5310 C-2014		1	499467	P684	ELLE	04/27/24 06:23
Total/NA	Prep	7.3.4			497402	USE1	ELLE	04/23/24 08:34
Total/NA	Analysis	9012		1	497724	JCG7	ELLE	04/23/24 18:36
Total/NA	Prep	9012A			497819	PQ9E	ELLE	04/24/24 10:00 - 04/24/24 11:45 ¹
Total/NA	Analysis	9012A		1	498260	JCG7	ELLE	04/24/24 15:55
Total/NA	Analysis	9034		1	496860	USE1	ELLE	04/22/24 08:25
Total/NA	Prep	7.3.4			497402	USE1	ELLE	04/23/24 08:34
Total/NA	Analysis	9034		1	497558	USE1	ELLE	04/23/24 12:49
Total/NA	Analysis	9040C		1	498017	DI9Q	ELLE	04/23/24 22:48
Total/NA	Analysis	Nitrogen,Org		1	498228	UKJF	ELLE	04/24/24 16:37
Total/NA	Analysis	Total Nitrogen		1	498229	UKJF	ELLE	04/25/24 09:58

Client Sample ID: Trip Blank
Date Collected: 04/15/24 00:00
Date Received: 04/18/24 09:05

Lab Sample ID: 580-138970-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	497729	K4WN	ELLE	04/23/24 23:37
Total/NA	Analysis	8260D	RA	1	498786	K4WN	ELLE	04/25/24 22:01

¹ This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Environmental Chemical Corp.
 Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	04-29-24
A2LA	ISO/IEC 17025	0001.01	11-30-24
Alabama	State	43200	01-31-25
Alaska	State	PA00009	06-30-24
Alaska (UST)	State	17-027	02-28-25
Arizona	State	AZ0780	03-12-25
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	11-30-24
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-25
Delaware (DW)	State	N/A	01-31-25
Florida	NELAP	E87997	06-30-24
Georgia (DW)	State	C048	01-31-25
Hawaii	State	N/A	01-31-25
Illinois	NELAP	200027	01-31-25
Iowa	State	361	03-01-24 *
Kansas	NELAP	E-10151	10-31-24
Kentucky (DW)	State	KY90088	12-31-24
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-23 *
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-25
Massachusetts	State	M-PA009	06-30-24
Michigan	State	9930	01-31-25
Minnesota	NELAP	042-999-487	12-31-24
Mississippi	State	023	01-31-25
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-25
Nebraska	State	NE-OS-32-17	01-31-25
New Hampshire	NELAP	2730	01-10-25
New Jersey	NELAP	PA011	06-30-24
New York	NELAP	10670	04-01-25
North Carolina (DW)	State	42705	07-31-24
North Carolina (WW/SW)	State	521	12-31-24
Oklahoma	NELAP	9804	08-31-24
Oregon	NELAP	PA200001	09-11-24
Pennsylvania	NELAP	36-00037	01-31-25
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-24
Rhode Island	State	LAO00338	12-30-24
South Carolina	State	89002	01-31-24 *
Tennessee	State	02838	01-31-25
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-24
Virginia	NELAP	460182	06-14-25
West Virginia (DW)	State	9906 C	01-31-25
West Virginia DEP	State	055	07-31-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wyoming	State	8TMS-L	01-31-25
Wyoming (UST)	A2LA	0001.01	11-30-24

1

2

3

4

5

6

7

8

9

10

11

12

Sample Summary

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Collected</u>	<u>Received</u>
580-138970-1	TDS-RP-15APR24	Water	04/15/24 14:45	04/18/24 09:05
580-138970-2	Trip Blank	Water	04/15/24 00:00	04/18/24 09:05

1

2

3

4

5

6

7

8

9

10

11

12



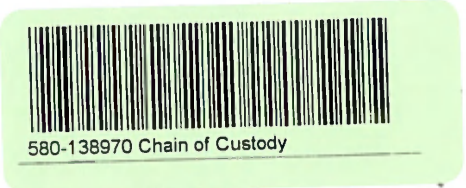
COC NO.
Page

4344-401-TDS-ECC-01
1 of 2

Laboratory Name: Eurofins - Lancaster Laboratories, Inc
Address : 2425 New Holland Pike / Lancaster, PA / 17601
Contact : Katie Grant /
Phone: 717-656-2300

Project Location:
ECC
75 Kupuohi St, Suite 103
Lahaina, Hawaii, 96761

Project Contact: Kane McNeill, 650-228-6950								TAT: Standard												
Project Name: TDS								Site: Detention Basin		VOCs	SVOCs	Herbicides	Pesticides	Dioxins	Metals	Metals - TCLP	Mercury	Mercury - TCLP	Oil & Grease	TPH (ORO)
Project Number: 4344-401								Event: Leachate Sampling		40-mL / 8260D	1-L / x2 8270	1-L / x2	1-L / x2	1-L / x2 8290	250-mL / 6010	250-mL / 6010	7470	7470	1-L / x2 1864	40-mL / 6015
Sampler Print: MORGAN THOMAS				Sampler Sign: M. TH				HCL	-	-	-	-	3	3			HCL	HCL		
Sample Number	Grab	Date	Time	Matrix	Site Type	Media Type	# of Bottles	Comments												
TDS-RP-15APR24	x	04/15/2024	1445	Water	Basin	W	18	X	X	X	X	X	X	X	X	X	X			
				Water	-	W	2	X										Trip Blank		
Relinquished By: M. TH				Received By: _____				Special Instructions Dioxins: 2378-TCDD only												
Date/Time: 04/15/2024 0900				Date/Time: _____																
Relinquished By: _____				Received From Laboratory By: _____				M. TH 3.9/3.16												
Date/Time: _____				Date/Time: 4/18/24 0905																



SM



COC NO. 4344-401-TDS-PCOG-01
 Page 2 of 2

Laboratory Name: Eurofins - Lancaster Laboratories, Inc
 Address : 2425 New Holland Pike / Lancaster, PA / 17601
 Contact : Katie Grant /
 Phone: 717-856-2300

Project Location:
 ECC
 75 Kupuohi St, Suite 103
 Lahaina, Hawaii, 96761

Project Contact: Kane McNeill, 650-228-6950								TAT: Standard													
Project Name: TDS				Site: Detention Basin				TSS / TDS	Cyanide / Sulfate / Sulfide	Turbidity / pH / Flashpoint	Nitrogen (Organic, Ammonia, Total)	Nitrites / Nitrites	Chlorine (Free Residual)	Alkalinity (Bicarb, Carb, Hydroxide)	Dissolved Oxygen	Total Organic Carbon	Calcium - Harness	Chemical Oxygen Demand	Reactivity-Cyanide	Reactivity - Sulfide	
Project Number: 4344-401				Event: Leachate Sampling																	
Sampler Print: MORGAN THOMAS				Sampler Sign: M. TH																	
Sample Number	Grab	Date	Time	Matrix	Site Type	Media Type	# of Bottles														Comments
TDS-RP-15APR24	x	04/15/2024	1445	Water	Basin	W	8	x	x	x	x	x	x	x	x	x	x	x	x	x	
				Water	-	W	2	x													Trip Blank
Relinquished By: M. TH								Received By:								Special Instructions Dioxins: 2378-TCDD only					
Date/Time: 04/16/2024 0905								Date/Time:													
Relinquished By:								Received From Laboratory By: [Signature]								3.9/3.6					
Date/Time:								Date/Time: 4/18/24 0905													

SM





Vision
Integrate
Results

COC NO.
Page

4344-401-TDS-ECC-01

1 of 2

Laboratory Name: Eurofins - Lancaster Laboratories, Inc
Address: 2425 New Holland Pike / Lancaster, PA / 17601
Contact: Katie Grant /
Phone: 717-656-2300

Project Location:
ECC
75 Kupuohi St, Suite 103
Lahaina, Hawaii, 96761

TAT: Standard										VOCS	SVOCs	Herbicides	Pesticides	Dioxins	Metals	Metals - TCLP	Mercury	Mercury - TCLP	Oil & Grease	TPH (ORO)		
Sample Number	Grab	Date	Time	Matrix	Site Type	Media Type	# of Bottles	HCL														Comments
TDS-RP-15APR24	x	04/15/2024	1445	Water	Basin	W	18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
				Water		W	2	X														Trip Blank
Relinquished By: M. Th										Received By:										Special Instructions		
Date/Time: 04/16/2024 0900										Date/Time:										Dioxins: 2378-TCDD only		
Relinquished By:										Received From Laboratory By:												
Date/Time:										Date/Time: 4/18/24 1200												

R: 5.5
C: 5.1

LAA



Vision
Integrity
Results

COC NO. 4344-401-TDS-ECOG-01
Page 2 of 2

Laboratory Name: Eurofins - Lancaster Laboratories, Inc
Address : 2425 New Holland Pike / Lancaster, PA / 17601
Contact : Katie Grant /
Phone: 717-656-2300

Project Location:
ECC
75 Kupuohi St, Suite 103
Lahaina, Hawaii, 96761

Project Contact: Kane McNeill, 650-228-6950								TAT: Standard														
Project Name: TDS				Site: Detention Basin																		
Project Number: 4344-401				Event: Leachate Sampling																		
Sampler Print: MORGAN THOMAS				Sampler Sign: <i>M. Thomas</i>																		
Sample Number	Grab	Date	Time	Matrix	Bottle Type	Media Type	# of Bottles	TSS / TDS	Cyanide / Sulfate / Sulfide	Turbidity / pH / Flashpoint	Nitrogen (Organic, Ammonia, Total)	Nitrates / Nitrites	Chlorine (Free Residual)	Alkalinity (Bicarb. Carb., Hydroxide)	Dissolved Oxygen	Total Organic Carbon	Calcium - Harness	Chemical Oxygen Demand	Reactivity-Cyanide	Reactivity - Sulfide	Comments	
TDS-RP-15APR24	x	04/15/2024	1445	Water	Basin	W	8	x	x	x	x	x	x	x	x	x	x	x	x	x		
				Water	-	W	2	x														Trip Blank
Relinquished By: <i>M. Thomas</i>				Received By:				Special Instructions Dioxins: 2378-TCDD only														
Date/Time: 04/16/2024 0900				Date/Time:																		
Relinquished By:				Received From Laboratory By: <i>[Signature]</i>																		
Date/Time:				Date/Time: 4/16/24 1210																		

R: 5.5
C: 5.1

HAB

Login Sample Receipt Checklist

Client: Environmental Chemical Corp.

Job Number: 580-138970-1

Login Number: 138970

List Source: Eurofins Seattle

List Number: 1

Creator: Groves, Elizabeth

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time (excluding tests with immediate HTs)		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: Environmental Chemical Corp.

Job Number: 580-138970-1

Login Number: 138970

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 2

List Creation: 04/18/24 05:15 PM

Creator: Bryan, Debra A

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temp acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	False	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	True	
VOA sample vials do not have headspace $>6\text{mm}$ in diameter (none, if from WV)?	True	

Isotope Dilution Summary

Client: Environmental Chemical Corp.
Project/Site: 2023 Maui Fires - Lahaina, Maui

Job ID: 580-138970-1

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCDD (40-135)
580-138970-1	TDS-RP-15APR24	101
LCS 410-496862/2-A	Lab Control Sample	116
LCSD 410-496862/3-A	Lab Control Sample Dup	106
MB 410-496862/1-A	Method Blank	132

Surrogate Legend

TCDD = 13C-2,3,7,8-TCDD

 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Mr. Jackson Kiker
Environmental Chemical Corp.
43 Broad St
Suite A301
Hudson, Massachusetts 01749

Generated 6/4/2024 8:25:08 AM

JOB DESCRIPTION

TDS Leachate Sampling

JOB NUMBER

580-140271-1

Eurofins Seattle

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



Generated
6/4/2024 8:25:08 AM

Authorized for release by
Katie Grant, Project Manager I
Katie.Grant@et.eurofinsus.com
(253)922-2310



Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Definitions	8
Client Sample Results	10
QC Sample Results	16
Chronicle	37
Certification Summary	39
Sample Summary	41
Chain of Custody	42
Receipt Checklists	44
Isotope Dilution Summary	45

Case Narrative

Client: Environmental Chemical Corp.
Project: TDS Leachate Sampling

Job ID: 580-140271-1

Job ID: 580-140271-1

Eurofins Seattle

Job Narrative 580-140271-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Receipt

The samples were received on 5/23/2024 9:40 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 0.8°C, 1.5°C and 1.9°C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

Receipt Exceptions

The Chain-of-Custody (COC) was incomplete as received. The COC is missing Sample Preservation. This does not meet regulatory requirements.

The following sample is marked for TSS and TDS analyses on the COC but no containers were received. Only received six 40mL HCl preserved vials.

Trip Blank (580-140271-2)

Method 8260D - Volatile Organic Compounds (GC/MS)

Samples TDS-RP-20MAY24 (580-140271-1) and Trip Blank (580-140271-2) were analyzed for Volatile Organic Compounds (GC/MS). The samples were prepared on 5/28/2024 and analyzed on 5/29/2024 and 5/30/2024.

The response for Chloromethane in the continuing calibration verification (CCV) marginally exceeds, low-biased, the DoD acceptance criteria on batch 410-511809. Due to the marginal nature of the outlier(s), the data is reported.

The continuing calibration verification (CCV) associated with batch 410-511809 recovered above the upper control limit for Pentachloroethane. Non-detections of the affected analytes are reported. Any detections are considered estimated.

The preservative used in the sample containers provided is not compatible with the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TDS-RP-20MAY24 (580-140271-1) and Trip Blank (580-140271-2). The requested target analyte list includes Acrolein and Acrylonitrile, acid-labile compounds that degrade in an acidic medium.

Method 8270D - Semivolatile Organic Compounds (GC/MS)

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Semivolatile Organic Compounds (GC/MS). The sample was prepared on 5/24/2024 and analyzed on 5/28/2024 and 5/29/2024.

