

July 10, 2025

Tena Seeds
Toxics Cleanup Program
Department of Ecology
Northwest Regional Office
P.O. Box 330316
Shoreline, Washington 98133

Re: Maralco Site Agreed Order No. DE 22343
Progress Report No. 6: Reporting Period April to June 2025

Dear Tena:

This progress report summarizes the activities performed from April to June 2025 in fulfillment of Agreed Order DE 22343 for the Maralco Site in Kent, Washington. This progress report provides a summary of the work performed, deviations from the scope of work, laboratory analyses, and work anticipated during the following reporting period. Progress Reports will be submitted quarterly, consistent with the requirements of the Agreed Order.

1. Activities Conducted During Reporting Period

The following activities were conducted during the reporting period:

- Monitoring well MW-12 was installed and developed on April 1, 2025.
- Decommissioned well MW-9 on April 8, 2025 because it overlapped with the TPH sheen area removal footprint. MW-9R, replacement well, was installed and developed on May 13, 2025.
- Well Installation of off-property wells MW-13 and MW-14 occurred on April 28, 2025; wells were developed on April 29, 2025.
- First quarterly groundwater sampling of off-property wells on April 10 (MW-12) and April 30, 2025 (MW-13 and MW-14).
- Second quarterly groundwater sampling of all on and off-property wells (MW-1 through MW-14) occurred May 20 through 23, 2025.
- Soil excavation and sampling of contaminated soil in the former TPH Sheen Area occurred April 3 through April 21, 2025.
- Submitted to Ecology on May 15, 2025 via electronic mail a review of surface water ditch source information for facilities that are discharging to ditches that may be associated with the Site. (Attachment 1)

2. Deviations from Scope of Work, Schedule, or Deliverables

None.

3. Laboratory Analyses

The following laboratory analyses activities were conducted during the reporting period and are provided in Attachment 2:

- Direct push soil and groundwater sampling data from the SRIWP for DPT-25 and DPT-26 (sampled on March 17, 2025).
- Groundwater data associated with the first quarter 2025 groundwater sampling event from Brooks Applied Labs (which was not included in the first quarter 2025 progress report as it was not issued at the time of that progress report) and groundwater data from MW-12 (sampled on April 10, 2025), MW-13 (sampled on April 30, 2025), and MW-14 (sampled on April 30, 2025).
- Groundwater data associated with the second quarter 2025 groundwater sampling event (MW-1 through MW-14) May 20 through 23, 2025.
- Data associated with the TPH sheen area excavation for soil samples collected on April 3, April 4, April 17, and April 21, 2025.

4. Activities and Planned Deliverables Anticipated for Next Reporting Period

- Ongoing coordination with Ecology regarding the SRIWP and area stormwater drainage.
- Decommission MW-7 because it overlaps with construction activities and install a replacement well MW-7R (July 2025)
- Complete third quarter SRIWP groundwater sampling in July or August 2025.
- Complete the off-site wetland Phase 2 Interim Action removal in July or August 2025.

Please contact me if you have questions about any of the information contained in this Progress Report.

Sincerely,
CRETE CONSULTING INCORPORATED, PC



Grant Hainsworth, P.E.
Principal, Senior Project Manager

cc: Kyle Siekawitch, 7730 202nd Street, LLC

Attachment 1 – Email to Ecology re Maralco Surface Water Items, dated May 15, 2025
Attachment 2 – Copies of Laboratory Reports

Attachment 1 – Email to Ecology re Maralco Surface Water Items, dated May 15, 2025

Jamie Stevens

From: Jamie Stevens
Sent: Thursday, May 15, 2025 2:52 PM
To: tena.seeds@ecy.wa.gov
Cc: Kyle Siekawitch; Thomas Morin; 'Grant Hainsworth'; Ken Lederman
Subject: Maralco surface water items
Attachments: For Ecology_Maralco Stormwater Backup Information_20250506.pdf

Tena –

We're circling back to the surface water / sediment issues we discussed relative to the off-property wetland. We had discussed reviewing the potential variety of inputs and sources to that ditch / wetland and the number of PLPs that could bear responsibility for any impacts that may be detected.

Attached you'll find a summary of readily available information, including from PARIS, related to stormwater inputs to the wetland. There are numerous sources, several with active and inactive permits, and several with known permit violations to permits, all of which feed directly into the on-property ditch system. There are also a large number of inputs to the King County Drainage District. This summary is unlikely to be the full universe of permits or violations, and it's unclear to what extent permit holders are actually complying with their monitoring and reporting requirements. We are not able to find data for all of the violations, but what we did find shows violations for zinc, copper and oil and grease for inputs that flow onto the property ditch system and similar for ones off site.

Additionally, the permittees are being held to the Ecology Industrial Stormwater General Permit (ISGP) Benchmarks, which are much higher than the PCUL values. As examples, the PCUL for copper is 2.1 ug/L, the ISGP benchmark is 14 ug/L, the PCUL for zinc is 24 ug/L vs the ISGP benchmark of 117 ug/L.

The ISGP also only requires testing for a short list of compounds. Most are limited to turbidity, pH, oil/grease, copper, zinc and some also require lead, mercury, phosphorus, ammonia, penta, fecal coliform/E.Coli/Enterococc, and TSS. We are not able to determine which list of compounds the other inputs are sampling for, but based on what we could find, it looks like the bulk are sampling for the shorter list.

We've also evaluated actual surface water quality entering the property to assess the degree to which that water already exceeds the PCULs, as outlined in the SRIWP. The attached table presents the results of surface water samples collected at the southern and eastern inputs onto the Site. You can see that this water exceeds the PCULs for aluminum, copper, iron, and zinc in total samples from both locations and also lead, manganese, and mercury in the southern sample only. Copper also exceeds the ISGP benchmark in the total sample from the south, all other results are below the benchmark values.

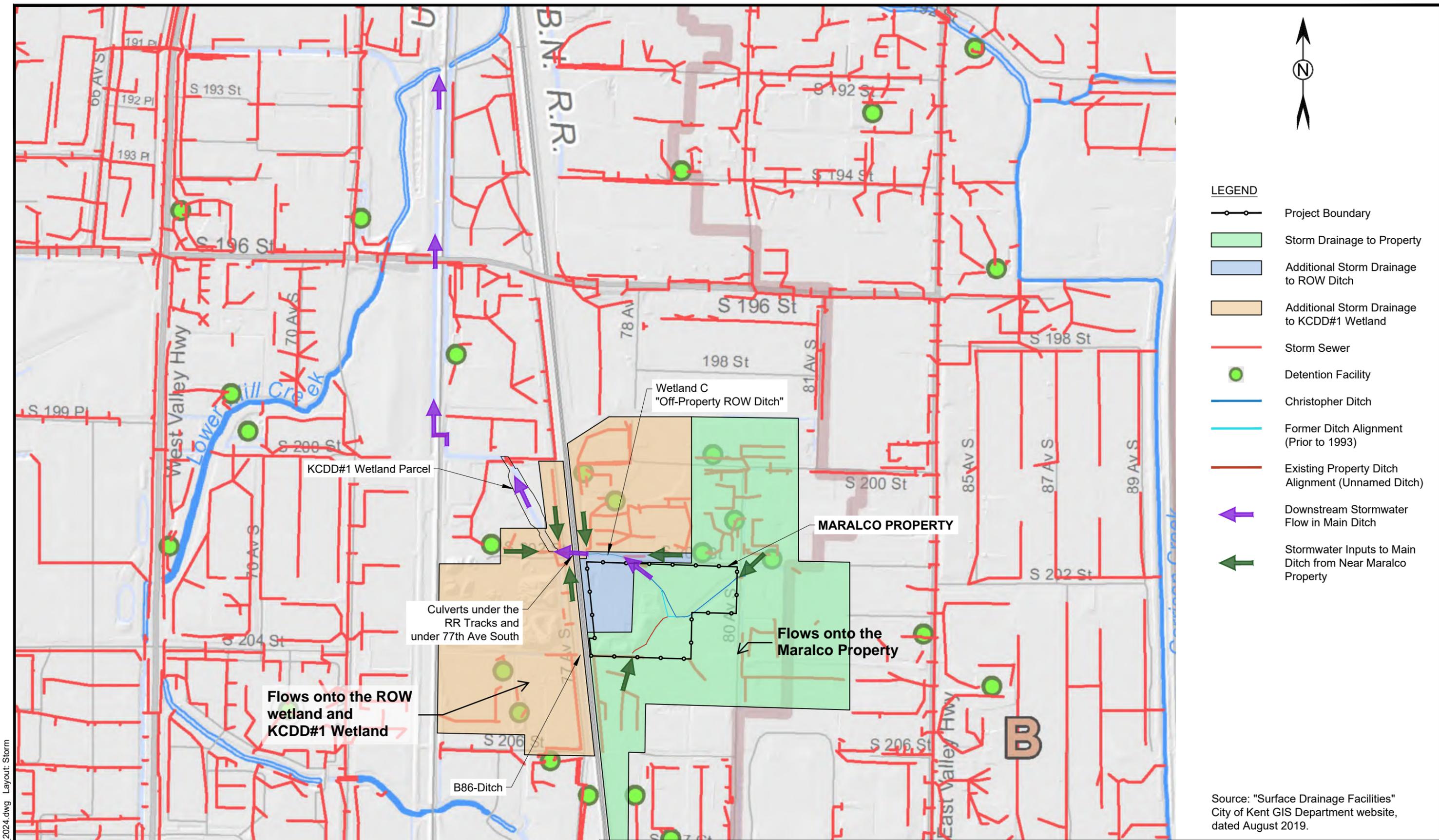
Data has not been collected from the onsite ditch system as the site remains under active construction and all site water is being processed through the construction treatment system.

The overarching finding of our analysis is that there are several known, and potentially multiple unknown, inputs that have or are still contributing to the ditch and wetland at concentrations above the PCULs. Even if a permittee is in compliance with its ISGP benchmarks, those benchmarks still exceed the PCULs. Evaluating the Maralco Site on PCULs while other sources have inputs to the Site and off-site locations at values higher than the PCULs creates an inequitable and inaccurate evaluation of our contribution to off-property impacts.

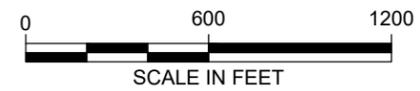
We look forward to discussing next steps with you. Would it be helpful to have another meeting after you (and the Ecology team) has had time to process this information?

