Environmental Monitoring Quarterly Report 7
West Maui Temporary Debris Storage Site
October 2025

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

Monitoring Period: 7/16/2025 – 10/14/2025

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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
PDS	Permanent disposal site
SHPO	state historic preservation officer
SWPPP	storm water pollution prevention plan
TDS	Temporary debris storage (site)
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. The permit applied to land parcels in West Maui to be occupied by a temporary debris storage (TDS) site. On November 27, 2023, the TDS 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). The agreement was for the installation of the TDS site subject to terms and conditions for the design, construction, operation, and maintenance of the site.

On January 21, 2024, the County of Maui approved Bill 120 of Ordinance 5596. The bill authorized the Mayor 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 collaborating with the Maui County Department of Environmental Management (MCDEM) Solid Waste Division and the Hawai'i Department of Health (DOH) to comply with the ordinance. A weekly coordination meeting ensures 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 on human health and the environment from operations.

Section 2.3.a of Bill 120 requires quarterly environmental monitoring reports for the TDS site. This document is the seventh such report, and applies to the monitoring period beginning on July 16, 2025, and ending on October 14, 2025.

Quarterly reports are being generated every 90 days 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, nearly 400,000 tons of ash and debris were cleared from commercial and residential parcels in Lahaina. Over 21,000 truckloads of ash and debris were transferred from Lahaina to the TDS site. There were 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. It specifies monitoring of the following:

- Leachate (liquids from 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	An emergency response plan will be in place to handle any unexpected leachate breaches or spills, including the following: • 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	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 *Hawai'i Administrative Rules*. 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: • 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 to be submitted to the County and made available to the public consistent with chapter 92F, *Hawai'i Revised Statutes*. In addition, Bill #120 requires this information to 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. A copy of this report can be found on here. Additionally, the website contains periodic data summaries that provide the public with updated information regarding the TDS site. Finally, a debris transfer webpage provides updates on transfer of the ash and debris from the TDS site to the Permanent Disposal Site (PDS) at the Central Maui Landfill.

3.2. Public Meetings

In October 2025, a county representative will participate in the Lahaina community's monthly disaster recovery meeting. 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 site was divided into five decision units, with soil samples taken from each unit and sent to a laboratory 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 in 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) TDS site entrance, above the recycling drop-off center (Station 1); (2) North Olowalu residential area (Station 2); and (3) near Olowalu general store (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), was 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 TDS site is underlain by a thick (80-mil or 0.08-inch), plastic liner that protects the soil, groundwater, and the ocean. ECC developed the TDS 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 here.

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.

5.1. Air

Particulate matter (PM) in the air can enter the respiratory system, either causing or exacerbating respiratory health problems. More information on the health effects of PM is provided by 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 maintains and operates these monitors according to the AMSP.

Air monitoring operations were paused from April 30, 2025 – June 17, 2025, since the TDS site was temporarily closed and no site operations took place while planning was underway for ash and debris transfer operations from the TDS site to the PDS at the Central Maui Landfill.

Figure 2 — Approximate Locations of Air Monitors

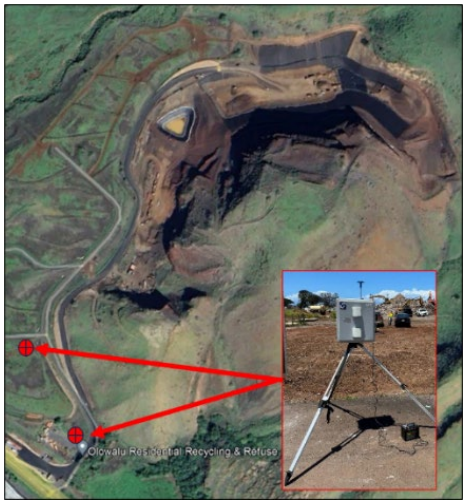


Table 2 summarizes the air monitoring readings collected to date at the TDS site:

Table 2 — Air Monitoring Measurements

Date	Average PM_{10} ($\mu g/m^3$)	Average $PM_{2.5}$ ($\mu g/m^3$)	Monitor
23-Jan-24 to 15-Jul-25	see previous reports		
16-Jul	25	5	1,2
17-Jul	25	5.5	1,2
18-Jul	22.5	4.5	1,2
19-Jul	21.5	3.5	1,2
20-Jul	23.5	5.5	1,2
21-Jul	26	7	1,2
22-Jul	28	8	1,2
23-Jul	28	9	1,2
24-Jul	29	10	1,2
25-Jul	25.5	5.5	1,2
26-Jul	23.5	6	1,2
27-Jul	25	9	1,2
28-Jul	25	9	1,2
29-Jul	50	5.5	1,2
30-Jul	49.5	6	1,2
31-Jul	55	6	1,2
1-Aug	53	6	1,2
2-Aug	52.5	6.5	1,2
3-Aug	48.5	4.5	1,2

Date	Average PM_{10} ($\mu g/m^3$)	Average $PM_{2.5}$ ($\mu g/m^3$)	Monitor
4-Aug	50.5	6.5	1,2
5-Aug	48	5	1,2
6-Aug	47	3	1,2
7-Aug	51	4.5	1,2
8-Aug	46	5.5	1,2
9-Aug	48.5	5.5	1,2
10-Aug	46.5	5.5	1,2
11-Aug	51	7.5	1,2
12-Aug	49.5	5.5	1,2
13-Aug	45	2.5	1,2
14-Aug	46.5	3	1,2
15-Aug	48.5	4	1,2
16-Aug	50	7.5	1,2
17-Aug	45	3.5	1,2
18-Aug	7.5	3.5	1,2
19-Aug	10	4	1,2
20-Aug	13.5	4	1,2
21-Aug	13.5	5	1,2
22-Aug	16.5	6	1,2
23-Aug	20	12.5	1,2
24-Aug	19	14	1,2
25-Aug	14	5.5	1,2
26-Aug	11.5	5.5	1,2
27-Aug	14	6	1,2
28-Aug	10	5	1,2
29-Aug	10	4.5	1,2
30-Aug	9	4	1,2
2-Sept	11	4	1,2