Method 8015D DRO - Diesel Range Organics (DRO) (GC)

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Diesel Range Organics (DRO) (GC). The sample was prepared on 5/24/2024 and analyzed on 5/25/2024.

Method 8151A DOD - Herbicides (GC)

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Herbicides (GC). The sample was prepared on 5/25/2024 and analyzed on 5/28/2024.

Method 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Eurofins Seattle

Case Narrative

Client: Environmental Chemical Corp.
Project: TDS Leachate Sampling

Job ID: 580-140271-1

Job ID: 580-140271-1 (Continued)

Eurofins Seattle

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Polychlorinated Biphenyls (PCBs) by Gas Chromatography. The sample was prepared on 5/24/2024 and analyzed on 5/27/2024.

The continuing calibration verification (CCV) associated with batch 410-510691 recovered above the upper control limit for DCB Decachlorobiphenyl (Surr) on one column. Results are reported from the passing column: TDS-RP-20MAY24 (580-140271-1).

Method 8081B - Organochlorine Pesticides (GC)

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Organochlorine Pesticides (GC). The sample was prepared on 5/24/2024 and analyzed on 5/25/2024 and 5/27/2024.

Method EPA 300.0 R2.1 - Anions, Ion Chromatography

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Anions, Ion Chromatography. The sample was analyzed on 5/24/2024.

Samples TDS-RP-20MAY24 (580-140271-1)[10x] and TDS-RP-20MAY24 (580-140271-1)[50x] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Method 9056A - Anions, Ion Chromatography

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Anions, Ion Chromatography. The sample was analyzed on 5/23/2024 and 5/24/2024.

Samples TDS-RP-20MAY24 (580-140271-1)[10x], TDS-RP-20MAY24 (580-140271-1)[5x] and TDS-RP-20MAY24 (580-140271-1)[50x] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Method 8290A - Dioxins and Furans (HRGC/HRMS)

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Dioxins and Furans (HRGC/HRMS). The sample was prepared on 5/30/2024 and analyzed on 6/2/2024.

Method 6010D - Metals (ICP)

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Metals (ICP). The sample was prepared on 5/28/2024 and analyzed on 5/28/2024 and 5/30/2024.

Method 6010D - Metals (ICP) - TCLP

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Metals (ICP) - TCLP. The sample was leached on 5/29/2024, prepared on 5/28/2024 and 5/29/2024 and analyzed on 5/29/2024 and 5/30/2024.

The TCLP leachate blank for batch 410-511428 contained Barium above the method detection limit (MDL) and below the reporting limit (RL). This target analyte concentration was less than the TCLP Regulatory Hazard Limit as well as the laboratory action limit. The associated samples were also below the TCLP Regulatory Hazard Limit for this analyte; therefore, re-extraction was not performed.

Method 7470A - Mercury (CVAA)

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Mercury (CVAA). The sample was prepared and analyzed on 5/24/2024.

Method 7470A - Mercury (CVAA) - TCLP

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Mercury (CVAA) - TCLP. The sample was leached on 5/29/2024, prepared on 5/28/2024 and 5/29/2024 and analyzed on 5/29/2024 and 5/30/2024.

Method 1010B - Ignitability, Pensky-Martens Closed-Cup Method

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Ignitability, Pensky-Martens Closed-Cup Method. The sample was analyzed on 5/24/2024.

Method 1664B - HEM and SGT-HEM

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for HEM and SGT-HEM. The sample was analyzed on 5/24/2024.

Method 180.1 - Turbidity, Nephelometric

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Turbidity, Nephelometric. The sample was analyzed on 5/23/2024.

Method 2320B-2011 - Alkalinity, Total

Eurofins Seattle

Case Narrative

Client: Environmental Chemical Corp.
Project: TDS Leachate Sampling

Job ID: 580-140271-1

Job ID: 580-140271-1 (Continued)

Eurofins Seattle

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Alkalinity, Total. The sample was analyzed on 5/23/2024.

Method 2340C-2011 - Hardness, Total

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Hardness, Total. The sample was analyzed on 5/27/2024.

Sample TDS-RP-20MAY24 (580-140271-1)[5x] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Method 2540C - 2015 - Solids, Total Dissolved (TDS)

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Solids, Total Dissolved (TDS). The sample was analyzed on 5/23/2024.

Method 2540D-2015 - Solids, Total Suspended (TSS)

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Solids, Total Suspended (TSS). The sample was analyzed on 5/23/2024.

Method 330.4 - Chlorine, Total Residual

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Chlorine, Total Residual. The sample was analyzed on 5/28/2024.

Method 351.2 - Nitrogen, Total Kjeldahl

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Nitrogen, Total Kjeldahl. The sample was prepared on 5/28/2024 and analyzed on 5/29/2024.

Method 360.1 - Oxygen, Dissolved

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Oxygen, Dissolved. The sample was analyzed on 5/27/2024.

Sample was transferred to 300 ml BOD bottle

TDS-RP-20MAY24 (580-140271-1)

Method 410.4 - COD

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for COD. The sample was analyzed on 5/28/2024.

Method 5310 C-2014 - Total Organic Carbon/Persulfate - Ultrav

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Total Organic Carbon/Persulfate - Ultrav. The sample was analyzed on 5/29/2024.

Method 9012 - Cyanide, Reactive

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Cyanide, Reactive. The sample was prepared and analyzed on 5/28/2024.

Method 9012A - Cyanide, Total and/or Amenable

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Cyanide, Total and/or Amenable. The sample was prepared on 5/24/2024 and analyzed on 5/28/2024.

Method 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric)

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Sulfide, Acid Soluble and Insoluble (Titrimetric). The sample was analyzed on 5/24/2024.

Headspace observed in container for sulfide:

TDS-RP-20MAY24 (580-140271-1)

Method 9034 - Sulfide, Reactive

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Sulfide, Reactive. The sample was prepared and analyzed on 5/28/2024.

Method 9040C - pH

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for pH. The sample was analyzed on 5/23/2024.

Eurofins Seattle

Case Narrative

Client: Environmental Chemical Corp.
Project: TDS Leachate Sampling

Job ID: 580-140271-1

Job ID: 580-140271-1 (Continued)

Eurofins Seattle

Method Nitrogen,Org - Nitrogen, Organic

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Nitrogen, Organic. The sample was analyzed on 5/29/2024.

Method Total Nitrogen - Nitrogen, Total

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Nitrogen, Total. The sample was analyzed on 5/26/2024.

Method 4500 NH3 D-2011 - Ammonia

Sample TDS-RP-20MAY24 (580-140271-1) was analyzed for Ammonia. The sample was analyzed on 5/29/2024.

1

2

3

4

5

6

7

8

9

10

11

12

Definitions/Glossary

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
M	Manual integrated compound.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
N	Nontarget analyte: The analyte is a tentatively identified compound (using mass spectroscopy).

GC Semi VOA

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
M	Manual integrated compound.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

HPLC/IC

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

Dioxin

Qualifier	Qualifier Description
I	Value is EMPC (estimated maximum possible concentration).
J	Estimated: The analyte was positively identified; the quantitation is an estimation
M	Manual integrated compound.
U	Undetected at the Limit of Detection.

Metals

Qualifier	Qualifier Description
B	Blank contamination: The analyte was detected above one-half the reporting limit in an associated blank.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
U	Undetected at the Limit of Detection.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
U	Undetected at the Limit of Detection.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid

Definitions/Glossary

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Client Sample ID: TDS-RP-20MAY24

Lab Sample ID: 580-140271-1

Date Collected: 05/20/24 14:45

Matrix: Water

Date Received: 05/23/24 09:40

Method: SW846 8260D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	6.0	U	100	3.0	ug/L			05/30/24 17:21	1
Acrylonitrile	3.2	U	20	1.6	ug/L			05/30/24 17:21	1
Benzene	0.60	U	1.0	0.30	ug/L			05/30/24 17:21	1
Carbon tetrachloride	0.60	U	1.0	0.30	ug/L			05/30/24 17:21	1
Chloroethane	0.60	U	1.0	0.30	ug/L			05/30/24 17:21	1
Chloroform	0.60	U	1.0	0.30	ug/L			05/30/24 17:21	1
Chloromethane	1.1	U Q	2.0	0.55	ug/L			05/30/24 17:21	1
1,2-Dichlorobenzene	0.50	U	5.0	0.20	ug/L			05/30/24 17:21	1
1,3-Dichlorobenzene	1.4	U	5.0	0.68	ug/L			05/30/24 17:21	1
1,4-Dichlorobenzene	0.60	U	5.0	0.30	ug/L			05/30/24 17:21	1
1,2-Dichloroethane	0.60	U	1.0	0.30	ug/L			05/30/24 17:21	1
1,1-Dichloroethene	0.60	U	1.0	0.30	ug/L			05/30/24 17:21	1
trans-1,2-Dichloroethene	1.4	U	2.0	0.70	ug/L			05/30/24 17:21	1
1,2-Dichloropropane	0.60	U	1.0	0.30	ug/L			05/30/24 17:21	1
1,3-Dichloropropane	0.60	U	1.0	0.30	ug/L			05/30/24 17:21	1
2,2-Dichloropropane	0.60	U	1.0	0.30	ug/L			05/30/24 17:21	1
trans-1,3-Dichloropropene	0.50	U	1.0	0.20	ug/L			05/30/24 17:21	1
Ethylbenzene	0.80	U	1.0	0.40	ug/L			05/30/24 17:21	1
Hexachlorobutadiene	4.0	U	5.0	2.0	ug/L			05/30/24 17:21	1
1,1,1,2-Tetrachloroethane	0.60	U	1.0	0.30	ug/L			05/30/24 17:21	1
1,1,1,2,2-Tetrachloroethane	0.60	U	1.0	0.30	ug/L			05/30/24 17:21	1
Tetrachloroethene	0.60	U	1.0	0.30	ug/L			05/30/24 17:21	1
Toluene	0.60	U	1.0	0.30	ug/L			05/30/24 17:21	1
1,1,1-Trichloroethane	0.60	U	1.0	0.30	ug/L			05/30/24 17:21	1
1,1,2-Trichloroethane	0.60	U	1.0	0.30	ug/L			05/30/24 17:21	1
Trichloroethene	0.60	U	1.0	0.30	ug/L			05/30/24 17:21	1
Vinyl chloride	0.60	U	1.0	0.30	ug/L			05/30/24 17:21	1
Pentachloroethane	4.1	U Q	5.0	2.1	ug/L			05/30/24 17:21	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A		05/30/24 17:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		89 - 112		05/30/24 17:21	1
1,2-Dichloroethane-d4 (Surr)	105		81 - 118		05/30/24 17:21	1
4-Bromofluorobenzene (Surr)	97		85 - 114		05/30/24 17:21	1
Dibromofluoromethane (Surr)	109		80 - 119		05/30/24 17:21	1

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzidine	43	U	65	22	ug/L		05/24/24 15:20	05/28/24 10:58	1
Bis(2-chloroethyl)ether	1.1	U	2.2	0.54	ug/L		05/24/24 15:20	05/28/24 10:58	1
Bis(2-ethylhexyl) phthalate	4.3	U	5.4	2.2	ug/L		05/24/24 15:20	05/28/24 10:58	1
2-Chlorophenol	1.1	U	2.2	0.54	ug/L		05/24/24 15:20	05/28/24 10:58	1
3,3'-Dichlorobenzidine	8.6	U Q	11	4.3	ug/L		05/24/24 15:20	05/28/24 10:58	1
2,4-Dichlorophenol	1.1	U	2.2	0.54	ug/L		05/24/24 15:20	05/28/24 10:58	1
Diethyl phthalate	4.3	U	5.4	2.2	ug/L		05/24/24 15:20	05/28/24 10:58	1
2,4-Dimethylphenol	9.7	U	11	3.2	ug/L		05/24/24 15:20	05/28/24 10:58	1
Dimethyl phthalate	4.3	U	5.4	2.2	ug/L		05/24/24 15:20	05/28/24 10:58	1
Di-n-butyl phthalate	4.3	U	5.4	2.2	ug/L		05/24/24 15:20	05/28/24 10:58	1

Eurolins Seattle

Client Sample Results

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Client Sample ID: TDS-RP-20MAY24