Jamie Stevens, P.E.
Environmental Engineer
206.799.2744

Crete Consulting Inc.
www.creteconsulting.com
jamie.stevens@creteconsulting.com



File: Maralco Site Adj_2024.dwg Layout: Storm

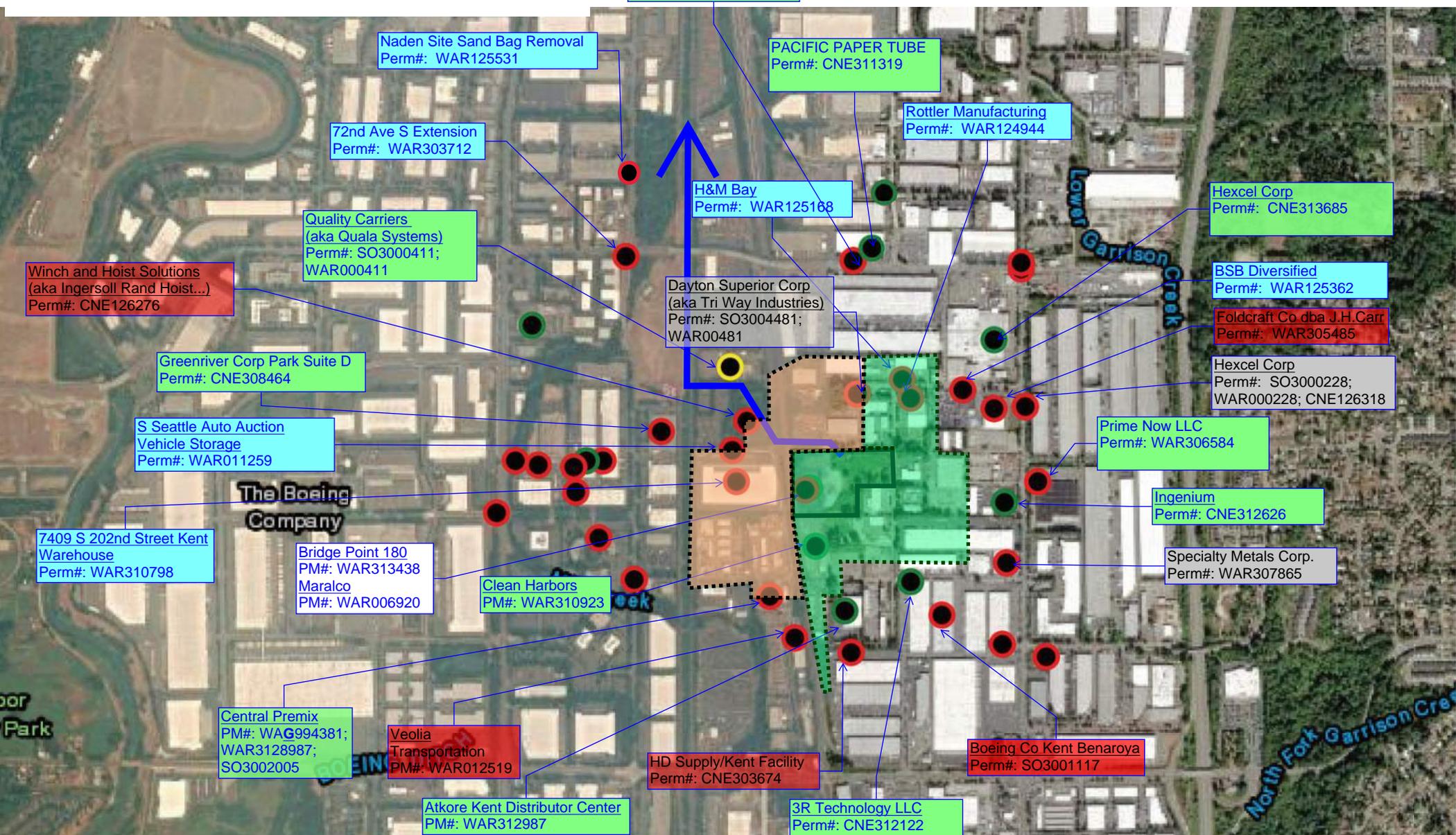


Maralco Site
7730 South 202nd Street
Kent, Washington
1/13/25

Figure 3
Current Stormwater Flow Conditions

- Notes:
1. If no receiving water bodies are listed, it is assumed these may flow into the ditch that flows eventually into Mill Creek.
 2. Sites that flow directly into Mill Creek (to the east) are not called out on this map but are included in the summary table. Flow paths should be confirmed.
 3. The map search function in the PARIS database is incorrectly identifying sites as inactive. See detailed table for more information.

Figure 1
Stormwater Permit Holders Information



LEGEND

- Project Boundary
- Storm Drainage to Property
- Ditch to Mill Creek (approx)
- Additional Storm Drainage to KCDD#1 Wetland

- Industrial SW GP - Active
- Industrial SW GP - Inactive
- Construction SW GP
- Discharge to Garrison Creek

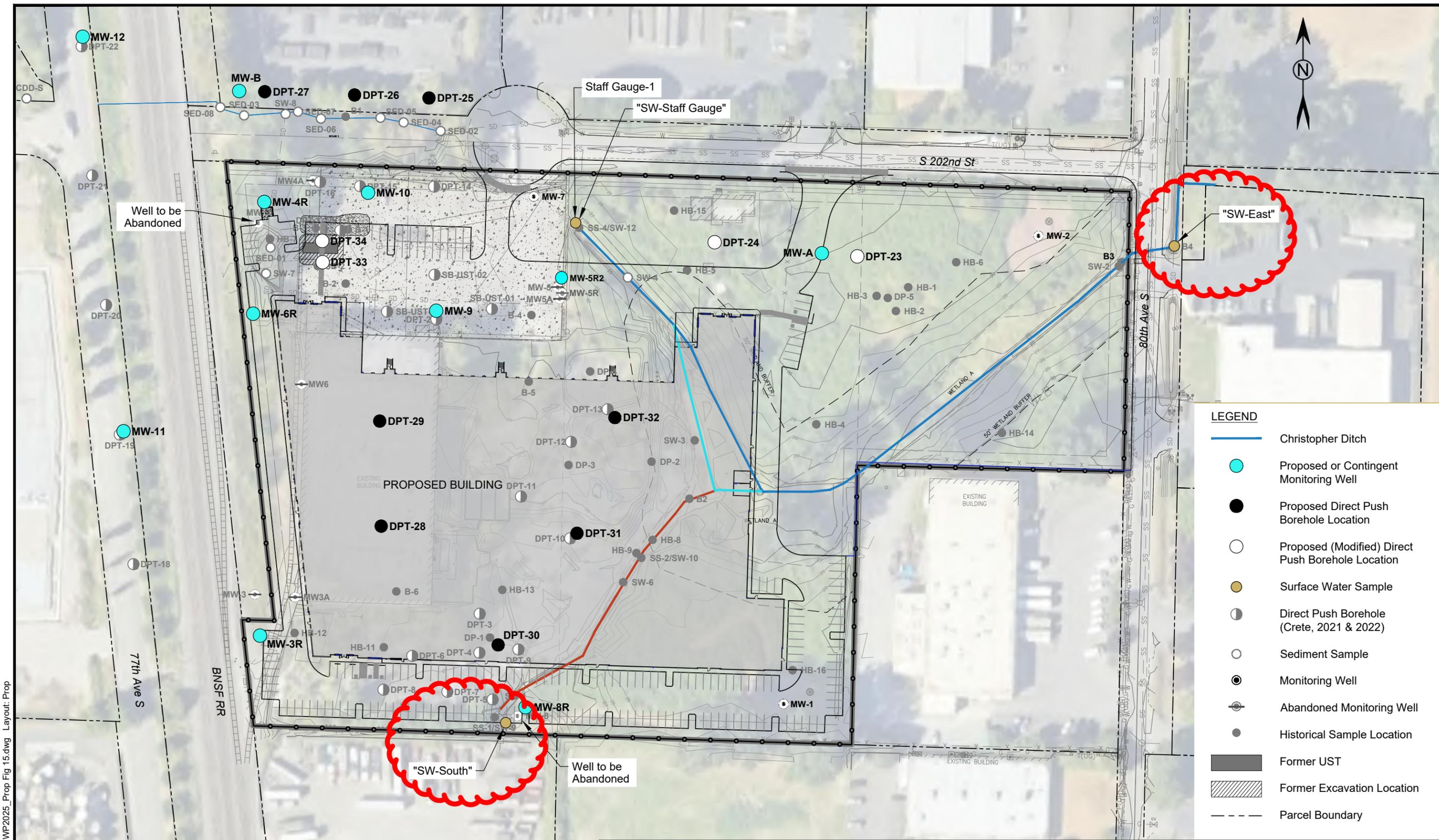
- PARIS database location ID (green, red or yellow)

Table 1 - Summary Table from Water Quality Permitting and Reporting Information System (PARIS)

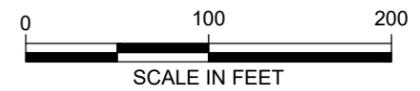
Approx. Distance From Maralco Site	Facility Name	General Locations to Maralco Site	Permittee Water Body (if noted in PARIS)	Permit Number	Permit Type (color corresponds with map)	Permit Status	Effective Date	Exp Date	Industrial Class	Facility Location	# of Violations Listed	# of Enforcements Listed	Violations Noted/Recorded in PARIS?
Sites that flow onto the Maralco Site (confirmed and suspected)													
0.211	Clean Harbors	Flows onto Maralco site	Outfall 1	WAR310923	Industrial SW GP	Active	Mar 2022	Dec 2026	SIC 4959/NAICS 562998 (Sanitary Services/All Other Miscellaneous)	S of site	4	0	zinc and copper exceedances; failure to analyze fecal coliform
0.347	Rottler Manufacturing Building Add	Flows onto Maralco site	Unnamed Wetland	WAR124944	Construction SW GP	Inactive	May 2011	Dec 2015	SIC 1794 (Excavation Work)	NE of site	4	2	Y- Late submittal of DMRs
0.375	H and M Bay - Kent Facility	Flows onto Maralco site	Mill Creek	WAR125168	Construction SW GP	Inactive	Jul 2011	Dec 2015	SIC 1794 (Excavation Work)	NE of site	0	1	Y-Failure to submit monitoring reports
0.277	DAYTON SUPERIOR CORPORATION	North of Maralco Site - unable to confirm that this flows to Garrison Creek	Garrison Creek	SO3004481/WAR004481	Industrial SW GP	Inactive	Feb 2002	Jan 2015	SIC 3441/4425/NAICS 4225: Fabricated Structural Metal	N of site	4	0	Y-Turbidity, PH, Zinc, O&G Benchmarks Exceeded
0.406	Atkore Kent Distribution Center	upgradient - Might flow onto Maralco site	Mill Creek	WAR312987	Industrial SW GP	Active	Feb 2024	Dec 2029	SIC 4226/NAICS 493110 (Special Warehouse & Storage)	S of site	22	0	Y- Zinc; Missing analyses; Late report.
0.49	BSB Diversified Co Inc	unknown - in close proximity to Maralco site (to the NE)	Not listed	WAR125362	Construction SW GP	Inactive	Jan 2012	Dec 2015	Excavation work	NE of site			N
0.507	Veolia Transportation	upgradient - Might flow onto Maralco site	Mill Creek	WAR012519	Industrial SW GP	Inactive	Jul 2010	Dec 2019	SIC 411 (Local and Suburban Transportation)	S of site	32	1	Y (downloaded)- BM exc (zinc, copper, ph, turbidity, late submittals, missing data)
0.534	BOEING COMPANY KENT BENAROYA	upgradient - Might flow onto Maralco site	Not listed	SO3001117	Industrial SW GP	Inactive	NO DATA FOR THIS PERMIT			S of site			
0.534	Ingenium (aka Associated Petroleum Products)	upgradient - Might flow onto Maralco site	Not listed	CNE312626	Industrial SW GP	Active	Jun 2023	May 2028	Specialized Freight Trucking, Long-Distance	S of site			NA
0.542	Foldcraft Co dba JH Carr	cross gradient - might flow onto Maralco site	Not listed	WAR305485	Industrial SW GP	Inactive	Jun 2017	Dec 2024	Institutional Furniture Manufacturing/Furniture and fixt	NE of site			Y-Failure to report; Missing Analysis; Benchmark exceeded
0.63	Prime Now LLC UWA6	cross gradient - might flow onto Maralco site	Not listed	WAR306584	Industrial SW GP	Active							
0.394	3R Technology LLC	upgradient - Might flow onto Maralco site	Not listed	CNE312122	Industrial SW GP	Active	Jan 2023	Dec 2027	NAICS 423930 (Recyclable Material Merchant Wholesale)	SE of site	0	0	N
0.535	HD Supply/Kent Facility	upgradient - Might flow onto Maralco site	Not listed	CNE303674	Industrial SW GP	Inactive							
Sites that flow onto the ROW Wetland and the KCDD#1 Wetland													
0.307	7409 S 202nd Street Kent Warehouse	Flows into ROW Wetland	Not listed	WAR310798	Construction SW GP	Inactive	Nov 2021	Dec 2025	SIC 1749 (Excavation Work)	W of site	0	1	NA
0.331	S SEATTLE AUTO AUCTION VEHICLE STORA	Flows into ROW Wetland	Not listed	WAR011259	Construction SW GP	Inactive	NA	NA	SIC 1749 (Excavation Work)	W of site	NA	NA	NA
0.333	WINCH AND HOIST SOLUTIONS/Ingersoll Rand Hoist and Winch Solutions	Flows into ROW Wetland	Not listed	CNE309410/CNE126276	Industrial SW GP	Inactive	10/17/2013?	Dec 2024	SIC 3536 (Hoists, Cranes, and Monorails)/NAICS 333923	NW of site	0	0	N
0.41	CENTRAL PRE MIX CONCRETE PRODUCTS/Central Premix	Flows into ROW Wetland	Mill Creek/Not Listed	WAR002005/SO3002005/WAG994381	Industrial SW GP/Sand and	Active/Inact	Sep 1994	Mar 2026	SIC 3272/NAICS 3272 (Concrete Products/Glass & Glass P	SW of site			Y-Zinc; Copper; Turbidity; pH: Late reports
Sites downgradient of the Maralco Site and ROW Wetland Area and the RR culvert area													
0.481	QUALITY CARRIERS INC (aka Quala Systems)	Down gradient	Mill Creek; Drain 1	WAR000411	Industrial SW GP	Active	Jan 2025	Dec 2029	SIC 4213, 4231, 7699/NAICS 4213, 484121, 484110, 4842	NW of site			
0.558	Greenriver Corporate Park Suite D	Down gradient	Not listed	CNE308464	Industrial SW GP	Active	May 2019	Apr 2024	NAICS 493110 (General Warehousing & Storage)	W of site	0	0	N
0.684	Future Foam, Inc./FOAMEX LP	Down gradient	Mill Creek	SO3004517/WAR004517	Industrial SW GP	Active	Mar 2002	Dec 2029			104	8	zinc
0.949	72nd Ave S Extension	Down gradient	Mill Creek	WAR303712	Construction SW GP	Inactive	Nov 2015	Feb 2020			12	8	
1	Naden Site Sand Bag Removal	Down gradient	Not listed	WAR125531	Construction SW GP	Inactive	Feb 2012	Dec 2015		NW	3		
0.731	PACIFIC PAPER TUBE	Down gradient	Not listed	CNE311319	Industrial SW GP	Active							
Sites near the Maralco Site but drain to Garrison Creek													
0.636	Hexcel Corporation/Hexcel Corporation 84TH AVE S	NE	Garrison Creek	SO3000228/WAR000228/CNE000228/CN	Industrial SW GP	Inactive	Dec 1992	Aug 2023	SIC 3728: Aircraft Parts and Equipment, NEC	NE of Site			Y-many (copper, zinc, turbidity, lead, hardness, O&G,
0.591	Specialty Metals Corporation	SE	Garrison Creek	WAR307865	Industrial SW GP	Active	Apr 2019	Dec 2029			39	1	
Not included in the map - outside of key area of focus													
0.559	Assa Abloy Service Center			CNE308457	Industrial SW GP	Inactive							
0.63	Amazon.com Services LLC BF16			WAR306584	Industrial SW GP	Inactive							
0.694	MUTUAL MATERIALS KENT BLOCK PLANT			SO3000364/WAR000364	Industrial SW GP	Inactive							
0.72	SAWDUST SUPPLY			SO3002000/WAR002000	Industrial SW GP	Inactive							
0.731	212th Business Park			WAR310971	Construction SW GP	Inactive							
0.731	212th Business Park Redevelopment			WAR126680	Construction SW GP	Inactive							
0.756	GKN AEROSPACE CHEM TRONICS INC			SO3008713/WAR008713	Industrial SW GP	Inactive							
0.776	BIMBO BAKERIES USA, INC			WAR308386/CNE005564	Industrial SW GP	Active							
0.805	Earthgrains Baking Companies, Inc.			CNE005564	Industrial SW GP	Inactive							
0.805	Sara Lee Fresh Inc			No Permit	Industrial SW GP	Inactive							
0.805	Bimbo Bakeries USA, Inc.			CNE005564	Industrial SW GP	Inactive							
0.808	Allflight			WAR125326	Industrial SW GP	Active							
0.853	DI PIETRO TRUCKING CO			WAR001969/SO3001969	Industrial SW GP	Inactive							
0.875	FEDEX NATIONAL LTL SEA			WAR011258/SO3011258	Industrial SW GP	Inactive							
0.889	TECT AEROSPACE KENT			WAR001753/SO3001753	Industrial SW GP	Inactive							
0.905	DAVIS WIRE CORP			WAR000041/SO3000041	Industrial SW GP	Active	Nov 1992	Dec 1905					
0.919	AlSCO Building			WAR125654	Construction SW GP	Inactive							
0.968	Cascade Metallurgical Inc			WAR001173	Industrial SW GP	Inactive							
0.968	RAMTREAT METAL TECHNOLOGY			SO3001173	Industrial SW GP	Inactive							
0.974	Blue Origin			WAR305614	Industrial SW GP	Active							
0.98	PSE Kent Substation Operations			WAR309243	Construction SW GP	Inactive							
0.985	UNIVAR USA INC LKENT			WAR000707/SO3000707	Industrial SW GP	Active							
0.991	Boeing Kent Space Center, 18-22, 18-34 Bldg. Demo			WAR012496	Construction SW GP	Inactive							
0.995	USF Reddaway Parking Lot Expansion			WAR303825	Construction SW GP	Inactive							
0.995	ABF Freight System, Inc.			CNE312330	Industrial SW GP	Inactive							
0.995	Reddaway Parking Lot Expansion			WAR308406	Construction SW GP	Inactive							
0.999	World Wide Technology, Inc.			CNE306961	Industrial SW GP	Inactive							

