Environmental Monitoring Quarterly Report 5
West Maui Temporary Debris Storage Site
April 2025

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

Monitoring Period: 1/16/2025 – 4/16/2025

Prepared by:

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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
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, was for the installation of the TDS site subject to terms and conditions for the design, construction, operation, and maintenance of the site. The agreement has since been extended for an additional year.

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 fifth such report; it applies to the monitoring period beginning on January 16, 2025, and ending on April 16, 2025. 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, nearly 400,000 tons ash and debris has been cleared from commercial and residential parcels in Lahaina. Over 21,000 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	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 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 April 16, 2025, a representative from MC DEM will participate in the Lahaina community's weekly disaster recovery meeting. The presentation, which will be available on the recovery website, summarizes 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 Eurofins Scientific 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 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.

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

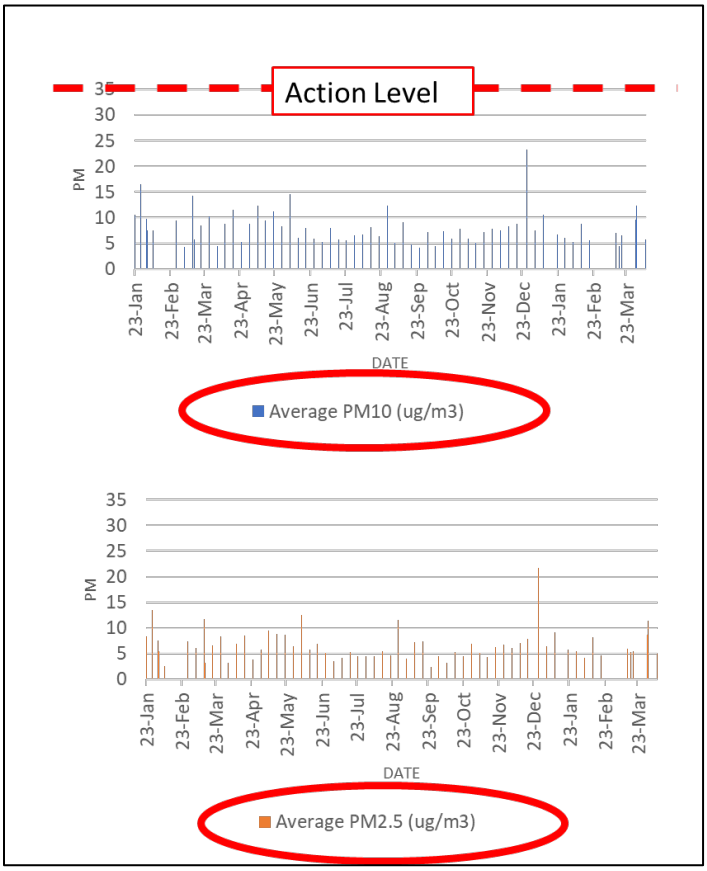
Date	Average PM_{10} ($\mu g/m^3$)	Average $PM_{2.5}$ ($\mu g/m^3$)	Monitor Identification Number
23-Jan-24 to 10-Jan-25	see previous reports		
22-Jan	6.68	5.83	11,16
29-Jan	6.09	5.49	11,16
05-Feb	5.20	4.21	11,16
12-Feb	8.84	8.17	11,16
19-Feb	5.53	4.71	10,16
14-Mar	7.01	6.0	4,10
17-Mar	4.44	5.31	4,10
19-Mar	6.60	5.55	4,10
24-Mar	6.23	5.72	4,10
26-Mar	5.91	5.40	4,10
31-Mar	9.56	8.65	4,10
1-Apr	12.33	11.45	4,10
9-Apr	5.68	4.96	4,10

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.

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 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.

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 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. 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.

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 is 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 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 to 15-Jan-25	see previous reports	see previous reports
1/15/2025	dry	0
2/19/2025	10’	100,000
3/5/2025	dry	0
3/19/2025	< 5’	50,000
3/27/2025	< 2’	20,000
4/15/2025	< 1’	4,000

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 continues sampling leachate monthly directly from the leachate basin only if sufficient leachate is available in the basin to conduct the analysis. No samples analyzed during the current reporting period. 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. 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 Sample Analytical Results

Parameter	Method	11-Jan-24 (Baseline)	15-Apr-24 Sample	20-May-24 Sample	3-Feb-25 Sample	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
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	

Parameter	Method	11-Jan-24 (Baseline)	15-Apr-24 Sample	20-May-24 Sample	3-Feb-25 Sample	Unit
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
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

A pre-construction 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 pre-assessment measurements will serve as a data comparison. Both the pre-construction and post-construction 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 — 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

Constituent (mg/kg)	DU -1 (mg/kg)	DU- 2 (mg/kg)	DU- 3 (mg/kg)	DU- 4 (mg/kg)	DU- 5 (mg/kg)
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

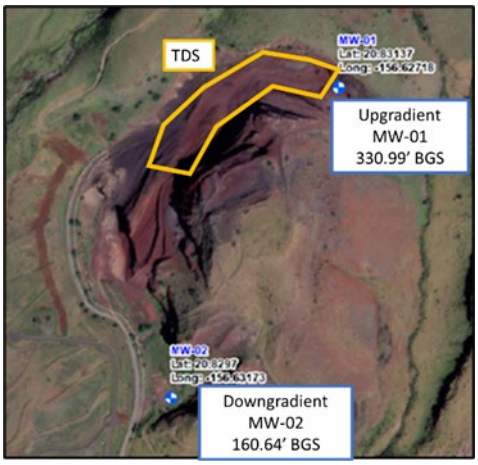
Because there have been no observed releases of leachate from the TDS site, there has been no need to sample surface water in creeks or drainage ditches adjacent to the TDS.

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. Review or 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 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 (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 found in Attachment 2 and shown in Table 6. Samples will 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 are newly installed, and there are no previous sampling data from them to compare. The analysis performed includes the analytes and parameters found in Table 6, which includes contaminants or indicators of contaminants present in the TDS leachate (see Section 1, Table 2).

Table 6 — Groundwater Monitoring Well Sample Results

Cations & anions	Method	7-Jul-24 MW-01 (baseline)	8-Oct-24 MW-01	3-Dec-2024 8-Dec-2024 MW-01 (re-sample)	8-Feb-2025 MW-01	7-Jul-24 MW-02 (baseline)	8-Oct-24 MW-02	4-Dec-2024 MW-02 (re-sample)	8-Feb-2025 MW-02	Units
Magnesium	6020B	12000	12000	10000	12000	17000	17000	17000	16000	ug/L
Sodium	6020B	78000	76000	64000	71000	130000	130000	100000	120000	ug/L
Calcium	6020B	15000	14000	12000	14000	21000	22000	19000	21000	ug/L
Potassium	6020B	5400	5200	4900	5100	7600	7700	6700	7400	ug/L
Chloride	300	100	110	110	110	190	200	220	200	mg/L
Carbonate	2320B	ND	ND	6.0	ND	ND	ND	6.0	6.0	mg/L
Sulfate	300	19	20	16	16	25	25	27	26	mg/L
Leachate indicators										
Total Dissolved Solids	2540C	210	340	590	280	350	500	500	480	mg/L

Total Organic Carbon	5310C	4.6	9.7	1.5	1.9	0.58	0.95	0.57	1.4	mg/L
Total Alkalinity	2320B	69	69	64	60	67	69	66	61	mg/L
Nitrogen-Ammonia	350.1	ND	0.069	0.090	0.09	0.05	0.091	0.090	0.09	mg/L
Iron	6020B	140	630*	26*	65	380	2500*	790*	660	ug/L
Field Parameters										
pH	9040C	7.2	7.5	7.0	7.3	7.5	7.9	7.9	7.6	
Turbidity	180.1	2.5	8.1*	0.70*	2.3	18	80*	24*	16	NTU
Metals										
Arsenic	6020B	ND	ND	1.7	1.7	ND	1.1	1.7	1.7	ug/L
Lead	6020B	ND	0.30	0.47	0.17	ND	0.76	0.25	3.2	ug/L
Antimony	6020B	ND	0.21	0.5	0.5	ND	ND	0.50	0.5	ug/L
Cobalt	6020B	0.84	1.9	0.84	0.54	0.19	0.41	0.17	0.4	ug/L
Copper	6020B	2.5	3.0	2.5	0.67	0.72	1.0	0.90	1.2	ug/L

***Note:** Elevated readings for Iron and Turbidity in October were due to an issue with sample collection. A re-sample event was conducted in early December to confirm that the issue was corrected. Further explanation is provided in the report in Attachment 2.

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

Results are posted in the Environmental Monitoring Summary posted on the webpage for debris containment.

Attachment 1. Dust Monitoring Reports

Daily Dust Monitoring Report: January 22, 2025
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

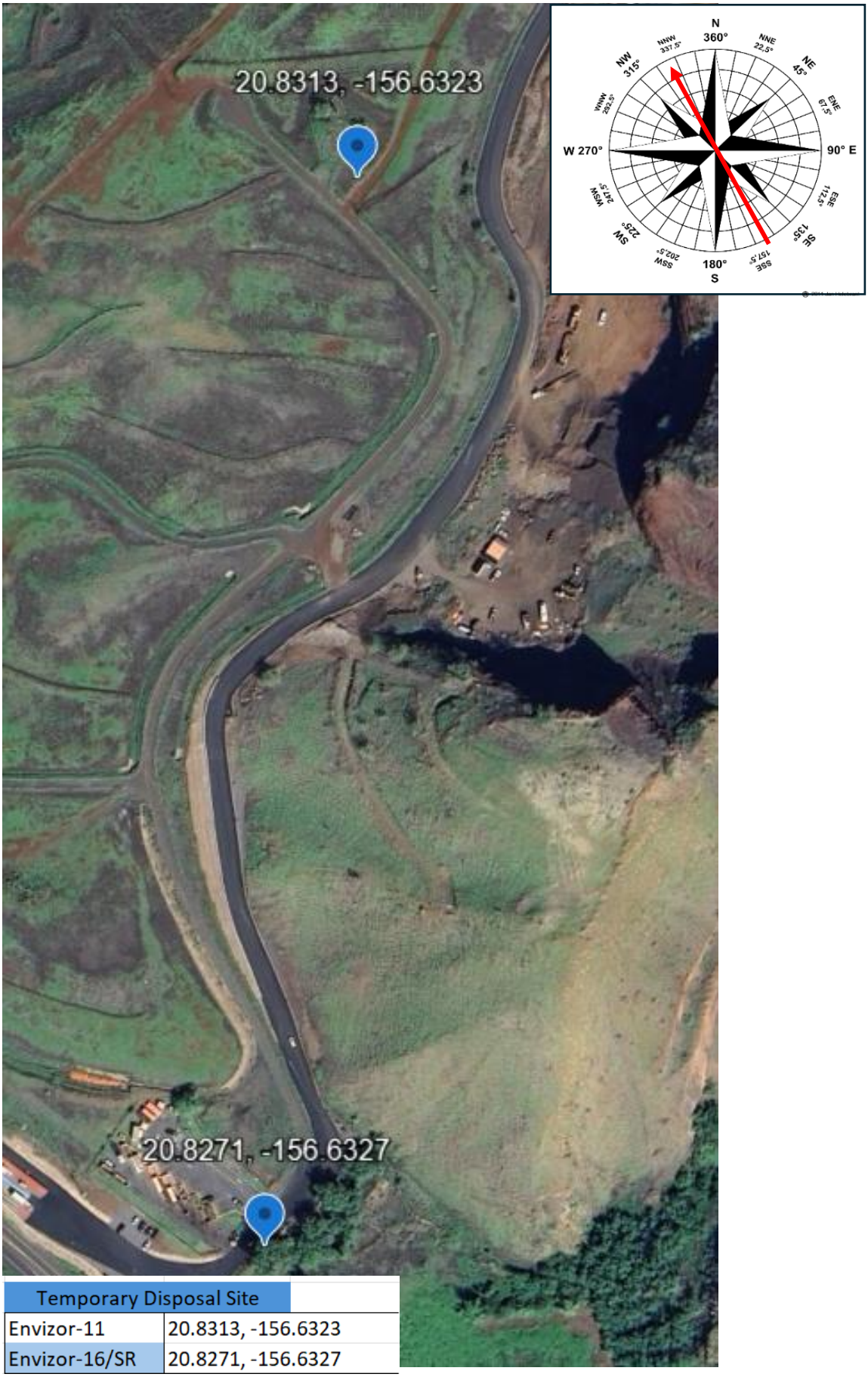
No weather data was transmitted today

Station Location Summary:

Station 11 and Station 16 + Sensitive Receptor were set up around the **Temporary Disposal Site** for continued debris removal air monitoring.

Station Data:

		Envizor-11	Envizor-16	Exceedance Limit	Action Limit
PM 2.5	Avg, ug/M3	6.06	5.59	70	35
PM 10	Avg, ug/M3	6.77	6.59	300	150



Temporary Disposal Site	
Envizor-11	20.8313, -156.6323
Envizor-16/SR	20.8271, -156.6327

Daily Dust Monitoring Report: January 29, 2025
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

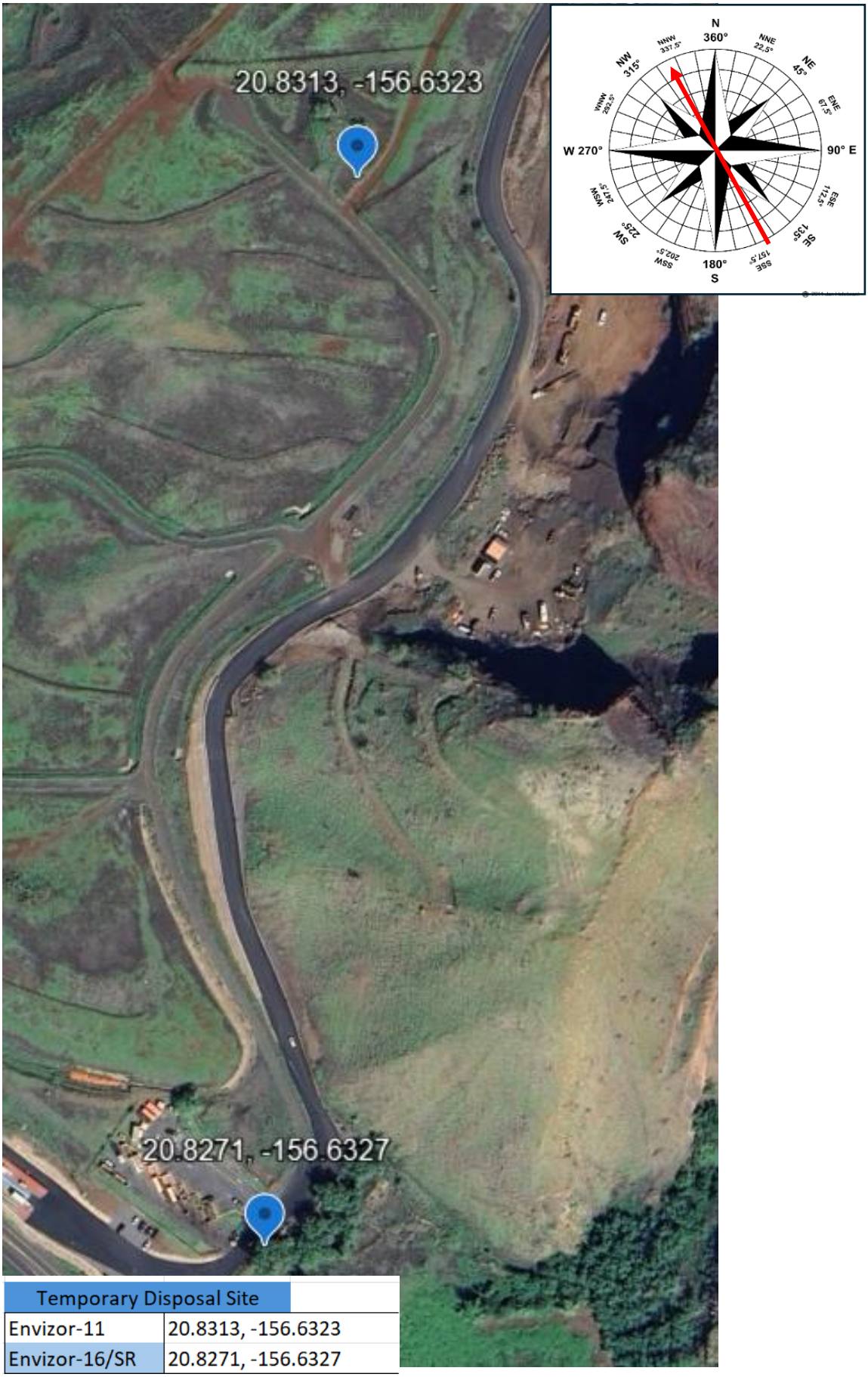
No weather data was transmitted today

Station Location Summary:

Station 11 and Station 16 + Sensitive Receptor were set up around the **Temporary Disposal Site** for continued debris removal air monitoring.