Lab Sample ID: 580-140271-1

Date Collected: 05/20/24 14:45

Matrix: Water

Date Received: 05/23/24 09:40

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	30	U	32	15	ug/L		05/24/24 15:20	05/28/24 10:58	1
2,4-Dinitrotoluene	2.2	U	5.4	1.1	ug/L		05/24/24 15:20	05/28/24 10:58	1
2,6-Dinitrotoluene	1.1	U	2.2	0.54	ug/L		05/24/24 15:20	05/28/24 10:58	1
Hexachlorobenzene	0.24	U	0.54	0.12	ug/L		05/24/24 15:20	05/28/24 10:58	1
Hexachlorocyclopentadiene	11	U	12	5.4	ug/L		05/24/24 15:20	05/28/24 10:58	1
Hexachloroethane	1.1	U	5.4	0.54	ug/L		05/24/24 15:20	05/28/24 10:58	1
Isophorone	1.1	U	2.2	0.54	ug/L		05/24/24 15:20	05/28/24 10:58	1
4,6-Dinitro-o-cresol	22	U	23	8.6	ug/L		05/24/24 15:20	05/28/24 10:58	1
Nitrobenzene	1.1	U	2.2	0.54	ug/L		05/24/24 15:20	05/28/24 10:58	1
2-Nitrophenol	2.2	U M	5.4	1.1	ug/L		05/24/24 15:20	05/28/24 10:58	1
4-Nitrophenol	22	U	32	11	ug/L		05/24/24 15:20	05/28/24 10:58	1
N-Nitrosodimethylamine	4.3	U	5.4	2.2	ug/L		05/24/24 15:20	05/28/24 10:58	1
N-Nitrosodiphenylamine	1.1	U	2.2	0.54	ug/L		05/24/24 15:20	05/28/24 10:58	1
bis(chloroisopropyl) ether	1.1	U	2.2	0.54	ug/L		05/24/24 15:20	05/28/24 10:58	1
Pentachlorophenol	4.3	U	5.4	1.1	ug/L		05/24/24 15:20	05/28/24 10:58	1
Phenol	1.1	U	2.2	0.54	ug/L		05/24/24 15:20	05/28/24 10:58	1
1,2,4,5-Tetrachlorobenzene	1.1	U	2.2	0.54	ug/L		05/24/24 15:20	05/28/24 10:58	1
2,4,6-Trichlorophenol	1.1	U	2.2	0.54	ug/L		05/24/24 15:20	05/28/24 10:58	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Trichloroethylene	5.2	N	ug/L		1.81	79-01-6	05/24/24 15:20	05/28/24 10:58	1
Benzene, chloro-	7.1	N	ug/L		3.06	108-90-7	05/24/24 15:20	05/28/24 10:58	1
Unknown	7.6	N	ug/L		7.35	N/A	05/24/24 15:20	05/28/24 10:58	1
Unknown	5.0	N	ug/L		8.71	N/A	05/24/24 15:20	05/28/24 10:58	1
Unknown	5.9	N	ug/L		9.21	N/A	05/24/24 15:20	05/28/24 10:58	1
Unknown	11	N	ug/L		13.08	N/A	05/24/24 15:20	05/28/24 10:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol (Surr)	42		19 - 119	05/24/24 15:20	05/28/24 10:58	1
2,4,6-Tribromophenol (Surr)	86		43 - 140	05/24/24 15:20	05/28/24 10:58	1
Nitrobenzene-d5 (Surr)	71		44 - 120	05/24/24 15:20	05/28/24 10:58	1
Phenol-d5 (Surr)	36		10 - 120	05/24/24 15:20	05/28/24 10:58	1
p-Terphenyl-d14 (Surr)	69		50 - 134	05/24/24 15:20	05/28/24 10:58	1
2-Fluorobiphenyl (Surr)	81		44 - 119	05/24/24 15:20	05/28/24 10:58	1

Method: SW846 8015D DRO - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	290	M	110	48	ug/L		05/24/24 15:26	05/25/24 02:44	1
ORO (>C28-C40)	96	U M	110	48	ug/L		05/24/24 15:26	05/25/24 02:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	84		56 - 125	05/24/24 15:26	05/25/24 02:44	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	0.0052	J M J1	0.022	0.0033	ug/L		05/24/24 15:33	05/25/24 08:15	1
gamma-BHC (Lindane)	0.0044	U	0.022	0.0022	ug/L		05/24/24 15:33	05/25/24 08:15	1
beta-BHC	0.034	J1	0.033	0.012	ug/L		05/24/24 15:33	05/25/24 08:15	1
delta-BHC	0.0075	U	0.022	0.0037	ug/L		05/24/24 15:33	05/25/24 08:15	1
Heptachlor	0.0078	J M J1	0.022	0.0022	ug/L		05/24/24 15:33	05/25/24 08:15	1
Aldrin	0.010	J	0.022	0.0022	ug/L		05/24/24 15:33	05/25/24 08:15	1

Eurofins Seattle

Client Sample Results

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Client Sample ID: TDS-RP-20MAY24

Lab Sample ID: 580-140271-1

Date Collected: 05/20/24 14:45

Matrix: Water

Date Received: 05/23/24 09:40

Method: SW846 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor epoxide	0.0056	J	0.022	0.0025	ug/L		05/24/24 15:33	05/25/24 08:15	1
trans-Chlordane	0.013	J J1	0.044	0.0077	ug/L		05/24/24 15:33	05/25/24 08:15	1
cis-Chlordane	0.017	J	0.022	0.0033	ug/L		05/24/24 15:33	05/25/24 08:15	1
Endosulfan I	0.010	J	0.022	0.0047	ug/L		05/24/24 15:33	05/25/24 08:15	1
4,4'-DDE	0.0087	J	0.033	0.0055	ug/L		05/24/24 15:33	05/25/24 08:15	1
Dieldrin	0.022	U	0.033	0.0058	ug/L		05/24/24 15:33	05/25/24 08:15	1
Endrin	0.022	U M	0.033	0.0089	ug/L		05/24/24 15:33	05/25/24 08:15	1
4,4'-DDD	0.011	U	0.033	0.0055	ug/L		05/24/24 15:33	05/25/24 08:15	1
Endosulfan II	0.033	U	0.044	0.016	ug/L		05/24/24 15:33	05/25/24 08:15	1
4,4'-DDT	0.022	U M	0.033	0.0057	ug/L		05/24/24 15:33	05/25/24 08:15	1
Endrin aldehyde	0.044	U	0.11	0.022	ug/L		05/24/24 15:33	05/25/24 08:15	1
Endosulfan sulfate	0.022	U	0.033	0.0064	ug/L		05/24/24 15:33	05/25/24 08:15	1
Methoxychlor	0.066	U	0.12	0.033	ug/L		05/24/24 15:33	05/25/24 08:15	1
Endrin ketone	0.011	U	0.033	0.0055	ug/L		05/24/24 15:33	05/25/24 08:15	1
Toxaphene	0.66	U M	1.1	0.33	ug/L		05/24/24 15:33	05/25/24 08:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	64		44 - 124				05/24/24 15:33	05/25/24 08:15	1
Tetrachloro-m-xylene	69	M	44 - 124				05/24/24 15:33	05/25/24 08:15	1
DCB Decachlorobiphenyl (Surr)	48		20 - 148				05/24/24 15:33	05/25/24 08:15	1
DCB Decachlorobiphenyl (Surr)	47		20 - 148				05/24/24 15:33	05/25/24 08:15	1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.22	U M	0.55	0.11	ug/L		05/24/24 15:37	05/27/24 15:26	1
PCB-1221	0.22	U	0.55	0.11	ug/L		05/24/24 15:37	05/27/24 15:26	1
PCB-1232	0.22	U M	0.55	0.11	ug/L		05/24/24 15:37	05/27/24 15:26	1
PCB-1242	0.22	U M	0.55	0.11	ug/L		05/24/24 15:37	05/27/24 15:26	1
PCB-1248	0.22	U M	0.55	0.11	ug/L		05/24/24 15:37	05/27/24 15:26	1
PCB-1254	0.22	U M	0.55	0.086	ug/L		05/24/24 15:37	05/27/24 15:26	1
PCB-1260	0.22	U	0.55	0.086	ug/L		05/24/24 15:37	05/27/24 15:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	68		33 - 137				05/24/24 15:37	05/27/24 15:26	1
Tetrachloro-m-xylene	69		33 - 137				05/24/24 15:37	05/27/24 15:26	1
DCB Decachlorobiphenyl (Surr)	61	Q	10 - 148				05/24/24 15:37	05/27/24 15:26	1
DCB Decachlorobiphenyl (Surr)	64		10 - 148				05/24/24 15:37	05/27/24 15:26	1

Method: SW846 8151A DOD - Herbicides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-T	0.14	U	0.16	0.069	ug/L		05/25/24 05:56	05/28/24 15:18	1
Silvex (2,4,5-TP)	0.046	U	0.053	0.023	ug/L		05/25/24 05:56	05/28/24 15:18	1
2,4-D	0.53	U	0.63	0.26	ug/L		05/25/24 05:56	05/28/24 15:18	1
2,4-DB	1.4	U	1.6	0.67	ug/L		05/25/24 05:56	05/28/24 15:18	1
Dichlorprop	0.34	U	0.53	0.17	ug/L		05/25/24 05:56	05/28/24 15:18	1
Dalapon	12	U	13	6.0	ug/L		05/25/24 05:56	05/28/24 15:18	1
Dicamba	0.57	U	0.58	0.29	ug/L		05/25/24 05:56	05/28/24 15:18	1
MCPPP	110	U	210	53	ug/L		05/25/24 05:56	05/28/24 15:18	1
MCPA	110	U	210	53	ug/L		05/25/24 05:56	05/28/24 15:18	1
Pentachlorophenol	0.063	U	0.074	0.029	ug/L		05/25/24 05:56	05/28/24 15:18	1

Eurofins Seattle

Client Sample Results

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Client Sample ID: TDS-RP-20MAY24

Lab Sample ID: 580-140271-1

Date Collected: 05/20/24 14:45

Matrix: Water

Date Received: 05/23/24 09:40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid (Surr)	91		32 - 138	05/25/24 05:56	05/28/24 15:18	1
2,4-Dichlorophenylacetic acid (Surr)	99		32 - 138	05/25/24 05:56	05/28/24 15:18	1

Method: SW846 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	1.5	H H3	0.55	0.25	mg/L			05/23/24 19:18	5
Nitrate as N	15	H H3	1.1	0.50	mg/L			05/24/24 12:47	10
Nitrate Nitrite as N	18	J1 H H3	5.5	0.25	mg/L			05/23/24 19:18	5

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	240	Q	15	5.0	mg/L			05/24/24 12:47	10

Method: SW846 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	2.1	U M	5.3	0.93	pg/L		05/30/24 22:57	06/02/24 04:41	1
Total TCDD	1.1	J I	5.3	0.93	pg/L		05/30/24 22:57	06/02/24 04:41	1
Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
¹³ C-2,3,7,8-TCDD	70		40 - 135	05/30/24 22:57	06/02/24 04:41	1			

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.032	U	0.050	0.016	mg/L		05/28/24 06:50	05/28/24 17:20	1
Arsenic	0.032	U	0.050	0.016	mg/L		05/28/24 06:50	05/28/24 17:20	1
Barium	0.025		0.0050	0.0010	mg/L		05/28/24 06:50	05/28/24 17:20	1
Beryllium	0.0020	U	0.0050	0.0010	mg/L		05/28/24 06:50	05/28/24 17:20	1
Cadmium	0.0020	U	0.0050	0.0010	mg/L		05/28/24 06:50	05/28/24 17:20	1
Chromium	0.0055	J	0.015	0.0030	mg/L		05/28/24 06:50	05/28/24 17:20	1
Cobalt	0.0020	J	0.0050	0.0015	mg/L		05/28/24 06:50	05/28/24 17:20	1
Copper	0.016	U	0.020	0.0080	mg/L		05/28/24 06:50	05/28/24 17:20	1
Lead	0.014	U	0.015	0.0071	mg/L		05/28/24 06:50	05/28/24 17:20	1
Molybdenum	0.0061	J	0.010	0.0020	mg/L		05/28/24 06:50	05/28/24 17:20	1
Nickel	0.0040	U	0.010	0.0021	mg/L		05/28/24 06:50	05/28/24 17:20	1
Selenium	0.032	U	0.050	0.016	mg/L		05/28/24 06:50	05/28/24 17:20	1
Silver	0.0080	U	0.010	0.0040	mg/L		05/28/24 06:50	05/28/24 17:20	1
Thallium	0.024	U	0.030	0.012	mg/L		05/28/24 06:50	05/30/24 11:26	1
Zinc	0.0074	U	0.020	0.0037	mg/L		05/28/24 06:50	05/28/24 17:20	1
Vanadium	0.011		0.010	0.0019	mg/L		05/28/24 06:50	05/28/24 17:20	1

Method: SW846 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.32	U	0.50	0.16	mg/L		05/29/24 21:10	05/30/24 07:07	1
Barium	0.028	J B	0.050	0.010	mg/L		05/29/24 21:10	05/30/24 07:07	1
Cadmium	0.020	U	0.050	0.010	mg/L		05/29/24 21:10	05/30/24 07:07	1
Chromium	0.060	U	0.15	0.030	mg/L		05/29/24 21:10	05/30/24 07:07	1
Lead	0.14	U	0.15	0.071	mg/L		05/29/24 21:10	05/30/24 07:07	1
Selenium	0.32	U	0.50	0.16	mg/L		05/29/24 21:10	05/30/24 07:07	1
Silver	0.080	U	0.10	0.040	mg/L		05/29/24 21:10	05/30/24 07:07	1

Client Sample Results

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Client Sample ID: TDS-RP-20MAY24

Lab Sample ID: 580-140271-1

Date Collected: 05/20/24 14:45

Matrix: Water

Date Received: 05/23/24 09:40

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.16	U	0.20	0.079	ug/L		05/24/24 08:45	05/24/24 15:40	1

Method: SW846 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.16	U	0.20	0.079	ug/L		05/29/24 23:35	05/30/24 10:52	1

General Chemistry

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint (SW846 1010B)	>190		50	50	Degrees F			05/24/24 03:31	1
HEM (Oil & Grease) (1664B)	1.4	J	5.1	1.4	mg/L			05/24/24 17:38	1
SGT-HEM (TPH) (1664B)	4.0	U	5.1	1.4	mg/L			05/24/24 17:38	1
Turbidity (EPA 180.1)	11	H H3	1.0	1.0	NTU			05/23/24 18:52	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	37		8.0	2.6	mg/L			05/23/24 21:32	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	5.6	J	8.0	2.6	mg/L			05/23/24 21:32	1
Hydroxide Alkalinity (SM 2320B-2011)	6.0	U	8.0	2.6	mg/L			05/23/24 21:32	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	42		8.0	2.6	mg/L			05/23/24 21:32	1
Total Hardness (SM 2340C-2011)	160	J1	50	15	mg/L			05/27/24 08:08	5
Total Dissolved Solids (SM 2540C - 2015)	730		60	24	mg/L			05/23/24 13:08	1
Total Suspended Solids (SM 2540D-2015)	23		6.0	2.0	mg/L			05/23/24 18:32	1
Residual Chlorine (EPA 330.4)	0.15	U HF	0.20	0.060	mg/L			05/28/24 23:37	1
Nitrogen, Kjeldahl (EPA 351.2)	3.0		1.5	0.50	mg/L		05/28/24 17:33	05/29/24 12:34	1
Oxygen, Dissolved (EPA 360.1)	5.0	HF	0.40	0.40	mg/L			05/27/24 10:56	1
Chemical Oxygen Demand (EPA 410.4)	59	J	75	25	mg/L			05/28/24 07:39	1
Ammonia-N (SM 4500 NH3 D-2011)	0.11	J	0.24	0.080	mg/L			05/29/24 11:39	1
Total Organic Carbon (SM 5310 C-2014)	11		1.0	0.50	mg/L			05/29/24 04:48	1
Cyanide, Reactive (SW846 9012)	50	U	59	20	mg/Kg		05/28/24 09:29	05/28/24 17:50	1
Cyanide, Total (SW846 9012A)	0.0090	U	0.010	0.0050	mg/L		05/24/24 10:54	05/28/24 17:02	1
Sulfide (SW846 9034)	1.5	U	2.0	0.70	mg/L			05/24/24 09:10	1
Sulfide, Reactive (SW846 9034)	140	U	160	53	mg/Kg		05/28/24 09:29	05/28/24 13:42	1
pH (SW846 9040C)	8.5	HF	0.01	0.01	S.U.			05/23/24 21:32	1
Temperature (SW846 9040C)	23.6	HF	0.01	0.01	Degrees C			05/23/24 21:32	1
Nitrogen, Organic (EPA Nitrogen,Org)	2.9		1.0	0.50	mg/L			05/29/24 16:23	1
Nitrogen, Total (EPA Total Nitrogen)	21		1.0	0.50	mg/L			05/26/24 23:16	1