Source

<https://apps.ecology.wa.gov/paris/MapSearch.aspx>



- LEGEND**
- Christopher Ditch
 - Proposed or Contingent Monitoring Well
 - Proposed Direct Push Borehole Location
 - Proposed (Modified) Direct Push Borehole Location
 - Surface Water Sample
 - Direct Push Borehole (Crete, 2021 & 2022)
 - Sediment Sample
 - Monitoring Well
 - Abandoned Monitoring Well
 - Historical Sample Location
 - Former UST
 - Former Excavation Location
 - Parcel Boundary



Maralco Site
7730 South 202nd Street
Kent, Washington
1/13/25

Figure 15
Proposed Sample Locations

Table 1 Surface Water Data Summary

Maralco Property - Kent, WA

Location	Sample ID	Date Collected	Analyte:	Metals																	Geochemical Parameters		
				Aluminum	Antimony	Arsenic	Barium	Cadmium	Total Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Vanadium	Zinc	Chloride	Fluoride	Cyanide
				Screening Level (Based on GW SL):	302 *	5.6	8	1000	0.42	71	4.8	1.2	300	2.1	50	0.01	11	3.1	0.17	80	24	230,000	960
			ISGP Benchmark (total sample; Western WA)	No Value	No Value	No Value	No Value	2.1**	No Value	No Value	14	No Value	64.6**	No Value	1.4**	No Value	No Value	3.4**	No Value	117	No Value	No Value	No Value
South End Manhole	SW-South	3/17/25	Total	1,720	1.27	4.46	33.0	0.129 J	4.73 J	2.60	44.9	3730	2.33	242	0.0582	7.38	0.537	0.087 J	16.7	36.5	80.2	5.70	0.050 U
	SW-South	3/17/25	Dissolved	372	1.12	2.58	21.7	0.182 U	2.20 J	1.79	27.0	933	0.488	200	0.0207	5.57	0.454 J	0.152 U	6.16	22.7 J	NA	NA	NA
80th Ave Ditch	SW-East	3/17/25	Total	368	1.60	0.541 J	13.6	0.202	6.06 U	0.265 J	7.32	370	0.812	25.3	0.00572	3.64	0.505 U	0.152 U	1.59	68.5	4.48	0.212	0.050 U
	SW-East	3/17/25	Dissolved	97.5	1.36	0.453 J	10.3	0.143 J	6.06 U	0.292 J	4.62	86.0	0.251	18.2	0.00455	3.64 U	0.505 U	0.152 U	0.828	55.8	NA	NA	NA

Notes:

Bold - analyte detected

Reported concentration exceeds a PCUL value

Reported concentration exceeds a ISGP Benchmark

ug/L - micrograms per liter

ISGP - Industrial Stormwater General Permit, effective on January 1, 2025; https://fortress.wa.gov/ecy/ezshare/wq/permits/ISGP_2025_FinalPermitwithErratta.pdf

NA - Not analyzed

J - Reported value is an estimate.

U - Compound is not detected at or above reporting limit

* Aluminum value based on the West Coast Marine Forest ecoregion and that the default value is 302 ug/L.

** ISGP Benchmarks are from Table 4 and may not apply. Table 4 applies to "Hazardous Waste Treatment, Storage and Disposal Facilities and Dangerous Waste Recyclers subject to the provisions of Resource Conservation and Recovery Act (RCRA) Subtitle C"

Attachment 2 – Copies of Laboratory Reports

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya
Ann Webber-Bruya
Michael Erdahl
Vineta Mills
Eric Young

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

June 10, 2025

Jamie Stevens, Project Manager
Crete Consulting
16300 Christensen Road, Suite 214
Tukwila, WA 98188

Dear Ms Stevens:

Included are the results from the testing of material submitted on May 23, 2025 from the Maralco Supplemental RI MARALCO, F&BI 505418 project. There are 13 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Rusty Jones, Grant Hainsworth
CTC0610R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 23, 2025 by Friedman & Bruya, Inc. from the Crete Consulting Maralco Supplemental RI MARALCO, F&BI 505418 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Crete Consulting</u>
505418 -01	MW5R2
505418 -02	MW3R
505418 -03	MW8R
505418 -04	MW1
505418 -05	MW4R
505418 -06	MW10
505418 -07	MW9R
505418 -08	MW2
505418 -09	MW11
505418 -10	DUP-0525
505418 -11	MW6R
505418 -12	MW12
505418 -13	MW7
505418 -14	MW13
505418 -15	MW14

The samples were sent to Alliance Technical Group for fluoride and chloride testing. In addition, samples MW10 and MW9R were sent to ATG for EPH and VPH testing. The report is enclosed.

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/10/25

Date Received: 05/23/25

Project: Maralco Supplemental RI MARALCO, F&BI 505418

Date Extracted: 05/28/25

Date Analyzed: 05/29/25

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES
USING EPA METHOD 8021B**

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Surrogate (% Recovery)</u> Limit (50-150)
MW9R 505418-07	<1	<1	<1	<3	92
Method Blank 05-1277 MB	<1	<1	<1	<3	97

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/10/25

Date Received: 05/23/25

Project: Maralco Supplemental RI MARALCO, F&BI 505418

Date Extracted: 05/27/25

Date Analyzed: 05/28/25 and 05/30/25

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-D_x
Sample Extracts Passed Through a
Silica Gel Column Prior to Analysis
Results Reported as ug/L (ppb)**

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 41-152)
MW5R2 505418-01	<50	<200	114
MW4R 505418-05	<50	<200	110
MW10 505418-06	<50	<200	83
MW9R 505418-07	52	<200	124
DUP-0525 505418-10	<50	<200	109
MW6R 505418-11	<50	<200	123
MW7 505418-13	<50	<200	101
Method Blank 05-1300 MB	<50	<200	122

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/10/25

Date Received: 05/23/25

Project: Maralco Supplemental RI MARALCO, F&BI 505418

Date Extracted: 05/27/25

Date Analyzed: 05/27/25

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-D_x**
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 41-152)
MW5R2 505418-01	160 x	<200	130
MW4R 505418-05	210 x	<200	124
MW10 505418-06	320 x	<200	105
MW9R 505418-07	2,600 x	540 x	ip
DUP-0525 505418-10	<50	<200	129
MW6R 505418-11	74 x	<200	140
MW7 505418-13	<50	<200	120
Method Blank 05-1300 MB	<50	<200	141

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	MW4R	Client:	Crete Consulting
Date Received:	05/23/25	Project:	Maralco Supplemental, F&BI 505418
Date Extracted:	05/27/25	Lab ID:	505418-05 1/0.5
Date Analyzed:	05/28/25	Data File:	052810.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	33	10	79
Phenol-d6	26	10	104
Nitrobenzene-d5	74	31	129
2-Fluorobiphenyl	78	32	130
2,4,6-Tribromophenol	92	22	158
Terphenyl-d14	94	48	155

Compounds:	Concentration ug/L (ppb)
3-Methylphenol + 4-Methylphenol	<0.25
Naphthalene	<0.045
2-Methylnaphthalene	<0.0075
1-Methylnaphthalene	<0.01
Acenaphthylene	<0.004 j
Acenaphthene	<0.004 j
Fluorene	<0.004 j
Phenanthrene	<0.008
Anthracene	<0.005
Fluoranthene	<0.0075
Pyrene	<0.0075
Benz(a)anthracene	<0.01
Chrysene	<0.005
Bis(2-ethylhexyl) phthalate	0.23
Di-n-octyl phthalate	<0.2
Benzo(a)pyrene	<0.003 j
Benzo(b)fluoranthene	<0.0025 j
Benzo(k)fluoranthene	<0.0025 j
Indeno(1,2,3-cd)pyrene	<0.0045 j
Dibenz(a,h)anthracene	<0.0075
Benzo(g,h,i)perylene	<0.0075

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	MW10	Client:	Crete Consulting
Date Received:	05/23/25	Project:	Maralco Supplemental, F&BI 505418
Date Extracted:	05/27/25	Lab ID:	505418-06
Date Analyzed:	05/28/25	Data File:	052811.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	1 ip	10	79
Phenol-d6	40	10	104
Nitrobenzene-d5	74	31	129
2-Fluorobiphenyl	79	32	130
2,4,6-Tribromophenol	89	22	158
Terphenyl-d14	92	48	155

Compounds:	Concentration ug/L (ppb)
3-Methylphenol + 4-Methylphenol	<0.5
Naphthalene	<0.09
2-Methylnaphthalene	<0.015
1-Methylnaphthalene	<0.02
Acenaphthylene	<0.008 j
Acenaphthene	0.079
Fluorene	<0.008 j
Phenanthrene	<0.016
Anthracene	<0.01
Fluoranthene	<0.015
Pyrene	<0.015
Benz(a)anthracene	<0.02
Chrysene	<0.01
Bis(2-ethylhexyl) phthalate	0.52
Di-n-octyl phthalate	<0.4
Benzo(a)pyrene	<0.006 j
Benzo(b)fluoranthene	<0.005 j
Benzo(k)fluoranthene	<0.005 j
Indeno(1,2,3-cd)pyrene	<0.009 j
Dibenz(a,h)anthracene	<0.015
Benzo(g,h,i)perylene	<0.015