Station Data:

		Envizor-11	Envizor-16	Exceedance Limit	Action Limit
PM 2.5	Avg, ug/M3	2.99	7.98	70	35
PM 10	Avg, ug/M3	3.52	8.66	300	150



Temporary Disposal Site	
Envizor-11	20.8313, -156.6323
Envizor-16/SR	20.8271, -156.6327

Daily Dust Monitoring Report: February 5, 2025
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

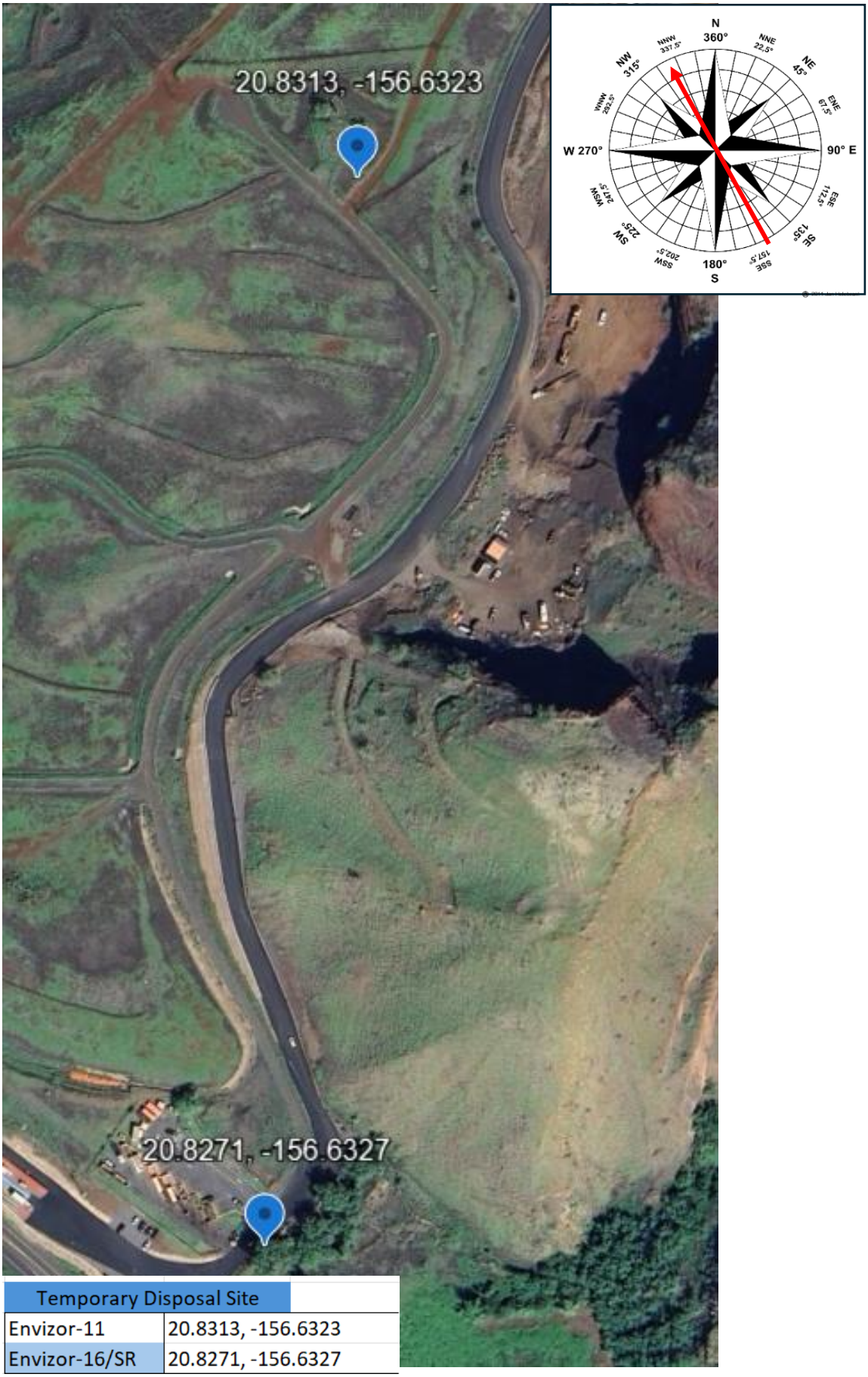
No weather data was transmitted today

Station Location Summary:

Station 11 and Station 16 + Sensitive Receptor were set up around the **Temporary Disposal Site** for continued debris removal air monitoring.

Station Data:

		Envizor-11	Envizor-16	Exceedance Limit	Action Limit
PM 2.5	Avg, ug/M3	3.81	4.61	70	35
PM 10	Avg, ug/M3	4.62	5.77	300	150



Temporary Disposal Site	
Envizor-11	20.8313, -156.6323
Envizor-16/SR	20.8271, -156.6327

Daily Dust Monitoring Report: February 12, 2025
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

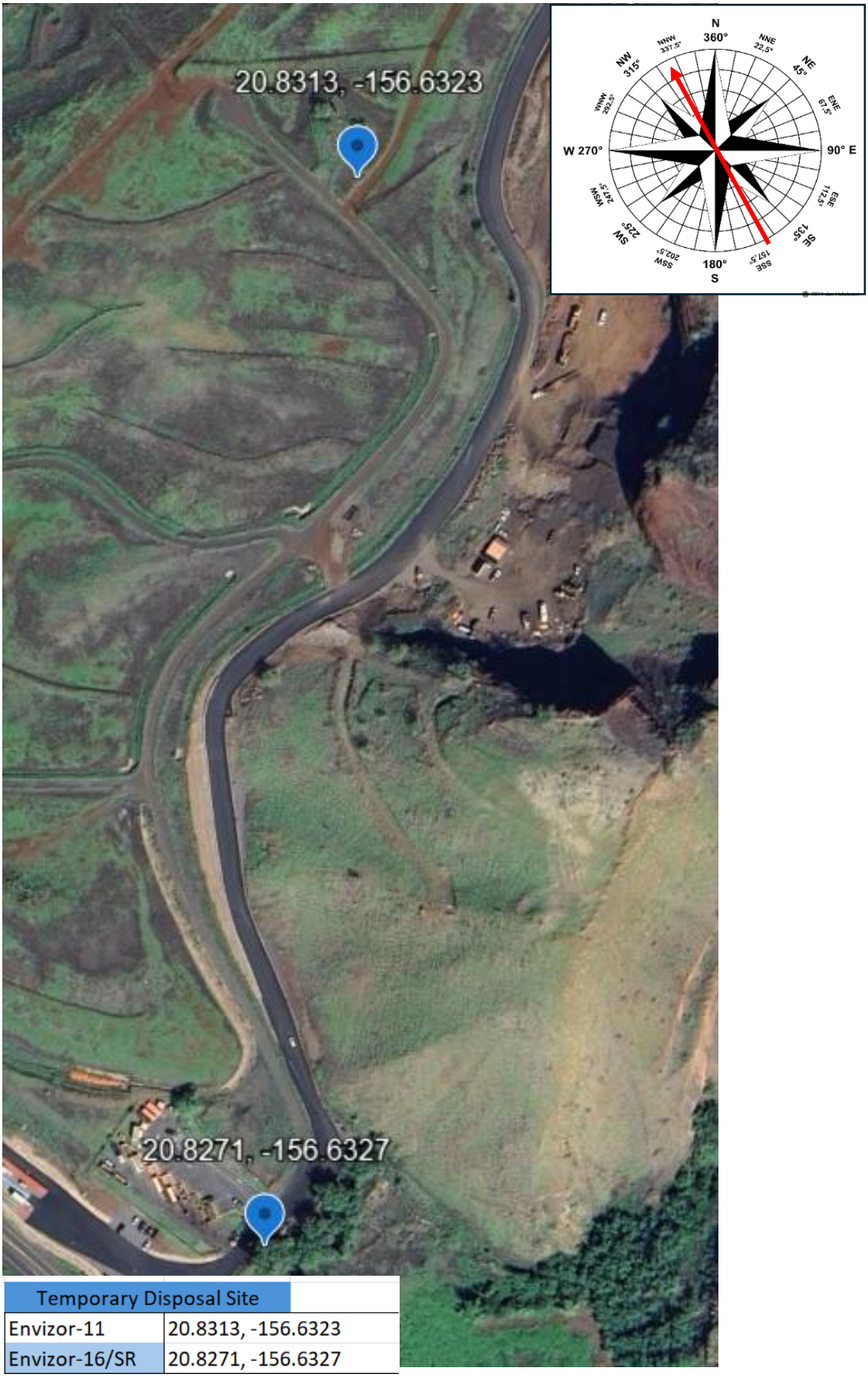
No weather data was transmitted today

Station Location Summary:

Station 11 and Station 16 + Sensitive Receptor were set up around the **Temporary Disposal Site** for continued debris removal air monitoring.

Station Data:

		Envizor-11	Envizor-16	Exceedance Limit	Action Limit
PM 2.5	Avg, ug/M3	9.10	7.23	70	35
PM 10	Avg, ug/M3	9.20	8.48	300	150



Temporary Disposal Site	
Envizor-11	20.8313, -156.6323
Envizor-16/SR	20.8271, -156.6327

Daily Dust Monitoring Report: February 19, 2025
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

No weather data was transmitted today

Station Location Summary:

Station 10 and Station 16 + Sensitive Receptor were set up around the **Temporary Disposal Site** for continued debris removal air monitoring.

Station Data:

		Envizor-10	Envizor-16	Exceedance Limit	Action Limit
PM 2.5	Avg, ug/M3	3.24	6.17	70	35
PM 10	Avg, ug/M3	4.27	6.79	300	150

Temporary Disposal Site	
Envizor-10	20.8313, -156.6323
Envizor-16/SR	20.8271, -156.6327

Daily Dust Monitoring Report: March 14, 2025
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

No weather data was transmitted today

Station Location Summary:

Station 10 and Station 4 + Sensitive Receptor were set up around the **Temporary Disposal Site** for continued debris removal air monitoring.

Station Data:

		Envizor-04	Envizor-10	Exceedance Limit	Action Limit
PM 2.5	Avg, ug/M3	8.07	3.93	70	35
PM 10	Avg, ug/M3	8.74	5.28	300	150


TDS
10
30
Awalua Beach
SR03
04
Olowalu Residential
Recycling & Refuse...
30
Google My Maps
Regenerative
Education Centers

Daily Dust Monitoring Report: March 17, 2025
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

No weather data was transmitted today

Station Location Summary:

Station 10 and Station 4 + Sensitive Receptor were set up around the **Temporary Disposal Site** for continued debris removal air monitoring.

Station Data:

		Envizor-04	Envizor-10	Exceedance Limit	Action Limit
PM 2.5	Avg, ug/M3	5.93	2.94	70	35
PM 10	Avg, ug/M3	7.08	3.53	300	150


TDS
10
30
Awalua Beach
SR03
04
Olowalu Residential
Recycling & Refuse...
30
Google My Maps
Regenerative
Education Centers

Daily Dust Monitoring Report: February 19, 2025
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

No weather data was transmitted today

Station Location Summary:

Station 10 and Station 16 + Sensitive Receptor were set up around the **Temporary Disposal Site** for continued debris removal air monitoring.

Station Data:

		Envizor-10	Envizor-16	Exceedance Limit	Action Limit
PM 2.5	Avg, ug/M3	3.24	6.17	70	35
PM 10	Avg, ug/M3	4.27	6.79	300	150

Temporary Disposal Site	
Envizor-10	20.8313, -156.6323
Envizor-16/SR	20.8271, -156.6327

Daily Dust Monitoring Report: March 24, 2025
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

No weather data was transmitted today

Station Location Summary:

Station 10 and Station 4 + Sensitive Receptor were set up around the **Temporary Disposal Site** for continued debris removal air monitoring.

Station Data:

		Envizor-04	Envizor-10	Exceedance Limit	Action Limit
PM 2.5	Avg, ug/M3	9.99	1.45	70	35
PM 10	Avg, ug/M3	10.47	1.98	300	150


TDS
10
SR03
04
Awalua Beach
Olowalu Residential
Recycling & Refuse...
Regenerative
Education Centers
Google My Maps
30
30

Daily Dust Monitoring Report: March 26, 2025
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

No weather data was transmitted today

Station Location Summary:

Station 10 and Station 4 + Sensitive Receptor were set up around the **Temporary Disposal Site** for continued debris removal air monitoring.

Station Data:

		Envizor-04	Envizor-10	Exceedance Limit	Action Limit
PM 2.5	Avg, ug/M3	8.81	1.99	70	35
PM 10	Avg, ug/M3	9.19	2.62	300	150


TDS
10
SR03
04
Awalua Beach
Olowalu Residential
Recycling & Refuse...
Regenerative
Education Centers
Google My Maps
30
30

Daily Dust Monitoring Report: March 31, 2025
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

No weather data was transmitted today

Station Location Summary:

Station 10 and Station 4 + Sensitive Receptor were set up around the **Temporary Disposal Site** for continued debris removal air monitoring.