Client Sample Results

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Client Sample ID: Trip Blank

Lab Sample ID: 580-140271-2

Date Collected: 05/20/24 00:00

Matrix: Water

Date Received: 05/23/24 09:40

Method: SW846 8260D - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	6.0	U	100	3.0	ug/L			05/30/24 17:43	1
Acrylonitrile	3.2	U	20	1.6	ug/L			05/30/24 17:43	1
Benzene	0.60	U	1.0	0.30	ug/L			05/30/24 17:43	1
Carbon tetrachloride	0.60	U	1.0	0.30	ug/L			05/30/24 17:43	1
Chloroethane	0.60	U	1.0	0.30	ug/L			05/30/24 17:43	1
Chloroform	0.60	U	1.0	0.30	ug/L			05/30/24 17:43	1
Chloromethane	1.1	U Q	2.0	0.55	ug/L			05/30/24 17:43	1
1,2-Dichlorobenzene	0.50	U	5.0	0.20	ug/L			05/30/24 17:43	1
1,3-Dichlorobenzene	1.4	U	5.0	0.68	ug/L			05/30/24 17:43	1
1,4-Dichlorobenzene	0.60	U	5.0	0.30	ug/L			05/30/24 17:43	1
1,2-Dichloroethane	0.60	U	1.0	0.30	ug/L			05/30/24 17:43	1
1,1-Dichloroethene	0.60	U	1.0	0.30	ug/L			05/30/24 17:43	1
trans-1,2-Dichloroethene	1.4	U	2.0	0.70	ug/L			05/30/24 17:43	1
1,2-Dichloropropane	0.60	U	1.0	0.30	ug/L			05/30/24 17:43	1
1,3-Dichloropropane	0.60	U	1.0	0.30	ug/L			05/30/24 17:43	1
2,2-Dichloropropane	0.60	U	1.0	0.30	ug/L			05/30/24 17:43	1
trans-1,3-Dichloropropene	0.50	U	1.0	0.20	ug/L			05/30/24 17:43	1
Ethylbenzene	0.80	U	1.0	0.40	ug/L			05/30/24 17:43	1
Hexachlorobutadiene	4.0	U	5.0	2.0	ug/L			05/30/24 17:43	1
1,1,1,2-Tetrachloroethane	0.60	U	1.0	0.30	ug/L			05/30/24 17:43	1
1,1,1,2,2-Tetrachloroethane	0.60	U	1.0	0.30	ug/L			05/30/24 17:43	1
Tetrachloroethene	0.60	U	1.0	0.30	ug/L			05/30/24 17:43	1
Toluene	0.60	U	1.0	0.30	ug/L			05/30/24 17:43	1
1,1,1-Trichloroethane	0.60	U	1.0	0.30	ug/L			05/30/24 17:43	1
1,1,2-Trichloroethane	0.60	U	1.0	0.30	ug/L			05/30/24 17:43	1
Trichloroethene	0.60	U	1.0	0.30	ug/L			05/30/24 17:43	1
Vinyl chloride	0.60	U	1.0	0.30	ug/L			05/30/24 17:43	1
Pentachloroethane	4.1	U Q	5.0	2.1	ug/L			05/30/24 17:43	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A		05/30/24 17:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		89 - 112		05/30/24 17:43	1
1,2-Dichloroethane-d4 (Surr)	106		81 - 118		05/30/24 17:43	1
4-Bromofluorobenzene (Surr)	99		85 - 114		05/30/24 17:43	1
Dibromofluoromethane (Surr)	111		80 - 119		05/30/24 17:43	1

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Method: 8260D - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 410-511809/10
Matrix: Water
Analysis Batch: 511809

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acrolein	6.0	U	100	3.0	ug/L			05/30/24 11:26	1
Acrylonitrile	3.2	U	20	1.6	ug/L			05/30/24 11:26	1
Benzene	0.60	U	1.0	0.30	ug/L			05/30/24 11:26	1
Carbon tetrachloride	0.60	U	1.0	0.30	ug/L			05/30/24 11:26	1
Chloroethane	0.60	U	1.0	0.30	ug/L			05/30/24 11:26	1
Chloroform	0.60	U	1.0	0.30	ug/L			05/30/24 11:26	1
Chloromethane	1.1	U	2.0	0.55	ug/L			05/30/24 11:26	1
1,2-Dichlorobenzene	0.50	U	5.0	0.20	ug/L			05/30/24 11:26	1
1,3-Dichlorobenzene	1.4	U	5.0	0.68	ug/L			05/30/24 11:26	1
1,4-Dichlorobenzene	0.60	U	5.0	0.30	ug/L			05/30/24 11:26	1
1,2-Dichloroethane	0.60	U	1.0	0.30	ug/L			05/30/24 11:26	1
1,1-Dichloroethene	0.60	U	1.0	0.30	ug/L			05/30/24 11:26	1
trans-1,2-Dichloroethene	1.4	U	2.0	0.70	ug/L			05/30/24 11:26	1
1,2-Dichloropropane	0.60	U	1.0	0.30	ug/L			05/30/24 11:26	1
1,3-Dichloropropane	0.60	U	1.0	0.30	ug/L			05/30/24 11:26	1
2,2-Dichloropropane	0.60	U	1.0	0.30	ug/L			05/30/24 11:26	1
trans-1,3-Dichloropropene	0.50	U	1.0	0.20	ug/L			05/30/24 11:26	1
Ethylbenzene	0.80	U	1.0	0.40	ug/L			05/30/24 11:26	1
Hexachlorobutadiene	4.0	U	5.0	2.0	ug/L			05/30/24 11:26	1
1,1,1,2-Tetrachloroethane	0.60	U	1.0	0.30	ug/L			05/30/24 11:26	1
1,1,1,2,2-Tetrachloroethane	0.60	U	1.0	0.30	ug/L			05/30/24 11:26	1
Tetrachloroethene	0.60	U	1.0	0.30	ug/L			05/30/24 11:26	1
Toluene	0.60	U	1.0	0.30	ug/L			05/30/24 11:26	1
1,1,1-Trichloroethane	0.60	U	1.0	0.30	ug/L			05/30/24 11:26	1
1,1,2-Trichloroethane	0.60	U	1.0	0.30	ug/L			05/30/24 11:26	1
Trichloroethene	0.60	U	1.0	0.30	ug/L			05/30/24 11:26	1
Vinyl chloride	0.60	U	1.0	0.30	ug/L			05/30/24 11:26	1
Pentachloroethane	4.1	U	5.0	2.1	ug/L			05/30/24 11:26	1

Tentatively Identified Compound	MB	MB	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
	Est. Result	Qualifier							
Tentatively Identified Compound	None		ug/L			N/A		05/30/24 11:26	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	100		89 - 112		05/30/24 11:26	1
1,2-Dichloroethane-d4 (Surr)	105		81 - 118		05/30/24 11:26	1
4-Bromofluorobenzene (Surr)	97		85 - 114		05/30/24 11:26	1
Dibromofluoromethane (Surr)	111		80 - 119		05/30/24 11:26	1

Lab Sample ID: LCS 410-511809/5
Matrix: Water
Analysis Batch: 511809

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Acrolein	150	164		ug/L		109	39 - 155
Acrylonitrile	100	111		ug/L		111	63 - 135
Benzene	20.0	21.1		ug/L		106	79 - 120
Carbon tetrachloride	20.0	22.2		ug/L		111	72 - 136
Chloroethane	20.0	19.9		ug/L		100	60 - 138

Eurofins Seattle

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Method: 8260D - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-511809/5
Matrix: Water
Analysis Batch: 511809

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	20.0	18.8		ug/L		94	79 - 124
Chloromethane	20.0	17.7		ug/L		88	50 - 139
1,2-Dichlorobenzene	20.0	19.1		ug/L		95	80 - 119
1,3-Dichlorobenzene	20.0	19.2		ug/L		96	80 - 119
1,4-Dichlorobenzene	20.0	19.5		ug/L		97	79 - 118
1,2-Dichloroethane	20.0	22.2		ug/L		111	73 - 128
1,1-Dichloroethene	20.0	22.8		ug/L		114	71 - 131
trans-1,2-Dichloroethene	20.0	21.6		ug/L		108	75 - 124
1,2-Dichloropropane	20.0	21.6		ug/L		108	78 - 122
1,3-Dichloropropane	20.0	21.5		ug/L		107	80 - 119
2,2-Dichloropropane	20.0	20.0		ug/L		100	60 - 139
trans-1,3-Dichloropropene	20.0	20.0		ug/L		100	73 - 127
Ethylbenzene	20.0	20.7		ug/L		103	79 - 121
Hexachlorobutadiene	20.0	19.9		ug/L		99	66 - 134
1,1,1,2-Tetrachloroethane	20.0	20.3		ug/L		102	78 - 124
1,1,2,2-Tetrachloroethane	20.0	19.8		ug/L		99	71 - 121
Tetrachloroethene	20.0	19.4		ug/L		97	74 - 129
Toluene	20.0	20.8		ug/L		104	80 - 121
1,1,1-Trichloroethane	20.0	21.9		ug/L		109	74 - 131
1,1,2-Trichloroethane	20.0	20.2		ug/L		101	80 - 119
Trichloroethene	20.0	20.8		ug/L		104	79 - 123
Vinyl chloride	20.0	17.5		ug/L		87	58 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	104		89 - 112
1,2-Dichloroethane-d4 (Surr)	104		81 - 118
4-Bromofluorobenzene (Surr)	100		85 - 114
Dibromofluoromethane (Surr)	104		80 - 119

Lab Sample ID: LCS 410-511809/7
Matrix: Water
Analysis Batch: 511809

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Pentachloroethane	20.0	23.0		ug/L		115	69 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	105		89 - 112
1,2-Dichloroethane-d4 (Surr)	102		81 - 118
4-Bromofluorobenzene (Surr)	99		85 - 114
Dibromofluoromethane (Surr)	107		80 - 119

Lab Sample ID: LCSD 410-511809/6
Matrix: Water
Analysis Batch: 511809

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acrolein	150	168		ug/L		112	39 - 155	2	20

Eurofins Seattle

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Method: 8260D - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 410-511809/6
Matrix: Water
Analysis Batch: 511809

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acrylonitrile	100	110		ug/L		110	63 - 135	1	20
Benzene	20.0	21.6		ug/L		108	79 - 120	2	20
Carbon tetrachloride	20.0	23.2		ug/L		116	72 - 136	4	20
Chloroethane	20.0	20.3		ug/L		101	60 - 138	2	20
Chloroform	20.0	19.4		ug/L		97	79 - 124	3	20
Chloromethane	20.0	17.5		ug/L		87	50 - 139	1	20
1,2-Dichlorobenzene	20.0	19.5		ug/L		97	80 - 119	2	20
1,3-Dichlorobenzene	20.0	19.7		ug/L		98	80 - 119	3	20
1,4-Dichlorobenzene	20.0	20.1		ug/L		100	79 - 118	3	20
1,2-Dichloroethane	20.0	23.8		ug/L		119	73 - 128	7	20
1,1-Dichloroethene	20.0	23.9		ug/L		119	71 - 131	4	20
trans-1,2-Dichloroethene	20.0	21.9		ug/L		109	75 - 124	1	20
1,2-Dichloropropane	20.0	21.9		ug/L		110	78 - 122	2	20
1,3-Dichloropropane	20.0	22.0		ug/L		110	80 - 119	2	20
2,2-Dichloropropane	20.0	20.7		ug/L		103	60 - 139	3	20
trans-1,3-Dichloropropene	20.0	20.6		ug/L		103	73 - 127	3	20
Ethylbenzene	20.0	21.0		ug/L		105	79 - 121	2	20
Hexachlorobutadiene	20.0	20.2		ug/L		101	66 - 134	2	20
1,1,1,2-Tetrachloroethane	20.0	20.6		ug/L		103	78 - 124	1	20
1,1,2,2-Tetrachloroethane	20.0	20.4		ug/L		102	71 - 121	3	20
Tetrachloroethene	20.0	19.7		ug/L		99	74 - 129	1	20
Toluene	20.0	21.6		ug/L		108	80 - 121	4	20
1,1,1-Trichloroethane	20.0	22.1		ug/L		110	74 - 131	1	20
1,1,2-Trichloroethane	20.0	20.2		ug/L		101	80 - 119	0	20
Trichloroethene	20.0	21.2		ug/L		106	79 - 123	2	20
Vinyl chloride	20.0	17.2		ug/L		86	58 - 137	2	20

Surrogate	%Recovery	Qualifier	Limits
<i>Toluene-d8 (Surr)</i>	106		89 - 112
<i>1,2-Dichloroethane-d4 (Surr)</i>	101		81 - 118
<i>4-Bromofluorobenzene (Surr)</i>	101		85 - 114
<i>Dibromofluoromethane (Surr)</i>	104		80 - 119