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	MW9R	Client:	Crete Consulting
Date Received:	05/23/25	Project:	Maralco Supplemental, F&BI 505418
Date Extracted:	05/27/25	Lab ID:	505418-07 1/0.5
Date Analyzed:	05/28/25	Data File:	052812.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	34	10	79
Phenol-d6	27	10	104
Nitrobenzene-d5	77	31	129
2-Fluorobiphenyl	78	32	130
2,4,6-Tribromophenol	96	22	158
Terphenyl-d14	94	48	155

Compounds:	Concentration ug/L (ppb)
3-Methylphenol + 4-Methylphenol	<0.25
Naphthalene	<0.045
2-Methylnaphthalene	<0.0075
1-Methylnaphthalene	<0.01
Acenaphthylene	<0.004 j
Acenaphthene	<0.004 j
Fluorene	<0.004 j
Phenanthrene	<0.008
Anthracene	<0.005
Fluoranthene	<0.0075
Pyrene	<0.0075
Benz(a)anthracene	<0.01
Chrysene	<0.005
Bis(2-ethylhexyl) phthalate	0.27
Di-n-octyl phthalate	<0.2
Benzo(a)pyrene	<0.003 j
Benzo(b)fluoranthene	<0.0025 j
Benzo(k)fluoranthene	<0.0025 j
Indeno(1,2,3-cd)pyrene	<0.0045 j
Dibenz(a,h)anthracene	<0.0075
Benzo(g,h,i)perylene	<0.0075

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	Method Blank	Client:	Crete Consulting
Date Received:	Not Applicable	Project:	Maralco Supplemental, F&BI 505418
Date Extracted:	05/27/25	Lab ID:	05-1305 mb 1/0.5
Date Analyzed:	05/27/25	Data File:	052705.D
Matrix:	Water	Instrument:	GCMS12
Units:	ug/L (ppb)	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	38	11	65
Phenol-d6	27	11	65
Nitrobenzene-d5	87	11	173
2-Fluorobiphenyl	82	25	128
2,4,6-Tribromophenol	57 ca	10	140
Terphenyl-d14	79	47	142

Compounds:	Concentration ug/L (ppb)
3-Methylphenol + 4-Methylphenol	<0.25
Naphthalene	<0.045
2-Methylnaphthalene	<0.0075
1-Methylnaphthalene	<0.01
Acenaphthylene	<0.004 j
Acenaphthene	<0.004 j
Fluorene	<0.004 j
Phenanthrene	<0.008
Anthracene	<0.005
Fluoranthene	<0.0075
Pyrene	<0.0075
Benz(a)anthracene	<0.01
Chrysene	<0.005
Bis(2-ethylhexyl) phthalate	<0.15 ca j
Di-n-octyl phthalate	<0.2 ca
Benzo(a)pyrene	<0.003 j
Benzo(b)fluoranthene	<0.0025 j
Benzo(k)fluoranthene	<0.0025 j
Indeno(1,2,3-cd)pyrene	<0.0045 j
Dibenz(a,h)anthracene	<0.0075
Benzo(g,h,i)perylene	<0.0075

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/10/25

Date Received: 05/23/25

Project: Maralco Supplemental RI MARALCO, F&BI 505418

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE,
AND XYLENES
USING EPA METHOD 8021B**

Laboratory Code: 505364-22 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	104	70-130
Toluene	ug/L (ppb)	50	102	70-130
Ethylbenzene	ug/L (ppb)	50	104	70-130
Xylenes	ug/L (ppb)	150	100	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/10/25

Date Received: 05/23/25

Project: Maralco Supplemental RI MARALCO, F&BI 505418

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-D_x**

Laboratory Code: Laboratory Control Sample Silica Gel

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	100	96	65-151	4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/10/25

Date Received: 05/23/25

Project: Maralco Supplemental RI MARALCO, F&BI 505418

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-D_x**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	116	112	72-139	4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/10/25

Date Received: 05/23/25

Project: Maralco Supplemental RI MARALCO, F&BI 505418

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270E**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
3-Methylphenol + 4-Methylphenol	ug/L (ppb)	10	69	65	11-88	6
Naphthalene	ug/L (ppb)	10	73	72	50-105	1
2-Methylnaphthalene	ug/L (ppb)	10	72	71	52-113	1
1-Methylnaphthalene	ug/L (ppb)	10	72	72	51-115	0
Acenaphthylene	ug/L (ppb)	10	83	83	60-114	0
Acenaphthene	ug/L (ppb)	10	77	79	57-110	3
Fluorene	ug/L (ppb)	10	85	85	61-115	0
Phenanthrene	ug/L (ppb)	10	83	82	69-115	1
Anthracene	ug/L (ppb)	10	87	86	65-121	1
Fluoranthene	ug/L (ppb)	10	92	89	71-127	3
Pyrene	ug/L (ppb)	10	95	92	62-133	3
Benz(a)anthracene	ug/L (ppb)	10	90	89	66-131	1
Chrysene	ug/L (ppb)	10	85	85	66-129	0
Bis(2-ethylhexyl) phthalate	ug/L (ppb)	10	99	99	52-142	0
Di-n-octyl phthalate	ug/L (ppb)	10	92	92	36-151	0
Benzo(a)pyrene	ug/L (ppb)	10	90	90	66-129	0
Benzo(b)fluoranthene	ug/L (ppb)	10	94	93	55-144	1
Benzo(k)fluoranthene	ug/L (ppb)	10	96	94	58-139	2
Indeno(1,2,3-cd)pyrene	ug/L (ppb)	10	67	74	62-136	10
Dibenz(a,h)anthracene	ug/L (ppb)	10	64	74	55-146	14
Benzo(g,h,i)perylene	ug/L (ppb)	10	66	74	58-137	11

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. The value reported is an estimate.
- c - The presence of the analyte may be due to carryover from previous sample injections.
- cf - The sample was centrifuged prior to analysis.
- d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv - Insufficient sample volume was available to achieve normal reporting limits.
- f - The sample was laboratory filtered prior to analysis.
- fb - The analyte was detected in the method blank.
- fc - The analyte is a common laboratory and field contaminant.
- hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs - Headspace was present in the container used for analysis.
- ht - The analysis was performed outside the method or client-specified holding time requirement.
- ip - Recovery fell outside of control limits due to sample matrix effects.
- j - The analyte concentration is reported between the method detection limit and the lowest calibration point. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- k - The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

505418

SAMPLE CHAIN OF CUSTODY

05/23/25

F4/vw2/K3

Page # 1 of 2

Report To: Jones/Greaves/Halsworth
 Company: CRETE Consulting
 Address: _____
 City, State, ZIP: _____
 Phone: 832.330.1354 Email: _____

SAMPLERS (signature) <u>Rusty Jones</u>	PROJECT NAME <u>Maralee Supplemental R.I.</u>	PO # <u>MARALCO</u>
REMARKS For: <u>EPH/PHH</u> <u>report to get analytes and all results to AHS where possible</u> Project specific RIs? - Yes / No	INVOICE TO <u>CRETE</u>	

TURNAROUND TIME
 Standard turnaround
 RUSH
 Rush charges authorized by: _____
 SAMPLE DISPOSAL
 Archive samples
 Other _____
 Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes	
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Anions/Fi/Cl	PAHs/CPAHs	Project SVOCs		EPH + PHH
MW5R2	01A-B	5/20/2025	1030	GRAB WATER	2	X							X	X	X	X	* See 5/23/25 email for Project SVOCs. * All TPA-Dx with and without SVOCs
MW3R	02		1122		1	X							X				
MW8R	03		1212		1	X							X				
MW1	04		1307		1	X							X				
MW4R	05A-D		1404		4	X							X	X			* Target analytes Report to AHS if possible
MW10	06A-F	5/21/2025	0920	GRAB WATER	6	X							X	X	X		
MW9R	07A-J		1020		10	X			X				X				
MW2	08		1130		1	X							X				
MW11	09A-B		1218		2	X							X				
DUPORS DUF-0525	10A-C	5/22/2025	0001	GRAB WATER	3	X							X				* Target analytes Report to AHS if possible

Friedman & Bruya, Inc.
 Ph. (206) 285-8282

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<u>R. Jones</u>	<u>Rusty Jones</u>	<u>CRETE</u>	<u>5/23/25</u>	<u>12:09</u>
<u>M</u>	<u>Anh Pham</u>	<u>FBI</u>	<u>5/23/25</u>	<u>18:09</u>
Relinquished by:		Samples received at		
Received by:				

505418

SAMPLE CHAIN OF CUSTODY

05/28/25 Fri 12:09

Page # 2 of 2

Report To Jones Stevens Plainsworth

Company CRE Consulting

Address _____

City, State, ZIP _____

Phone 832.330.1359 Email _____

SAMPLERS (signature) <u>Rusty Jones</u>	PROJECT NAME <u>Muralco Supplemental P.I.</u>	PO # <u>MRALCO</u>
REMARKS <u>For BTL/WH, report target analytes and all other results to MWS where possible. Project specific PLS. Yes / No</u>	INVOICE TO <u>CRE</u>	

TURNAROUND TIME <input checked="" type="checkbox"/> Standard turnaround <input type="checkbox"/> RUSH Rush charges authorized by: _____	SAMPLE DISPOSAL <input type="checkbox"/> Archive samples <input type="checkbox"/> Other _____ Default: Dispose after 30 days
--	---

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes	
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Amiox/CF/H	PAHs/ePAHs	Project SVOCs		VPH+TEPH
MW6R	11 A-B	5/22/2025	1007	GRAB WATER	2	X											* Kill TPT-Dx with and w/out SGL. *
MW12	18		1102		1												
MW7	13 A-C	↓	1203	↓	3	X											*
MW13	14 A-B	5/23/2025	0931	GRAB WATER	2												
MW14	15 ↓	↓	1018	↓	2												

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Reinquished by: <u>R. Jones</u>	<u>Rusty Jones</u>	<u>CRE</u>	<u>5/23/2025</u>	<u>12:09</u>
Received by: <u>M</u>	<u>Ana Phan</u>	<u>FB I</u>	<u>5/23/25</u>	<u>12:09</u>
Reinquished by:		Samples received at	at	°C
Received by:				

Friedman & Bruya, Inc.
Ph. (206) 285-8282

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 505418 CLIENT Crete INITIALS/ DATE: AP 5/23/25

If custody seals are present on cooler, are they intact? NA YES NO

Cooler/Sample temperature _____ °C
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? YES NO

How did samples arrive?
 Over the Counter Picked up by F&BI FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? YES NO Initials/ DATE: AP 5/23/25
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 0-3 days

Are the samples clearly identified? (explain "no" answer below) YES NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) YES NO

Were appropriate sample containers used? YES NO Unknown

If custody seals are present on samples, are they intact? NA YES NO

Are samples requiring no headspace, headspace free? NA YES NO

Is the following information provided on the COC, and does it match the sample label? (explain "no" answer below)

- Sample ID's Yes No _____ Not on COC/label
- Date Sampled Yes No _____ Not on COC/label
- Time Sampled Yes No _____ Not on COC/label
- # of Containers Yes No _____
- Relinquished Yes No _____
- Requested analysis Yes On Hold _____

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? NA YES NO

Number of unused TO15 canisters** _____ Number of unused TO17 tubes _____

**Fill out Green manifolds billing sheet

Friedman & Bruya
Michael Erdahl
5500 4th Ave S
Seattle, WA 98108

RE: 505418,
Work Order Number: 2505536

June 09, 2025

Attention Michael Erdahl:

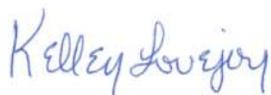
Alliance Technical Group, LLC - Seattle received 15 sample(s) on 5/23/2025 for the analyses presented in the following report.

Extractable Petroleum Hydrocarbons by NWEPH
Ion Chromatography by EPA 300.0
Volatile Petroleum Hydrocarbons by NWVPH

All analyses were performed according to our accredited Quality Assurance program. Please contact the laboratory if you should have any questions about the results.

Alliance Technical Group is committed to accuracy, speed, and customer service. Thank you for choosing Alliance Technical Group's Seattle laboratory team for your analytical needs. We appreciate this opportunity to serve you!