Date	Average PM_{10} ($\mu g/m^3$)	Average $PM_{2.5}$ ($\mu g/m^3$)	Monitor
3-Sept	7.5	3	1,2
4-Sept	7	2.5	1,2
5-Sept	5.5	2	1,2
6-Sept	8.5	3	1,2
8-Sept	13.5	6.5	1,2
9-Sept	11	5	1,2
10-Sept	10.5	4	1,2
11-Sept	12	5	1,2
12-Sept	9	4.5	1,2
13-Sept	6.5	2.5	1,2
14-Sept	5.5	2.5	1,2
15-Sept	10	4.5	1,2
16-Sept	11	4	2
17-Sept	6	2.5	1,2
18-Sept	7.5	3.5	1,2
19-Sept	11.5	5.5	1,2
20-Sept	9	4.5	1,2
21-Sept	8	4.5	1,2
22-Sept	9	6	1,2
23-Sept	8	5.5	1,2
24-Sept	5	3	1,2
25-Sept	12.5	9	1,2
26-Sept	15.5	11	1,2
27-Sept	17.5	12	1,2
28-Sept	13	8	1,2
29-Sept	13.5	7.5	1,2
30-Sept	11.5	7	1,2
1-Oct	8	6	1,2

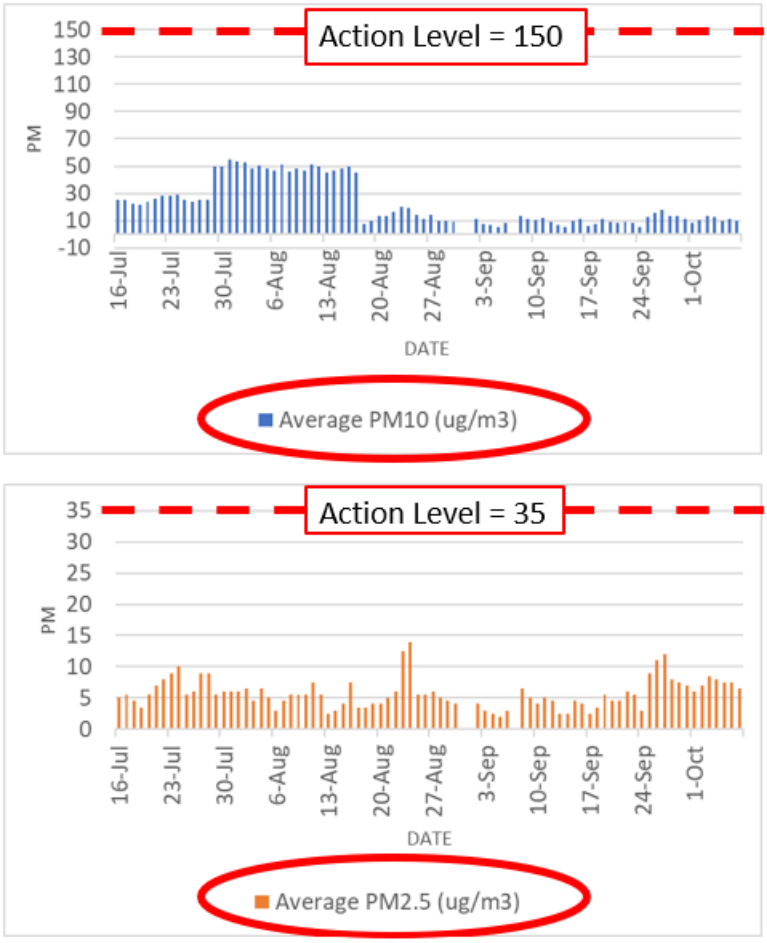
Date	Average PM_{10} ($\mu g/m^3$)	Average $PM_{2.5}$ ($\mu g/m^3$)	Monitor
2-Oct	10.5	7	1,2
3-Oct	13.5	8.5	1,2
4-Oct	12.5	8	1,2
5-Oct	10	7.5	1,2
6-Oct	11	7.5	1,2
7-Oct	9.5	6.5	1,2

Abbreviations:

- $\mu g/m^3$: micrograms per cubic meter
- PM_{10}: 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 limit," of 35 micrograms per cubic meter ($\mu g/m^3$) for particulate matter (PM 2.5) 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 limit. Detailed daily dust monitoring reports are available upon request.

Figure 3 — Air Monitoring Data for Particulate Matter (PM 10, PM 2.5) Compared to Action Level



Abbreviations:

- µg/m^3: micrograms per cubic meter
- PM_{10}: particulate matter with diameters of 10 microns or less
- $PM_{2.5}$: particulate matter with diameters of 2.5 microns or less

USACE implements wind restrictions on operations at the TDS site: 25 miles per hour as sustained for 15 minutes. If wind speeds are greater than this limit, large truck loading dumping is restricted. This restriction is done for safety reasons.

Lastly, DOH operates and maintains several other air monitoring stations at the locations shown in Figure 4. Data from these sensors are shown on dashboards found at DOH's Maui Data Portal.

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 µg/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, which can be found in Attachment 14 of Environmental Monitoring Quarterly Report 1 (April 19, 2024). Additionally, DOH prepared and posted a fact sheet that explains air monitoring readings, which 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) 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.

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 has been only periodically conducted to maintain compliance with worker protection standards.

5.3. Leachate

Leachate is a liquid, usually rainwater, that percolates through ash and debris within the lined storage area. It differs from rainwater or surface water runoff, which is diverted around the lined storage area from the surrounding hills. Stormwater is intentionally diverted around the lined storage area 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 lined storage area is drained by gravity to a low spot, called a sump, where it is drained via a PVC pipe to a leachate basin (Figure 5). This basin is directly below the lined storage area and is constructed with a thick plastic liner underneath it to prevent any infiltration into the 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 diverted around the lined storage area and leachate basin. The water collected 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, lined storage area as well as the surrounding area (because construction was incomplete on the stormwater diversion canals). The leachate basin was 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 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 also needed for dust control.

Table 3 — Leachate Basin Level Monitoring Results

Date	Water Level	Estimated Gallons
11-Jan-24 to 9-Jul-25	see previous reports	see previous reports
7/15/2025	dry	0
8/15/2025	dry	0
9/15/2025	dry	0
10/8/2025	<2’	20,000

5.3.2. Leachate Sampling

Because of dry conditions in West Maui, ECC collected baseline samples of runoff water directly from the leachate basin two 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 lined storage area, so the runoff represented a typical precipitation runoff that was 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 continues sampling leachate monthly directly from the leachate basin only if sufficient leachate is available in the basin to conduct the analysis. One sample was collected following a rain event during the current reporting period. Sample results will be reported in the next quarterly report. To date, USACE's samples underwent analyses for the parameters shown in Table 4. The laboratory does 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 may be eliminated for analysis in subsequent sampling events if they were not detected in previous sampling events.