Lab Sample ID: LCSD 410-511809/8
Matrix: Water
Analysis Batch: 511809

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Pentachloroethane	20.0	22.3		ug/L		112	69 - 133	3	20

Surrogate	%Recovery	Qualifier	Limits
<i>Toluene-d8 (Surr)</i>	102		89 - 112
<i>1,2-Dichloroethane-d4 (Surr)</i>	101		81 - 118
<i>4-Bromofluorobenzene (Surr)</i>	97		85 - 114
<i>Dibromofluoromethane (Surr)</i>	108		80 - 119

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 410-510371/1-A
Matrix: Water
Analysis Batch: 510792

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 510371

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzidine	40	U	60	20	ug/L		05/24/24 15:20	05/28/24 08:26	1
Bis(2-chloroethyl)ether	1.0	U	2.0	0.50	ug/L		05/24/24 15:20	05/28/24 08:26	1
Bis(2-ethylhexyl) phthalate	4.0	U	5.0	2.0	ug/L		05/24/24 15:20	05/28/24 08:26	1
2-Chlorophenol	1.0	U	2.0	0.50	ug/L		05/24/24 15:20	05/28/24 08:26	1
3,3'-Dichlorobenzidine	8.0	U	10	4.0	ug/L		05/24/24 15:20	05/28/24 08:26	1
2,4-Dichlorophenol	1.0	U	2.0	0.50	ug/L		05/24/24 15:20	05/28/24 08:26	1
Diethyl phthalate	4.0	U	5.0	2.0	ug/L		05/24/24 15:20	05/28/24 08:26	1
2,4-Dimethylphenol	9.0	U	10	3.0	ug/L		05/24/24 15:20	05/28/24 08:26	1
Dimethyl phthalate	4.0	U	5.0	2.0	ug/L		05/24/24 15:20	05/28/24 08:26	1
Di-n-butyl phthalate	4.0	U	5.0	2.0	ug/L		05/24/24 15:20	05/28/24 08:26	1
2,4-Dinitrophenol	28	U	30	14	ug/L		05/24/24 15:20	05/28/24 08:26	1
2,4-Dinitrotoluene	2.0	U	5.0	1.0	ug/L		05/24/24 15:20	05/28/24 08:26	1
2,6-Dinitrotoluene	1.0	U M	2.0	0.50	ug/L		05/24/24 15:20	05/28/24 08:26	1
Hexachlorobenzene	0.22	U	0.50	0.11	ug/L		05/24/24 15:20	05/28/24 08:26	1
Hexachlorocyclopentadiene	10	U	11	5.0	ug/L		05/24/24 15:20	05/28/24 08:26	1
Hexachloroethane	1.0	U	5.0	0.50	ug/L		05/24/24 15:20	05/28/24 08:26	1
Isophorone	1.0	U	2.0	0.50	ug/L		05/24/24 15:20	05/28/24 08:26	1
4,6-Dinitro-o-cresol	20	U	21	8.0	ug/L		05/24/24 15:20	05/28/24 08:26	1
Nitrobenzene	1.0	U M	2.0	0.50	ug/L		05/24/24 15:20	05/28/24 08:26	1
2-Nitrophenol	2.0	U	5.0	1.0	ug/L		05/24/24 15:20	05/28/24 08:26	1
4-Nitrophenol	20	U	30	10	ug/L		05/24/24 15:20	05/28/24 08:26	1
N-Nitrosodimethylamine	4.0	U	5.0	2.0	ug/L		05/24/24 15:20	05/28/24 08:26	1
N-Nitrosodiphenylamine	1.0	U	2.0	0.50	ug/L		05/24/24 15:20	05/28/24 08:26	1
bis(chloroisopropyl) ether	1.0	U	2.0	0.50	ug/L		05/24/24 15:20	05/28/24 08:26	1
Pentachlorophenol	4.0	U	5.0	1.0	ug/L		05/24/24 15:20	05/28/24 08:26	1
Phenol	1.0	U	2.0	0.50	ug/L		05/24/24 15:20	05/28/24 08:26	1
1,2,4,5-Tetrachlorobenzene	1.0	U	2.0	0.50	ug/L		05/24/24 15:20	05/28/24 08:26	1
2,4,6-Trichlorophenol	1.0	U	2.0	0.50	ug/L		05/24/24 15:20	05/28/24 08:26	1

Tentatively Identified Compound	MB	MB	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
	Est. Result	Qualifier							
Tentatively Identified Compound	None		ug/L			N/A	05/24/24 15:20	05/28/24 08:26	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorophenol (Surr)	45		19 - 119	05/24/24 15:20	05/28/24 08:26	1
2,4,6-Tribromophenol (Surr)	87		43 - 140	05/24/24 15:20	05/28/24 08:26	1
Nitrobenzene-d5 (Surr)	77		44 - 120	05/24/24 15:20	05/28/24 08:26	1
Phenol-d5 (Surr)	32		10 - 120	05/24/24 15:20	05/28/24 08:26	1
p-Terphenyl-d14 (Surr)	88		50 - 134	05/24/24 15:20	05/28/24 08:26	1
2-Fluorobiphenyl (Surr)	86		44 - 119	05/24/24 15:20	05/28/24 08:26	1

Lab Sample ID: LCS 410-510371/2-A
Matrix: Water
Analysis Batch: 510792

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 510371

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec	Limits
		Result	Qualifier					
Benzidine	100	32.5	J	ug/L		33		10 - 53
Bis(2-chloroethyl)ether	50.0	43.3		ug/L		87		43 - 118
Bis(2-ethylhexyl) phthalate	50.0	53.2		ug/L		106		55 - 135

Eurofins Seattle

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 410-510371/2-A
Matrix: Water
Analysis Batch: 510792

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 510371

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Chlorophenol	50.0	42.3		ug/L		85	38 - 117
3,3'-Dichlorobenzidine	100	90.0		ug/L		90	27 - 129
2,4-Dichlorophenol	50.0	45.3		ug/L		91	47 - 121
Diethyl phthalate	50.0	51.1		ug/L		102	56 - 125
2,4-Dimethylphenol	50.0	40.2		ug/L		80	31 - 124
Dimethyl phthalate	50.0	48.8		ug/L		98	45 - 127
Di-n-butyl phthalate	50.0	50.5		ug/L		101	59 - 127
2,4-Dinitrophenol	100	108		ug/L		108	23 - 143
2,4-Dinitrotoluene	50.0	48.7		ug/L		97	57 - 128
2,6-Dinitrotoluene	50.0	48.9		ug/L		98	57 - 124
Hexachlorobenzene	50.0	46.6		ug/L		93	53 - 125
Hexachlorocyclopentadiene	50.0	19.1		ug/L		38	10 - 82
Hexachloroethane	50.0	32.2		ug/L		64	21 - 115
Isophorone	50.0	43.8		ug/L		88	42 - 124
4,6-Dinitro-o-cresol	100	117		ug/L		117	44 - 137
Nitrobenzene	50.0	39.8		ug/L		80	45 - 121
2-Nitrophenol	50.0	43.6		ug/L		87	47 - 123
4-Nitrophenol	100	57.1		ug/L		57	17 - 120
N-Nitrosodimethylamine	50.0	24.6		ug/L		49	34 - 77
N-Nitrosodiphenylamine	42.5	42.2		ug/L		99	51 - 123
bis(chloroisopropyl) ether	50.0	43.8		ug/L		88	37 - 130
Pentachlorophenol	100	107		ug/L		107	35 - 138
Phenol	50.0	22.6		ug/L		45	22 - 69
1,2,4,5-Tetrachlorobenzene	50.0	40.7		ug/L		81	35 - 121
2,4,6-Trichlorophenol	50.0	48.1		ug/L		96	50 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol (Surr)	49		19 - 119
2,4,6-Tribromophenol (Surr)	91		43 - 140
Nitrobenzene-d5 (Surr)	69		44 - 120
Phenol-d5 (Surr)	37		10 - 120
p-Terphenyl-d14 (Surr)	87		50 - 134
2-Fluorobiphenyl (Surr)	75		44 - 119

Lab Sample ID: LCSD 410-510371/3-A
Matrix: Water
Analysis Batch: 510792

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 510371

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzidine	100	31.0	J	ug/L		31	10 - 53	5	30
Bis(2-chloroethyl)ether	50.0	42.3		ug/L		85	43 - 118	2	20
Bis(2-ethylhexyl) phthalate	50.0	51.0		ug/L		102	55 - 135	4	20
2-Chlorophenol	50.0	37.0		ug/L		74	38 - 117	13	20
3,3'-Dichlorobenzidine	100	72.5	Q	ug/L		73	27 - 129	21	20
2,4-Dichlorophenol	50.0	40.9		ug/L		82	47 - 121	10	20
Diethyl phthalate	50.0	52.0		ug/L		104	56 - 125	2	20
2,4-Dimethylphenol	50.0	38.7		ug/L		77	31 - 124	4	20
Dimethyl phthalate	50.0	48.9		ug/L		98	45 - 127	0	20

Eurofins Seattle

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 410-510371/3-A
Matrix: Water
Analysis Batch: 510792

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 510371

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Di-n-butyl phthalate	50.0	53.2		ug/L		106	59 - 127	5	20
2,4-Dinitrophenol	100	105		ug/L		105	23 - 143	3	20
2,4-Dinitrotoluene	50.0	51.4		ug/L		103	57 - 128	5	20
2,6-Dinitrotoluene	50.0	49.6		ug/L		99	57 - 124	1	20
Hexachlorobenzene	50.0	48.3		ug/L		97	53 - 125	4	20
Hexachlorocyclopentadiene	50.0	15.7		ug/L		31	10 - 82	20	30
Hexachloroethane	50.0	34.0		ug/L		68	21 - 115	6	20
Isophorone	50.0	39.1		ug/L		78	42 - 124	11	20
4,6-Dinitro-o-cresol	100	115		ug/L		115	44 - 137	2	20
Nitrobenzene	50.0	41.0		ug/L		82	45 - 121	3	20
2-Nitrophenol	50.0	40.3		ug/L		81	47 - 123	8	20
4-Nitrophenol	100	57.3		ug/L		57	17 - 120	0	30
N-Nitrosodimethylamine	50.0	23.9		ug/L		48	34 - 77	3	30
N-Nitrosodiphenylamine	42.5	43.0		ug/L		101	51 - 123	2	20
bis(chloroisopropyl) ether	50.0	39.1		ug/L		78	37 - 130	11	20
Pentachlorophenol	100	104		ug/L		104	35 - 138	3	20
Phenol	50.0	19.9		ug/L		40	22 - 69	13	30
1,2,4,5-Tetrachlorobenzene	50.0	39.7		ug/L		79	35 - 121	3	20
2,4,6-Trichlorophenol	50.0	44.3		ug/L		89	50 - 125	8	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorophenol (Surr)	46		19 - 119
2,4,6-Tribromophenol (Surr)	87		43 - 140
Nitrobenzene-d5 (Surr)	73		44 - 120
Phenol-d5 (Surr)	32		10 - 120
p-Terphenyl-d14 (Surr)	86		50 - 134
2-Fluorobiphenyl (Surr)	70		44 - 119

Method: 8015D DRO - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 410-510382/1-A
Matrix: Water
Analysis Batch: 510475

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 510382

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	90	U M	100	45	ug/L		05/24/24 15:26	05/25/24 00:28	1
ORO (>C28-C40)	90	U M	100	45	ug/L		05/24/24 15:26	05/25/24 00:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	84		56 - 125	05/24/24 15:26	05/25/24 00:28	1

Lab Sample ID: LCS 410-510382/2-A
Matrix: Water
Analysis Batch: 510475

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 510382

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
DRO (C10-C28)	603	401		ug/L		67	36 - 132

Eurofins Seattle

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Method: 8015D DRO - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 410-510382/2-A
Matrix: Water
Analysis Batch: 510475

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 510382

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o-terphenyl (Surr)</i>	76		56 - 125

Lab Sample ID: LCS 410-510382/4-A
Matrix: Water
Analysis Batch: 510475

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 510382

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o-terphenyl (Surr)</i>	90		56 - 125

Lab Sample ID: LCSD 410-510382/3-A
Matrix: Water
Analysis Batch: 510475

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 510382

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
DRO (C10-C28)	603	437		ug/L		73	36 - 132	9	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o-terphenyl (Surr)</i>	86		56 - 125

Lab Sample ID: LCSD 410-510382/5-A
Matrix: Water
Analysis Batch: 510475

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 510382

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o-terphenyl (Surr)</i>	84		56 - 125

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 410-510391/1-A
Matrix: Water
Analysis Batch: 510502

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 510391

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	0.0060	U	0.020	0.0030	ug/L		05/24/24 15:33	05/25/24 05:34	1
gamma-BHC (Lindane)	0.0040	U	0.020	0.0020	ug/L		05/24/24 15:33	05/25/24 05:34	1
beta-BHC	0.022	U	0.030	0.011	ug/L		05/24/24 15:33	05/25/24 05:34	1
delta-BHC	0.0068	U	0.020	0.0034	ug/L		05/24/24 15:33	05/25/24 05:34	1
Heptachlor	0.0040	U	0.020	0.0020	ug/L		05/24/24 15:33	05/25/24 05:34	1
Aldrin	0.0040	U	0.020	0.0020	ug/L		05/24/24 15:33	05/25/24 05:34	1
Heptachlor epoxide	0.0046	U	0.020	0.0023	ug/L		05/24/24 15:33	05/25/24 05:34	1
trans-Chlordane	0.014	U	0.040	0.0070	ug/L		05/24/24 15:33	05/25/24 05:34	1
cis-Chlordane	0.0060	U	0.020	0.0030	ug/L		05/24/24 15:33	05/25/24 05:34	1
Endosulfan I	0.0086	U	0.020	0.0043	ug/L		05/24/24 15:33	05/25/24 05:34	1
4,4'-DDE	0.020	U	0.030	0.0050	ug/L		05/24/24 15:33	05/25/24 05:34	1
Dieldrin	0.020	U	0.030	0.0053	ug/L		05/24/24 15:33	05/25/24 05:34	1
Endrin	0.020	U	0.030	0.0081	ug/L		05/24/24 15:33	05/25/24 05:34	1
4,4'-DDD	0.010	U	0.030	0.0050	ug/L		05/24/24 15:33	05/25/24 05:34	1
Endosulfan II	0.030	U	0.040	0.015	ug/L		05/24/24 15:33	05/25/24 05:34	1