Station Data:

		Envizor-04	Envizor-10	Exceedance Limit	Action Limit
PM 2.5	Avg, ug/M3	12.70	4.60	70	35
PM 10	Avg, ug/M3	13.54	5.58	300	150


TDS
10
30
Awalua Beach
SR03
04
Olowalu Residential
Recycling & Refuse...
30
Google My Maps
Regenerative
Education Centers

Daily Dust Monitoring Report: April 1, 2025
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

No weather data was transmitted today

Station Location Summary:

Station 10 and Station 4 + Sensitive Receptor were set up around the **Temporary Disposal Site** for continued debris removal air monitoring.

Station Data:

		Envizor-04	Envizor-10	Exceedance Limit	Action Limit
PM 2.5	Avg, ug/M3	13.71	9.19	70	35
PM 10	Avg, ug/M3	14.56	10.10	300	150


TDS
10
SR03
04
Awalua Beach
Olowalu Residential
Recycling & Refuse...
Regenerative
Education Centers
Google My Maps
30
30

Daily Dust Monitoring Report: April 9, 2025
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

No weather data was transmitted today

Station Location Summary:

Station 10 and Station 4 + Sensitive Receptor were set up around the **Temporary Disposal Site** for continued debris removal air monitoring.

Station Data:

		Envizor-04	Envizor-10	Exceedance Limit	Action Limit
PM 2.5	Avg, ug/M3	8.36	1.56	70	35
PM 10	Avg, ug/M3	9.57	1.78	300	150


TDS
10
SR03
04
Awalua Beach
Olowalu Residential
Recycling & Refuse...
Regenerative
Education Centers
Google My Maps
30
30

Attachment 2. Leachate Analysis Laboratory Data Reports

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

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 2/12/2025 5:12:41 PM

JOB DESCRIPTION

West Maui TDS Detention Basin
410-206515

JOB NUMBER

410-206515-1

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

Generated
2/12/2025 5:12:41 PM

Authorized for release by
Michelle Lalli, Analyst I
Michelle.Lalli@et.eurofinsus.com
Designee for
Elizabeth Martin, Project Manager
Elizabeth.Martin@et.eurofinsus.com
(717)205-3949

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 Detention Basin

Job ID: 410-206515-1
SDG: 410-206515

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.

HPLC/IC

Qualifier	Qualifier Description
*	See Case Narrative
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.
U	Undetected at the Limit of Detection.

Metals

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.

General Chemistry

Qualifier	Qualifier Description
*	See Case Narrative
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.
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.

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

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 410-206515-1 Eurofins Lancaster Laboratories Environment

Job Narrative
410-206515-1

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 2/5/2025 10:05 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 0.6°C.

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

HPLC/IC
Method 300_ORGFM_D6: The following sample was received with less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: TDS-RP-03Feb25 (410-206515-1).

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
Method 180.1: The following sample(s) was received with less than 1 day remaining on the holding time or less than one shift (8 hours) remaining on a test with a holding time of 48 hours. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: TDS-RP-03Feb25 (410-206515-1).

Method 365.3_Ortho_D6: The following sample was received with less than 1 day remaining on the holding time or less than one shift (8 hours) remaining on a test with a holding time of 48 hours. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: TDS-RP-03Feb25 (410-206515-1).

Method SM5210B_Calc: The following sample(s) was received with less than 1 day remaining on the holding time or less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: TDS-RP-03Feb25 (410-206515-1).

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 Detention Basin

Job ID: 410-206515-1
SDG: 410-206515

Client Sample ID: TDS-RP-03Feb25 — Lab Sample ID: 410-206515-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrate as N	17	D H *	1.1	1.0	0.50	mg/L	10		300.0	Total/NA
Nitrite as N	0.27	H	0.11	0.10	0.050	mg/L	1		300.0	Total/NA
Nitrate Nitrite as N	17	D H *	11	1.0	0.50	mg/L	10		300.0	Total/NA
Barium	0.030		0.020	0.016	0.0075	mg/L	1		6020B	TCLP
Flashpoint	>200		50	50	50	Degrees F	1		1010B	Total/NA
HEM (Oil & Grease)	2.6	J	6.0	4.8	1.7	mg/L	1		1664B	Total/NA
Turbidity	14	H *	1.0	0.70	1.0	NTU	1		180.1	Total/NA
Total Hardness	290	D	100	80	30	mg/L	10		2340C-2011	Total/NA
Total Suspended Solids	5.9		3.0	2.5	1.0	mg/L	1		2540D-2015	Total/NA
Ammonia as N	0.066	J	0.10	0.090	0.050	mg/L	1		350.1	Total/NA
Oxygen, Dissolved	8.5	HF	0.40	0.40	0.40	mg/L	1		360.1	Total/NA
Orthophosphate as P	0.047	H *	0.020	0.012	0.0060	mg/L	1		365.3	Total/NA
Chemical Oxygen Demand	35	J	75	60	25	mg/L	1		410.4	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 410-206515-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: TDS-RP-03Feb25

Date Collected: 02/03/25 07:15
Date Received: 02/05/25 10:05

Lab Sample ID: 410-206515-1

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Bromomethane	0.60	U	1.0	0.60	0.30	ug/L		02/07/25 15:20	1
2-Chloroethyl vinyl ether	0.60	U	10	0.60	0.30	ug/L		02/07/25 15:20	1
Chloromethane	1.1	U	2.0	1.1	0.55	ug/L		02/07/25 15:20	1
1,3-Dichlorobenzene	1.4	U	5.0	1.4	0.68	ug/L		02/07/25 15:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*85 - 114*		*02/07/25 15:20*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 119*		*02/07/25 15:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*81 - 118*		*02/07/25 15:20*	*1*
Toluene-d8 (Surr)	*96*		*89 - 112*		*02/07/25 15:20*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate as N	**17**	**D H ***	1.1	1.0	0.50	mg/L		02/06/25 20:19	10
Nitrite as N	**0.27**	**H**	0.11	0.10	0.050	mg/L		02/06/25 02:42	1
Nitrate Nitrite as N	**17**	**D H ***	11	1.0	0.50	mg/L		02/06/25 20:19	10

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	0.017	U	0.020	0.017	0.0068	mg/L		02/12/25 13:45	1
Barium	**0.030**		0.020	0.016	0.0075	mg/L		02/12/25 13:45	1
Cadmium	0.0040	U	0.0050	0.0040	0.0015	mg/L		02/12/25 13:45	1
Chromium	0.011	U	0.020	0.011	0.0055	mg/L		02/12/25 13:45	1
Lead	0.0024	U	0.0050	0.0024	0.0012	mg/L		02/12/25 13:45	1
Selenium	0.0060	U	0.010	0.0060	0.0028	mg/L		02/12/25 13:45	1
Silver	0.0030	U	0.0050	0.0030	0.0010	mg/L		02/12/25 13:45	1

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Mercury	0.16	U	0.20	0.16	0.079	ug/L		02/10/25 16:42	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Flashpoint (SW846 1010B)	**>200**		50	50	50	Degrees F		02/10/25 08:05	1
HEM (Oil & Grease) (1664B)	**2.6**	**J**	6.0	4.8	1.7	mg/L		02/07/25 18:36	1
Turbidity (EPA 180.1)	**14**	**H ***	1.0	0.70	1.0	NTU		02/05/25 14:50	1
Total Hardness (SM 2340C-2011)	**290**	**D**	100	80	30	mg/L		02/11/25 12:19	10
Total Suspended Solids (SM 2540D-2015)	**5.9**		3.0	2.5	1.0	mg/L		02/05/25 18:18	1
Ammonia as N (EPA 350.1)	**0.066**	**J**	0.10	0.090	0.050	mg/L		02/12/25 11:34	1
Nitrogen, Kjeldahl (EPA 351.2)	1.4	U	1.5	1.4	0.70	mg/L		02/10/25 12:14	1
Oxygen, Dissolved (EPA 360.1)	**8.5**	**HF**	0.40	0.40	0.40	mg/L		02/06/25 12:48	1
Total Phosphorus as P (EPA 365.1)	0.10	U	0.15	0.10	0.050	mg/L		02/11/25 15:00	1
Total Phosphorus as PO4 (EPA 365.1)	0.31	U	0.46	0.31	0.25	mg/L		02/11/25 15:00	1
Orthophosphate as P (EPA 365.3)	**0.047**	**H ***	0.020	0.012	0.0060	mg/L		02/06/25 14:05	1
Chemical Oxygen Demand (EPA 410.4)	**35**	**J**	75	60	25	mg/L		02/07/25 06:30	1
Biochemical Oxygen Demand (SM 5210 B-2016)	2.0	U H *	2.0	2.0	2.0	mg/L		02/05/25 18:05	1
Cyanide, Reactive (SW846 9012)	78	U	88	78	20	mg/Kg		02/07/25 15:49	1
Sulfide, Reactive (SW846 9034)	140	U	160	140	52	mg/Kg		02/07/25 13:28	1

Client Sample ID: TDS-RP-03Feb25

Lab Sample ID: 410-206515-1
Matrix: Water
Date Collected: 02/03/25 07:15
Date Received: 02/05/25 10:05

General Chemistry (Continued)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrogen, Organic (EPA Nitrogen,Org)	0.90	U	1.0	0.90	0.50	mg/L		02/10/25 16:01	1

Client Sample ID: Trip Blank

Lab Sample ID: 410-206515-2
Matrix: Water
Date Collected: 02/03/25 00:00
Date Received: 02/05/25 10:05

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Bromomethane	0.60	U	1.0	0.60	0.30	ug/L		02/07/25 12:21	1
2-Chloroethyl vinyl ether	0.60	U	10	0.60	0.30	ug/L		02/07/25 12:21	1
Chloromethane	1.1	U	2.0	1.1	0.55	ug/L		02/07/25 12:21	1
1,3-Dichlorobenzene	1.4	U	5.0	1.4	0.68	ug/L		02/07/25 12:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*85 - 114*		*02/07/25 12:21*	*1*
Dibromofluoromethane (Surr)	*109*		*80 - 119*		*02/07/25 12:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*81 - 118*		*02/07/25 12:21*	*1*
Toluene-d8 (Surr)	*96*		*89 - 112*		*02/07/25 12:21*	*1*

Surrogate Summary

Client: Environmental Chemical Corp.
Project/Site: West Maui TDS Detention Basin

Job ID: 410-206515-1
SDG: 410-206515

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	DCA	TOL
Lab Sample ID	Client Sample ID	(85-114)	(80-119)	(81-118)	(89-112)
410-206515-1	TDS-RP-03Feb25	93	107	104	96
410-206515-2	Trip Blank	93	109	104	96
LCS 410-603479/5	Lab Control Sample	98	103	101	98
LCSD 410-603479/6	Lab Control Sample Dup	99	101	104	99
MB 410-603479/10	Method Blank	94	104	107	95

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

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

Lab Sample ID: MB 410-603479/10
Matrix: Water
Analysis Batch: 603479

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Bromomethane	0.60	U	1.0	0.60	0.30	ug/L		02/07/25 11:36	1
2-Chloroethyl vinyl ether	0.60	U	10	0.60	0.30	ug/L		02/07/25 11:36	1
Chloromethane	1.1	U	2.0	1.1	0.55	ug/L		02/07/25 11:36	1
1,3-Dichlorobenzene	1.4	U	5.0	1.4	0.68	ug/L		02/07/25 11:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*85 - 114*		*02/07/25 11:36*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 119*		*02/07/25 11:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*81 - 118*		*02/07/25 11:36*	*1*
Toluene-d8 (Surr)	*95*		*89 - 112*		*02/07/25 11:36*	*1*

Lab Sample ID: LCS 410-603479/5
Matrix: Water
Analysis Batch: 603479

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Bromomethane			20.0	18.4		ug/L		92	53 - 141		
2-Chloroethyl vinyl ether			20.0	20.6		ug/L		103	51 - 139		
Chloromethane			20.0	18.7		ug/L		94	50 - 139		
1,3-Dichlorobenzene			20.0	19.0		ug/L		95	80 - 119		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*85 - 114*
Dibromofluoromethane (Surr)	*103*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*101*		*81 - 118*
Toluene-d8 (Surr)	*98*		*89 - 112*

Lab Sample ID: LCSD 410-603479/6
Matrix: Water
Analysis Batch: 603479

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
Bromomethane			20.0	19.1		ug/L		96	53 - 141	4	30
2-Chloroethyl vinyl ether			20.0	20.0		ug/L		100	51 - 139	3	30
Chloromethane			20.0	18.6		ug/L		93	50 - 139	1	30
1,3-Dichlorobenzene			20.0	19.5		ug/L		97	80 - 119	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*85 - 114*
Dibromofluoromethane (Surr)	*101*		*80 - 119*
1,2-Dichloroethane-d4 (Surr)	*104*		*81 - 118*
Toluene-d8 (Surr)	*99*		*89 - 112*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 410-602979/40
Matrix: Water
Analysis Batch: 602979

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate as N	0.10	U	0.11	0.10	0.050	mg/L		02/06/25 06:56	1
Nitrite as N	0.10	U	0.11	0.10	0.050	mg/L		02/06/25 06:56	1
Nitrate Nitrite as N	0.10	U	1.1	0.10	0.050	mg/L		02/06/25 06:56	1

Lab Sample ID: LCS 410-602979/38
Matrix: Water
Analysis Batch: 602979

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	0.739		mg/L		99	88 - 111
Nitrite as N	0.750	0.763		mg/L		102	87 - 111

Lab Sample ID: LCSD 410-602979/39
Matrix: Water
Analysis Batch: 602979

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	0.741		mg/L		99	88 - 111	0	10
Nitrite as N	0.750	0.764		mg/L		102	87 - 111	0	10

Lab Sample ID: MB 410-603213/5
Matrix: Water
Analysis Batch: 603213

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate as N	0.10	U	0.11	0.10	0.050	mg/L		02/06/25 14:33	1
Nitrite as N	0.10	U	0.11	0.10	0.050	mg/L		02/06/25 14:33	1
Nitrate Nitrite as N	0.10	U	1.1	0.10	0.050	mg/L		02/06/25 14:33	1

Lab Sample ID: LCS 410-603213/3
Matrix: Water
Analysis Batch: 603213

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	0.735		mg/L		98	88 - 111
Nitrite as N	0.750	0.783		mg/L		104	87 - 111

Lab Sample ID: LCSD 410-603213/4
Matrix: Water
Analysis Batch: 603213

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	0.736		mg/L		98	88 - 111	0	10
Nitrite as N	0.750	0.782		mg/L		104	87 - 111	0	10

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-603848/1-A
Matrix: Water
Analysis Batch: 605337

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 603848

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Arsenic	0.017	U	0.020	0.017	0.0068	mg/L		02/12/25 13:04	1
Barium	0.016	U	0.020	0.016	0.0075	mg/L		02/12/25 13:04	1
Cadmium	0.0040	U	0.0050	0.0040	0.0015	mg/L		02/12/25 13:04	1
Chromium	0.011	U	0.020	0.011	0.0055	mg/L		02/12/25 13:04	1
Lead	0.0024	U	0.0050	0.0024	0.0012	mg/L		02/12/25 13:04	1
Selenium	0.0060	U	0.010	0.0060	0.0028	mg/L		02/12/25 13:04	1
Silver	0.0030	U	0.0050	0.0030	0.0010	mg/L		02/12/25 13:04	1