Sincerely,



Kelley Lovejoy
Project Manager

DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.4 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910

Original



CLIENT: Friedman & Bruya
Project: 505418
Work Order: 2505536

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2505536-001	MW5R2	05/20/2025 10:30 AM	05/23/2025 2:12 PM
2505536-002	MW3R	05/20/2025 11:22 AM	05/23/2025 2:12 PM
2505536-003	MW8R	05/20/2025 12:12 PM	05/23/2025 2:12 PM
2505536-004	MW1	05/20/2025 1:07 PM	05/23/2025 2:12 PM
2505536-005	MW4R	05/20/2025 2:04 PM	05/23/2025 2:12 PM
2505536-006	MW10	05/21/2025 9:20 AM	05/23/2025 2:12 PM
2505536-007	MW9R	05/21/2025 10:20 AM	05/23/2025 2:12 PM
2505536-008	MW2	05/21/2025 11:30 AM	05/23/2025 2:12 PM
2505536-009	MW11	05/21/2025 12:18 PM	05/23/2025 2:12 PM
2505536-010	DUP-0525	05/22/2025 12:01 AM	05/23/2025 2:12 PM
2505536-011	MW-6R	05/22/2025 10:07 AM	05/23/2025 2:12 PM
2505536-012	MW-12	05/22/2025 11:02 AM	05/23/2025 2:12 PM
2505536-013	MW7	05/22/2025 12:03 PM	05/23/2025 2:12 PM
2505536-014	MW13	05/23/2025 9:31 AM	05/23/2025 2:12 PM
2505536-015	MW14	05/23/2025 10:18 AM	05/23/2025 2:12 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

CLIENT: Friedman & Bruya

Project: 505418

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Please note: Volatile Petroleum Hydrocarbons by NWVPH samples were re-analyzed out of hold due to initial CCV failures. The re-analysis produced similar results for target analytes.

Qualifiers:

- * - Associated LCS is outside of control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Method Detection Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- DUP - Sample Duplicate
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MCL - Maximum Contaminant Level
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- REP - Sample Replicate
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: 2505536
Date Reported: 6/9/2025

Client: Friedman & Bruya
Project: 505418
Lab ID: 2505536-001
Client Sample ID: MW5R2

Collection Date: 5/20/2025 10:30:00 AM
Matrix: Water

Analyses	Result	RL	MDL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 47930 Analyst: SS

Fluoride	10.1	5.00	1.44	DQ	mg/L	50	06/02/25 11:07:00
Chloride	1,090	80.0	25.3	D	mg/L	400	06/02/25 18:20:00

NOTES:

Q - Associated calibration verification is below acceptance criteria (83.8%, nominal 90-110). Result may be low-biased.

Client: Friedman & Bruya
Project: 505418
Lab ID: 2505536-002
Client Sample ID: MW3R

Collection Date: 5/20/2025 11:22:00 AM
Matrix: Water

Analyses	Result	RL	MDL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 47930 Analyst: SS

Fluoride	46.6	2.00	0.577	DQ	mg/L	20	06/02/25 11:30:00
Chloride	115	4.00	1.26	D	mg/L	20	06/02/25 11:30:00

NOTES:

Q - Associated calibration verification is below acceptance criteria (83.8%, nominal 90-110). Result may be low-biased.

Client: Friedman & Bruya
Project: 505418
Lab ID: 2505536-003
Client Sample ID: MW8R

Collection Date: 5/20/2025 12:12:00 PM
Matrix: Water

Analyses	Result	RL	MDL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 47930 Analyst: SS

Fluoride	0.381	0.100	0.0288		mg/L	1	06/01/25 6:46:00
Chloride	30.9	2.00	0.631	D	mg/L	10	06/02/25 11:53:00



Analytical Report

Work Order: 2505536
Date Reported: 6/9/2025

Client: Friedman & Bruya

Collection Date: 5/20/2025 1:07:00 PM

Project: 505418

Lab ID: 2505536-004

Matrix: Water

Client Sample ID: MW1

Analyses	Result	RL	MDL	Qual	Units	DF	Date Analyzed
<u>Ion Chromatography by EPA 300.0</u>			Batch ID: 47930		Analyst: SS		
Fluoride	0.0980	0.100	0.0288	J	mg/L	1	06/01/25 7:09:00
Chloride	11.8	2.00	0.631	D	mg/L	10	06/02/25 12:16:00

Client: Friedman & Bruya

Collection Date: 5/20/2025 2:04:00 PM

Project: 505418

Lab ID: 2505536-005

Matrix: Water

Client Sample ID: MW4R

Analyses	Result	RL	MDL	Qual	Units	DF	Date Analyzed
<u>Ion Chromatography by EPA 300.0</u>			Batch ID: 47930		Analyst: SS		
Fluoride	0.856	0.100	0.0288		mg/L	1	06/01/25 7:32:00
Chloride	396	20.0	6.31	D	mg/L	100	06/02/25 12:39:00



Analytical Report

Work Order: **2505536**
 Date Reported: **6/9/2025**

Client: Friedman & Bruya

Collection Date: 5/21/2025 9:20:00 AM

Project: 505418

Lab ID: 2505536-006

Matrix: Water

Client Sample ID: MW10

Analyses	Result	RL	MDL	Qual	Units	DF	Date Analyzed
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Extractable Petroleum Hydrocarbons by NWEPH

Batch ID: 47852

Analyst: ZD

Aliphatic Hydrocarbon (C8-C10)	46.9	79.4	39.3	J	µg/L	1	06/05/25 17:30:04
Aliphatic Hydrocarbon (C10-C12)	ND	39.7	20.5		µg/L	1	06/05/25 17:30:04
Aliphatic Hydrocarbon (C12-C16)	ND	39.7	9.78		µg/L	1	06/05/25 17:30:04
Aliphatic Hydrocarbon (C16-C21)	ND	39.7	14.2		µg/L	1	06/05/25 17:30:04
Aliphatic Hydrocarbon (C21-C34)	ND	39.7	22.4		µg/L	1	06/05/25 17:30:04
Aromatic Hydrocarbon (C8-C10)	128	79.4	25.9		µg/L	1	06/06/25 15:21:15
Aromatic Hydrocarbon (C10-C12)	ND	39.7	8.84		µg/L	1	06/06/25 15:21:15
Aromatic Hydrocarbon (C12-C16)	18.3	39.7	6.93	J	µg/L	1	06/06/25 15:21:15
Aromatic Hydrocarbon (C16-C21)	29.5	39.7	12.7	J	µg/L	1	06/05/25 18:58:00
Aromatic Hydrocarbon (C21-C34)	ND	39.7	26.4		µg/L	1	06/05/25 18:58:00
Surr: 1-Chlorooctadecane	37.0	50 - 150		S	%Rec	1	06/05/25 17:30:04
Surr: o-Terphenyl	50.6	50 - 150			%Rec	1	06/06/25 15:21:15

NOTES:

S - Outlying surrogate recovery observed.

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 47885

Analyst: SG

Hexane	ND	20.0	9.94	H	µg/L	1	06/05/25 1:50:02
Aliphatic Hydrocarbon (C5-C6)	ND	50.0	21.2		µg/L	1	05/28/25 17:41:00
Aliphatic Hydrocarbon (C6-C8)	673	50.0	26.8		µg/L	1	05/28/25 17:41:00
Aliphatic Hydrocarbon (C8-C10)	37.5	50.0	14.2	J	µg/L	1	05/28/25 17:41:00
Aliphatic Hydrocarbon (C10-C12)	ND	40.0	10.3		µg/L	1	05/28/25 17:41:00
Aromatic Hydrocarbon (C8-C10)	ND	60.0	29.9		µg/L	1	05/28/25 17:41:00
Aromatic Hydrocarbon (C10-C12)	ND	50.0	2.13		µg/L	1	05/28/25 17:41:00
Aromatic Hydrocarbon (C12-C13)	ND	50.0	7.40		µg/L	1	05/28/25 17:41:00
Benzene	ND	10.0	4.08	H	µg/L	1	06/05/25 1:50:02
Toluene	ND	10.0	2.22	H	µg/L	1	06/05/25 1:50:02
Ethylbenzene	ND	10.0	3.80	H	µg/L	1	06/05/25 1:50:02
m,p-Xylene	ND	20.0	6.26	H	µg/L	1	06/05/25 1:50:02
o-Xylene	ND	10.0	2.62	H	µg/L	1	06/05/25 1:50:02
Naphthalene	ND	10.0	12.2	H	µg/L	1	06/05/25 1:50:02



Analytical Report

Work Order: **2505536**
Date Reported: **6/9/2025**

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 47885 Analyst: SG

Methyl tert-butyl ether (MTBE)	ND	10.0	0.661	H	µg/L	1	06/05/25 1:50:02
Surr: 2,5-dibromotoluene	60.1	60 - 140			%Rec	1	05/28/25 17:41:00

Ion Chromatography by EPA 300.0

Batch ID: 47930 Analyst: SS

Fluoride	0.175	0.100	0.0288		mg/L	1	06/01/25 7:55:00
Chloride	344	20.0	6.31	D	mg/L	100	06/02/25 13:02:00

Client: Friedman & Bruya

Collection Date: 5/21/2025 10:20:00 AM

Project: 505418

Lab ID: 2505536-007

Matrix: Water

Client Sample ID: MW9R

Analyses	Result	RL	MDL	Qual	Units	DF	Date Analyzed
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Extractable Petroleum Hydrocarbons by NWEPH

Batch ID: 47852

Analyst: ZD

Aliphatic Hydrocarbon (C8-C10)	49.3	79.1	39.2	J	µg/L	1	06/05/25 17:52:07
Aliphatic Hydrocarbon (C10-C12)	ND	39.6	20.4		µg/L	1	06/05/25 17:52:07
Aliphatic Hydrocarbon (C12-C16)	ND	39.6	9.75		µg/L	1	06/05/25 17:52:07
Aliphatic Hydrocarbon (C16-C21)	ND	39.6	14.1		µg/L	1	06/05/25 17:52:07
Aliphatic Hydrocarbon (C21-C34)	ND	39.6	22.3		µg/L	1	06/05/25 17:52:07
Aromatic Hydrocarbon (C8-C10)	111	79.1	25.8		µg/L	1	06/05/25 19:19:55
Aromatic Hydrocarbon (C10-C12)	ND	39.6	8.81		µg/L	1	06/05/25 19:19:55
Aromatic Hydrocarbon (C12-C16)	12.5	39.6	6.91	J	µg/L	1	06/05/25 19:19:55
Aromatic Hydrocarbon (C16-C21)	53.1	39.6	12.6		µg/L	1	06/05/25 19:19:55
Aromatic Hydrocarbon (C21-C34)	27.2	39.6	26.3	J	µg/L	1	06/05/25 19:19:55
Surr: 1-Chlorooctadecane	56.1	50 - 150			%Rec	1	06/05/25 17:52:07
Surr: o-Terphenyl	66.4	50 - 150			%Rec	1	06/05/25 19:19:55

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 47885

Analyst: SG

Hexane	ND	20.0	9.94	H	µg/L	1	06/05/25 2:26:10
Aliphatic Hydrocarbon (C5-C6)	ND	50.0	21.2		µg/L	1	05/28/25 18:54:00
Aliphatic Hydrocarbon (C6-C8)	ND	50.0	26.8		µg/L	1	05/28/25 18:54:00
Aliphatic Hydrocarbon (C8-C10)	ND	50.0	14.2		µg/L	1	05/28/25 18:54:00
Aliphatic Hydrocarbon (C10-C12)	ND	40.0	10.3		µg/L	1	05/28/25 18:54:00
Aromatic Hydrocarbon (C8-C10)	ND	60.0	29.9		µg/L	1	05/28/25 18:54:00
Aromatic Hydrocarbon (C10-C12)	11.4	50.0	2.13	J	µg/L	1	05/28/25 18:54:00
Aromatic Hydrocarbon (C12-C13)	ND	50.0	7.40		µg/L	1	05/28/25 18:54:00
Benzene	ND	10.0	4.08	H	µg/L	1	06/05/25 2:26:10
Toluene	ND	10.0	2.22	H	µg/L	1	06/05/25 2:26:10
Ethylbenzene	ND	10.0	3.80	H	µg/L	1	06/05/25 2:26:10
m,p-Xylene	ND	20.0	6.26	H	µg/L	1	06/05/25 2:26:10
o-Xylene	ND	10.0	2.62	H	µg/L	1	06/05/25 2:26:10
Naphthalene	ND	10.0	12.2	H	µg/L	1	06/05/25 2:26:10
Methyl tert-butyl ether (MTBE)	ND	10.0	0.661	H	µg/L	1	06/05/25 2:26:10



Analytical Report

Work Order: **2505536**
 Date Reported: **6/9/2025**

Volatile Petroleum Hydrocarbons by NWVPH

Batch ID: 47885 Analyst: SG

Surr: 2,5-dibromotoluene 67.4 60 - 140 %Rec 1 05/28/25 18:54:00

Ion Chromatography by EPA 300.0

Batch ID: 47930 Analyst: SS

Fluoride 0.452 0.100 0.0288 mg/L 1 06/01/25 8:18:00
 Chloride 659 40.0 12.6 D mg/L 200 06/02/25 18:43:00