Eurofins Seattle

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 410-510391/1-A
Matrix: Water
Analysis Batch: 510502

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 510391

Analyte	MB MB		LOQ	DL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier									
4,4'-DDT	0.020	U	0.030	0.0052	ug/L		05/24/24 15:33	05/25/24 05:34	05:34	1	
Endrin aldehyde	0.040	U	0.10	0.020	ug/L		05/24/24 15:33	05/25/24 05:34	05:34	1	
Endosulfan sulfate	0.020	U	0.030	0.0058	ug/L		05/24/24 15:33	05/25/24 05:34	05:34	1	
Methoxychlor	0.060	U	0.11	0.030	ug/L		05/24/24 15:33	05/25/24 05:34	05:34	1	
Endrin ketone	0.010	U	0.030	0.0050	ug/L		05/24/24 15:33	05/25/24 05:34	05:34	1	
Toxaphene	0.60	U M	1.0	0.30	ug/L		05/24/24 15:33	05/25/24 05:34	05:34	1	

Surrogate	MB MB		Limits	Prepared		Analyzed		Dil Fac
	%Recovery	Qualifier						
Tetrachloro-m-xylene	74		44 - 124	05/24/24 15:33	05/25/24 05:34	05:34	1	
Tetrachloro-m-xylene	72		44 - 124	05/24/24 15:33	05/25/24 05:34	05:34	1	
DCB Decachlorobiphenyl (Surr)	69		20 - 148	05/24/24 15:33	05/25/24 05:34	05:34	1	
DCB Decachlorobiphenyl (Surr)	69		20 - 148	05/24/24 15:33	05/25/24 05:34	05:34	1	

Lab Sample ID: LCS 410-510391/2-A
Matrix: Water
Analysis Batch: 510502

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 510391

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
alpha-BHC	0.100	0.0932		ug/L		93	54 - 138	
gamma-BHC (Lindane)	0.100	0.0932		ug/L		93	59 - 134	
beta-BHC	0.100	0.0997		ug/L		100	56 - 136	
delta-BHC	0.100	0.0911		ug/L		91	52 - 142	
Heptachlor	0.100	0.0802		ug/L		80	54 - 130	
Aldrin	0.100	0.0627		ug/L		63	45 - 134	
Heptachlor epoxide	0.100	0.0903		ug/L		90	61 - 133	
trans-Chlordane	0.100	0.0894		ug/L		89	56 - 136	
cis-Chlordane	0.100	0.0915		ug/L		92	60 - 129	
Endosulfan I	0.100	0.0924		ug/L		92	62 - 126	
4,4'-DDE	0.200	0.173		ug/L		86	57 - 135	
Dieldrin	0.200	0.178		ug/L		89	60 - 136	
Endrin	0.200	0.183		ug/L		92	60 - 138	
4,4'-DDD	0.200	0.184		ug/L		92	56 - 143	
Endosulfan II	0.200	0.182		ug/L		91	52 - 135	
4,4'-DDT	0.200	0.223		ug/L		111	51 - 143	
Endrin aldehyde	0.200	0.170		ug/L		85	51 - 132	
Endosulfan sulfate	0.200	0.190		ug/L		95	62 - 133	
Methoxychlor	1.00	1.07		ug/L		107	54 - 145	
Endrin ketone	0.200	0.201		ug/L		100	58 - 134	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	74		44 - 124
Tetrachloro-m-xylene	73		44 - 124
DCB Decachlorobiphenyl (Surr)	66		20 - 148
DCB Decachlorobiphenyl (Surr)	67		20 - 148

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 410-510395/1-A
Matrix: Water
Analysis Batch: 510691

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 510395

Analyte	MB MB		LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	0.20	U	0.50	0.10	ug/L		05/24/24 15:37	05/27/24 13:10	1
PCB-1221	0.20	U	0.50	0.10	ug/L		05/24/24 15:37	05/27/24 13:10	1
PCB-1232	0.20	U	0.50	0.10	ug/L		05/24/24 15:37	05/27/24 13:10	1
PCB-1242	0.20	U	0.50	0.10	ug/L		05/24/24 15:37	05/27/24 13:10	1
PCB-1248	0.20	U	0.50	0.10	ug/L		05/24/24 15:37	05/27/24 13:10	1
PCB-1254	0.20	U	0.50	0.078	ug/L		05/24/24 15:37	05/27/24 13:10	1
PCB-1260	0.20	U	0.50	0.078	ug/L		05/24/24 15:37	05/27/24 13:10	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	76		33 - 137	05/24/24 15:37	05/27/24 13:10	1
Tetrachloro-m-xylene	75		33 - 137	05/24/24 15:37	05/27/24 13:10	1
DCB Decachlorobiphenyl (Surr)	83		10 - 148	05/24/24 15:37	05/27/24 13:10	1
DCB Decachlorobiphenyl (Surr)	83		10 - 148	05/24/24 15:37	05/27/24 13:10	1

Lab Sample ID: LCS 410-510395/2-A
Matrix: Water
Analysis Batch: 510691

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 510395

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
PCB-1016	5.01	4.17		ug/L		83	46 - 129
PCB-1260	5.02	3.85		ug/L		77	45 - 134

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	75		33 - 137
Tetrachloro-m-xylene	71		33 - 137
DCB Decachlorobiphenyl (Surr)	91		10 - 148
DCB Decachlorobiphenyl (Surr)	89		10 - 148

Method: 8151A DOD - Herbicides (GC)

Lab Sample ID: MB 410-510554/1-A
Matrix: Water
Analysis Batch: 510749

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 510554

Analyte	MB MB		LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
2,4,5-T	0.13	U	0.15	0.065	ug/L		05/25/24 05:56	05/28/24 07:17	1
Silvex (2,4,5-TP)	0.044	U	0.050	0.022	ug/L		05/25/24 05:56	05/28/24 07:17	1
2,4-D	0.50	U	0.60	0.25	ug/L		05/25/24 05:56	05/28/24 07:17	1
2,4-DB	1.3	U	1.5	0.63	ug/L		05/25/24 05:56	05/28/24 07:17	1
Dichlorprop	0.32	U	0.50	0.16	ug/L		05/25/24 05:56	05/28/24 07:17	1
Dalapon	11	U	12	5.7	ug/L		05/25/24 05:56	05/28/24 07:17	1
Dicamba	0.54	U	0.55	0.27	ug/L		05/25/24 05:56	05/28/24 07:17	1
MCPP	100	U	200	50	ug/L		05/25/24 05:56	05/28/24 07:17	1
MCPA	100	U	200	50	ug/L		05/25/24 05:56	05/28/24 07:17	1
Pentachlorophenol	0.060	U	0.070	0.027	ug/L		05/25/24 05:56	05/28/24 07:17	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2,4-Dichlorophenylacetic acid (Surr)	83		32 - 138	05/25/24 05:56	05/28/24 07:17	1

Eurofins Seattle

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Method: 8151A DOD - Herbicides (GC) (Continued)

Lab Sample ID: MB 410-510554/1-A
Matrix: Water
Analysis Batch: 510749

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 510554

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2,4-Dichlorophenylacetic acid (Surr)	87		32 - 138	05/25/24 05:56	05/28/24 07:17	1

Lab Sample ID: LCS 410-510554/2-A
Matrix: Water
Analysis Batch: 510749

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 510554

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
2,4,5-T	0.250	0.307		ug/L		123	42 - 147
Silvex (2,4,5-TP)	0.250	0.264		ug/L		106	51 - 134
2,4-D	2.51	2.56		ug/L		102	45 - 152
2,4-DB	2.51	3.49		ug/L		139	35 - 153
Dichlorprop	2.50	2.17		ug/L		87	46 - 159
Dalapon	6.25	11	U M	ug/L		54	19 - 139
Dicamba	0.250	0.54	U	ug/L		75	50 - 141
MCPP	251	232	M	ug/L		92	33 - 157
MCPA	496	429		ug/L		86	35 - 144
Pentachlorophenol	0.199	0.205		ug/L		103	56 - 139

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2,4-Dichlorophenylacetic acid (Surr)	83		32 - 138
2,4-Dichlorophenylacetic acid (Surr)	86		32 - 138

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 410-509932/5
Matrix: Water
Analysis Batch: 509932

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB MB		LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Nitrite as N	0.10	U	0.11	0.050	mg/L			05/23/24 16:25	1
Nitrate as N	0.10	U	0.11	0.050	mg/L			05/23/24 16:25	1
Nitrate Nitrite as N	0.10	U	1.1	0.050	mg/L			05/23/24 16:25	1

Lab Sample ID: LCS 410-509932/3
Matrix: Water
Analysis Batch: 509932

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Nitrite as N	0.750	0.728		mg/L		97	87 - 111
Nitrate as N	0.750	0.679		mg/L		91	88 - 111

Lab Sample ID: LCSD 410-509932/4
Matrix: Water
Analysis Batch: 509932

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec Limits	RPD	
		Result	Qualifier					RPD	Limit
Nitrite as N	0.750	0.725		mg/L		97	87 - 111	0	15

Eurofins Seattle

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 410-509932/4
Matrix: Water
Analysis Batch: 509932

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	0.750	0.680		mg/L		91	88 - 111	0	15

Lab Sample ID: MB 410-510037/5
Matrix: Water
Analysis Batch: 510037

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	0.10	U	0.11	0.050	mg/L			05/24/24 02:01	1
Nitrate as N	0.10	U	0.11	0.050	mg/L			05/24/24 02:01	1
Nitrate Nitrite as N	0.10	U	1.1	0.050	mg/L			05/24/24 02:01	1

Lab Sample ID: LCS 410-510037/3
Matrix: Water
Analysis Batch: 510037

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	0.750	0.730		mg/L		97	87 - 111
Nitrate as N	0.750	0.685		mg/L		91	88 - 111

Lab Sample ID: LCSD 410-510037/4
Matrix: Water
Analysis Batch: 510037

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrite as N	0.750	0.729		mg/L		97	87 - 111	0	15
Nitrate as N	0.750	0.685		mg/L		91	88 - 111	0	15

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 410-510036/5
Matrix: Water
Analysis Batch: 510036

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	1.0	U	1.5	0.50	mg/L			05/24/24 02:01	1

Lab Sample ID: LCS 410-510036/3
Matrix: Water
Analysis Batch: 510036

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	7.50	7.14		mg/L		95	90 - 110

Lab Sample ID: LCSD 410-510036/4
Matrix: Water
Analysis Batch: 510036

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	7.50	7.06		mg/L		94	90 - 110	1	20

Eurofins Seattle

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Lab Sample ID: MB 410-512220/1-A
Matrix: Water
Analysis Batch: 512389

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 512220

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
2,3,7,8-TCDD	2.0	U	5.0	0.87	pg/L		05/30/24 22:57	06/01/24 10:42	1
Total TCDD	1.14	J I	5.0	0.87	pg/L		05/30/24 22:57	06/01/24 10:42	1
Isotope Dilution	MB MB		Limits			D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
13C-2,3,7,8-TCDD	92		40 - 135				05/30/24 22:57	06/01/24 10:42	1

Lab Sample ID: LCS 410-512220/2-A
Matrix: Water
Analysis Batch: 512389

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 512220

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits			
		Result	Qualifier					%Rec	Limits	
2,3,7,8-TCDD	200	163		pg/L		82	71 - 125			
Isotope Dilution	LCS LCS		Limits			D	%Rec	Limits		
	%Recovery	Qualifier								
13C-2,3,7,8-TCDD	90		40 - 135							

Lab Sample ID: LCSD 410-512220/3-A
Matrix: Water
Analysis Batch: 512389

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 512220

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	Limits	RPD		
		Result	Qualifier					RPD	Limit	
2,3,7,8-TCDD	200	174		pg/L		87	71 - 125	6	20	
Isotope Dilution	LCSD LCSD		Limits			D	%Rec	Limits		
	%Recovery	Qualifier								
13C-2,3,7,8-TCDD	83		40 - 135							

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 410-510759/1-A
Matrix: Water
Analysis Batch: 511311

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 510759

Analyte	MB MB		LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	0.032	U	0.050	0.016	mg/L		05/28/24 06:50	05/28/24 16:32	1
Arsenic	0.032	U	0.050	0.016	mg/L		05/28/24 06:50	05/28/24 16:32	1
Barium	0.0020	U	0.0050	0.0010	mg/L		05/28/24 06:50	05/28/24 16:32	1
Beryllium	0.0020	U	0.0050	0.0010	mg/L		05/28/24 06:50	05/28/24 16:32	1
Cadmium	0.0020	U	0.0050	0.0010	mg/L		05/28/24 06:50	05/28/24 16:32	1
Chromium	0.0060	U	0.015	0.0030	mg/L		05/28/24 06:50	05/28/24 16:32	1
Cobalt	0.0030	U	0.0050	0.0015	mg/L		05/28/24 06:50	05/28/24 16:32	1
Copper	0.016	U	0.020	0.0080	mg/L		05/28/24 06:50	05/28/24 16:32	1
Lead	0.014	U	0.015	0.0071	mg/L		05/28/24 06:50	05/28/24 16:32	1
Molybdenum	0.0040	U	0.010	0.0020	mg/L		05/28/24 06:50	05/28/24 16:32	1
Nickel	0.0040	U	0.010	0.0021	mg/L		05/28/24 06:50	05/28/24 16:32	1
Selenium	0.032	U	0.050	0.016	mg/L		05/28/24 06:50	05/28/24 16:32	1
Silver	0.0080	U	0.010	0.0040	mg/L		05/28/24 06:50	05/28/24 16:32	1
Zinc	0.0074	U	0.020	0.0037	mg/L		05/28/24 06:50	05/28/24 16:32	1
Vanadium	0.0038	U	0.010	0.0019	mg/L		05/28/24 06:50	05/28/24 16:32	1