Lab Sample ID: LCS 410-603848/2-A
Matrix: Water
Analysis Batch: 605337

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 603848

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	5.00	5.13		mg/L		103	84 - 116
Barium	5.00	4.96		mg/L		99	86 - 114
Cadmium	0.500	0.506		mg/L		101	87 - 115
Chromium	5.00	5.04		mg/L		101	85 - 116
Lead	0.500	0.497		mg/L		99	88 - 115
Selenium	1.00	0.987		mg/L		99	80 - 120
Silver	0.500	0.487		mg/L		97	85 - 116

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 410-603851/1-A
Matrix: Water
Analysis Batch: 604460

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 603851

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Mercury	0.16	U	0.20	0.16	0.079	ug/L		02/10/25 16:02	1

Lab Sample ID: LCS 410-603851/2-A
Matrix: Water
Analysis Batch: 604460

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 603851

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	1.16		ug/L		116	82 - 119

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

Lab Sample ID: LCS 410-604069/1
Matrix: Water
Analysis Batch: 604069

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Flashpoint	127	133		Degrees F		105	90.0 - 110.00

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 410-603830/1
Matrix: Water
Analysis Batch: 603830

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
HEM (Oil & Grease)	4.0	U	5.0	4.0	1.4	mg/L		02/07/25 18:36	1

Lab Sample ID: LCS 410-603830/2
Matrix: Water
Analysis Batch: 603830

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	32.7		mg/L		82	78 - 114

Method: 180.1 - Turbidity, Nephelometric

Lab Sample ID: MB 410-602829/3
Matrix: Water
Analysis Batch: 602829

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		02/05/25 14:50	1

Lab Sample ID: LCS 410-602829/4
Matrix: Water
Analysis Batch: 602829

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		102	85 - 115

Method: 2340C-2011 - Hardness, Total

Lab Sample ID: MB 410-605143/4
Matrix: Water
Analysis Batch: 605143

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Hardness	8.0	U	10	8.0	3.0	mg/L		02/11/25 12:01	1

Lab Sample ID: LCS 410-605143/5
Matrix: Water
Analysis Batch: 605143

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	42.7		mg/L		107	85 - 115

Lab Sample ID: MRL 410-605143/6
Matrix: Water
Analysis Batch: 605143

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Total Hardness	10.0	10.0		mg/L		100	

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

Lab Sample ID: 410-206515-1 DU
Matrix: Water
Analysis Batch: 605143

Client Sample ID: TDS-RP-03Feb25
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Hardness	290	D	338	D	mg/L		16	10

Method: 2540D-2015 - Total Suspended Solids (Dried at 103-105°C)

Lab Sample ID: MB 410-602869/1
Matrix: Water
Analysis Batch: 602869

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Suspended Solids	2.5	U	3.0	2.5	1.0	mg/L		02/05/25 18:18	1

Lab Sample ID: LCS 410-602869/2
Matrix: Water
Analysis Batch: 602869

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		96	89 - 105

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 410-605302/17
Matrix: Water
Analysis Batch: 605302

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		02/12/25 11:24	1

Lab Sample ID: LCS 410-605302/15
Matrix: Water
Analysis Batch: 605302

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	2.05		mg/L		102	90 - 110

Lab Sample ID: LCSD 410-605302/16
Matrix: Water
Analysis Batch: 605302

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	2.04		mg/L		102	90 - 110	1	15

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 410-603738/2-A
Matrix: Water
Analysis Batch: 604348

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 603738

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrogen, Kjeldahl	1.4	U	1.5	1.4	0.70	mg/L		02/10/25 11:59	1

Method: 351.2 - Nitrogen, Total Kjeldahl (Continued)

Lab Sample ID: LCS 410-603738/1-A
Matrix: Water
Analysis Batch: 604348

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 603738

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrogen, Kjeldahl	3.98	4.10		mg/L		103	90 - 110

Method: 365.1 - Phosphorus, Total

Lab Sample ID: MB 410-604773/2-A
Matrix: Water
Analysis Batch: 604982

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 604773

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Phosphorus as P	0.10	U	0.15	0.10	0.050	mg/L		02/11/25 14:57	1
Total Phosphorus as PO4	0.31	U	0.46	0.31	0.25	mg/L		02/11/25 14:57	1

Lab Sample ID: LCS 410-604773/1-A
Matrix: Water
Analysis Batch: 604982

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 604773

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Phosphorus as P	1.67	1.69		mg/L		102	90 - 110
Total Phosphorus as PO4	5.10	5.19		mg/L		102	90 - 110

Method: 365.3 - Phosphorus, Orthophosphate

Lab Sample ID: MB 410-603204/3
Matrix: Water
Analysis Batch: 603204

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Orthophosphate as P	0.012	U	0.020	0.012	0.0060	mg/L		02/06/25 14:05	1

Lab Sample ID: LCS 410-603204/4
Matrix: Water
Analysis Batch: 603204

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Orthophosphate as P	0.400	0.390		mg/L		98	90 - 110

Lab Sample ID: LCSD 410-603204/5
Matrix: Water
Analysis Batch: 603204

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
Orthophosphate as P	0.400	0.391		mg/L		98	90 - 110	0	10

Method: 410.4 - COD

Lab Sample ID: MB 410-603497/4
Matrix: Water
Analysis Batch: 603497

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Chemical Oxygen Demand	60	U	75	60	25	mg/L		02/07/25 06:30	1

Method: 410.4 - COD

Lab Sample ID: LCS 410-603497/5
Matrix: Water
Analysis Batch: 603497

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	504		mg/L		101			

Lab Sample ID: LCSD 410-603497/6
Matrix: Water
Analysis Batch: 603497

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
Chemical Oxygen Demand			500	504		mg/L		101		0	

Method: 5210 B-2016 - BOD, 5-Day

Lab Sample ID: SCB 410-604607/4
Matrix: Water
Analysis Batch: 604607

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

Analyte	SCB Result	SCB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Biochemical Oxygen Demand	1.16		0.0000010	0.0000010	0.0000010	mg/L		02/05/25 11:45	1

Lab Sample ID: USB 410-604607/2
Matrix: Water
Analysis Batch: 604607

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

Analyte	USB Result	USB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Biochemical Oxygen Demand	0.157		0.0000010	0.0000010	0.0000010	mg/L		02/05/25 11:45	1

Lab Sample ID: LCS 410-604607/49
Matrix: Water
Analysis Batch: 604607

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Biochemical Oxygen Demand			198	175		mg/L		88	84.5 - 115.96 154		

Lab Sample ID: 410-206515-1 DU
Matrix: Water
Analysis Batch: 604607

Client Sample ID: TDS-RP-03Feb25
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Biochemical Oxygen Demand	2.0	U H *		2.0	U	mg/L				NC	30

Method: 9012 - Cyanide, Reactive

Lab Sample ID: MB 410-603475/1-A
Matrix: Water
Analysis Batch: 603759

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 603475

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Cyanide, Reactive	80	U	90	80	20	mg/Kg		02/07/25 15:36	1

Method: 9012 - Cyanide, Reactive (Continued)

Lab Sample ID: LCS 410-603475/2-A
Matrix: Water
Analysis Batch: 603759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 603475

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Reactive	1000	800	U	mg/Kg		3	0 - 5.14

Method: 9034 - Sulfide, Reactive

Lab Sample ID: MB 410-603475/1-A
Matrix: Water
Analysis Batch: 603674

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 603475

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide, Reactive	140	U	160	140	54	mg/Kg		02/07/25 13:28	1

Lab Sample ID: LCS 410-603475/24-A
Matrix: Water
Analysis Batch: 603674

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 603475

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide, Reactive	538	477		mg/Kg		89	62 - 104

QC Association Summary

Client: Environmental Chemical Corp.
Project/Site: West Maui TDS Detention Basin

Job ID: 410-206515-1
SDG: 410-206515

GC/MS VOA

Analysis Batch: 603479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-206515-1	TDS-RP-03Feb25	Total/NA	Water	8260D	
410-206515-2	Trip Blank	Total/NA	Water	8260D	
MB 410-603479/10	Method Blank	Total/NA	Water	8260D	
LCS 410-603479/5	Lab Control Sample	Total/NA	Water	8260D	
LCSD 410-603479/6	Lab Control Sample Dup	Total/NA	Water	8260D	

HPLC/IC

Analysis Batch: 602979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-206515-1	TDS-RP-03Feb25	Total/NA	Water	300.0	
MB 410-602979/40	Method Blank	Total/NA	Water	300.0	
LCS 410-602979/38	Lab Control Sample	Total/NA	Water	300.0	
LCSD 410-602979/39	Lab Control Sample Dup	Total/NA	Water	300.0	

Analysis Batch: 603213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-206515-1	TDS-RP-03Feb25	Total/NA	Water	300.0	
MB 410-603213/5	Method Blank	Total/NA	Water	300.0	
LCS 410-603213/3	Lab Control Sample	Total/NA	Water	300.0	
LCSD 410-603213/4	Lab Control Sample Dup	Total/NA	Water	300.0	

Metals

Leach Batch: 603521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-206515-1	TDS-RP-03Feb25	TCLP	Water	1311	

Prep Batch: 603848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-206515-1	TDS-RP-03Feb25	TCLP	Water	3005A	603521
MB 410-603848/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 410-603848/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 603851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-206515-1	TDS-RP-03Feb25	TCLP	Water	7470A	603521
MB 410-603851/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-603851/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 604460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-206515-1	TDS-RP-03Feb25	TCLP	Water	7470A	603851
MB 410-603851/1-A	Method Blank	Total/NA	Water	7470A	603851
LCS 410-603851/2-A	Lab Control Sample	Total/NA	Water	7470A	603851

Analysis Batch: 605337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-206515-1	TDS-RP-03Feb25	TCLP	Water	6020B	603848
MB 410-603848/1-A	Method Blank	Total Recoverable	Water	6020B	603848
LCS 410-603848/2-A	Lab Control Sample	Total Recoverable	Water	6020B	603848

General Chemistry

Analysis Batch: 602829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-206515-1	TDS-RP-03Feb25	Total/NA	Water	180.1	
MB 410-602829/3	Method Blank	Total/NA	Water	180.1	
LCS 410-602829/4	Lab Control Sample	Total/NA	Water	180.1	

Analysis Batch: 602869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-206515-1	TDS-RP-03Feb25	Total/NA	Water	2540D-2015	
MB 410-602869/1	Method Blank	Total/NA	Water	2540D-2015	
LCS 410-602869/2	Lab Control Sample	Total/NA	Water	2540D-2015	

Analysis Batch: 603177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-206515-1	TDS-RP-03Feb25	Total/NA	Water	360.1	

Analysis Batch: 603204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-206515-1	TDS-RP-03Feb25	Total/NA	Water	365.3	
MB 410-603204/3	Method Blank	Total/NA	Water	365.3	
LCS 410-603204/4	Lab Control Sample	Total/NA	Water	365.3	
LCSD 410-603204/5	Lab Control Sample Dup	Total/NA	Water	365.3	

Prep Batch: 603475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-206515-1	TDS-RP-03Feb25	Total/NA	Water	7.3.4	
MB 410-603475/1-A	Method Blank	Total/NA	Water	7.3.4	
LCS 410-603475/24-A	Lab Control Sample	Total/NA	Water	7.3.4	
LCS 410-603475/2-A	Lab Control Sample	Total/NA	Water	7.3.4	

Analysis Batch: 603497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-206515-1	TDS-RP-03Feb25	Total/NA	Water	410.4	
MB 410-603497/4	Method Blank	Total/NA	Water	410.4	
LCS 410-603497/5	Lab Control Sample	Total/NA	Water	410.4	
LCSD 410-603497/6	Lab Control Sample Dup	Total/NA	Water	410.4	

Analysis Batch: 603674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-206515-1	TDS-RP-03Feb25	Total/NA	Water	9034	603475
MB 410-603475/1-A	Method Blank	Total/NA	Water	9034	603475
LCS 410-603475/24-A	Lab Control Sample	Total/NA	Water	9034	603475

Prep Batch: 603738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-206515-1	TDS-RP-03Feb25	Total/NA	Water	351.2	
MB 410-603738/2-A	Method Blank	Total/NA	Water	351.2	
LCS 410-603738/1-A	Lab Control Sample	Total/NA	Water	351.2	

Analysis Batch: 603759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-206515-1	TDS-RP-03Feb25	Total/NA	Water	9012	603475
MB 410-603475/1-A	Method Blank	Total/NA	Water	9012	603475

General Chemistry (Continued)

Analysis Batch: 603759 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 410-603475/2-A	Lab Control Sample	Total/NA	Water	9012	603475

Analysis Batch: 603830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-206515-1	TDS-RP-03Feb25	Total/NA	Water	1664B	
MB 410-603830/1	Method Blank	Total/NA	Water	1664B	
LCS 410-603830/2	Lab Control Sample	Total/NA	Water	1664B	

Analysis Batch: 604069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-206515-1	TDS-RP-03Feb25	Total/NA	Water	1010B	
LCS 410-604069/1	Lab Control Sample	Total/NA	Water	1010B	

Analysis Batch: 604348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-206515-1	TDS-RP-03Feb25	Total/NA	Water	351.2	603738
MB 410-603738/2-A	Method Blank	Total/NA	Water	351.2	603738
LCS 410-603738/1-A	Lab Control Sample	Total/NA	Water	351.2	603738

Analysis Batch: 604400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-206515-1	TDS-RP-03Feb25	Total/NA	Water	Nitrogen,Org	

Analysis Batch: 604607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-206515-1	TDS-RP-03Feb25	Total/NA	Water	5210 B-2016	
SCB 410-604607/4	Method Blank	Total/NA	Water	5210 B-2016	
USB 410-604607/2	Method Blank	Total/NA	Water	5210 B-2016	
LCS 410-604607/49	Lab Control Sample	Total/NA	Water	5210 B-2016	
410-206515-1 DU	TDS-RP-03Feb25	Total/NA	Water	5210 B-2016	

Prep Batch: 604773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-206515-1	TDS-RP-03Feb25	Total/NA	Water	365.1	
MB 410-604773/2-A	Method Blank	Total/NA	Water	365.1	
LCS 410-604773/1-A	Lab Control Sample	Total/NA	Water	365.1	

Analysis Batch: 604982

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-206515-1	TDS-RP-03Feb25	Total/NA	Water	365.1	604773
MB 410-604773/2-A	Method Blank	Total/NA	Water	365.1	604773
LCS 410-604773/1-A	Lab Control Sample	Total/NA	Water	365.1	604773

Analysis Batch: 605143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-206515-1	TDS-RP-03Feb25	Total/NA	Water	2340C-2011	
MB 410-605143/4	Method Blank	Total/NA	Water	2340C-2011	
LCS 410-605143/5	Lab Control Sample	Total/NA	Water	2340C-2011	
MRL 410-605143/6	Lab Control Sample	Total/NA	Water	2340C-2011	
410-206515-1 DU	TDS-RP-03Feb25	Total/NA	Water	2340C-2011	