Table 4 — Leachate Sample Analytical Results

Parameter	Method	11-Jan-24 (Baseline)	15-Apr-24	20-May-24	3-Feb-25	Unit
Ammonia	4500	NS	ND	0.11	0.066	mg/L
Antimony	6010D	< 0.010	ND	ND	NS	mg/L
Arsenic	6010D	< 0.010	ND	ND	ND	mg/L
Barium	6010D	0.251	0.037	0.025	0.030	mg/L
Beryllium	6010D	< 0.010	ND	ND	NS	mg/L
Cadmium	6010D	< 0.010	ND	ND	ND	mg/L
Carbonate	6010D	NS	6	5.6	NS	mg/L
Chlorine	330.4	NS	ND	ND	NS	mg/L
Chromium	6010D	0.136	0.024	0.0055	ND	mg/L
Cobalt	6010D	0.026	0.0028	0.0020	NS	mg/L
COD	410.4	NS	38	59	35	mg/L
Copper	6010D	0.042	ND	ND	NS	mg/L

Parameter	Method	11-Jan-24 (Baseline)	15-Apr-24	20-May-24	3-Feb-25	Unit
Dioxins and Furans (2,3,7,8-TCDD)	8290A	NS	ND	2.1	NS	pg/L
Dissolved Oxygen	360.1	NS	6.5	5.0	8.5	mg/L
Herbicides	8151A	NS	0.78	ND	NS	µg/L
Lead	6010D	< 0.010	ND	ND	ND	mg/L
Mercury	7470A	< 0.0002	0.14	ND	ND	mg/L
Molybdenum	6010D	< 0.010	0.0074	0.0061	NS	mg/L
Nickel	6010D	0.078	0.0085	ND	NS	mg/L
Nitrates	353.2	NS	21	15	17	mg/L
Nitrites	353.2	NS	0.32	1.5	0.27	mg/L
Oil & Grease	1664A	< 5.0	1.5	1.4	2.6	mg/L
Pesticides	8081B	NS	ND	ND	NS	µg/L
pH	9040C	NS	7.4	8.5	NS	
Selenium	6010D	< 0.010	ND	ND	ND	mg/L
Silver	6010D	< 0.010	ND	ND	ND	mg/L
Sulfate	300	NS	230	240	NS	mg/L
Sulfide	9034	NS	ND	ND	ND	mg/L
SVOCs	8270D/E	NS	ND	ND	NS	µg/L
TDS	2540C	NS	670	730	NS	mg/L
Thallium	6010D	< 0.010	ND	ND	NS	mg/L
TOC	5310C	NS	7.0	11.0	NS	mg/L
Total Alkalinity	2320B	NS	44	42	NS	mg/L
Total Nitrogen	351.2	NS	22	21	1.4	mg/L
Total PCBs	8082A	NS	ND	ND	NS	mg/L
TPH	1664A	< 5.0	4.1	4.0	NS	mg/L
TSS	SM 2450D	316	39	23	5.9	mg/L

Parameter	Method	11-Jan-24 (Baseline)	15-Apr-24	20-May-24	3-Feb-25	Unit
Turbidity	180.1	650	80	11	14	NTU
Vanadium	6010D	0.13	0.017	0.011	NS	mg/L
VOCs	8260D	NS	ND	ND	ND	µg/L
Zinc	6010D	< 0.100	0.0048	ND	NS	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

5.4. Soil

During a pre-construction assessment (see Section 4.1), the TDS site was divided into five decision units, or defined areas, to analyze preexisting soil conditions for contaminants. Analytical results from this assessment, summarized in Table 5, will be used for comparison once debris has been removed from the site and soil is re-sampled at similar locations for the analysis of constituents. Both the pre-construction and post-construction data will be evaluated by the County of Maui and DOH to determine if any cleanup action is necessary prior to final grading of the TDS site.

Table 5 — Pre-construction 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
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

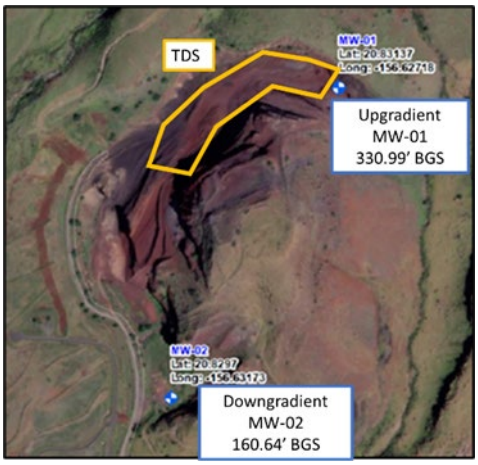
Because there have been no observed releases of leachate from the TDS site, there has been no need to sample surface water in adjacent creeks or drainage ditches.

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 Maui Data Portal. Review of 3rd party reports and data collected by DOH affirms that near-shore data show that there are no ash- or fire-related chemicals present in the surface water at concentrations that threaten human health.

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 (MW-01) and one downgradient (MW-02), as shown in Figure 6. Groundwater monitoring wells are used specifically to measure or monitor the level, quality, quantity, or movement of subsurface water.

Figure 6 — Locations of Groundwater Monitoring Wells



Abbreviations: GW: groundwater, BGS: below ground surface

The upgradient groundwater monitoring well (MW-01) was installed to a depth of approximately 330' below ground surface (BGS) and the downgradient groundwater monitoring well (MW-02) was installed to a depth of approximately 160' BGS. The difference in drilling depths reflects the approximate difference in ground surface elevation. The finished well (MW-02) is shown in Figure 7.

Figure 7 —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.

The first samples were collected by USACE on July 7, 2024, with a second round collected on October 8, 2024. Due to an issue associated with the way the samples were collected in the second round, which impacted results for turbidity and Iron, the County of Maui requested that the wells be re-sampled. The re-sampling was completed on December 3 & 8, 2024 (MW-01), and December 4, 2024 (MW-02).

Results from samples taken in 2025 are shown in Table 6. Sample results prior to 2025 are found in previous quarterly reports. Samples continue to be collected and analyzed quarterly (every 3 months), which is a typical frequency for waste storage and disposal facilities.

The first samples taken on July 7, 2024, are considered ‘baseline’ samples, and since MW-01 and MW-02 were newly installed, there were no previous sampling data for comparison. The analysis performed includes the analytes and parameters found in Table 6, which include contaminants or indicators of contaminants present in leachate (see Section 1, Table 2).