Eurofins Seattle

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: MB 410-510759/1-A
Matrix: Water
Analysis Batch: 512243

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 510759

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.024	U	0.030	0.012	mg/L		05/28/24 06:50	05/30/24 10:51	1

Lab Sample ID: LCS 410-510759/2-A
Matrix: Water
Analysis Batch: 511311

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 510759

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.100	0.0913		mg/L		91	88 - 113
Arsenic	0.500	0.533		mg/L		107	87 - 113
Barium	0.500	0.515		mg/L		103	88 - 113
Beryllium	0.0500	0.0515		mg/L		103	89 - 112
Cadmium	0.0500	0.0513		mg/L		103	88 - 113
Chromium	0.500	0.502		mg/L		100	90 - 113
Cobalt	0.500	0.503		mg/L		101	89 - 114
Copper	0.500	0.499		mg/L		100	86 - 114
Lead	0.0500	0.0496		mg/L		99	86 - 113
Molybdenum	0.0500	0.0484		mg/L		97	89 - 113
Nickel	0.500	0.512		mg/L		102	88 - 113
Selenium	0.100	0.0918		mg/L		92	83 - 114
Silver	0.0500	0.0516		mg/L		103	84 - 115
Zinc	0.500	0.490		mg/L		98	87 - 115
Vanadium	0.500	0.507		mg/L		101	90 - 111

Lab Sample ID: LCS 410-510759/2-A
Matrix: Water
Analysis Batch: 512243

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 510759

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Thallium	0.100	0.106		mg/L		106	85 - 114

Lab Sample ID: MB 410-511420/1-A
Matrix: Water
Analysis Batch: 512048

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 511420

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.32	U	0.50	0.16	mg/L		05/29/24 21:10	05/30/24 06:24	1
Barium	0.020	U	0.050	0.010	mg/L		05/29/24 21:10	05/30/24 06:24	1
Cadmium	0.020	U	0.050	0.010	mg/L		05/29/24 21:10	05/30/24 06:24	1
Chromium	0.060	U	0.15	0.030	mg/L		05/29/24 21:10	05/30/24 06:24	1
Lead	0.14	U	0.15	0.071	mg/L		05/29/24 21:10	05/30/24 06:24	1
Selenium	0.32	U	0.50	0.16	mg/L		05/29/24 21:10	05/30/24 06:24	1
Silver	0.080	U	0.10	0.040	mg/L		05/29/24 21:10	05/30/24 06:24	1

Lab Sample ID: LCS 410-511420/2-A
Matrix: Water
Analysis Batch: 512048

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 511420

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	5.00	5.53		mg/L		111	87 - 113

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: LCS 410-511420/2-A
Matrix: Water
Analysis Batch: 512048

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 511420

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	5.00	5.25		mg/L		105	88 - 113
Cadmium	0.500	0.533		mg/L		107	88 - 113
Chromium	5.00	5.21		mg/L		104	90 - 113
Lead	0.500	0.533		mg/L		107	86 - 113
Selenium	1.00	1.14		mg/L		114	83 - 114
Silver	0.500	0.551		mg/L		110	84 - 115

Lab Sample ID: MB 410-511711/1-A
Matrix: Water
Analysis Batch: 512048

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 511711

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.32	U	0.50	0.16	mg/L		05/29/24 20:30	05/30/24 12:09	1
Barium	0.020	U	0.050	0.010	mg/L		05/29/24 20:30	05/30/24 12:09	1
Cadmium	0.020	U	0.050	0.010	mg/L		05/29/24 20:30	05/30/24 12:09	1
Chromium	0.060	U	0.15	0.030	mg/L		05/29/24 20:30	05/30/24 12:09	1
Lead	0.14	U	0.15	0.071	mg/L		05/29/24 20:30	05/30/24 12:09	1
Selenium	0.32	U	0.50	0.16	mg/L		05/29/24 20:30	05/30/24 12:09	1
Silver	0.080	U	0.10	0.040	mg/L		05/29/24 20:30	05/30/24 12:09	1

Lab Sample ID: LCS 410-511711/2-A
Matrix: Water
Analysis Batch: 512048

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 511711

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	5.00	5.28		mg/L		106	87 - 113
Barium	5.00	5.15		mg/L		103	88 - 113
Cadmium	0.500	0.515		mg/L		103	88 - 113
Chromium	5.00	5.05		mg/L		101	90 - 113
Lead	0.500	0.509		mg/L		102	86 - 113
Selenium	1.00	0.968		mg/L		97	83 - 114
Silver	0.500	0.549		mg/L		110	84 - 115

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 410-510143/1-A
Matrix: Water
Analysis Batch: 510400

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 510143

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.16	U	0.20	0.079	ug/L		05/24/24 08:45	05/24/24 14:45	1

Lab Sample ID: LCS 410-510143/2-A
Matrix: Water
Analysis Batch: 510400

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 510143

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	0.849		ug/L		85	82 - 119

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: MB 410-511433/1-A
Matrix: Water
Analysis Batch: 512022

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 511433

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.16	U	0.20	0.079	ug/L		05/29/24 23:35	05/30/24 10:22	1

Lab Sample ID: LCS 410-511433/2-A
Matrix: Water
Analysis Batch: 512022

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 511433

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	1.03		ug/L		103	82 - 119

Method: 1010B - Ignitability, Pensky-Martens Closed-Cup Method

Lab Sample ID: LCS 410-510082/1
Matrix: Water
Analysis Batch: 510082

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Flashpoint	81.0	83.0		Degrees F		102	96.9 - 103.1

Lab Sample ID: LCSD 410-510082/2
Matrix: Water
Analysis Batch: 510082

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Flashpoint	81.0	82.0		Degrees F		101	96.9 - 103.1	1	4

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 410-510430/1
Matrix: Water
Analysis Batch: 510430

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	4.0	U	5.0	1.4	mg/L			05/24/24 17:38	1
SGT-HEM (TPH)	4.0	U	5.0	1.4	mg/L			05/24/24 17:38	1

Lab Sample ID: LCS 410-510430/2
Matrix: Water
Analysis Batch: 510430

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
HEM (Oil & Grease)	40.0	34.7		mg/L		87	78 - 114
SGT-HEM (TPH)	20.0	13.3		mg/L		66	64 - 132

Lab Sample ID: LCSD 410-510430/3
Matrix: Water
Analysis Batch: 510430

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HEM (Oil & Grease)	40.0	31.9		mg/L		80	78 - 114	8	13

Eurofins Seattle

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Method: 1664B - HEM and SGT-HEM (Continued)

Lab Sample ID: LCSD 410-510430/3
Matrix: Water
Analysis Batch: 510430

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
SGT-HEM (TPH)	20.0	13.3		mg/L		67	64 - 132	0	23

Method: 180.1 - Turbidity, Nephelometric

Lab Sample ID: MB 410-510026/3
Matrix: Water
Analysis Batch: 510026

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Turbidity	0.70	U	1.0	1.0	NTU			05/23/24 18:52	1

Lab Sample ID: LCS 410-510026/4
Matrix: Water
Analysis Batch: 510026

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Turbidity	1.00	1.0		NTU		104	90 - 130

Method: 2320B-2011 - Alkalinity, Total

Lab Sample ID: MB 410-510293/30
Matrix: Water
Analysis Batch: 510293

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	6.0	U	8.0	2.6	mg/L			05/23/24 18:35	1

Lab Sample ID: LCS 410-510293/33
Matrix: Water
Analysis Batch: 510293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity as CaCO3 to pH 4.5	189	188		mg/L		100	66 - 110

Lab Sample ID: LCSD 410-510293/34
Matrix: Water
Analysis Batch: 510293

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Alkalinity as CaCO3 to pH 4.5	189	188		mg/L		100	66 - 110	0	10

Method: 2340C-2011 - Hardness, Total

Lab Sample ID: MB 410-510690/4
Matrix: Water
Analysis Batch: 510690

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Total Hardness	8.0	U	10	3.0	mg/L			05/27/24 07:54	1

Eurofins Seattle

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Method: 2340C-2011 - Hardness, Total (Continued)

Lab Sample ID: LCS 410-510690/5
Matrix: Water
Analysis Batch: 510690

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Hardness	40.0	39.4		mg/L		99	90 - 110

Lab Sample ID: 580-140271-1 MS
Matrix: Water
Analysis Batch: 510690

Client Sample ID: TDS-RP-20MAY24
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Hardness	160	J1	200	330	J1	mg/L		87	90 - 110

Lab Sample ID: 580-140271-1 DU
Matrix: Water
Analysis Batch: 510690

Client Sample ID: TDS-RP-20MAY24
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Hardness	160	J1	109		mg/L		36	10

Method: 2540C - 2015 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 410-509713/1
Matrix: Water
Analysis Batch: 509713

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	25	U	30	12	mg/L			05/23/24 08:31	1

Lab Sample ID: LCS 410-509713/2
Matrix: Water
Analysis Batch: 509713

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	200	189		mg/L		95	90 - 110

Method: 2540D-2015 - Solids, Total Suspended (TSS)

Lab Sample ID: MB 410-510019/1
Matrix: Water
Analysis Batch: 510019

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	2.5	U	3.0	1.0	mg/L			05/23/24 18:32	1

Lab Sample ID: LCS 410-510019/2
Matrix: Water
Analysis Batch: 510019

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	151	143		mg/L		95	89 - 105

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Method: 330.4 - Chlorine, Total Residual

Lab Sample ID: MB 410-511234/1
Matrix: Water
Analysis Batch: 511234

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Residual Chlorine	0.15	U	0.20	0.060	mg/L			05/28/24 23:37	1

Lab Sample ID: LCS 410-511234/2
Matrix: Water
Analysis Batch: 511234

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Residual Chlorine	1.00	1.00		mg/L		100	95 - 105

Lab Sample ID: LCSD 410-511234/3
Matrix: Water
Analysis Batch: 511234

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Residual Chlorine	1.00	1.00		mg/L		100	95 - 105	0	10

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 410-511179/2-A
Matrix: Water
Analysis Batch: 511630

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 511179

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Kjeldahl	1.0	U	1.5	0.50	mg/L		05/28/24 17:33	05/29/24 12:28	1

Lab Sample ID: LCS 410-511179/1-A
Matrix: Water
Analysis Batch: 511630

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 511179

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrogen, Kjeldahl	4.86	4.56		mg/L		94	90 - 110

Lab Sample ID: 580-140271-1 MS
Matrix: Water
Analysis Batch: 511630

Client Sample ID: TDS-RP-20MAY24
Prep Type: Total/NA
Prep Batch: 511179

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrogen, Kjeldahl	3.0		4.00	6.75		mg/L		94	90 - 110

Lab Sample ID: 580-140271-1 DU
Matrix: Water
Analysis Batch: 511630

Client Sample ID: TDS-RP-20MAY24
Prep Type: Total/NA
Prep Batch: 511179

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrogen, Kjeldahl	3.0		2.72		mg/L		10	20

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Method: 410.4 - COD

Lab Sample ID: MB 410-511051/5
Matrix: Water
Analysis Batch: 511051

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	60	U	75	25	mg/L			05/28/24 07:31	1

Lab Sample ID: LCS 410-511051/6
Matrix: Water
Analysis Batch: 511051

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	500	491		mg/L		98	90 - 110

Method: 4500 NH3 D-2011 - Ammonia

Lab Sample ID: MB 410-511560/3
Matrix: Water
Analysis Batch: 511560

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia-N	0.20	U	0.24	0.080	mg/L			05/29/24 11:25	1

Lab Sample ID: LCS 410-511560/4
Matrix: Water
Analysis Batch: 511560

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia-N	5.00	5.33		mg/L		107	88 - 122

Lab Sample ID: 580-140271-1 MS
Matrix: Water
Analysis Batch: 511560

Client Sample ID: TDS-RP-20MAY24
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia-N	0.11	J	5.00	5.44		mg/L		107	88 - 122

Lab Sample ID: 580-140271-1 MSD
Matrix: Water
Analysis Batch: 511560

Client Sample ID: TDS-RP-20MAY24
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia-N	0.11	J	5.00	5.13		mg/L		100	88 - 122	6	15

Lab Sample ID: 580-140271-1 DU
Matrix: Water
Analysis Batch: 511560

Client Sample ID: TDS-RP-20MAY24
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ammonia-N	0.11	J	0.0900	J	mg/L		20	11

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Method: 5310 C-2014 - Total Organic Carbon/Persulfate - Ultrav

Lab Sample ID: MB 410-511265/37
Matrix: Water
Analysis Batch: 511265

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	0.90	U	1.0	0.50	mg/L			05/29/24 01:07	1

Lab Sample ID: LCS 410-511265/36
Matrix: Water
Analysis Batch: 511265

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	50.2	48.9		mg/L		97	90 - 110

Lab Sample ID: MRL 410-511265/3
Matrix: Water
Analysis Batch: 511265

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	1.00	0.751	J	mg/L		75	50 - 150

Method: 9012 - Cyanide, Reactive

Lab Sample ID: MB 410-510919/1-A
Matrix: Water
Analysis Batch: 511469

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 510919

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	50	U	60	20	mg/Kg		05/28/24 09:29	05/28/24 17:37	1

Lab Sample ID: LCS 410-510919/2-A
Matrix: Water
Analysis Batch: 511469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 510919

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Reactive	1000	500	U	mg/Kg		3	0 - 5.14

Method: 9012A - Cyanide, Total and/or Amenable

Lab Sample ID: MB 410-510218/1-A
Matrix: Water
Analysis Batch: 511468

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 510218

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0090	U	0.010	0.0050	mg/L		05/24/24 10:54	05/28/24 16:56	1