QC Association Summary

Client: Environmental Chemical Corp.
Project/Site: West Maui TDS Detention Basin

Job ID: 410-206515-1
SDG: 410-206515

General Chemistry

Analysis Batch: 605302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-206515-1	TDS-RP-03Feb25	Total/NA	Water	350.1	
MB 410-605302/17	Method Blank	Total/NA	Water	350.1	
LCS 410-605302/15	Lab Control Sample	Total/NA	Water	350.1	
LCSD 410-605302/16	Lab Control Sample Dup	Total/NA	Water	350.1	

Lab Chronicle

Client: Environmental Chemical Corp.
Project/Site: West Maui TDS Detention Basin

Job ID: 410-206515-1
SDG: 410-206515

Client Sample ID: TDS-RP-03Feb25

Date Collected: 02/03/25 07:15
Date Received: 02/05/25 10:05

Lab Sample ID: 410-206515-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	603479	N7YK	ELLE	02/07/25 15:20
Total/NA	Analysis	300.0		1	602979	UJE2	ELLE	02/06/25 02:42
Total/NA	Analysis	300.0		10	603213	L4QM	ELLE	02/06/25 20:19
TCLP	Leach	1311			603521	HA8T	ELLE	02/07/25 09:18 - 02/07/25 09:22 [1]
TCLP	Prep	3005A			603848	UAMX	ELLE	02/07/25 21:00
TCLP	Analysis	6020B		1	605337	SAM2	ELLE	02/12/25 13:45
TCLP	Leach	1311			603521	HA8T	ELLE	02/07/25 09:18 - 02/07/25 09:22 [1]
TCLP	Prep	7470A			603851	UAMX	ELLE	02/09/25 22:40
TCLP	Analysis	7470A		1	604460	IJ3I	ELLE	02/10/25 16:42
Total/NA	Analysis	1010B		1	604069	USAE	ELLE	02/10/25 08:05 - 02/10/25 08:05 [1]
Total/NA	Analysis	1664B		1	603830	QT6L	ELLE	02/07/25 18:36
Total/NA	Analysis	180.1		1	602829	DI9Q	ELLE	02/05/25 14:50
Total/NA	Analysis	2340C-2011		10	605143	USAE	ELLE	02/11/25 12:19
Total/NA	Analysis	2540D-2015		1	602869	UOCA	ELLE	02/05/25 18:18 - 02/06/25 09:10 [1]
Total/NA	Analysis	350.1		1	605302	JCG7	ELLE	02/12/25 11:34
Total/NA	Prep	351.2			603738	YZU9	ELLE	02/07/25 15:30 - 02/07/25 18:30 [1]
Total/NA	Analysis	351.2		1	604348	JCG7	ELLE	02/10/25 12:14
Total/NA	Analysis	360.1		1	603177	B6LN	ELLE	02/06/25 12:48
Total/NA	Prep	365.1			604773	NLE3	ELLE	02/11/25 11:36 - 02/11/25 14:00 [1]
Total/NA	Analysis	365.1		1	604982	P684	ELLE	02/11/25 15:00
Total/NA	Analysis	365.3		1	603204	DI9Q	ELLE	02/06/25 14:05
Total/NA	Analysis	410.4		1	603497	USAE	ELLE	02/07/25 06:30
Total/NA	Analysis	5210 B-2016		1	604607	B6LN	ELLE	02/05/25 18:05
Total/NA	Prep	7.3.4			603475	USE1	ELLE	02/07/25 07:22
Total/NA	Analysis	9012		1	603759	JCG7	ELLE	02/07/25 15:49
Total/NA	Prep	7.3.4			603475	USE1	ELLE	02/07/25 07:22
Total/NA	Analysis	9034		1	603674	USE1	ELLE	02/07/25 13:28
Total/NA	Analysis	Nitrogen,Org		1	604400	UKJF	ELLE	02/10/25 16:01

Client Sample ID: Trip Blank

Date Collected: 02/03/25 00:00
Date Received: 02/05/25 10:05

Lab Sample ID: 410-206515-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	603479	N7YK	ELLE	02/07/25 12:21

[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 Detention Basin

Job ID: 410-206515-1
SDG: 410-206515

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
180.1		Water	Turbidity
360.1		Water	Oxygen, Dissolved
Nitrogen,Org		Water	Nitrogen, Organic

Method Summary

Client: Environmental Chemical Corp.
Project/Site: West Maui TDS Detention Basin

Job ID: 410-206515-1
SDG: 410-206515

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds (GC/MS)	SW846	ELLE
300.0	Anions, Ion Chromatography	EPA	ELLE
6020B	Metals (ICP/MS)	SW846	ELLE
7470A	Mercury (CVAA)	SW846	ELLE
1010B	Ignitability, Pensky-Martens Closed-Cup Method	SW846	ELLE
1664B	HEM and SGT-HEM	1664B	ELLE
180.1	Turbidity, Nephelometric	EPA	ELLE
2340C-2011	Hardness, Total	SM	ELLE
2540D-2015	Total Suspended Solids (Dried at 103-105°C)	SM	ELLE
350.1	Nitrogen, Ammonia	EPA	ELLE
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
360.1	Oxygen, Dissolved	EPA	ELLE
365.1	Phosphorus, Total	EPA	ELLE
365.3	Phosphorus, Orthophosphate	EPA	ELLE
410.4	COD	EPA	ELLE
5210 B-2016	BOD, 5-Day	SM	ELLE
9012	Cyanide, Reactive	SW846	ELLE
9034	Sulfide, Reactive	SW846	ELLE
Nitrogen,Org	Nitrogen, Organic	EPA	ELLE
1311	TCLP Extraction	SW846	ELLE
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
365.1	Sample Digestion for Total Phosphorus	MCAWW	ELLE
5030C	Purge and Trap	SW846	ELLE
7.3.3	Cyanide, Reactive	SW846	ELLE
7.3.4	Sulfide, Reactive	SW846	ELLE
7470A	Preparation, Mercury	SW846	ELLE

Protocol References:

1664B = EPA-821-98-002

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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 Detention Basin

Job ID: 410-206515-1
SDG: 410-206515

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-206515-1	TDS-RP-03Feb25	Water	02/03/25 07:15	02/05/25 10:05
410-206515-2	Trip Blank	Water	02/03/25 00:00	02/05/25 10:05

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Chain of Custody Record

eurofins | Environment Testing

Sampler: Lena Diaz	Lab PM: Martin, Elizabeth	Carrier Tracking No(s):	COC No: 410-134934-38591.1
Phone: 720-935-4801	E-Mail: Elizabeth.Martin@et.eurofinsus.com	State of Origin: Hawaii	Page: Page 1 of 2
Company: Environmental Chemical Corp.	PWSID:	Analysis Requested	Job #:

Mr. Jackson Kiker		
Address: 43 Broad St Suite A301	Due Date Requested:	
City: Hudson	TAT Requested (days):	
State, Zip: MA, 01749	Compliance Project: Δ Yes Δ No	
Phone:	PO #: 4347.017	
Email: JKiker@ecc.net	WO #:	
Project Name: West Maui TDS GW & Leachate	Project #: 41020464	
Site: Detention Basin	SSOW#:	

Preservation Codes: N - None; S - H2SO4; D - HNO3; A - HCL

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)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1010B - Ignitability	300_ORGFM_D5 - Anions (NO2,NO3)	350.1- Ammonia, 365.1_DOD5 - Total Phos	351.2_DOD5 -TKN, 410.4- COD	180.1 - Turbidity	365.3_Ortho - Phosphorus, Orthophosphate	6020B_DOD5, 7470A_DOD5 - TCLP	2340C - Hardness	1664B_NP - HEM Only	Nitrogen,Org	360.1 - Oxygen, Dissolved	8260D_DOD5 - VOCs (Custom List)	2540D_SingleDry - TSS	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	S	S	N	N	N	D	A	N	N	A	N		
TDS-BP-03Feb25	02/03/25	0715	G	W			X	X	X	X	X	X	X	X	X	X	X	X	X	15	
Trip Blank				W														X		2	

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: 02/03/25 1700	Company: TETRATECH	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time: 2/5/25 1005	Company: ECC

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1: 0.6 C: 1 0.6

Eurofins Lancaster Laboratories Environme
2425 New Holland Pike
Lancaster, PA 17601
Phone (717) 656-2300

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Lena Diaz	Lab PM: Martin, Elizabeth	Carrier Tracking No(s):	COC No: 410-134934-38591.2
Client Contact: Mr. Jackson Kiker	Phone: 720-935-4801	E-Mail: Elizabeth.Martin@et.eurofinsus.com	State of Origin: Hawaii	Page: Page 2 of 2
Company: Environmental Chemical Corp	PWSID:			Job #:
Address: 43 Broad St Suite A301	Due Date Requested:			
City: Hudson	TAT Requested (days):			
State, Zip: MA, 01749	Compliance Project: Δ Yes Δ No			
Phone:	PO #: 4347.017			
Email: JKiker@ecc.net	WO #:			
Project Name: West Maui TDS GW & Leachate	Project #: 41020464			
Site: Detention Basin	SSOW#:			

Analysis Requested

Preservation Codes: N - None

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)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM5210B_Calc - BOD, 5-Day Only	9012_ReactiveCN - Reactive Cyanide	9034_Reactive - Reactive Sulfide	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
TDS-RP-03Feb25	02/03/25	0715	G	W			X	X	X	3	

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	Company	Received by	Date/Time	Company
1		02/03/25 1700	TETRATECH			
2						
3					2/5/25 1005	ECS

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: R = 3.6 C = 0.1

HA

Ver: 05/06/2024

Login Sample Receipt Checklist

Client: Environmental Chemical Corp.

Job Number: 410-206515-1
SDG Number: 410-206515

Login Number: 206515
List Number: 1
Creator: Arroyo, Haley

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.	True	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	True	

Attachment 3. Groundwater Analysis Laboratory Data Reports

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

Monitoring Well - Sampling Summary Report

Event: 1Q-2025

TEMPORARY DISPOSAL SITE

OPERATIONS & MAINTENANCE

Prepared for:

United States Army Corps of Engineers

Honolulu District
Fort Shafter, Hawaii 96858

Contract No. W9128A24C0017

Report Date: 24-Feb-2025
PC-013.00

Prepared by:

ECC Constructors LLC
700 Airport Blvd, Suite 250
Burlingame, CA 94010

24-Feb-2025

1. Introduction

This report summarizes the following sampling event at the Olowalu TDSS in Maui County performed under contract W9128A24C0017.

- **Event ID:** 1Q-2025
- **Sample Date(s):** 08-Feb-2025
- **SDG(s):** 410-207441
- **Wells:** MW-01 (Deep Well / Up-gradient) & MW-02 (Shallow Well / Down-gradient)

Both monitoring wells, MW-01 and MW-02, at the Olowalu TDSS were sampled early on 08-Feb 2025 at the request of Maui County. The original sampling event was originally scheduled for the week of 23-Feb-2025.

2. Field Summary

The previous samples from the Dec-2024 Event (*4Q-2024-02*) were collected via low flow with a bladder pump, the same method as the first round in 3Q-2024. It was determined the low flow method was not productive, as it took multiple attempts over three days to get the required sample volume collected. The process was re-evaluated, and it was determined that passive sample was a more viable option for these wells.

The Hydra sleeve (HS) was the selected method to utilize the passive sampling methodology. The HS sizes were selected to meet the required volumes. The HS and complete set up, including tether and weights, were ordered, shipped to the job site in Maui from the mainland, and installed on 28-Jan-2025 (10-Days prior to sampling).

The sampling MW-01 was completed with out issues. The HS was full and was able to fill all of the required sample containers. The initial collection of MW-02 produced about 1-liter of water. The main containers were filled, including the metals and turbidity. A second HS was deployed to get the missing volume for the remaining 2 containers: 2320B [(Total alkalinity / Carb / Bicarb) & 9040C (pH)] & 2540C (Total Dissolved Solids). Upon completion the of each well, the next round (2Q-2025) of HS bags were deployed, so the sample team can collect the samples upon arrival at the well.

The sampling for both wells were completed on the same day, 08-Feb-2025 and were shipped out for analysis on Monday, 10-Dec-2025.

3. Chemistry Data Review

Data Validation was performed on the completed sample analyses. No results were rejected and are suitable for use as qualified. Refer to the attached Data Validation reports for details.

4. Summary

The sample collection issue at MW-02 was determined to be an issue when activating the HS, as there was enough volume in the well to get the water necessary to fill the required containers. The sample crew will make the necessary adjustments in the next event to get the required volume in the initial HS activation.

5. Attachments

Tables

- *Olowalu GW Summary Sample Table – All Events*

Data Validation Reports:

- *410-207441 – Metals Validated*
- *410-1208441 Gen Chem Validated*

Laboratory Data Packages:

- *J207441 UDS Level 2 Report - Final Report*

				A2320B			A2540C	A5310C	E180.1	300		E350.1	6020B										SW9040C		
Event	SDG	Sample Date	Sample ID	Bicarbonate Alkalinity as CaCO3	Carbonate Alkalinity as CaCO3	Total Alkalinity as CaCO3 to pH 4.5	Total Dissolved Solids	Total Organic Carbon	Turbidity	Sulfate (mg/L)	Chloride (mg/L)	Ammonia as N	Antimony	Arsenic	Calcium	Cobalt	Copper	Iron	Lead	Magnesium	Potassium	Sodium	pH	Notes	Collection Method
				mg/L			mg/L	mg/L	NTUs	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	pH units		
3Q-2024	J179201	7-Jul-2024	TDSS-MW01-3Q24	69.00	6.0 U	69.00	210.00	4.60	2.50	19.00	100.00	0.09 U	0.50 U	1.7 U	15,000.00	0.84	2.50	140.00	0.24 U	12,000.00	5,400.00	78,000.00	7.20		Low Flow / Compressor
4Q-2024	J191287	8-Oct-2024	TDSS-MW01-4Q24	69	6.0 U	69	340	9.7	8.1	20	110	0.069 J	0.21 J	1.7 U	14000	1.9	3	630	0.30 J	12000	5200	76000	7.5		Bailer
4Q-2024, Resample-1	J199687	4-Dec-2024	TDSS-MW01-4Q24-02	*NS*	*NS*	*NS*	590	*NS*	0.7 U	*NS*	*NS*	*NS*	0.50 U	1.7 U	12000	0.84	2.5	26 J	0.47 J	10000	4900	64000	NS	TDS: Half volume provided	Low Flow w/ Nitrogen
4Q-2024, Resample-2	J200051	8-Dec-2024	TDSS-MW01-4Q24-02B	64	6.0 U	64	NS	1.5 j	ns	16	110	0.090 U	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	7		Low Flow w/ Nitrogen
1Q-2025	J207441	8-Feb-2025	TDSS-MW01-1Q25	60 J	6.0 U	60	280 J	1.9 J	2.3 J	16	110	0.090 U	0.50 U	1.7 U	14000	0.54	0.67 J	65	0.17 J	12000	5100	71000	7.3 J		Hydrasleeve
2Q-2025		*Est: Week of May 5, 2025*																							
3Q-2025		*Est: Week of Aug 4, 2025*																							
4Q-2025		*Est: Week of Dec 4, 2025*																							