Table 6 — Groundwater Monitoring Well Sample Results

Cations & anions	Method	7-Jul-24 MW-01 (baseline)	5-May-2025 MW-01	5-Aug-2025 MW-01	7-Jul-24 MW-02 (baseline)	5-May-2025 MW-02	5-Aug-2025 MW-02	Units
Magnesium	6020B	12000	11000	11000	17000	15000	15000	ug/L
Sodium	6020B	78000	64000	67000	130000	110000	120000	ug/L
Calcium	6020B	15000	13000	13000	21000	21000	21000	ug/L
Potassium	6020B	5400	4600	4700	7600	7100	7100	ug/L
Chloride	300	100	110	110	190	170	210	mg/L
Carbonate	2320B	ND	ND	6.0	ND	ND	6.0	mg/L
Sulfate	300	19	16	17	25	27	29	mg/L
Leachate indicators								
Total Dissolved Solids	2540C	210	290	300	350	450	460	mg/L
Total Organic Carbon	5310C	4.6	1.5	0.90	0.58	1.1	0.97	mg/L
Total Alkalinity	2320B	69	60	56	67	63	61	mg/L
Nitrogen-Ammonia	350.1	ND	ND	0.086	ND	ND	0.076	mg/L
Iron	6020B	140	170	190	380	2700	1100	ug/L
Field Parameters								
pH	9040C	7.2	7.4	7.4	7.5	7.5	7.7	
Turbidity	180.1	2.5	12	12	18	60	95	NTU

Metals								
Arsenic	6020B	ND	ND	ND	ND	ND	ND	ug/L
Lead	6020B	ND	ND	ND	ND	ND	ND	ug/L
Antimony	6020B	ND	ND	ND	ND	ND	ND	ug/L
Cobalt	6020B	0.84	0.69	0.23	0.19	0.17	0.4	ug/L
Copper	6020B	2.5	0.93	0.86	0.72	1.1	0.9	ug/L

Abbreviations & Symbols:
mg/L: milligrams per liter
MW: monitoring well
ND: non-detect or below detection limit
NTU: nephelometric turbidity unit
TDS: total dissolved solids
TOC: total organic carbon
µg/L: micrograms per liter

Results from all quarterly sampling events are posted in the Environmental Monitoring Summary posted here. The laboratory report for the latest sampling event on August 5, 2025, is found in Attachment 1.

Attachment 1. Groundwater Analysis Laboratory Data Report

(Reagent Traceability, Data Sheets and Shipping/Receiving available upon request)

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ANALYTICAL REPORT

PREPARED FOR

Attn: Kane McNeill
Environmental Chemical Corp.
1240 Bayshore Hwy
Burlingame, California 94010

Generated 8/22/2025 9:21:55 AM

JOB DESCRIPTION

West Maui TDS GW & Leachate
410-236183

JOB NUMBER

410-236183-1

Eurofins Lancaster Laboratories Environment Testing, LLC
2425 New Holland Pike
Lancaster PA 17601

See page two for job notes and contact information.

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.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

Elizabeth D. Phillips

Generated
8/22/2025 9:21:55 AM

Authorized for release by
Elizabeth Phillips, Project Manager
Elizabeth.Phillips@et.eurofinsus.com
(717)205-3949

Eurofins Lancaster Laboratories Environment Testing, LLC

Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· 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 is 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.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. The foregoing express warranty is exclusive and is given in lieu of all other warranties, expressed or implied, except as otherwise agreed. We disclaim any other warranties, expressed or implied, including a warranty of fitness for particular purpose and warranty of merchantability. In no event shall Eurofins Lancaster Laboratories Environmental, LLC be liable for indirect, special, consequential, or incidental damages including, but not limited to, damages for loss of profit or goodwill regardless of (A) the negligence (either sole or concurrent) of Eurofins Lancaster Laboratories Environmental and (B) whether Eurofins Lancaster Laboratories Environmental has been informed of the possibility of such damages. We accept no legal responsibility for the purposes for which the client uses the test results. Except as otherwise agreed, no purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

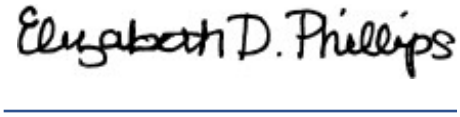

Table of Contents

Definitions/Glossary

Client: Environmental Chemical Corp.
Project/Site: West Maui TDS GW & Leachate

Job ID: 410-236183-1
SDG: 410-236183

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
D	The reported value is from a dilution.
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
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
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.
☼	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)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TNTC	Too Numerous To Count

Job ID: 410-236183-1 Eurofins Lancaster Laboratories Environment

Job Narrative
410-236183-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 8/8/2025 9:40 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.3°C.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Environmental Chemical Corp.
Project/Site: West Maui TDS GW & Leachate

Job ID: 410-236183-1
SDG: 410-236183

Client Sample ID: TDSS-MW02-3Q25 — Lab Sample ID: 410-236183-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	29		1.5	1.0	0.50	mg/L	1		300.0	Total/NA
Chloride	210	D	75	60	30	mg/L	50		300.0	Total/NA
Calcium	21000		120	100	50	ug/L	1		6020B	Total Recoverable
Iron	1100		50	40	20	ug/L	1		6020B	Total Recoverable
Lead	0.25	J	0.50	0.24	0.12	ug/L	1		6020B	Total Recoverable
Magnesium	15000		50	32	16	ug/L	1		6020B	Total Recoverable
Potassium	7100		200	180	65	ug/L	1		6020B	Total Recoverable
Sodium	120000		200	180	90	ug/L	1		6020B	Total Recoverable
Turbidity	95	H H3 D	5.0	3.6	5.0	NTU	5		180.1	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	61		8.0	6.0	2.6	mg/L	1		2320B-2011	Total/NA
Bicarbonate Alkalinity as CaCO3	61		8.0	6.0	2.6	mg/L	1		2320B-2011	Total/NA
Total Dissolved Solids	460		20	10	10	mg/L	1		2540C - 2015	Total/NA
pH	7.7	HF	0.01	0.01	0.01	S.U.	1		9040C	Total/NA
Ammonia as N	0.076	J J1	0.10	0.090	0.050	mg/L	1		EPA 350.1	Total/NA
Total Organic Carbon	0.97	J	2.0	1.0	0.50	mg/L	1		SM5310C	Total/NA
TOC Result 1	1.0	J	2.0	1.0	0.50	mg/L	1		SM5310C	Total/NA
TOC Result 2	0.92	J	2.0	1.0	0.50	mg/L	1		SM5310C	Total/NA
TOC Result 3	0.99	J	2.0	1.0	0.50	mg/L	1		SM5310C	Total/NA