Client: Friedman & Bruya
Project: 505418
Lab ID: 2505536-008
Client Sample ID: MW2

Collection Date: 5/21/2025 11:30:00 AM
Matrix: Water

Analyses	Result	RL	MDL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 47930 Analyst: SS

Fluoride 0.168 0.100 0.0288 mg/L 1 06/01/25 8:41:00
 Chloride 15.9 2.00 0.631 D mg/L 10 06/02/25 13:48:00

Client: Friedman & Bruya
Project: 505418
Lab ID: 2505536-009
Client Sample ID: MW11

Collection Date: 5/21/2025 12:18:00 PM
Matrix: Water

Analyses	Result	RL	MDL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 47930 Analyst: SS

Fluoride 0.123 0.100 0.0288 mg/L 1 06/01/25 9:04:00
 Chloride 15.7 2.00 0.631 D mg/L 10 06/02/25 14:12:00



Analytical Report

Work Order: 2505536
Date Reported: 6/9/2025

Client: Friedman & Bruya
Project: 505418
Lab ID: 2505536-010
Client Sample ID: DUP-0525

Collection Date: 5/22/2025 12:01:00 AM
Matrix: Water

Analyses	Result	RL	MDL	Qual	Units	DF	Date Analyzed
<u>Ion Chromatography by EPA 300.0</u>			Batch ID: 47930		Analyst: SS		
Fluoride	0.908	0.100	0.0288		mg/L	1	06/01/25 9:27:00
Chloride	71.9	4.00	1.26	D	mg/L	20	06/02/25 14:35:00

Client: Friedman & Bruya
Project: 505418
Lab ID: 2505536-011
Client Sample ID: MW-6R

Collection Date: 5/22/2025 10:07:00 AM
Matrix: Water

Analyses	Result	RL	MDL	Qual	Units	DF	Date Analyzed
<u>Ion Chromatography by EPA 300.0</u>			Batch ID: 47930		Analyst: SS		
Fluoride	0.340	0.100	0.0288		mg/L	1	06/01/25 10:37:00
Chloride	691	40.0	12.6	D	mg/L	200	06/02/25 19:06:00

Client: Friedman & Bruya
Project: 505418
Lab ID: 2505536-012
Client Sample ID: MW-12

Collection Date: 5/22/2025 11:02:00 AM
Matrix: Water

Analyses	Result	RL	MDL	Qual	Units	DF	Date Analyzed
<u>Ion Chromatography by EPA 300.0</u>			Batch ID: 47930		Analyst: SS		
Fluoride	0.338	0.100	0.0288		mg/L	1	06/01/25 11:00:00
Chloride	213	20.0	6.31	D	mg/L	100	06/02/25 16:07:00



Analytical Report

Work Order: 2505536
Date Reported: 6/9/2025

Client: Friedman & Bruya

Collection Date: 5/22/2025 12:03:00 PM

Project: 505418

Lab ID: 2505536-013

Matrix: Water

Client Sample ID: MW7

Analyses	Result	RL	MDL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 47930

Analyst: SS

Fluoride	0.930	0.100	0.0288		mg/L	1	06/01/25 11:23:00
Chloride	72.4	4.00	1.26	D	mg/L	20	06/02/25 16:30:00

Client: Friedman & Bruya

Collection Date: 5/23/2025 9:31:00 AM

Project: 505418

Lab ID: 2505536-014

Matrix: Water

Client Sample ID: MW13

Analyses	Result	RL	MDL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 47930

Analyst: SS

Fluoride	0.120	0.100	0.0288		mg/L	1	06/01/25 11:46:00
Chloride	2.46	0.200	0.0631		mg/L	1	06/01/25 11:46:00

Client: Friedman & Bruya

Collection Date: 5/23/2025 10:18:00 AM

Project: 505418

Lab ID: 2505536-015

Matrix: Water

Client Sample ID: MW14

Analyses	Result	RL	MDL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 47930

Analyst: SS

Fluoride	0.119	0.100	0.0288		mg/L	1	06/01/25 12:09:00
Chloride	4.63	0.200	0.0631		mg/L	1	06/01/25 12:09:00

Work Order: 2505536
 CLIENT: Friedman & Bruya
 Project: 505418

QC SUMMARY REPORT
Ion Chromatography by EPA 300.0

Sample ID: MB-47930	SampType: MBLK	Units: mg/L			Prep Date: 5/31/2025	RunNo: 100245					
Client ID: MBLKW	Batch ID: 47930				Analysis Date: 6/1/2025	SeqNo: 2088709					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.100									
Chloride	ND	0.200									

Sample ID: LCS-47930	SampType: LCS	Units: mg/L			Prep Date: 5/31/2025	RunNo: 100245					
Client ID: LCSW	Batch ID: 47930				Analysis Date: 6/1/2025	SeqNo: 2088710					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.466	0.100	0.5000	0	93.2	90	110				
Chloride	0.708	0.200	0.7500	0	94.4	90	110				

Sample ID: 2505639-001CDUP	SampType: DUP	Units: mg/L			Prep Date: 5/31/2025	RunNo: 100245					
Client ID: BATCH	Batch ID: 47930				Analysis Date: 6/1/2025	SeqNo: 2088720					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.0830	0.100						0.08400	1.20	20	J
Chloride	3.59	0.200						3.540	1.35	20	

Sample ID: 2505639-001CMS	SampType: MS	Units: mg/L			Prep Date: 5/31/2025	RunNo: 100245					
Client ID: BATCH	Batch ID: 47930				Analysis Date: 6/1/2025	SeqNo: 2088721					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.543	0.100	0.5000	0.08400	91.8	80	120				
Chloride	4.29	0.200	0.7500	3.540	99.9	80	120				

Sample ID: 2505639-001CMSD	SampType: MSD	Units: mg/L			Prep Date: 5/31/2025	RunNo: 100245					
Client ID: BATCH	Batch ID: 47930				Analysis Date: 6/1/2025	SeqNo: 2088722					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.547	0.100	0.5000	0.08400	92.6	80	120	0.5430	0.734	20	
Chloride	4.30	0.200	0.7500	3.540	102	80	120	4.289	0.326	20	

Work Order: 2505536
CLIENT: Friedman & Bruya
Project: 505418

QC SUMMARY REPORT
Ion Chromatography by EPA 300.0

Sample ID: 2505639-001CMSD	SampType: MSD	Units: mg/L	Prep Date: 5/31/2025	RunNo: 100245							
Client ID: BATCH	Batch ID: 47930	Analysis Date: 6/1/2025	SeqNo: 2088722								
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: 2505671-001BDUP	SampType: DUP	Units: mg/L	Prep Date: 5/31/2025	RunNo: 100245							
Client ID: BATCH	Batch ID: 47930	Analysis Date: 6/1/2025	SeqNo: 2088724								
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.643	0.100						0.6400	0.468	20	
Chloride	3.38	0.200						3.368	0.356	20	

Sample ID: 2505671-001BMS	SampType: MS	Units: mg/L	Prep Date: 5/31/2025	RunNo: 100245							
Client ID: BATCH	Batch ID: 47930	Analysis Date: 6/1/2025	SeqNo: 2088725								
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	1.16	0.100	0.5000	0.6400	104	80	120				
Chloride	4.13	0.200	0.7500	3.368	102	80	120				

Work Order: 2505536
 CLIENT: Friedman & Bruya
 Project: 505418

QC SUMMARY REPORT
Extractable Petroleum Hydrocarbons by NWEPH

Sample ID: MB-47852	SampType: MBLK	Units: µg/L			Prep Date: 5/23/2025	RunNo: 100372					
Client ID: MBLKW	Batch ID: 47852				Analysis Date: 6/5/2025	SeqNo: 2091733					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C8-C10)	ND	80.0		0	0						
Aliphatic Hydrocarbon (C10-C12)	ND	40.0		0	0						
Aliphatic Hydrocarbon (C12-C16)	ND	40.0		0	0						
Aliphatic Hydrocarbon (C16-C21)	ND	40.0		0	0						
Aliphatic Hydrocarbon (C21-C34)	ND	40.0		0	0						
Surr: 1-Chlorooctadecane	299		500.0		59.8	50	150				

Sample ID: LCS-47852	SampType: LCS	Units: µg/L			Prep Date: 5/23/2025	RunNo: 100372					
Client ID: LCSW	Batch ID: 47852				Analysis Date: 6/5/2025	SeqNo: 2091734					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C8-C10)	266	80.0	1,250	0	21.3	5	77.8				
Aliphatic Hydrocarbon (C10-C12)	249	40.0	625.0	0	39.9	15.7	84.5				
Aliphatic Hydrocarbon (C12-C16)	332	40.0	625.0	0	53.1	36.5	91.7				
Aliphatic Hydrocarbon (C16-C21)	371	40.0	625.0	0	59.4	32.6	111				
Aliphatic Hydrocarbon (C21-C34)	364	40.0	625.0	0	58.2	5.72	135				
Surr: 1-Chlorooctadecane	325		500.0		65.1	50	150				

Sample ID: 2505499-001AMS	SampType: MS	Units: µg/L			Prep Date: 5/23/2025	RunNo: 100372					
Client ID: BATCH	Batch ID: 47852				Analysis Date: 6/5/2025	SeqNo: 2091736					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C8-C10)	274	75.6	1,181	0	23.2	5.34	53.5				
Aliphatic Hydrocarbon (C10-C12)	217	37.8	590.3	0	36.7	10.5	88.5				
Aliphatic Hydrocarbon (C12-C16)	317	37.8	590.3	0	53.7	33.9	91.5				
Aliphatic Hydrocarbon (C16-C21)	366	37.8	590.3	0	62.0	33.8	100				
Aliphatic Hydrocarbon (C21-C34)	360	37.8	590.3	0	61.0	15.9	110				
Surr: 1-Chlorooctadecane	352		472.2		74.6	50	150				

Work Order: 2505536
 CLIENT: Friedman & Bruya
 Project: 505418

QC SUMMARY REPORT
Extractable Petroleum Hydrocarbons by NWEPH

Sample ID: 2505499-001AMSD	SampType: MSD	Units: µg/L				Prep Date: 5/23/2025	RunNo: 100372				
Client ID: BATCH	Batch ID: 47852					Analysis Date: 6/5/2025	SeqNo: 2091737				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C8-C10)	289	75.3	1,177	0	24.5	5.34	53.5	274.1	5.15	30	
Aliphatic Hydrocarbon (C10-C12)	227	37.7	588.6	0	38.6	10.5	88.5	216.7	4.80	30	
Aliphatic Hydrocarbon (C12-C16)	324	37.7	588.6	0	55.0	33.9	91.5	316.8	2.19	30	
Aliphatic Hydrocarbon (C16-C21)	381	37.7	588.6	0	64.7	33.8	100	365.9	4.04	30	
Aliphatic Hydrocarbon (C21-C34)	367	37.7	588.6	0	62.3	15.9	110	360.1	1.77	30	
Surr: 1-Chlorooctadecane	350		470.8		74.4	50	150		0		

Sample ID: MB-47852	SampType: MBLK	Units: µg/L				Prep Date: 5/23/2025	RunNo: 100373				
Client ID: MBLKW	Batch ID: 47852					Analysis Date: 6/6/2025	SeqNo: 2092089				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aromatic Hydrocarbon (C8-C10)	52.8	80.0		0	0						J
Aromatic Hydrocarbon (C10-C12)	ND	40.0		0	0						
Aromatic Hydrocarbon (C12-C16)	ND	40.0		0	0						
Aromatic Hydrocarbon (C16-C21)	31.0	40.0		0	0						JQ
Aromatic Hydrocarbon (C21-C34)	ND	40.0		0	0						Q
Surr: o-Terphenyl	341		500.0		68.3	50	150				

NOTES:

Q - Associated calibration verification is below acceptance criteria. Result may be low-biased.