Notes

NS Not Sampled

				A2320B			A2540C	A5310C	E180.1	300		E350.1	6020B										SW9040C	
Event	SDG	Sample Date	Sample ID	Bicarbonate Alkalinity as CaCO3	Carbonate Alkalinity as CaCO3	Total Alkalinity as CaCO3 to pH 4.5	Total Dissolved Solids	Total Organic Carbon	Turbidity	Sulfate (mg/L)	Chloride (mg/L)	Ammonia as N	Antimony	Arsenic	Calcium	Cobalt	Copper	Iron	Lead	Magnesium	Potassium	Sodium	pH	Collection Method
				mg/L			mg/L	mg/L	NTUs	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	pH units	
3Q-2024	J179201	7-Jul-2024	TDSS-MW-02-3Q24	67	6.0 U	67	350	0.58 J	18	25	190	0.05 J	0.5 U	1.7 U	21,000	0.19 J	0.72 J	380	0.24 U	17,000	7,600	130,000	7.5	Low Flow / Compressor
4Q-2024	J191287	8-Oct-2024	TDSS-MW02-4Q24	69	6.0 U	69	500	0.95 J	80	25	200	0.091	0.5 U	1.1 J	22,000	0.41 J	1	2500	0.76	17,000	7,700	130,000	7.9	Bailer
4Q-2024, Resample	J199687	4-Dec-2024	TDSS-MW02-4Q24-02	66	6.0 U	66	500	1.0 U	24	27	220	0.090 U	0.5 U	1.7 U	19000 J	0.17 J	0.9 U	790	0.25 J	17,000	6,700	100,000 J	7.9	Low Flow w/ Nitrogen
1Q-2025	J207441	8-Feb-2025	TDSS-MW02-1Q25	61 J	6.0 U	61	480 J	1.4 J	16 J	26	200	0.090 U	0.5 U	1.7 U	21000	0.40 U	1.2	660	3.2	16000	7400	120000	7.6 J	Hydrasleeve
2Q-2025		Est: Week of May 5, 2025																						
3Q-2025		Est: Week of Aug 4, 2025																						
4Q-2025		Est: Week of Dec 4, 2025																						

ECC Data Review Worksheet
Project: TDS (Maui, HI)

TDS Metals 6020
Review Criteria: DoD QSM DV Module and Laboratory Limits

Data Validation Level	Matrix	Preservation	Temperature Sample Receipt	Laboratory	SDG Number
Stage 2B	Groundwater	Nitric Acid	<6 ºC	Eurofins Lancaster, PA	410-207441

FIELD IDENTIFICATION OF SAMPLES EVALUATED:

Field Identification (ID)	Laboratory (lab) Sample Number
TDSS-MW01-1Q25	410-207441-1
TDSS-MW02-1Q25	410-207441-2

Note: Samples are described below in the data worksheets by reference to the last one to three digits of the Lab Sample Number. 10 metals reported.

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative	Inven-tory	QUAL	BIAS
COC	Unbroken custody (accept or if broken R) Temp≤6° (Soil-J detects, R –non-detects Preserved per method (amber bottles, temperature. J, UJ, or R (function of HT and compound)	Cooler temperature < 6 ºC. Sample custody transferred from Field Team Leader to lab sample custodian. Unbroken Chain of Custody. No samples qualified.	X	-	
Holding Time	180 days (6010), Hg 28 Days to analysis J –detects, UJ or R –non-detects (function of time)	All samples analyzed within holding times. No samples qualified.	X	-	
Field Dup RPD	RPD ≤ 30% water for (50% solids) Results > X PQL (FD pair only) J-detects (both > X PQL) If one >X PQL, other ND, J-detections, UJ non-detect	Not Applicable (NA)	-	-	
% Solids Check (SOLIDS)	30%<Solids: if no sample weight adjustment made <10% R entire sample 10%.> and <30%; J-detects, NDs –R	NA	-	-	
Preparation and Sequence Logs	Review to ensure conformity to batch QC order and frequency. Discrepancies noted in DVR. ICAL, ICV, LLOQ/LLCCV, CCV, ICB, ISC/SIC, CCBS	Reviewed.	X	-	
Results > Cal Range or <Cal Range	>Upper Cal Range J-detects - ensure instrument blank performed <LOQ but >DL – J –detects (estimated)	Results that were < LOQ but > DL were qualified J.	X	Cu and Pb in sample #1 qualified J	
Lab Blanks (method blank or preparation	Method blank- **Blank Detection** / **Sample Detection** / **Val Qualifier** >DL / <LOQ / U at LOQ	All method blank (ICP E08) associated with #1 and #2 were within MPC.	X	-	

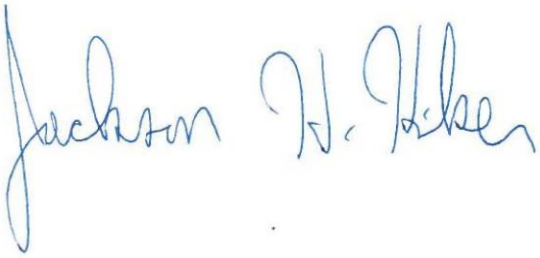
<table>
<tr><th>REVIEW ITEMS</th><th>ACCEPTANCE CRITERIA</th><th>SAMPLES AFFECTED Narrative</th><th>Inven-tory</th><th>QUAL</th><th>BIAS</th></tr>
<tr><td>blank)</td><td>
<table>
<tr><td>>DL</td><td>>LOQ& <5X blank</td><td>J</td></tr>
<tr><td>>DL</td><td>>LOQ&>5X Blank</td><td>None of</td></tr>
</table>
Negative Blank
<table>
<tr><th>Blank Detection</th><th>Sample Detection</th><th>Val Qualifier</th></tr>
<tr><td>DL<|blank|< LOQ</td><td><DL</td><td>UJ</td></tr>
<tr><td>DL<|blank|< LOQ</td><td>>Dl but <LOQ</td><td>J</td></tr>
<tr><td>DL<|blank|< LOQ</td><td>>LOQ but <5X blank</td><td>J</td></tr>
<tr><td>DL<|blank|< LOQ</td><td>>LOQ and >5X blank</td><td>None</td></tr>
<tr><td>|blank|>LOQ</td><td><DL</td><td>J or R</td></tr>
<tr><td>|blank|>LOQ</td><td>>Dl but <LOQ</td><td>J or R</td></tr>
<tr><td>|blank|>LOQ</td><td>>5X blank</td><td>J</td></tr>
</table>
</td><td></td><td></td><td></td><td></td></tr>
<tr><td>LCS Recovery</td><td>>UCL% J detects
<LCL% J detects, and UJ NDs.</td><td>All LCS %R's were within MPC for all metals.</td><td>X</td><td>-</td><td></td></tr>
<tr><td>LCS/LCSD RPD</td><td>RPD<20%</td><td>Not analyzed/collected with this SDG.</td><td>-</td><td>-</td><td></td></tr>
<tr><td>MS Recovery</td><td>>UCL% J detects
<LCL% J detects, and UJ NDs.
4X rule</td><td>Not analyzed/collected for this SDG</td><td>-</td><td>-</td><td></td></tr>
<tr><td>MS/MSD RPD</td><td>MS/MSD RPD<20%</td><td>Not analyzed/collected for this SDG</td><td>-</td><td>-</td><td></td></tr>
<tr><td>Laboratory Replicate RPD</td><td>RPD < 20%</td><td>Not analyzed/collected for this SDG.</td><td>-</td><td>-</td><td></td></tr>
<tr><td>Internal Standard</td><td>70-130% or lab limits</td><td>All internal standard results in limits.</td><td>X</td><td>-</td><td></td></tr>
<tr><td>Sensitivity</td><td>Sample results will be reported to the detection limit (DL)
Sample Results that are < LOQ, but >DL, will be reported as J
Dilution factors for samples – impacts to sensitivity</td><td>Dilution factor = 1x for metals,
No qualification.</td><td>X</td><td>-</td><td></td></tr>
<tr><td>Equip Blank</td><td>
<table>
<tr><th>Blank Detection</th><th>Sample Detection</th><th>Val Qualifier</th></tr>
<tr><td>>DL</td><td><LOQ</td><td>U at LOQ</td></tr>
<tr><td>>DL</td><td>>LOQ& <5X blank</td><td>J</td></tr>
<tr><td>>DL</td><td>>LOQ&>5X Blank</td><td>None of</td></tr>
</table>
</td><td>NA</td><td>-</td><td>-</td><td></td></tr>
<tr><td>Initial Cal Multipoint</td><td>Daily initial calibration prior to sample analysis r > 0.995 or r2 0.99 or RSE <20% for multipoint. At least 3 point with one at or below LOQ.
Single Standard Calibration optional.
Calibration blank and one high level standard.
Calibrated daily.</td><td>All calibrations within MPC limits.</td><td>X</td><td>-</td><td></td></tr>
</table>

<table>
<tr><th>REVIEW ITEMS</th><th>ACCEPTANCE CRITERIA</th><th>SAMPLES AFFECTED Narrative</th><th>Inven-tory</th><th>QUAL</th><th>BIAS</th></tr>
<tr><td>CRQL or LLOQ (std/blank used)</td><td>Daily, after one-point ICAL. Within + 20% of true value.
%R 80-120%</td><td>In limits</td><td>X</td><td>-</td><td></td></tr>
<tr><td>Tune Check (6020)</td><td>Method SOP
Be, Mg, Co, In, Pb
0.1 AMU and <5% RSD</td><td>In limits.</td><td>X</td><td>-</td><td></td></tr>
<tr><td>Initial Calibration Blanks (ICB)</td><td>Ical blank after Ical ICV
<table><tr><th>Blank Detection</th><th>Sample Detection</th><th>Val Qualifier</th></tr><tr><td>>DL</td><td><LOQ</td><td>U at LOQ</td></tr><tr><td>>DL</td><td>>LOQ& <5X blank</td><td>J</td></tr><tr><td>>DL</td><td>>LOQ&>5X Blank</td><td>None of</td></tr></table>Negative Blank<table><tr><th>Blank Detection</th><th>Sample Detection</th><th>Val Qualifier</th></tr><tr><td>DL<|blank|< LOQ</td><td><DL</td><td>UJ</td></tr><tr><td>DL<|blank|< LOQ</td><td>>Dl but <LOQ</td><td>J</td></tr><tr><td>DL<|blank|< LOQ</td><td>>LOQ but <5X blank</td><td>J</td></tr><tr><td>DL<|blank|< LOQ</td><td>>LOQ and >5X blank</td><td>None</td></tr><tr><td>|blank|>LOQ</td><td><DL</td><td>J or R</td></tr><tr><td>|blank|>LOQ</td><td>>Dl but <LOQ</td><td>J or R</td></tr><tr><td>|blank|>LOQ</td><td>>5X blank</td><td>J</td></tr></table></td><td>All ICB results were non-detect.</td><td>X</td><td>-</td><td></td></tr>
<tr><td>Continuing Calibration Blanks (CCB)</td><td>CCB bracketing samples.
<table><tr><th>Blank Detection</th><th>Sample Detection</th><th>Val Qualifier</th></tr><tr><td>>DL</td><td><LOQ</td><td>U at LOQ</td></tr><tr><td>>DL</td><td>>LOQ& <5X blank</td><td>J</td></tr><tr><td>>DL</td><td>>LOQ&>5X Blank</td><td>None</td></tr></table>Negative Blank<table><tr><th>Blank Detection</th><th>Sample Detection</th><th>Val Qualifier</th></tr><tr><td>DL<|blank|< LOQ</td><td><DL</td><td>UJ</td></tr><tr><td>DL<|blank|< LOQ</td><td>>Dl but <LOQ</td><td>J</td></tr><tr><td>DL<|blank|< LOQ</td><td>>LOQ but <5X blank</td><td>J</td></tr><tr><td>DL<|blank|< LOQ</td><td>>LOQ and >5X blank</td><td>None</td></tr><tr><td>|blank|>LOQ</td><td><DL</td><td>J or R</td></tr><tr><td>|blank|>LOQ</td><td>>Dl but <LOQ</td><td>J or R</td></tr><tr><td>|blank|>LOQ</td><td>>5X blank</td><td>J</td></tr></table></td><td>All CCBs were ND</td><td>X</td><td>-</td><td></td></tr>
<tr><td>Serial Dilution</td><td>once per digestion batch
%D<10%
%D not evaluated if element results is <50X IDL (<LOD)
J detects, UJ non-detects.</td><td>Not collected/analyzed with this SDG.</td><td>-</td><td>-</td><td></td></tr>
</table>

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED Narrative	Inven-tory	QUAL	BIAS
Inter-element checks ICS-A, ICS-AB Instrument performance check	ICS-A: Absolute value of concentration for all non-spiked analytes < LOD (unless they are a verified trace impurity from one of the spiked analytes). 6010D ISC-A only. ICSAB: Within + 20% of expected value. %R>UCL J detect only >50% and <LCL- UJ NDs and J detects <50% R NDs and J Detects Not spiked detection: >1/2 LOQ J detects if <5X Negative unspiked element: |1/2 LOQ|	Both ICS-A and ICS-AB %R's for within MPC.	X	-	
2nd Source ICV	Once after each initial calibration, prior to sample analysis 90- 110% Recovery	ICV results within limits all metals.	X	-	
CCV and/or CCVL	every 10 samples and end of run 90- 110% Recovery CCVL 80-120%	CCV results were within limits all metals.	X	-	
Post Digestion Spike	Analyze if MS >MPC 75-125%R	Not collected/analyzed with this SDG.	-	-	
Overall Evaluation of Data	Appropriate method Evaluate any analytical problems Evaluate sampling errors – field contamination, sample hold times	<u>Analytical Error Evaluation:</u> The laboratory accuracy is acceptable. Method Blanks was ND LCS %Rs were within limits. ICB was ND. CCB was ND ICAL: per method. ICV: in limits CCV: in limits. <u>Sample Error Evaluation:</u> Not evaluaed.	X	-	

Completeness Check: Inventory Check Sheet___X_Sample Inventory Check

Lab Correspondence: None.

Project Role	Name	Signature	Date
Data Validator	Jackson Kiker		19 Feb 2025

ECC: Data Review Worksheet
Project: TDS (Maui, HI)

GenChem: TOC, Chloride, Ammonia Sulfate, Alk, Turbidity, pH, TDS
Review Criteria: Laboratory Limits

Validation Level	Matrix	Preservation	Temperature Sample Receipt	Laboratory	SDG Number
Stage 2B	Groundwater	None/H_2SO_4/ H_3PO_4	<6 °C	Eurofins Lancaster, PA	410-207441

FIELD IDENTIFICATION OF SAMPLES EVALUATED:

Field Identification (ID)	Laboratory (lab) Sample Number
TDSS-MW01-1Q25	410-207441-1
TDSS-MW02-1Q25	410-207441-2

Note: Samples are described below in the data worksheets by reference to the last digit of the Lab Sample Number.