Client Sample ID: TDSS-MW01-3Q25 — Lab Sample ID: 410-236183-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	17		1.5	1.0	0.50	mg/L	1		300.0	Total/NA
Chloride	110	D	15	12	6.0	mg/L	10		300.0	Total/NA
Calcium	13000		120	100	50	ug/L	1		6020B	Total Recoverable
Cobalt	0.23	J	0.50	0.40	0.16	ug/L	1		6020B	Total Recoverable
Copper	0.86	J	1.0	0.90	0.85	ug/L	1		6020B	Total Recoverable
Iron	190		50	40	20	ug/L	1		6020B	Total Recoverable
Magnesium	11000		50	32	16	ug/L	1		6020B	Total Recoverable
Potassium	4700		200	180	65	ug/L	1		6020B	Total Recoverable
Sodium	67000		200	180	90	ug/L	1		6020B	Total Recoverable
Turbidity	7.2	H H3	1.0	0.70	1.0	NTU	1		180.1	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	56		8.0	6.0	2.6	mg/L	1		2320B-2011	Total/NA
Bicarbonate Alkalinity as CaCO3	56		8.0	6.0	2.6	mg/L	1		2320B-2011	Total/NA
Total Dissolved Solids	300		10	5.0	5.0	mg/L	1		2540C - 2015	Total/NA
pH	7.6	HF	0.01	0.01	0.01	S.U.	1		9040C	Total/NA
Ammonia as N	0.086	J	0.10	0.090	0.050	mg/L	1		EPA 350.1	Total/NA
Total Organic Carbon	0.90	J	2.0	1.0	0.50	mg/L	1		SM5310C	Total/NA
TOC Result 1	0.83	J	2.0	1.0	0.50	mg/L	1		SM5310C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TDSS-MW01-3Q25 (Continued)

Lab Sample ID: 410-236183-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
TOC Result 2	1.0	J	2.0	1.0	0.50	mg/L	1		SM5310C	Total/NA
TOC Result 3	0.86	J	2.0	1.0	0.50	mg/L	1		SM5310C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TDSS-MW02-3Q25

Lab Sample ID: 410-236183-1

Date Collected: 08/05/25 10:00
Matrix: Water
Date Received: 08/08/25 09:40

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**29**		1.5	1.0	0.50	mg/L		08/14/25 04:15	1
Chloride	**210**	**D**	75	60	30	mg/L		08/15/25 16:20	50

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Antimony	0.50	U	1.0	0.50	0.20	ug/L		08/21/25 16:12	1
Arsenic	1.7	U	2.0	1.7	0.68	ug/L		08/21/25 16:12	1
Calcium	**21000**		120	100	50	ug/L		08/21/25 16:12	1
Cobalt	0.40	U	0.50	0.40	0.16	ug/L		08/21/25 16:12	1
Copper	0.90	U	1.0	0.90	0.85	ug/L		08/21/25 16:12	1
Iron	**1100**		50	40	20	ug/L		08/21/25 16:12	1
Lead	**0.25**	**J**	0.50	0.24	0.12	ug/L		08/21/25 16:12	1
Magnesium	**15000**		50	32	16	ug/L		08/21/25 16:12	1
Potassium	**7100**		200	180	65	ug/L		08/21/25 16:12	1
Sodium	**120000**		200	180	90	ug/L		08/21/25 16:12	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Turbidity (EPA 180.1)	**95**	**H H3 D**	5.0	3.6	5.0	NTU		08/09/25 05:40	5
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**61**		8.0	6.0	2.6	mg/L		08/13/25 23:43	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	6.0	U	8.0	6.0	2.6	mg/L		08/13/25 23:43	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**61**		8.0	6.0	2.6	mg/L		08/13/25 23:43	1
Total Dissolved Solids (SM 2540C - 2015)	**460**		20	10	10	mg/L		08/11/25 06:50	1
pH (SW846 9040C)	**7.7**	**HF**	0.01	0.01	0.01	S.U.		08/13/25 04:32	1
Ammonia as N (EPA 350.1)	**0.076**	**J J1**	0.10	0.090	0.050	mg/L		08/13/25 14:19	1
Total Organic Carbon (SM5310C)	**0.97**	**J**	2.0	1.0	0.50	mg/L		08/11/25 18:55	1
TOC Result 1 (SM5310C)	**1.0**	**J**	2.0	1.0	0.50	mg/L		08/11/25 18:55	1
TOC Result 2 (SM5310C)	**0.92**	**J**	2.0	1.0	0.50	mg/L		08/11/25 18:55	1
TOC Result 3 (SM5310C)	**0.99**	**J**	2.0	1.0	0.50	mg/L		08/11/25 18:55	1

Client Sample ID: TDSS-MW01-3Q25

Lab Sample ID: 410-236183-2

Date Collected: 08/05/25 12:00
Matrix: Water
Date Received: 08/08/25 09:40

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**17**		1.5	1.0	0.50	mg/L		08/14/25 04:31	1
Chloride	**110**	**D**	15	12	6.0	mg/L		08/14/25 04:39	10

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Antimony	0.50	U	1.0	0.50	0.20	ug/L		08/21/25 16:10	1
Arsenic	1.7	U	2.0	1.7	0.68	ug/L		08/21/25 16:10	1
Calcium	**13000**		120	100	50	ug/L		08/21/25 16:10	1
Cobalt	**0.23**	**J**	0.50	0.40	0.16	ug/L		08/21/25 16:10	1
Copper	**0.86**	**J**	1.0	0.90	0.85	ug/L		08/21/25 16:10	1
Iron	**190**		50	40	20	ug/L		08/21/25 16:10	1
Lead	0.24	U	0.50	0.24	0.12	ug/L		08/21/25 16:10	1

Client Sample ID: TDSS-MW01-3Q25

Date Collected: 08/05/25 12:00
Date Received: 08/08/25 09:40

Lab Sample ID: 410-236183-2

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Magnesium	11000		50	32	16	ug/L		08/21/25 16:10	1
Potassium	4700		200	180	65	ug/L		08/21/25 16:10	1
Sodium	67000		200	180	90	ug/L		08/21/25 16:10	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Turbidity (EPA 180.1)	7.2	H H3	1.0	0.70	1.0	NTU		08/09/25 05:40	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	56		8.0	6.0	2.6	mg/L		08/14/25 00:01	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	6.0	U	8.0	6.0	2.6	mg/L		08/14/25 00:01	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	56		8.0	6.0	2.6	mg/L		08/14/25 00:01	1
Total Dissolved Solids (SM 2540C - 2015)	300		10	5.0	5.0	mg/L		08/11/25 06:50	1
pH (SW846 9040C)	7.6	HF	0.01	0.01	0.01	S.U.		08/13/25 04:29	1
Ammonia as N (EPA 350.1)	0.086	J	0.10	0.090	0.050	mg/L		08/13/25 14:25	1
Total Organic Carbon (SM5310C)	0.90	J	2.0	1.0	0.50	mg/L		08/11/25 19:54	1
TOC Result 1 (SM5310C)	0.83	J	2.0	1.0	0.50	mg/L		08/11/25 19:54	1
TOC Result 2 (SM5310C)	1.0	J	2.0	1.0	0.50	mg/L		08/11/25 19:54	1
TOC Result 3 (SM5310C)	0.86	J	2.0	1.0	0.50	mg/L		08/11/25 19:54	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 410-685539/5
Matrix: Water
Analysis Batch: 685539