Sample ID: LCS-47852	SampType: LCS	Units: µg/L				Prep Date: 5/23/2025	RunNo: 100373				
Client ID: LCSW	Batch ID: 47852					Analysis Date: 6/6/2025	SeqNo: 2092090				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aromatic Hydrocarbon (C8-C10)	321	80.0	1,250	0	25.6	6.48	78.2				
Aromatic Hydrocarbon (C10-C12)	289	40.0	625.0	0	46.2	28.7	115				
Aromatic Hydrocarbon (C12-C16)	362	40.0	625.0	0	58.0	23.2	130				
Aromatic Hydrocarbon (C16-C21)	480	40.0	625.0	0	76.7	51.2	130				
Aromatic Hydrocarbon (C21-C34)	371	40.0	625.0	0	59.4	44.5	120				
Surr: o-Terphenyl	358		500.0		71.6	50	150				

Work Order: 2505536
 CLIENT: Friedman & Bruya
 Project: 505418

QC SUMMARY REPORT
Extractable Petroleum Hydrocarbons by NWEPH

Sample ID: 2505499-001AMS		SampType: MS		Units: µg/L		Prep Date: 5/23/2025		RunNo: 100373			
Client ID: BATCH		Batch ID: 47852				Analysis Date: 6/6/2025		SeqNo: 2092092			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aromatic Hydrocarbon (C8-C10)	401	75.6	1,181	88.72	26.5	5.14	70.6				
Aromatic Hydrocarbon (C10-C12)	315	37.8	590.3	0	53.3	19	105				
Aromatic Hydrocarbon (C12-C16)	398	37.8	590.3	7.712	66.1	33	116				
Aromatic Hydrocarbon (C16-C21)	474	37.8	590.3	33.24	74.6	33	120				
Aromatic Hydrocarbon (C21-C34)	433	37.8	590.3	0	73.3	31.3	119				
Surr: o-Terphenyl	396		472.2		83.9	50	150				

Sample ID: 2505499-001AMSD		SampType: MSD		Units: µg/L		Prep Date: 5/23/2025		RunNo: 100373			
Client ID: BATCH		Batch ID: 47852				Analysis Date: 6/6/2025		SeqNo: 2092093			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aromatic Hydrocarbon (C8-C10)	377	75.3	1,177	88.72	24.5	5.14	70.6	401.3	6.28	30	
Aromatic Hydrocarbon (C10-C12)	279	37.7	588.6	0	47.4	19	105	314.7	12.1	30	
Aromatic Hydrocarbon (C12-C16)	351	37.7	588.6	7.712	58.3	33	116	397.6	12.5	30	
Aromatic Hydrocarbon (C16-C21)	420	37.7	588.6	33.24	65.8	33	120	473.5	11.9	30	
Aromatic Hydrocarbon (C21-C34)	356	37.7	588.6	0	60.4	31.3	119	432.9	19.6	30	
Surr: o-Terphenyl	357		470.8		75.7	50	150		0		

Work Order: 2505536
 CLIENT: Friedman & Bruya
 Project: 505418

QC SUMMARY REPORT
Volatile Petroleum Hydrocarbons by NWVPH

Sample ID: LCS-47885	SampType: LCS	Units: µg/L			Prep Date: 5/28/2025	RunNo: 100185					
Client ID: LCSW	Batch ID: 47885				Analysis Date: 5/28/2025	SeqNo: 2087413					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C5-C6)	371	50.0	400.0	0	92.8	70	130				
Aliphatic Hydrocarbon (C6-C8)	176	50.0	200.0	0	88.2	70	130				
Aliphatic Hydrocarbon (C8-C10)	203	50.0	200.0	0	102	70	130				
Aliphatic Hydrocarbon (C10-C12)	177	40.0	200.0	0	88.6	70	130				
Aromatic Hydrocarbon (C8-C10)	941	60.0	1,000	0	94.1	70	130				
Aromatic Hydrocarbon (C10-C12)	220	50.0	200.0	0	110	70	130				
Aromatic Hydrocarbon (C12-C13)	161	50.0	200.0	0	80.5	70	130				
Surr: 2,5-dibromotoluene	36.9		50.00		73.9	60	140				

Sample ID: MB-47885	SampType: MBLK	Units: µg/L			Prep Date: 5/28/2025	RunNo: 100185					
Client ID: MBLKW	Batch ID: 47885				Analysis Date: 5/28/2025	SeqNo: 2087406					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C5-C6)	ND	50.0		0	0						
Aliphatic Hydrocarbon (C6-C8)	ND	50.0		0	0						
Aliphatic Hydrocarbon (C8-C10)	ND	50.0		0	0						
Aliphatic Hydrocarbon (C10-C12)	ND	40.0		0	0						
Aromatic Hydrocarbon (C8-C10)	ND	60.0		0	0						
Aromatic Hydrocarbon (C10-C12)	8.78	50.0		0	0						J
Aromatic Hydrocarbon (C12-C13)	ND	50.0		0	0						
Surr: 2,5-dibromotoluene	31.4		50.00		62.7	60	140				

Sample ID: LCSW02	SampType: LCSW02	Units: µg/L			Prep Date: 5/28/2025	RunNo: 100185					
Client ID: LCSW02	Batch ID: 47885				Analysis Date: 5/28/2025	SeqNo: 2087412					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aliphatic Hydrocarbon (C5-C6)	380	50.0	400.0	0	94.9	70	130	371.2	2.23	20	
Aliphatic Hydrocarbon (C6-C8)	169	50.0	200.0	0	84.3	70	130	176.4	4.49	20	
Aliphatic Hydrocarbon (C8-C10)	212	50.0	200.0	0	106	70	130	203.0	4.50	20	
Aliphatic Hydrocarbon (C10-C12)	213	40.0	200.0	0	107	70	130	177.2	18.5	20	
Aromatic Hydrocarbon (C8-C10)	893	60.0	1,000	0	89.3	70	130	940.6	5.22	20	

Work Order: 2505536
 CLIENT: Friedman & Bruya
 Project: 505418

QC SUMMARY REPORT
Volatile Petroleum Hydrocarbons by NWVPH

Sample ID: LCS-D-47885	SampType: LCS-D	Units: µg/L			Prep Date: 5/28/2025	RunNo: 100185					
Client ID: LCSW02	Batch ID: 47885				Analysis Date: 5/28/2025	SeqNo: 2087412					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aromatic Hydrocarbon (C10-C12)	190	50.0	200.0	0	94.9	70	130	219.5	14.5	20	
Aromatic Hydrocarbon (C12-C13)	205	50.0	200.0	0	103	70	130	161.0	24.1	20	
Surr: 2,5-dibromotoluene	30.2		50.00		60.4	60	140		0	0	

Sample ID: LCS-47885	SampType: LCS	Units: µg/L			Prep Date: 5/28/2025	RunNo: 100185					
Client ID: LCSW	Batch ID: 47885				Analysis Date: 6/4/2025	SeqNo: 2092380					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	226	10.0	200.0	0	113	70	130				
Toluene	225	10.0	200.0	0	113	70	130				
Ethylbenzene	226	10.0	200.0	0	113	70	130				
m,p-Xylene	447	20.0	400.0	0	112	70	130				
o-Xylene	219	10.0	200.0	0	110	70	130				
Naphthalene	240	20.0	200.0	0	120	70	130				
Methyl tert-butyl ether (MTBE)	220	10.0	200.0	0	110	70	130				

Sample ID: MB-47885	SampType: MBLK	Units: µg/L			Prep Date: 5/28/2025	RunNo: 100185					
Client ID: MBLKW	Batch ID: 47885				Analysis Date: 6/5/2025	SeqNo: 2091570					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexane	ND	20.0									
Benzene	ND	10.0		0	0						
Toluene	ND	10.0		0	0						
Ethylbenzene	ND	10.0		0	0						
m,p-Xylene	ND	20.0		0	0						
o-Xylene	ND	10.0		0	0						
Naphthalene	ND	10.0		0	0						
Methyl tert-butyl ether (MTBE)	ND	10.0		0	0						
Surr: 2,5-dibromotoluene	32.0		50.00		64.1	60	140				

Work Order: 2505536
CLIENT: Friedman & Bruya
Project: 505418

QC SUMMARY REPORT
Volatile Petroleum Hydrocarbons by NWVPH

Sample ID: LCSD-47885	SampType: LCSD	Units: µg/L			Prep Date: 5/28/2025	RunNo: 100185					
Client ID: LCSW02	Batch ID: 47885				Analysis Date: 6/5/2025	SeqNo: 2092381					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	221	10.0	200.0	0	110	70	130	225.7	0	20	
Toluene	220	10.0	200.0	0	110	70	130	225.5	0	20	
Ethylbenzene	219	10.0	200.0	0	110	70	130	225.9	0	20	
m,p-Xylene	436	20.0	400.0	0	109	70	130	446.7	0	20	
o-Xylene	214	10.0	200.0	0	107	70	130	219.3	0	20	
Naphthalene	199	20.0	200.0	0	99.5	70	130	240.1	0	20	
Methyl tert-butyl ether (MTBE)	214	10.0	200.0	0	107	70	130	219.7	0	20	

Client Name: FB	Work Order Number: 2505536
Logged by: Morgan Wilson	Date Received: 5/23/2025 2:12:00 PM

Chain of Custody

1. Is Chain of Custody complete? Yes No Not Present
2. How was the sample delivered? Courier

Log In

3. Custody Seals present on shipping container/cooler?
(Refer to comments for Custody Seals not intact) Yes No Not Present
4. Was an attempt made to cool the samples? Yes No NA
5. Were all items received at a temperature of >2°C to 6°C * Yes No NA
6. Sample(s) in proper container(s)? Yes No
7. Sufficient sample volume for indicated test(s)? Yes No
8. Are samples properly preserved? Yes No
9. Was preservative added to bottles? Yes No NA
10. Is there headspace in the VOA vials? Yes No NA
11. Did all samples containers arrive in good condition(unbroken)? Yes No
12. Does paperwork match bottle labels? Yes No
13. Are matrices correctly identified on Chain of Custody? Yes No
14. Is it clear what analyses were requested? Yes No
15. Were all hold times (except field parameters, pH e.g.) able to be met? Yes No

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes No NA

Person Notified:	<input type="text" value="Michael Erdahl"/>	Date:	<input type="text" value="5/23/2025"/>
By Whom:	<input type="text" value="Morgan Wilson"/>	Via:	<input checked="" type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text" value="EPH+Targets List"/>		
Client Instructions:	<input type="text" value="Standard EPH List"/>		

17. Additional remarks:

Item Information

Item #	Temp °C
Sample	6.0

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

25705756

Page # 1 of 2

Send Report To Michael Erdahl

Company Friedman and Bruya, Inc.

Address 5500 4th Ave S

City, State, ZIP Seattle, WA 98108

Phone # (206) 285-8282 merdahl@friedmanandbruya.com

SUBCONTRACTER ATG		PROJECT NAME/NO. 505418	PO # F-252
REMARKS EIM, REPORT TO MDL			

TURNAROUND TIME	<input checked="" type="checkbox"/> Standard TAT <input type="checkbox"/> RUSH
SAMPLE DISPOSAL	Rush charges authorized by: _____ Dispose after 30 days Return samples Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED			Notes
						Anions (Cl and F)	EPH+targets	VPH+targets	
MW5R2		5/20/2025	1030	water	1	x			Report to MDL
MW3R		5/20/2025	1122	water	1	x			
MW8R		5/20/2025	1212	water	1	x			
MW1		5/20/2025	1307	water	1	x			
MW4R		5/20/2025	1404	water	1	x			
MW10		5/21/2025	920	water	5	x	x		
MW9R		5/21/2025	1020	water	6	x	x		
MW2		5/21/2025	1130	water	1	x			
MW11		5/21/2025	1218	water	2	x			
DUP-0525		5/22/2025	0001	water	2	x			
MW-6R		5/22/2025	1007	water	1	x			
MW-12		5/22/2025	1102	water	1	x			
MW7		5/22/2025	1203	water	2	x			

Friedman & Bruya, Inc. 3012 16th Avenue West Seattle, WA 98119-2029 Ph. (206) 285-8282 Fax (206) 283-5044		SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by: _____		Michael Erdahl		Friedman & Bruya		5/23/25		1300	
Received by: _____		Michael Erdahl		Friedman & Bruya		5/23		2:12PM	
Relinquished by: _____		Michael Erdahl		Friedman & Bruya		5/23		2:12PM	
Received by: _____		Michael Erdahl		Friedman & Bruya		5/23		2:12PM	

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

2505534

Page # 2 of 2

Send Report To Michael Erdahl
 Company Friedman and Bruya, Inc.
 Address 5500 4th Ave S
 City, State, ZIP Seattle, WA 98108
 Phone # (206) 285-8282 merdahl@friedmanandbruya.com

SUBCONTRACTER ATG		PROJECT NAME/NO. 505418	PO # F-252
REMARKS EIM, REPORT TO MDL			

TURNDOWN TIME <input checked="" type="checkbox"/> Standard TAT <input type="checkbox"/> RUSH _____ Rush charges authorized by: _____	SAMPLE DISPOSAL Dispose after 30 days Return samples Will call with instructions
---	---

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED			Notes
						Anions (Cl and F)	EPH+targets	VPH+targets	
MW13		5/23/2025		931 water	2	1	x		Report to MDL
MW14		5/23/2025		1018 water	2	1	x		

Friedman & Bruya, Inc. 3012 16th Avenue West Seattle, WA 98119-2029 Ph. (206) 285-8282 Fax (206) 283-5044		RECEIVED BY: 		PRINT NAME: Michael Erdahl		COMPANY: Friedman & Bruya		DATE: 5/23/25		TIME: 2:12PM	
RECEIVED BY: 		PRINT NAME: Brina Baird		COMPANY: ATG		DATE: 5/23		TIME:		Received by:	

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya
Ann Webber-Bruya
Michael Erdahl
Vineta Mills
Eric Young

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

April 22, 2025

Jamie Stevens, Project Manager
Crete Consulting
16300 Christensen Road, Suite 214
Tukwila, WA 98188

Dear Ms Stevens:

Included are the results from the testing of material submitted on April 11, 2025 from the Maralco Supplemental RI, F&BI 504184 project. There is 1 page included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Rusty Jones, Grant Hainsworth
CTC0422R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 11, 2025 by Friedman & Bruya, Inc. from the Crete Consulting Maralco Supplemental RI, F&BI 504184 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Crete Consulting</u>
504184 -01	DUP01-0425
504184 -02	MW12

The samples were sent to Alliance Technical Group for chloride and fluoride testing. The report is enclosed.