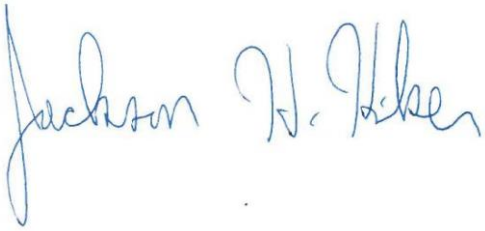
REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED / RATIONALE	INVENT-ORY	QUALIFICA-TION	BIAS
Chain of Custody (COC)	Unbroken custody (accept or if broken reject [R]) Temp. < 6 degrees Celsuis (°C) Preservation per method No chemical preservation required; Chloride, sulfate, Alkalinity (Alk), Nitrate/nitrite (as N), and total dissolved solids (TDS) Total Organic Compounds (TOC) and chemical oxygen demand (COD) preserved with sulfuric acid (H_2SO_4 or H_3PO_4). Ammonia chemical preservative (H_2SO_4).	Cooler temperature < 6 °C. Sample custody transferred from Field Team Leader to lab sample custodian. Unbroken COC. No samples qualified.	X	-	
Holding Time (HT)	48 hours (nitrate/nitrite) 7 days (TDS) 48 hours (Turbidity) 28 days (Ammonia) 14 days (Alk) 28 days (TOX) 28 days (chloride, sulfate, TOC, COD) Immediate / 24 hours (pH) See QAPP Worksheet #19 J –detects, UJ or R –non-detects (ND)	Within measurement performance criteria (MPC) limits except for turbidity and pH. pH and turbidity are typically time sensitive parameters for environmental water matrices. .	X	J qualify pH and turbidity all samples.	
Sensitivity	Denote samples analyzed at dilution	Sample dilutions were made to bring analytes within calibration ranges. Cl at 50X.	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED / RATIONALE	INVENT-ORY	QUALIFICA-TION	BIAS
Field Duplicate (FD) Relative Percent Difference (RPD)	FD RPD ≤ 30 percent (%) aq FD RPD < 50% soil 1 per 10 samples	Not applicable (NA)	-	-	
Results > Cal Range or <Cal Range	<Limit of Quantitation (LOQ) but > method detection limits (DL) – J –detects (estimated)	Detects <LOQ qualified as J.	X	All TOC data qualified J	
Lab Blanks (method blank or preparation blank)	**Blank Detection** / **Sample Detection** / **Val Qualifier** >DL / <LOQ / U at LOQ >DL / >LOQ& <5X blank / J >DL / >LOQ&>5X Blank / None of	Method blanks were ND for all compounds.	X	-	
Laboratory Control Sample (LCS) Recovery	See QAPP Appendix I and Worksheet #12 >UCL%J detects <LCL% J detects, and UJ NDs.	All LCS percent recovery (%R) within the laboratory control limits, except for TDS in the LCSD	X	J all TDS	
LCS/LCSD RPD	RPD <20%	In limits, except for total TDS.	X	J all TDS	
Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recovery	See QAPP Appendix I and Worksheet #12 >UCL% J detects <LCL% J detects, and UJ NDs.	Sample #1 Only reported for ammonia. MS R in limits.	X	=	
MS/MSD RPD	RPD < 20%	NA	-	-	
Laboratory Replicate RPD (if MSD not analyzed)	RPD <15% Others per method/Lab limits	Sample #1 (ammonia) Sample #2 (Turbidity) In limits	X	-	
Equipment Blank (EB)	**Blank Detection** / **Sample Detection** / **Val Qualifier** >DL / <LOQ / U at LOQ >DL / >LOQ& <5X blank / J >DL / >LOQ&>5X Blank / None of	NA	-	=	
Initial Calibration (ICal) Multipoint	Per method SOP	Instrument calibrations or checks In limits.	X	-	
Initial Calibration Blanks (ICB) and Continuing Calibration Blank (CCB)	**Blank Detection** / **Sample Detection** / **Val Qualifier** >DL / <LOQ / U at LOQ >DL / >LOQ& <5X blank / J >DL / >LOQ&>5X Blank / None of	ICB and CCB were ND for all methods.	X	-	
2nd Source ICV	Percent deviation (%D) < 10%	In limits for all methods	X	-	

REVIEW ITEMS	ACCEPTANCE CRITERIA	SAMPLES AFFECTED / RATIONALE	INVENT-ORY	QUALIFICA-TION	BIAS
CCV	%D < 10%	In limits, except for carbonate and bicarbonate alkalinity	X	J Alk-B (#1/#2) and UJ NDs for Alk-C (#1/#2)	
Overall Evaluation of Data	Appropriate method Evaluate any analytical problems Evaluate sampling errors – field contamination, sample hold times	Analytical Error Evaluation: The sample results are usable for making project decisions. ICAL: Acceptable. ICV: %D in limits CCV: %Ds within MPC limits, except for Alk-C and Alk-B MS %R in limits. Method blank was non-detect. LCS %R within limits, except for TDS. ICB/CCB within limits Field Error Evaluation: Not evaluated- no field QC. Overall Evaluation: Project data is usable as qualified.	X	-	

Completeness Check: Inventory Check Sheet_____X__.

Lab Correspondence: none

Project Role	Name	Signature	Date
Data Validator	Jackson Kiker		19 Feb 2025

eurofins | Environment Testing

1 2 3 4 5 6 7 8 9 10 11 12 13 14

ANALYTICAL REPORT

PREPARED FOR

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

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JOB DESCRIPTION

West Maui TDS GW 1Q 2025
410-207441

JOB NUMBER

410-207441-1

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

See page two for job notes and contact information.

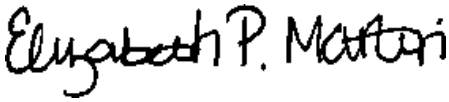
my EOL

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



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Authorized for release by
Elizabeth Martin, Project Manager
Elizabeth.Martin@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.

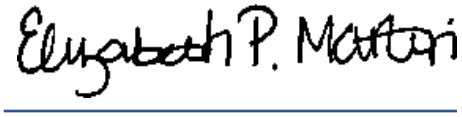

Table of Contents

Definitions/Glossary

Client: Environmental Chemical Corp.
Project/Site: West Maui TDS GW 1Q 2025

Job ID: 410-207441-1
SDG: 410-207441

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
D	The reported value is from a dilution.
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
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.
Q	One or more quality control criteria failed.
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)
TNTC	Too Numerous To Count

Job ID: 410-207441-1 — Eurofins Lancaster Laboratories Environment

Job Narrative
410-207441-1

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 2/12/2025 8:30 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 1.4°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 1Q 2025

Job ID: 410-207441-1
SDG: 410-207441

Client Sample ID: TDSS-MW01-1Q25 — Lab Sample ID: 410-207441-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	16		1.5	1.0	0.50	mg/L	1		300.0	Total/NA
Chloride	110	D	75	60	30	mg/L	50		300.0	Total/NA
Calcium	14000		120	100	50	ug/L	1		6020B	Total Recoverable
Cobalt	0.54		0.50	0.40	0.16	ug/L	1		6020B	Total Recoverable
Copper	0.67	J	1.0	0.90	0.36	ug/L	1		6020B	Total Recoverable
Iron	65		50	40	20	ug/L	1		6020B	Total Recoverable
Lead	0.17	J	0.50	0.24	0.12	ug/L	1		6020B	Total Recoverable
Magnesium	12000		50	32	16	ug/L	1		6020B	Total Recoverable
Potassium	5100		200	180	65	ug/L	1		6020B	Total Recoverable
Sodium	71000		200	180	90	ug/L	1		6020B	Total Recoverable
Turbidity	2.3	H H3	1.0	0.70	1.0	NTU	1		180.1	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	60		8.0	6.0	2.6	mg/L	1		2320B-2011	Total/NA
Bicarbonate Alkalinity as CaCO3	60		8.0	6.0	2.6	mg/L	1		2320B-2011	Total/NA
Total Dissolved Solids	280	Q	30	25	12	mg/L	1		2540C - 2015	Total/NA
pH	7.3	HF	0.01	0.01	0.01	S.U.	1		9040C	Total/NA
Total Organic Carbon	1.9	J	2.0	1.0	0.50	mg/L	1		SM5310C	Total/NA
TOC Result 1	1.5	J	2.0	1.0	0.50	mg/L	1		SM5310C	Total/NA
TOC Result 2	2.6		2.0	1.0	0.50	mg/L	1		SM5310C	Total/NA
TOC Result 3	1.5	J	2.0	1.0	0.50	mg/L	1		SM5310C	Total/NA

Client Sample ID: TDSS-MW02-1Q25 — Lab Sample ID: 410-207441-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	26		1.5	1.0	0.50	mg/L	1		300.0	Total/NA
Chloride	200	D	75	60	30	mg/L	50		300.0	Total/NA
Calcium	21000		120	100	50	ug/L	1		6020B	Total Recoverable
Copper	1.2		1.0	0.90	0.36	ug/L	1		6020B	Total Recoverable
Iron	660		50	40	20	ug/L	1		6020B	Total Recoverable
Lead	3.2		0.50	0.24	0.12	ug/L	1		6020B	Total Recoverable
Magnesium	16000		50	32	16	ug/L	1		6020B	Total Recoverable
Potassium	7400		200	180	65	ug/L	1		6020B	Total Recoverable
Sodium	120000		200	180	90	ug/L	1		6020B	Total Recoverable
Turbidity	16	H H3	1.0	0.70	1.0	NTU	1		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	480	Q	60	50	24	mg/L	1		2540C - 2015	Total/NA
pH	7.6	HF	0.01	0.01	0.01	S.U.	1		9040C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TDSS-MW02-1Q25 (Continued)

Lab Sample ID: 410-207441-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon	1.4	J	2.0	1.0	0.50	mg/L	1		SM5310C	Total/NA
TOC Result 1	1.5	J	2.0	1.0	0.50	mg/L	1		SM5310C	Total/NA
TOC Result 2	1.2	J	2.0	1.0	0.50	mg/L	1		SM5310C	Total/NA
TOC Result 3	1.3	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-MW01-1Q25

Lab Sample ID: 410-207441-1

Date Collected: 02/08/25 10:00
Matrix: Water
Date Received: 02/12/25 08:30

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**16**		1.5	1.0	0.50	mg/L		02/12/25 20:38	1
Chloride	**110**	**D**	75	60	30	mg/L		02/12/25 21:26	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		02/13/25 12:44	1
Arsenic	1.7	U	2.0	1.7	0.68	ug/L		02/13/25 12:44	1
Calcium	**14000**		120	100	50	ug/L		02/13/25 12:44	1
Cobalt	**0.54**		0.50	0.40	0.16	ug/L		02/13/25 12:44	1
Copper	**0.67**	**J**	1.0	0.90	0.36	ug/L		02/13/25 12:44	1
Iron	**65**		50	40	20	ug/L		02/13/25 12:44	1
Lead	**0.17**	**J**	0.50	0.24	0.12	ug/L		02/13/25 12:44	1
Magnesium	**12000**		50	32	16	ug/L		02/13/25 12:44	1
Potassium	**5100**		200	180	65	ug/L		02/13/25 12:44	1
Sodium	**71000**		200	180	90	ug/L		02/13/25 12:44	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Turbidity (EPA 180.1)	**2.3**	**H H3**	1.0	0.70	1.0	NTU		02/13/25 07:08	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**60**		8.0	6.0	2.6	mg/L		02/14/25 14:40	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	6.0	U	8.0	6.0	2.6	mg/L		02/14/25 14:40	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**60**		8.0	6.0	2.6	mg/L		02/14/25 14:40	1
Total Dissolved Solids (SM 2540C - 2015)	**280**	**Q**	30	25	12	mg/L		02/12/25 22:55	1
pH (SW846 9040C)	**7.3**	**HF**	0.01	0.01	0.01	S.U.		02/13/25 23:09	1
Ammonia as N (EPA 350.1)	0.090	U J1	0.10	0.090	0.050	mg/L		02/13/25 14:07	1
Total Organic Carbon (SM5310C)	**1.9**	**J**	2.0	1.0	0.50	mg/L		02/12/25 22:19	1
TOC Result 1 (SM5310C)	**1.5**	**J**	2.0	1.0	0.50	mg/L		02/12/25 22:19	1
TOC Result 2 (SM5310C)	**2.6**		2.0	1.0	0.50	mg/L		02/12/25 22:19	1
TOC Result 3 (SM5310C)	**1.5**	**J**	2.0	1.0	0.50	mg/L		02/12/25 22:19	1

Client Sample ID: TDSS-MW02-1Q25

Lab Sample ID: 410-207441-2

Date Collected: 02/08/25 08:35
Matrix: Water
Date Received: 02/12/25 08:30

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	**26**		1.5	1.0	0.50	mg/L		02/12/25 21:49	1
Chloride	**200**	**D**	75	60	30	mg/L		02/12/25 22:13	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		02/13/25 12:42	1
Arsenic	1.7	U	2.0	1.7	0.68	ug/L		02/13/25 12:42	1
Calcium	**21000**		120	100	50	ug/L		02/13/25 12:42	1
Cobalt	0.40	U	0.50	0.40	0.16	ug/L		02/13/25 12:42	1
Copper	**1.2**		1.0	0.90	0.36	ug/L		02/13/25 12:42	1
Iron	**660**		50	40	20	ug/L		02/13/25 12:42	1
Lead	**3.2**		0.50	0.24	0.12	ug/L		02/13/25 12:42	1

Client Sample ID: TDSS-MW02-1Q25

Date Collected: 02/08/25 08:35
Date Received: 02/12/25 08:30

Lab Sample ID: 410-207441-2

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Magnesium	**16000**		50	32	16	ug/L		02/13/25 12:42	1
Potassium	**7400**		200	180	65	ug/L		02/13/25 12:42	1
Sodium	**120000**		200	180	90	ug/L		02/13/25 12:42	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Turbidity (EPA 180.1)	**16**	**H H3**	1.0	0.70	1.0	NTU		02/13/25 07:08	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B-2011)	**61**		8.0	6.0	2.6	mg/L		02/14/25 14:46	1
Carbonate Alkalinity as CaCO3 (SM 2320B-2011)	6.0	U	8.0	6.0	2.6	mg/L		02/14/25 14:46	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B-2011)	**61**		8.0	6.0	2.6	mg/L		02/14/25 14:46	1
Total Dissolved Solids (SM 2540C - 2015)	**480**	**Q**	60	50	24	mg/L		02/12/25 22:55	1
pH (SW846 9040C)	**7.6**	**HF**	0.01	0.01	0.01	S.U.		02/13/25 23:15	1
Ammonia as N (EPA 350.1)	0.090	U	0.10	0.090	0.050	mg/L		02/13/25 14:14	1
Total Organic Carbon (SM5310C)	**1.4**	**J**	2.0	1.0	0.50	mg/L		02/12/25 22:40	1
TOC Result 1 (SM5310C)	**1.5**	**J**	2.0	1.0	0.50	mg/L		02/12/25 22:40	1
TOC Result 2 (SM5310C)	**1.2**	**J**	2.0	1.0	0.50	mg/L		02/12/25 22:40	1
TOC Result 3 (SM5310C)	**1.3**	**J**	2.0	1.0	0.50	mg/L		02/12/25 22:40	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 410-605381/5
Matrix: Water
Analysis Batch: 605381