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U	1.5	1.0	0.50	mg/L		08/14/25 00:22	1
Chloride	1.2	U	1.5	1.2	0.60	mg/L		08/14/25 00:22	1

Lab Sample ID: LCS 410-685539/3
Matrix: Water
Analysis Batch: 685539

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	7.15	M	mg/L		95	87 - 112
Chloride	3.00	2.89		mg/L		96	87 - 111

Lab Sample ID: LCSD 410-685539/4
Matrix: Water
Analysis Batch: 685539

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	7.20	M	mg/L		96	87 - 112	1	10
Chloride	3.00	2.89		mg/L		96	87 - 111	0	10

Lab Sample ID: MB 410-686095/5
Matrix: Water
Analysis Batch: 686095

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	1.0	U M	1.5	1.0	0.50	mg/L		08/15/25 10:02	1
Chloride	1.2	U	1.5	1.2	0.60	mg/L		08/15/25 10:02	1

Lab Sample ID: LCS 410-686095/3
Matrix: Water
Analysis Batch: 686095

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	7.44	M	mg/L		99	87 - 112
Chloride	3.00	2.98		mg/L		99	87 - 111

Lab Sample ID: LCSD 410-686095/4
Matrix: Water
Analysis Batch: 686095

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	7.31	M	mg/L		97	87 - 112	2	10
Chloride	3.00	2.97		mg/L		99	87 - 111	0	10

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-685247/1-A
Matrix: Water
Analysis Batch: 689043

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 685247

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Antimony	0.50	U	1.0	0.50	0.20	ug/L		08/21/25 15:33	1
Arsenic	1.7	U	2.0	1.7	0.68	ug/L		08/21/25 15:33	1
Calcium	100	U	120	100	50	ug/L		08/21/25 15:33	1
Cobalt	0.40	U	0.50	0.40	0.16	ug/L		08/21/25 15:33	1
Copper	0.90	U	1.0	0.90	0.85	ug/L		08/21/25 15:33	1
Iron	40	U	50	40	20	ug/L		08/21/25 15:33	1
Lead	0.24	U	0.50	0.24	0.12	ug/L		08/21/25 15:33	1
Magnesium	32	U	50	32	16	ug/L		08/21/25 15:33	1
Potassium	180	U	200	180	65	ug/L		08/21/25 15:33	1
Sodium	180	U	200	180	90	ug/L		08/21/25 15:33	1

Lab Sample ID: LCS 410-685247/2-A
Matrix: Water
Analysis Batch: 689043

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 685247

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	109		ug/L		109	85 - 117
Arsenic	500	510		ug/L		102	84 - 116
Calcium	5000	4950		ug/L		99	87 - 118
Cobalt	500	494		ug/L		99	86 - 115
Copper	500	498		ug/L		100	85 - 118
Iron	5000	5010		ug/L		100	87 - 118
Lead	50.0	53.5		ug/L		107	88 - 115
Magnesium	5000	4730		ug/L		95	83 - 118
Potassium	5000	4790		ug/L		96	87 - 115
Sodium	5000	4920		ug/L		98	85 - 117

Method: 180.1 - Turbidity, Nephelometric

Lab Sample ID: MB 410-683199/3
Matrix: Water
Analysis Batch: 683199

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Turbidity	0.70	U	1.0	0.70	1.0	NTU		08/09/25 05:40	1

Lab Sample ID: LCS 410-683199/4
Matrix: Water
Analysis Batch: 683199

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	1.1		NTU		114	85 - 115

Lab Sample ID: 410-236183-1 DU
Matrix: Water
Analysis Batch: 683199

Client Sample ID: TDSS-MW02-3Q25
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Turbidity	95	H H3 D	95	D	NTU		2	10

Method: 2320B-2011 - Alkalinity, Total

Lab Sample ID: MB 410-685556/40
Matrix: Water
Analysis Batch: 685556

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	6.0	U	8.0	6.0	2.6	mg/L		08/13/25 21:12	1

Lab Sample ID: LCS 410-685556/41
Matrix: Water
Analysis Batch: 685556

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	178		mg/L		94	80 - 110

Lab Sample ID: LCSD 410-685556/42
Matrix: Water
Analysis Batch: 685556

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	175		mg/L		93	80 - 110	2	10

Method: 2540C - 2015 - Total Dissolved Solids (Dried at 180 °C)

Lab Sample ID: MB 410-683438/1
Matrix: Water
Analysis Batch: 683438

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	10	5.0	5.0	mg/L		08/11/25 06:50	1

Lab Sample ID: LCS 410-683438/2
Matrix: Water
Analysis Batch: 683438

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	195		mg/L		98	90 - 110

Method: 9040C - pH

Lab Sample ID: LCS 410-684958/6
Matrix: Water
Analysis Batch: 684958

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.		101	95 - 105

Lab Sample ID: LCS 410-684958/71
Matrix: Water
Analysis Batch: 684958

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.		101	95 - 105

Method: 9040C - pH (Continued)

Lab Sample ID: LCSD 410-684958/7
Matrix: Water
Analysis Batch: 684958

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 Sample ID: LCSD 410-684958/72
Matrix: Water
Analysis Batch: 684958

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

Method: EPA 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 410-685025/17
Matrix: Water
Analysis Batch: 685025

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia as N	0.090	U	0.10	0.090	0.050	mg/L		08/13/25 13:48	1

Lab Sample ID: LCS 410-685025/15
Matrix: Water
Analysis Batch: 685025

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia as N			2.00	2.12		mg/L		106	90 - 110		

Lab Sample ID: LCSD 410-685025/16
Matrix: Water
Analysis Batch: 685025

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
Ammonia as N			2.00	2.08		mg/L		104	90 - 110	2	15

Lab Sample ID: 410-236183-1 MS
Matrix: Water
Analysis Batch: 685025

Client Sample ID: TDSS-MW02-3Q25
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia as N	0.076	J1	2.50	2.79		mg/L		109	90 - 110		

Lab Sample ID: 410-236183-1 DU
Matrix: Water
Analysis Batch: 685025

Client Sample ID: TDSS-MW02-3Q25
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Ammonia as N	0.076	J1		0.0723	J	mg/L				6	20