Lab Sample ID: LCS 410-510218/2-A
Matrix: Water
Analysis Batch: 511468

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 510218

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.200	0.196		mg/L		98	85 - 115

QC Sample Results

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Method: 9034 - Sulfide, Reactive

Lab Sample ID: MB 410-510919/1-A
Matrix: Water
Analysis Batch: 511066

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 510919

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Reactive	140	U	160	54	mg/Kg		05/28/24 09:29	05/28/24 13:42	1

Lab Sample ID: LCS 410-510919/25-A
Matrix: Water
Analysis Batch: 511066

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 510919

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide, Reactive	539	371		mg/Kg		69	62 - 104

Method: 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 410-510205/1
Matrix: Water
Analysis Batch: 510205

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.5	U	2.0	0.70	mg/L			05/24/24 09:10	1

Lab Sample ID: LCS 410-510205/2
Matrix: Water
Analysis Batch: 510205

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	20.1	17.6		mg/L		88	77 - 110

Lab Sample ID: LCSD 410-510205/3
Matrix: Water
Analysis Batch: 510205

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	20.1	17.4		mg/L		87	77 - 110	1	10

Method: 9040C - pH

Lab Sample ID: LCS 410-510294/31
Matrix: Water
Analysis Batch: 510294

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		S.U.		100	95 - 105

Lab Sample ID: LCSD 410-510294/32
Matrix: Water
Analysis Batch: 510294

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
pH	7.00	7.0		S.U.		100	95 - 105	0	3

Lab Chronicle

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Client Sample ID: TDS-RP-20MAY24

Lab Sample ID: 580-140271-1

Date Collected: 05/20/24 14:45

Matrix: Water

Date Received: 05/23/24 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	511809	TQ4J	ELLE	05/30/24 17:21
Total/NA	Prep	3510C			510371	JDJ2	ELLE	05/24/24 15:20
Total/NA	Analysis	8270D		1	510792	W6ZA	ELLE	05/28/24 10:58
Total/NA	Prep	3510C			510382	JDJ2	ELLE	05/24/24 15:26
Total/NA	Analysis	8015D DRO		1	510475	IUSB	ELLE	05/25/24 02:44
Total/NA	Prep	3510C			510391	JDJ2	ELLE	05/24/24 15:33
Total/NA	Analysis	8081B		1	510502	UAMZ	ELLE	05/25/24 08:15
Total/NA	Prep	3510C			510395	JDJ2	ELLE	05/24/24 15:37
Total/NA	Analysis	8082A		1	510691	M6UH	ELLE	05/27/24 15:26
Total/NA	Prep	8151A			510554	UKL2	ELLE	05/25/24 05:56
Total/NA	Analysis	8151A DOD		1	510749	UAMZ	ELLE	05/28/24 15:18
Total/NA	Analysis	9056A		5	509932	L4QM	ELLE	05/23/24 19:18
Total/NA	Analysis	9056A		10	510037	L4QM	ELLE	05/24/24 12:47
Total/NA	Analysis	EPA 300.0 R2.1		10	510036	L4QM	ELLE	05/24/24 12:47
Total/NA	Prep	8290A			512220	SJ7Z	ELLE	05/30/24 22:57
Total/NA	Analysis	8290A		1	512559	TJK2	ELLE	06/02/24 04:41
TCLP	Leach	1311			511428	HA8T	ELLE	05/29/24 11:47 - 05/29/24 12:20 ¹
TCLP	Prep	3005A			511420	UAMX	ELLE	05/29/24 21:10
TCLP	Analysis	6010D		1	512048	MT26	ELLE	05/30/24 07:07
Total/NA	Prep	3005A			510759	X3ZX	ELLE	05/28/24 06:50
Total/NA	Analysis	6010D		1	512243	MT26	ELLE	05/30/24 11:26
Total/NA	Prep	3005A			510759	X3ZX	ELLE	05/28/24 06:50
Total/NA	Analysis	6010D		1	511311	MT26	ELLE	05/28/24 17:20
TCLP	Leach	1311			511428	HA8T	ELLE	05/29/24 11:47 - 05/29/24 12:20 ¹
TCLP	Prep	7470A			511433	UAMX	ELLE	05/29/24 23:35
TCLP	Analysis	7470A		1	512022	UEFS	ELLE	05/30/24 10:52
Total/NA	Prep	7470A			510143	X3ZX	ELLE	05/24/24 08:45
Total/NA	Analysis	7470A		1	510400	UEFS	ELLE	05/24/24 15:40
Total/NA	Analysis	1010B		1	510082	USAE	ELLE	05/24/24 03:31 - 05/24/24 03:31 ¹
Total/NA	Analysis	1664B		1	510430	QT6L	ELLE	05/24/24 17:38
Total/NA	Analysis	180.1		1	510026	DI9Q	ELLE	05/23/24 18:52
Total/NA	Analysis	2320B-2011		1	510293	DI9Q	ELLE	05/23/24 21:32
Total/NA	Analysis	2340C-2011		5	510690	USAE	ELLE	05/27/24 08:08
Total/NA	Analysis	2540C - 2015		1	509713	M98K	ELLE	05/23/24 13:08
Total/NA	Analysis	2540D-2015		1	510019	UOCA	ELLE	05/23/24 18:32 - 05/24/24 21:34 ¹
Total/NA	Analysis	330.4		1	511234	UDS7	ELLE	05/28/24 23:37
Total/NA	Prep	351.2			511179	NLE3	ELLE	05/28/24 17:33 - 05/28/24 20:33 ¹
Total/NA	Analysis	351.2		1	511630	JCG7	ELLE	05/29/24 12:34
Total/NA	Analysis	360.1		1	510680	USAE	ELLE	05/27/24 10:56
Total/NA	Analysis	410.4		1	511051	USAE	ELLE	05/28/24 07:39
Total/NA	Analysis	4500 NH3 D-2011		1	511560	UML5	ELLE	05/29/24 11:39
Total/NA	Analysis	5310 C-2014		1	511265	P684	ELLE	05/29/24 04:48

Lab Chronicle

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Client Sample ID: TDS-RP-20MAY24

Lab Sample ID: 580-140271-1

Date Collected: 05/20/24 14:45

Matrix: Water

Date Received: 05/23/24 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7.3.4			510919	USE1	ELLE	05/28/24 09:29
Total/NA	Analysis	9012		1	511469	JCG7	ELLE	05/28/24 17:50
Total/NA	Prep	9012A			510218	PQ9E	ELLE	05/24/24 10:54 - 05/24/24 12:39 ¹
Total/NA	Analysis	9012A		1	511468	JCG7	ELLE	05/28/24 17:02
Total/NA	Analysis	9034		1	510205	USE1	ELLE	05/24/24 09:10
Total/NA	Prep	7.3.4			510919	USE1	ELLE	05/28/24 09:29
Total/NA	Analysis	9034		1	511066	USE1	ELLE	05/28/24 13:42
Total/NA	Analysis	9040C		1	510294	DI9Q	ELLE	05/23/24 21:32
Total/NA	Analysis	Nitrogen,Org		1	511645	UKJF	ELLE	05/29/24 16:23
Total/NA	Analysis	Total Nitrogen		1	510657	A1C	ELLE	05/26/24 23:16

Client Sample ID: Trip Blank

Lab Sample ID: 580-140271-2

Date Collected: 05/20/24 00:00

Matrix: Water

Date Received: 05/23/24 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	511809	TQ4J	ELLE	05/30/24 17:43

¹ This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Environmental Chemical Corp.
 Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24
Alabama	State	43200	01-31-25
Alaska	State	PA00009	06-30-24
Alaska (UST)	State	17-027	02-28-25
Arizona	State	AZ0780	03-12-25
Arkansas DEQ	State	88-00660	08-09-24
California	State	2792	11-30-24
Colorado	State	PA00009	06-30-24
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-25
Delaware (DW)	State	N/A	01-31-25
Florida	NELAP	E87997	06-30-24
Georgia (DW)	State	C048	01-31-25
Hawaii	State	N/A	01-31-25
Illinois	NELAP	200027	01-31-25
Iowa	State	361	03-01-24 *
Kansas	NELAP	E-10151	10-31-24
Kentucky (DW)	State	KY90088	12-31-24
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-24
Louisiana (All)	NELAP	02055	06-30-24
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-25
Massachusetts	State	M-PA009	06-30-24
Michigan	State	9930	01-31-25
Minnesota	NELAP	042-999-487	12-31-24
Mississippi	State	023	01-31-25
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-25
Nebraska	State	NE-OS-32-17	01-31-25
New Hampshire	NELAP	2730	01-10-25
New Jersey	NELAP	PA011	06-30-24
New York	NELAP	10670	04-01-25
North Carolina (DW)	State	42705	07-31-24
North Carolina (WW/SW)	State	521	12-31-24
North Dakota	State	R-205	01-31-24 *
Oklahoma	NELAP	9804	08-31-24
Oregon	NELAP	PA200001	09-11-24
Pennsylvania	NELAP	36-00037	01-31-25
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-24
Rhode Island	State	LAO00338	12-30-24
South Carolina	State	89002	01-31-24 *
Tennessee	State	02838	01-31-25
Texas	NELAP	T104704194-23-46	08-31-24
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-24
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-24 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
West Virginia (DW)	State	9906 C	01-31-25
West Virginia DEP	State	055	07-31-25
Wyoming	State	8TMS-L	01-31-25
Wyoming (UST)	A2LA	0001.01	11-30-24

1

2

3

4

5

6

7

8

9

10

11

12

Sample Summary

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-140271-1	TDS-RP-20MAY24	Water	05/20/24 14:45	05/23/24 09:40
580-140271-2	Trip Blank	Water	05/20/24 00:00	05/23/24 09:40

1

2

3

4

5

6

7

8

9

10

11

12



COC NO.
Page

4344-401_TDS_eCOC-02
1 of 2

Laboratory Name: Eurofins Lancaster
Address: 2425 New Holland Pike, Lancaster PA
Contact
Phone: 717-656-2300

Project Location:
ECC
75 Kupuohi St, Suite 103
Lahaina, Hawaii 96761

TAT Standard								VOCs	SVOCS	Herbicides	Pesticides / PCBs	Dioxins	Cations / Anions	Metals	Metals TCLP	Mercury	Mercury TCLP	Oil & Grease	TPH (ORO)	
Sample Number	Grab	Date	Time	Matrix	Site Type	Media Type	# of Bottles	40-mL / 3	250-mL / 2	1-L / 1/2	250-mL / 3	1-L / x2	250-mL / 1	250-mL / 3	7470	7470	1664	8015	Comments	
Project Contact: Kane McNeill 650-228-6950																				
Project Name: TDS								Site: Detention Basin												
Project Number: 4344-401								Event: Leachate Sampling												
Sampler Print: Mike Marmoo				Sampler Sign: 																
TDS-RP-20JAN24	X	5/20/2024	1445	Water	Basin	W	23	X	X	X	X	X	X	X	X	X	X	X	X	
Trip Blank				Water			4	X												Trip Blank
Relinquished By: 				Received By: 				Special Instructions Dioxins. 2378-TCDD only Cations / Anions: Sodium, Magnesium, Potassium, Calcium, Chlorine Metals. Include Iron												
Date/Time 05/21/24 0900				Date/Time				0.8-1.9/08-1.9												
Relinquished By: 				Received From Laboratory By:																
Date/Time				Date/Time 5/22/24 09:40																



JM

6/4/2024



COC NO.
Page

4344-401_TDS_eCOC-02
2 of 2

Laboratory Name: Eurofins Lancaster
Address 2425 New Holland Pike, Lancaster PA
Contact
Phone: 717-656-2300

Project Location

ECC
75 Kupuohi St, Suite 103
Lahaina, Hawaii, 96761

TAT Standard								TSS / TDS	Cyanide / Sulfate / Sulfide	Turbidity / pH / Flashpoint	Nitrogen (Organic, Ammonia, Total)	Nitrates / Nitrites	Chlorine (Free Residual)	Alkalinity (Bicarb, Carb Hydroxide)	Dissolved Oxygen	Total Organic Carbon	Calcium Harness	Chemical Oxygen Demand	Reactivity-Cyanide	Reactivity Sulfide	Comments		
Project Contact: Kane McNeill, 650-228-6950																							
Project Name: TDS								Site: Detention Basin															
Project Number: 4344-401								Event: Leachate Sampling															
Sampler Print: <i>Mike Marinoro</i>				Sampler Sign: <i>[Signature]</i>																			
Sample Number	Grab	Date	Time	Matrix	Site Type	Media Type	# of Bottles																
TDS-RP-20JAN24	x	5/20/2024	1445	Water	Basin	W	14	x	x	x	x	x	x	x	x	x	x	x	x	x			
Trip Blank				Water			2	x													Trip Blank		
Relinquished By: <i>[Signature]</i> Date/Time 05-21-24 0900								Received By: <i>[Signature]</i> Date/Time								Special Instructions Dioxins: 2378-TCDD only <i>0.8-1.9 / 0.8-1.9</i>							
Relinquished By: <i>[Signature]</i> Date/Time								Received From Laboratory By: <i>[Signature]</i> Date/Time 5/23/24 09:40															

JM

Login Sample Receipt Checklist

Client: Environmental Chemical Corp.

Job Number: 580-140271-1

Login Number: 140271

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 2

Creator: Miller, Wesley R

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable, where thermal pres is required (<=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temp acceptable, where thermal pres is required (<=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	Refer to Job Narrative for details.
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	True	



Isotope Dilution Summary

Client: Environmental Chemical Corp.
Project/Site: TDS Leachate Sampling

Job ID: 580-140271-1

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCDD (40-135)
580-140271-1	TDS-RP-20MAY24	70
LCS 410-512220/2-A	Lab Control Sample	90
LCSD 410-512220/3-A	Lab Control Sample Dup	83
MB 410-512220/1-A	Method Blank	92

Surrogate Legend

TCDD = 13C-2,3,7,8-TCDD

1

2

3

4

5

6

7

8

9

10

11

12