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		02/12/25 14:38	1
Chloride	1.2	U	1.5	1.2	0.60	mg/L		02/12/25 14:38	1

Lab Sample ID: LCS 410-605381/3
Matrix: Water
Analysis Batch: 605381

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	6.97		mg/L		93	87 - 112
Chloride	3.00	2.81		mg/L		94	87 - 111

Lab Sample ID: LCSD 410-605381/4
Matrix: Water
Analysis Batch: 605381

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	7.13		mg/L		95	87 - 112	2	10
Chloride	3.00	2.87		mg/L		96	87 - 111	2	10

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-605465/1-A
Matrix: Water
Analysis Batch: 605803

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 605465

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		02/13/25 12:09	1
Arsenic	1.7	U	2.0	1.7	0.68	ug/L		02/13/25 12:09	1
Calcium	100	U	120	100	50	ug/L		02/13/25 12:09	1
Cobalt	0.40	U	0.50	0.40	0.16	ug/L		02/13/25 12:09	1
Copper	0.90	U	1.0	0.90	0.36	ug/L		02/13/25 12:09	1
Iron	40	U	50	40	20	ug/L		02/13/25 12:09	1
Lead	0.24	U	0.50	0.24	0.12	ug/L		02/13/25 12:09	1
Magnesium	32	U	50	32	16	ug/L		02/13/25 12:09	1
Potassium	180	U	200	180	65	ug/L		02/13/25 12:09	1
Sodium	180	U	200	180	90	ug/L		02/13/25 12:09	1

Lab Sample ID: LCS 410-605465/2-A
Matrix: Water
Analysis Batch: 605803

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 605465

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	100		ug/L		100	85 - 117
Arsenic	500	500		ug/L		100	84 - 116
Calcium	5000	5150		ug/L		103	87 - 118
Cobalt	500	498		ug/L		100	86 - 115
Copper	500	499		ug/L		100	85 - 118
Iron	5000	4990		ug/L		100	87 - 118
Lead	50.0	50.6		ug/L		101	88 - 115
Magnesium	5000	5240		ug/L		105	83 - 118

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

Lab Sample ID: LCS 410-605465/2-A
Matrix: Water
Analysis Batch: 605803

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 605465

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Potassium			5000	5260		ug/L		105	87 - 115		
Sodium			5000	5240		ug/L		105	85 - 117		

Method: 180.1 - Turbidity, Nephelometric

Lab Sample ID: MB 410-605544/3
Matrix: Water
Analysis Batch: 605544

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		02/13/25 07:08	1

Lab Sample ID: LCS 410-605544/4
Matrix: Water
Analysis Batch: 605544

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		106	85 - 115		

Lab Sample ID: 410-207441-2 DU
Matrix: Water
Analysis Batch: 605544

Client Sample ID: TDSS-MW02-1Q25
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Turbidity	16	H H3		15		NTU				5	10

Method: 2320B-2011 - Alkalinity, Total

Lab Sample ID: MB 410-606330/5
Matrix: Water
Analysis Batch: 606330

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		02/14/25 14:21	1

Lab Sample ID: LCS 410-606330/6
Matrix: Water
Analysis Batch: 606330

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 410-606330/7
Matrix: Water
Analysis Batch: 606330

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	178		mg/L		94	80 - 110	0	10

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

Lab Sample ID: LCS 410-605089/2
Matrix: Water
Analysis Batch: 605089

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	182		mg/L		91	90 - 110		

Lab Sample ID: LCSD 410-605089/3
Matrix: Water
Analysis Batch: 605089

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 Dissolved Solids			200	146	Q	mg/L		73	90 - 110	22	10

Method: 9040C - pH

Lab Sample ID: LCS 410-606221/44
Matrix: Water
Analysis Batch: 606221

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: LCSD 410-606221/45
Matrix: Water
Analysis Batch: 606221

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	7.1		S.U.		101	95 - 105	0	3

Method: EPA 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 410-605894/56
Matrix: Water
Analysis Batch: 605894

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		02/13/25 14:05	1

Lab Sample ID: LCS 410-605894/54
Matrix: Water
Analysis Batch: 605894

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	1.92		mg/L		96	90 - 110		

Lab Sample ID: LCSD 410-605894/55
Matrix: Water
Analysis Batch: 605894

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	1.89		mg/L		94	90 - 110	1	15

Method: EPA 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: 410-207441-1 MS
Matrix: Water
Analysis Batch: 605894

Client Sample ID: TDSS-MW01-1Q25
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia as N	0.090	U J1	2.51	2.46		mg/L		98	90 - 110		

Lab Sample ID: 410-207441-1 DU
Matrix: Water
Analysis Batch: 605894

Client Sample ID: TDSS-MW01-1Q25
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Ammonia as N	0.090	U J1		0.090	U	mg/L				NC	20

Method: SM5310C - TOC

Lab Sample ID: MB 410-605792/7
Matrix: Water
Analysis Batch: 605792

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		02/12/25 20:18	1
TOC Result 1	1.0	U	2.0	1.0	0.50	mg/L		02/12/25 20:18	1
TOC Result 2	1.0	U	2.0	1.0	0.50	mg/L		02/12/25 20:18	1
TOC Result 3	1.0	U	2.0	1.0	0.50	mg/L		02/12/25 20:18	1

Lab Sample ID: LCS 410-605792/6
Matrix: Water
Analysis Batch: 605792

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	47.9		mg/L		96	90 - 110		
TOC Result 1			50.0	47.1		mg/L		94	90 - 110		
TOC Result 2			50.0	47.6		mg/L		95	90 - 110		
TOC Result 3			50.0	48.9		mg/L		98	90 - 110		

Lab Sample ID: MRL 410-605792/3
Matrix: Water
Analysis Batch: 605792

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	1.23	J	mg/L		123	50 - 150		
TOC Result 1			1.00	1.21	J	mg/L		121			
TOC Result 2			1.00	1.25	J	mg/L		125			
TOC Result 3			1.00	1.24	J	mg/L		124			

HPLC/IC

Analysis Batch: 605381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-207441-1	TDSS-MW01-1Q25	Total/NA	Water	300.0	
410-207441-1	TDSS-MW01-1Q25	Total/NA	Water	300.0	
410-207441-2	TDSS-MW02-1Q25	Total/NA	Water	300.0	
410-207441-2	TDSS-MW02-1Q25	Total/NA	Water	300.0	
MB 410-605381/5	Method Blank	Total/NA	Water	300.0	
LCS 410-605381/3	Lab Control Sample	Total/NA	Water	300.0	
LCSD 410-605381/4	Lab Control Sample Dup	Total/NA	Water	300.0	

Metals

Prep Batch: 605465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-207441-1	TDSS-MW01-1Q25	Total Recoverable	Water	3005A	
410-207441-2	TDSS-MW02-1Q25	Total Recoverable	Water	3005A	
MB 410-605465/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 410-605465/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 605803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-207441-1	TDSS-MW01-1Q25	Total Recoverable	Water	6020B	605465
410-207441-2	TDSS-MW02-1Q25	Total Recoverable	Water	6020B	605465
MB 410-605465/1-A	Method Blank	Total Recoverable	Water	6020B	605465
LCS 410-605465/2-A	Lab Control Sample	Total Recoverable	Water	6020B	605465

General Chemistry

Analysis Batch: 605089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-207441-1	TDSS-MW01-1Q25	Total/NA	Water	2540C - 2015	
410-207441-2	TDSS-MW02-1Q25	Total/NA	Water	2540C - 2015	
LCS 410-605089/2	Lab Control Sample	Total/NA	Water	2540C - 2015	
LCSD 410-605089/3	Lab Control Sample Dup	Total/NA	Water	2540C - 2015	

Analysis Batch: 605544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-207441-1	TDSS-MW01-1Q25	Total/NA	Water	180.1	
410-207441-2	TDSS-MW02-1Q25	Total/NA	Water	180.1	
MB 410-605544/3	Method Blank	Total/NA	Water	180.1	
LCS 410-605544/4	Lab Control Sample	Total/NA	Water	180.1	
410-207441-2 DU	TDSS-MW02-1Q25	Total/NA	Water	180.1	

Analysis Batch: 605792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-207441-1	TDSS-MW01-1Q25	Total/NA	Water	SM5310C	
410-207441-2	TDSS-MW02-1Q25	Total/NA	Water	SM5310C	
MB 410-605792/7	Method Blank	Total/NA	Water	SM5310C	
LCS 410-605792/6	Lab Control Sample	Total/NA	Water	SM5310C	
MRL 410-605792/3	Lab Control Sample	Total/NA	Water	SM5310C	

Analysis Batch: 605894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-207441-1	TDSS-MW01-1Q25	Total/NA	Water	EPA 350.1	

General Chemistry (Continued)

Analysis Batch: 605894 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-207441-2	TDSS-MW02-1Q25	Total/NA	Water	EPA 350.1	
MB 410-605894/56	Method Blank	Total/NA	Water	EPA 350.1	
LCS 410-605894/54	Lab Control Sample	Total/NA	Water	EPA 350.1	
LCSD 410-605894/55	Lab Control Sample Dup	Total/NA	Water	EPA 350.1	
410-207441-1 MS	TDSS-MW01-1Q25	Total/NA	Water	EPA 350.1	
410-207441-1 DU	TDSS-MW01-1Q25	Total/NA	Water	EPA 350.1	

Analysis Batch: 606221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-207441-1	TDSS-MW01-1Q25	Total/NA	Water	9040C	
410-207441-2	TDSS-MW02-1Q25	Total/NA	Water	9040C	
LCS 410-606221/44	Lab Control Sample	Total/NA	Water	9040C	
LCSD 410-606221/45	Lab Control Sample Dup	Total/NA	Water	9040C	

Analysis Batch: 606330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-207441-1	TDSS-MW01-1Q25	Total/NA	Water	2320B-2011	
410-207441-2	TDSS-MW02-1Q25	Total/NA	Water	2320B-2011	
MB 410-606330/5	Method Blank	Total/NA	Water	2320B-2011	
LCS 410-606330/6	Lab Control Sample	Total/NA	Water	2320B-2011	
LCSD 410-606330/7	Lab Control Sample Dup	Total/NA	Water	2320B-2011	

Lab Chronicle

Client: Environmental Chemical Corp.
Project/Site: West Maui TDS GW 1Q 2025

Job ID: 410-207441-1
SDG: 410-207441

Client Sample ID: TDSS-MW01-1Q25

Lab Sample ID: 410-207441-1

Date Collected: 02/08/25 10:00

Matrix: Water

Date Received: 02/12/25 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	605381	UJE2	ELLE	02/12/25 20:38
Total/NA	Analysis	300.0		50	605381	UJE2	ELLE	02/12/25 21:26
Total Recoverable	Prep	3005A			605465	UAMX	ELLE	02/12/25 21:30
Total Recoverable	Analysis	6020B		1	605803	SAM2	ELLE	02/13/25 12:44
Total/NA	Analysis	180.1		1	605544	USAE	ELLE	02/13/25 07:08
Total/NA	Analysis	2320B-2011		1	606330	DI9Q	ELLE	02/14/25 14:40
Total/NA	Analysis	2540C - 2015		1	605089	M98K	ELLE	02/12/25 22:55 - 02/14/25 13:49 [1]
Total/NA	Analysis	9040C		1	606221	DI9Q	ELLE	02/13/25 23:09
Total/NA	Analysis	EPA 350.1		1	605894	JCG7	ELLE	02/13/25 14:07
Total/NA	Analysis	SM5310C		1	605792	P684	ELLE	02/12/25 22:19

Client Sample ID: TDSS-MW02-1Q25

Lab Sample ID: 410-207441-2

Date Collected: 02/08/25 08:35

Matrix: Water

Date Received: 02/12/25 08:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	605381	UJE2	ELLE	02/12/25 21:49
Total/NA	Analysis	300.0		50	605381	UJE2	ELLE	02/12/25 22:13
Total Recoverable	Prep	3005A			605465	UAMX	ELLE	02/12/25 21:30
Total Recoverable	Analysis	6020B		1	605803	SAM2	ELLE	02/13/25 12:42
Total/NA	Analysis	180.1		1	605544	USAE	ELLE	02/13/25 07:08
Total/NA	Analysis	2320B-2011		1	606330	DI9Q	ELLE	02/14/25 14:46
Total/NA	Analysis	2540C - 2015		1	605089	M98K	ELLE	02/12/25 22:55 - 02/14/25 13:49 [1]
Total/NA	Analysis	9040C		1	606221	DI9Q	ELLE	02/13/25 23:15
Total/NA	Analysis	EPA 350.1		1	605894	JCG7	ELLE	02/13/25 14:14
Total/NA	Analysis	SM5310C		1	605792	P684	ELLE	02/12/25 22:40

[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 1Q 2025

Job ID: 410-207441-1
SDG: 410-207441

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
180.1		Water	Turbidity
SM5310C		Water	TOC Result 3

Method Summary

Client: Environmental Chemical Corp.
Project/Site: West Maui TDS GW 1Q 2025

Job ID: 410-207441-1
SDG: 410-207441

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 1Q 2025

Job ID: 410-207441-1
SDG: 410-207441

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-207441-1	TDSS-MW01-1Q25	Water	02/08/25 10:00	02/12/25 08:30
410-207441-2	TDSS-MW02-1Q25	Water	02/08/25 08:35	02/12/25 08:30

Eurofins Lancaster Laboratories Environme
2425 New Holland Pike
Lancaster, PA 17601
Phone (717) 656-2300

Chain

410-207441 Chain of Custody

eurofins | Environment Testing

Client Information	Sampler: T. Stranimic-		Carrier Tracking No(s):	COC No: 410-147895-40706.1
Client Contact: Kane McNeill	Phone: 316-640-6305	E-Mail: Elizabeth.Martin@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): TS ~~Standard~~ 48 hr			
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~~ 1Q 2025	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)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORFM_28D_DS - Major Anions - Chloride, Sulfate	350.1 - Major Leachate Indicators - Ammonia	2320B - Alkalinity Total, Carb, Bicarb / 9040C Field Measurements - pH	180.1 - Field Measurements - Turbidity	6020B_DOD5 - Metals (GW & Leachate list)	2540C_Calcd - Major Leachate Indicators - TDS	5310C_DOD5 - Major Leachate Indicators - TOC (triplicate)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	S	N	N	D	N	AA		
TDSS-MW01-1Q25	02/08/25	1400	G	W	N	N	1	1	1	1	1	1	2		
TDSS-MW02-1Q25	02/08/25	0835	G	W	N	N	1	1	1	1	1	1	2		2320B & 2540C collected via Steel Dag

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:

7719 6397 — 3dd

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: Fed Ex

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
		02/08/25	FCC			
		10 Feb 2025	FCC			
					2/12/25 0830	ECC

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

Cooler Temperature(s) °C and Other Remarks: 12.1.4 C: 1.4

Login Sample Receipt Checklist

Client: Environmental Chemical Corp.

Job Number: 410-207441-1
SDG Number: 410-207441

Login Number: 207441
List Number: 1
Creator: Arroyo, Haley

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	
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	