Method: SM5310C - TOC

Lab Sample ID: MB 410-684453/7
Matrix: Water
Analysis Batch: 684453

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Organic Carbon	1.0	U	2.0	1.0	0.50	mg/L		08/11/25 18:35	1
TOC Result 1	1.0	U	2.0	1.0	0.50	mg/L		08/11/25 18:35	1
TOC Result 2	1.0	U	2.0	1.0	0.50	mg/L		08/11/25 18:35	1
TOC Result 3	1.0	U	2.0	1.0	0.50	mg/L		08/11/25 18:35	1

Lab Sample ID: LCS 410-684453/6
Matrix: Water
Analysis Batch: 684453

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	49.5		mg/L		99	90 - 110
TOC Result 1	50.0	49.2		mg/L		98	90 - 110
TOC Result 2	50.0	48.9		mg/L		98	90 - 110
TOC Result 3	50.0	50.3		mg/L		101	90 - 110

Lab Sample ID: MRL 410-684453/1
Matrix: Water
Analysis Batch: 684453

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	1.29	J	mg/L		129	50 - 150
TOC Result 1	1.00	1.31	J	mg/L		131	
TOC Result 2	1.00	1.27	J	mg/L		127	
TOC Result 3	1.00	1.28	J	mg/L		128	

Lab Sample ID: 410-236183-1 MS
Matrix: Water
Analysis Batch: 684453

Client Sample ID: TDSS-MW02-3Q25
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Organic Carbon	0.97	J	10.0	10.6		mg/L		96	90 - 110
TOC Result 1	1.0	J	10.0	10.5		mg/L		95	90 - 110
TOC Result 2	0.92	J	10.0	10.5		mg/L		96	90 - 110
TOC Result 3	0.99	J	10.0	10.7		mg/L		97	90 - 110

Lab Sample ID: 410-236183-1 DU
Matrix: Water
Analysis Batch: 684453

Client Sample ID: TDSS-MW02-3Q25
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon	0.97	J	0.943	J	mg/L		3	15
TOC Result 1	1.0	J	0.856	J	mg/L		16	15
TOC Result 2	0.92	J	1.04	J	mg/L		12	15
TOC Result 3	0.99	J	0.936	J	mg/L		6	15

HPLC/IC

Analysis Batch: 685539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-236183-1	TDSS-MW02-3Q25	Total/NA	Water	300.0	
410-236183-2	TDSS-MW01-3Q25	Total/NA	Water	300.0	
410-236183-2	TDSS-MW01-3Q25	Total/NA	Water	300.0	
MB 410-685539/5	Method Blank	Total/NA	Water	300.0	
LCS 410-685539/3	Lab Control Sample	Total/NA	Water	300.0	
LCSD 410-685539/4	Lab Control Sample Dup	Total/NA	Water	300.0	

Analysis Batch: 686095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-236183-1	TDSS-MW02-3Q25	Total/NA	Water	300.0	
MB 410-686095/5	Method Blank	Total/NA	Water	300.0	
LCS 410-686095/3	Lab Control Sample	Total/NA	Water	300.0	
LCSD 410-686095/4	Lab Control Sample Dup	Total/NA	Water	300.0	

Metals

Prep Batch: 685247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-236183-1	TDSS-MW02-3Q25	Total Recoverable	Water	3005A	
410-236183-2	TDSS-MW01-3Q25	Total Recoverable	Water	3005A	
MB 410-685247/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 410-685247/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 689043

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-236183-1	TDSS-MW02-3Q25	Total Recoverable	Water	6020B	685247
410-236183-2	TDSS-MW01-3Q25	Total Recoverable	Water	6020B	685247
MB 410-685247/1-A	Method Blank	Total Recoverable	Water	6020B	685247
LCS 410-685247/2-A	Lab Control Sample	Total Recoverable	Water	6020B	685247

General Chemistry

Analysis Batch: 683199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-236183-1	TDSS-MW02-3Q25	Total/NA	Water	180.1	
410-236183-2	TDSS-MW01-3Q25	Total/NA	Water	180.1	
MB 410-683199/3	Method Blank	Total/NA	Water	180.1	
LCS 410-683199/4	Lab Control Sample	Total/NA	Water	180.1	
410-236183-1 DU	TDSS-MW02-3Q25	Total/NA	Water	180.1	

Analysis Batch: 683438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-236183-1	TDSS-MW02-3Q25	Total/NA	Water	2540C - 2015	
410-236183-2	TDSS-MW01-3Q25	Total/NA	Water	2540C - 2015	
MB 410-683438/1	Method Blank	Total/NA	Water	2540C - 2015	
LCS 410-683438/2	Lab Control Sample	Total/NA	Water	2540C - 2015	

Analysis Batch: 684453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-236183-1	TDSS-MW02-3Q25	Total/NA	Water	SM5310C	
410-236183-2	TDSS-MW01-3Q25	Total/NA	Water	SM5310C	
MB 410-684453/7	Method Blank	Total/NA	Water	SM5310C	

General Chemistry (Continued)

Analysis Batch: 684453 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 410-684453/6	Lab Control Sample	Total/NA	Water	SM5310C	
MRL 410-684453/1	Lab Control Sample	Total/NA	Water	SM5310C	
410-236183-1 MS	TDSS-MW02-3Q25	Total/NA	Water	SM5310C	
410-236183-1 DU	TDSS-MW02-3Q25	Total/NA	Water	SM5310C	

Analysis Batch: 684958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-236183-1	TDSS-MW02-3Q25	Total/NA	Water	9040C	
410-236183-2	TDSS-MW01-3Q25	Total/NA	Water	9040C	
LCS 410-684958/6	Lab Control Sample	Total/NA	Water	9040C	
LCS 410-684958/71	Lab Control Sample	Total/NA	Water	9040C	
LCSD 410-684958/7	Lab Control Sample Dup	Total/NA	Water	9040C	
LCSD 410-684958/72	Lab Control Sample Dup	Total/NA	Water	9040C	

Analysis Batch: 685025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-236183-1	TDSS-MW02-3Q25	Total/NA	Water	EPA 350.1	
410-236183-2	TDSS-MW01-3Q25	Total/NA	Water	EPA 350.1	
MB 410-685025/17	Method Blank	Total/NA	Water	EPA 350.1	
LCS 410-685025/15	Lab Control Sample	Total/NA	Water	EPA 350.1	
LCSD 410-685025/16	Lab Control Sample Dup	Total/NA	Water	EPA 350.1	
410-236183-1 MS	TDSS-MW02-3Q25	Total/NA	Water	EPA 350.1	
410-236183-1 DU	TDSS-MW02-3Q25	Total/NA	Water	EPA 350.1	

Analysis Batch: 685556

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-236183-1	TDSS-MW02-3Q25	Total/NA	Water	2320B-2011	
410-236183-2	TDSS-MW01-3Q25	Total/NA	Water	2320B-2011	
MB 410-685556/40	Method Blank	Total/NA	Water	2320B-2011	
LCS 410-685556/41	Lab Control Sample	Total/NA	Water	2320B-2011	
LCSD 410-685556/42	Lab Control Sample Dup	Total/NA	Water	2320B-2011	

Lab Chronicle

Client: Environmental Chemical Corp.
Project/Site: West Maui TDS GW & Leachate

Job ID: 410-236183-1
SDG: 410-236183

Client Sample ID: TDSS-MW02-3Q25

Lab Sample ID: 410-236183-1

Date Collected: 08/05/25 10:00

Matrix: Water

Date Received: 08/08/25 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	685539	L4QM	ELLE	08/14/25 04:15
Total/NA	Analysis	300.0		50	686095	KJQ8	ELLE	08/15/25 16:20
Total Recoverable	Prep	3005A			685247	UJL8	ELLE	08/14/25 03:10
Total Recoverable	Analysis	6020B		1	689043	LHF4	ELLE	08/21/25 16:12
Total/NA	Analysis	180.1		5	683199	UDS7	ELLE	08/09/25 05:40
Total/NA	Analysis	2320B-2011		1	685556	DI9Q	ELLE	08/13/25 23:43
Total/NA	Analysis	2540C - 2015		1	683438	M98K	ELLE	08/11/25 06:50 - 08/12/25 12:10 [1]
Total/NA	Analysis	9040C		1	684958	DI9Q	ELLE	08/13/25 04:32
Total/NA	Analysis	EPA 350.1		1	685025	JCG7	ELLE	08/13/25 14:19
Total/NA	Analysis	SM5310C		1	684453	P684	ELLE	08/11/25 18:55

Client Sample ID: TDSS-MW01-3Q25

Lab Sample ID: 410-236183-2

Date Collected: 08/05/25 12:00

Matrix: Water

Date Received: 08/08/25 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	685539	L4QM	ELLE	08/14/25 04:31
Total/NA	Analysis	300.0		10	685539	L4QM	ELLE	08/14/25 04:39
Total Recoverable	Prep	3005A			685247	UJL8	ELLE	08/14/25 03:10
Total Recoverable	Analysis	6020B		1	689043	LHF4	ELLE	08/21/25 16:10
Total/NA	Analysis	180.1		1	683199	UDS7	ELLE	08/09/25 05:40
Total/NA	Analysis	2320B-2011		1	685556	DI9Q	ELLE	08/14/25 00:01
Total/NA	Analysis	2540C - 2015		1	683438	M98K	ELLE	08/11/25 06:50 - 08/12/25 12:10 [1]
Total/NA	Analysis	9040C		1	684958	DI9Q	ELLE	08/13/25 04:29
Total/NA	Analysis	EPA 350.1		1	685025	JCG7	ELLE	08/13/25 14:25
Total/NA	Analysis	SM5310C		1	684453	P684	ELLE	08/11/25 19:54

[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: West Maui TDS GW & Leachate

Job ID: 410-236183-1
SDG: 410-236183

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-26

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
SM5310C		Water	TOC Result 3

Method Summary

Client: Environmental Chemical Corp.
Project/Site: West Maui TDS GW & Leachate

Job ID: 410-236183-1
SDG: 410-236183

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	ELLE
6020B	Metals (ICP/MS)	SW846	ELLE
180.1	Turbidity, Nephelometric	EPA	ELLE
2320B-2011	Alkalinity, Total	SM	ELLE
2540C - 2015	Total Dissolved Solids (Dried at 180 °C)	SM	ELLE
9040C	pH	SW846	ELLE
EPA 350.1	Nitrogen, Ammonia	EPA	ELLE
SM5310C	TOC	SM	ELLE
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

Client: Environmental Chemical Corp.
Project/Site: West Maui TDS GW & Leachate

Job ID: 410-236183-1
SDG: 410-236183

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
410-236183-1	TDSS-MW02-3Q25	Water	08/05/25 10:00	08/08/25 09:40	Hawaii
410-236183-2	TDSS-MW01-3Q25	Water	08/05/25 12:00	08/08/25 09:40	Hawaii

Euro
2425 N
Lancas
Phone

410-236183 Chain of Custody

Chain of Custody Record

eurofins | Environment Testing

Client:	Sampler:	Lab PM: Phillips, Elizabeth	Carrier Tracking No(s):	COC No: 410-163813-45537.1
Client Con...: Kane McNeill	Phone:	E-Mail: Elizabeth.Phillips@et.eurofinsus.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: Environmental Chemical Corp.	PWSID:			Job #:
Address: 1240 Bayshore Hwy	Due Date Requested:			
City: Burlingame	TAT Requested (days):			
State, Zip: CA, 94010	Compliance Project: Δ Yes Δ No			
Phone:	PO #: 4347.017			
Email: KMcNeill@ecc.net	WO #:			
Project Name: West Maui TDS GW & Leachate	Project #: 41020464			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
N - None
S - H2SO4
D - HNO3
AA - PhosphorAc
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air, DW=Drinking Water)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORFM_28D_D6 - Major Anions - Chloride, Sulfate	350.1_DOD6 - Major Leachate Indicators - Ammonia	23208_DOD6 - Alkalinity - (Total, Bicarb. Carb), 9040C - Field Measurements -pH	180.1 - Field Measurements - Turbidity	6020B_DOD6 - Metals (GW & Leachate list)	6310C_DOD6 - Major Leachate Indicators - TOC (triplicate)	2540C_Calcd - Major Leachate Indicators - TDS	Total Number of containers	Special Instructions/Note:
Preservation Code:							N	S	N	N	D	AA	N		
TDSS-MW02-3Q25	08/05	1440	G	W	N	N	1	1	1	1	1	2	1		
TDSS-MW01-3Q25	08/05	1240	G	W	N	N	1	1	1	1	1	2	1		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 08/06/25	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 8/6/25 9:40	Company ESNET

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: R: 4.3 C: 4.3

Ver: 05/06/2024

Login Sample Receipt Checklist

Client: Environmental Chemical Corp.

Job Number: 410-236183-1
SDG Number: 410-236183

Login Number: 236183
List Number: 1
Creator: Santiago, Nathaniel

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

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.	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.	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)?	N/A	