504184

SAMPLE CHAIN OF CUSTODY

04/11/25 J2

Page # 1 of 1

Report To Jones, Stevens Hainsworth
 Company CRETE Consulting
 Address _____
 City, State, ZIP _____
 Phone 822-330-1359 Email _____

SAMPLERS (signature) <u>Rusty Jones</u>		PO # _____	
PROJECT NAME <u>Maralco Supplemental RI</u>		MARALCO	
REMARKS		INVOICE TO <u>CRETE</u>	
Project specific RIs? - Yes / No			

TURNAROUND TIME	Standard turnaround <input checked="" type="checkbox"/> RUSH <input type="checkbox"/>
Rush charges authorized by:	_____
SAMPLE DISPOSAL	<input type="checkbox"/> Archive samples <input type="checkbox"/> Other _____
Default: Dispose after 30 days	

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes					
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082						
DUP01-0425	01	4/11/2025	0001	GRAB WATER	1													
MW12	02	↓	1605	↓	1													

Friedman & Bruya, Inc.
 5500 4th Ave S.
 Seattle WA 98108
 (206) 285-8282
 office@friedmanandbruya.com

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>Rusty Jones</u>	<u>Rusty Jones</u>	<u>CRETE</u>	<u>4/11/2025</u>	<u>1406</u>		
Received by: <u>[Signature]</u>	<u>Michael E. Hall</u>	<u>Michael E. Hall</u>	<u>FIRB</u>	<u>4/11/25</u>	<u>1406</u>		
Relinquished by:							
Received by:							

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 504184 CLIENT Crete INITIALS/ AP DATE: 4/11/25

If custody seals are present on cooler, are they intact? [X] NA [] YES [] NO

Cooler/Sample temperature [] °C Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? [X] YES [] NO

How did samples arrive? [X] Over the Counter [] Picked up by F&BI [] FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? [X] YES [] NO Initials/ AP Date: 4/11/25

Number of days samples have been sitting prior to receipt at laboratory [] days

Are the samples clearly identified? (explain "no" answer below) [X] YES [] NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) [X] YES [] NO

Were appropriate sample containers used? [X] YES [] NO [] Unknown

If custody seals are present on samples, are they intact? [X] NA [] YES [] NO

Are samples requiring no headspace, headspace free? [X] NA [] YES [] NO

Is the following information provided on the COC, and does it match the sample label? (explain "no" answer below)

- Sample ID's [] Yes [] No [] Not on COC/label
Date Sampled [] Yes [] No [] Not on COC/label
Time Sampled [] Yes [] No [] Not on COC/label
of Containers [] Yes [] No
Relinquished [] Yes [] No
Requested analysis [] Yes [] On Hold

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? [X] NA [] YES [] NO

Number of unused TO15 canisters** Number of unused TO17 tubes

Friedman & Bruya

Michael Erdahl

5500 4th Ave S

Seattle, WA 98108

RE: 504184,

Work Order Number: 2504394

April 21, 2025

Attention Michael Erdahl:

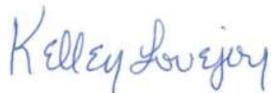
Alliance Technical Group, LLC - Seattle received 2 sample(s) on 4/14/2025 for the analyses presented in the following report.

Ion Chromatography by EPA 300.0

All analyses were performed according to our accredited Quality Assurance program. Please contact the laboratory if you should have any questions about the results.

Alliance Technical Group is committed to accuracy, speed, and customer service. Thank you for choosing Alliance Technical Group's Seattle laboratory team for your analytical needs. We appreciate this opportunity to serve you!

Sincerely,



Kelley Lovejoy

Project Manager

*DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.4 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910*

Original





Date: 04/21/2025

CLIENT: Friedman & Bruya
Project: 504184
Work Order: 2504394

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2504394-001	DUP01-0425	04/11/2025 12:01 AM	04/14/2025 2:49 PM
2504394-002	MW12	04/11/2025 4:05 PM	04/14/2025 2:49 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

CLIENT: Friedman & Bruya

Project: 504184

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- DUP - Sample Duplicate
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MCL - Maximum Contaminant Level
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- REP - Sample Replicate
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: 2504394
Date Reported: 4/21/2025

CLIENT: Friedman & Bruya
Project: 504184

Lab ID: 2504394-001 Collection Date: 4/11/2025 12:01:00 AM
Client Sample ID: DUP01-0425 Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Ion Chromatography by EPA 300.0</u>				Batch ID: 47358	Analyst: OP	
Fluoride	0.416	0.200	D	mg/L	2	4/16/2025 4:07:00 AM
Chloride	236	20.0	D	mg/L	100	4/16/2025 2:35:00 AM

Lab ID: 2504394-002 Collection Date: 4/11/2025 4:05:00 PM
Client Sample ID: MW12 Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Ion Chromatography by EPA 300.0</u>				Batch ID: 47358	Analyst: OP	
Fluoride	0.418	0.200	D	mg/L	2	4/16/2025 4:31:00 AM
Chloride	233	20.0	D	mg/L	100	4/16/2025 2:58:00 AM

Work Order: 2504394
 CLIENT: Friedman & Bruya
 Project: 504184

QC SUMMARY REPORT
Ion Chromatography by EPA 300.0

Sample ID: LCS-47358	SampType: LCS	Units: mg/L				Prep Date: 4/15/2025	RunNo: 99072				
Client ID: LCSW	Batch ID: 47358					Analysis Date: 4/15/2025	SeqNo: 2063438				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.492	0.100	0.5000	0	98.4	90	110				
Chloride	0.742	0.200	0.7500	0	98.9	90	110				

Sample ID: MB-47358	SampType: MBLK	Units: mg/L				Prep Date: 4/15/2025	RunNo: 99072				
Client ID: MBLKW	Batch ID: 47358					Analysis Date: 4/15/2025	SeqNo: 2063440				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.100									
Chloride	ND	0.200									

Sample ID: 2504391-001BDUP	SampType: DUP	Units: mg/L-dry				Prep Date: 4/15/2025	RunNo: 99072				
Client ID: BATCH	Batch ID: 47358					Analysis Date: 4/15/2025	SeqNo: 2063442				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.154						0		20	
Chloride	43.3	0.309						43.28	0.00713	20	E

Sample ID: 2504391-001BMS	SampType: MS	Units: mg/L-dry				Prep Date: 4/15/2025	RunNo: 99072				
Client ID: BATCH	Batch ID: 47358					Analysis Date: 4/15/2025	SeqNo: 2063443				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.796	0.154	0.7714	0	103	80	120				
Chloride	43.7	0.309	1.157	43.28	38.9	80	120				ES

NOTES:

S - Spiked amount was low relative to sample concentration. Outlying spike recoveries may be expected.

Sample ID: 2504391-001BMSD	SampType: MSD	Units: mg/L-dry				Prep Date: 4/15/2025	RunNo: 99072				
Client ID: BATCH	Batch ID: 47358					Analysis Date: 4/15/2025	SeqNo: 2063444				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.799	0.154	0.7714	0	104	80	120	0.7961	0.387	20	

Work Order: 2504394
 CLIENT: Friedman & Bruya
 Project: 504184

QC SUMMARY REPORT
Ion Chromatography by EPA 300.0

Sample ID: 2504391-001BMSD	SampType: MSD	Units: mg/L-dry			Prep Date: 4/15/2025	RunNo: 99072					
Client ID: BATCH	Batch ID: 47358				Analysis Date: 4/15/2025	SeqNo: 2063444					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	43.7	0.309	1.157	43.28	38.0	80	120	43.73	0.0247	20	ES

NOTES:

S - Spiked amount was low relative to sample concentration. Outlying spike recoveries may be expected.

Sample ID: 2504394-002ADUP	SampType: DUP	Units: mg/L			Prep Date: 4/15/2025	RunNo: 99072					
Client ID: MW12	Batch ID: 47358				Analysis Date: 4/16/2025	SeqNo: 2063468					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	10.0						0		20	D
Chloride	231	20.0						233.2	0.861	20	D

Sample ID: 2504394-002AMS	SampType: MS	Units: mg/L			Prep Date: 4/15/2025	RunNo: 99072					
Client ID: MW12	Batch ID: 47358				Analysis Date: 4/16/2025	SeqNo: 2063469					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	48.1	10.0	50.00	0	96.2	80	120				D
Chloride	311	20.0	75.00	233.2	103	80	120				D

Client Name: FB	Work Order Number: 2504394
Logged by: Clare Griggs	Date Received: 4/14/2025 2:49:00 PM

Chain of Custody

1. Is Chain of Custody complete? Yes No Not Present
2. How was the sample delivered? Client

Log In

3. Custody Seals present on shipping container/cooler?
(Refer to comments for Custody Seals not intact) Yes No Not Present
4. Was an attempt made to cool the samples? Yes No NA
5. Were all items received at a temperature of >2°C to 6°C * Yes No NA
6. Sample(s) in proper container(s)? Yes No
7. Sufficient sample volume for indicated test(s)? Yes No
8. Are samples properly preserved? Yes No
9. Was preservative added to bottles? Yes No NA
10. Is there headspace in the VOA vials? Yes No NA
11. Did all samples containers arrive in good condition(unbroken)? Yes No
12. Does paperwork match bottle labels? Yes No
13. Are matrices correctly identified on Chain of Custody? Yes No
14. Is it clear what analyses were requested? Yes No
15. Were all hold times (except field parameters, pH e.g.) able to be met? Yes No

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes No NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

17. Additional remarks:

Item Information

Item #	Temp °C
Sample	3.0

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya
Ann Webber-Bruya
Michael Erdahl
Vineta Mills
Eric Young

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

March 26, 2025

Rusty Jones, Project Manager
Crete Consulting
16300 Christensen Road, Suite 214
Tukwila, WA 98188

Dear Mr Jones:

Included are the results from the testing of material submitted on March 17, 2025 from the Maralco Supplemental RI Maralco, F&BI 503263 project. There is 1 page included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Grant Hainsworth, Jamie Stevens
CTC0326R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on March 17, 2025 by Friedman & Bruya, Inc. from the Crete Consulting Maralco Supplemental RI Maralco, F&BI 503263 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Crete Consulting</u>
503263 -01	DUP02-031725
503263 -02	DPT-25
503263 -03	DPT-26
503263 -04	DPT-27
503263 -05	SW-SOUTH
503263 -06	SW-EAST

The samples were sent to Alliance Technical Group for fluoride, chloride, and cyanide testing. The report is enclosed.

503263

SAMPLE CHAIN OF CUSTODY

03/17/25

23

Report To Jones, Stevens, Hainsworth

Company CRETE Consulting

Address _____

City, State, ZIP _____

Phone 832.330.1359 Email _____

SAMPLERS (signature) Rusty Jones

PROJECT NAME Maraleo Supplemental R.I

REMARKS Minor grass in "Su" sample bottles. Project specific RIs? Yes / No

PO# R. Jones

INVOICE TO MARALEO

INVOICE TO CRETE

Page # 1 of 1

TURNAROUND TIME

Standard turnaround
 RUSH Results by 3/14/25
Rush charges authorized by: _____

SAMPLE DISPOSAL

Archive samples
 Other
Default: Dispose after 30 days

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED										Notes		
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Chloride / Fluoride	Cyanide				
DUP02-031725	01	3/17/25	0002	WATER	1													
DPT-25	02		0920		1													
DPT-26	03		1043		1													
DPT-27	04		1208		1													
SW-SOUTH	05 A B		1350		2													
SW-EAST	06 A B		1430		2													

SIGNATURE

Relinquished by: R. Jones

PRINT NAME Rusty Jones

COMPANY CRETE

DATE 3/17/25

TIME 15:54

Received by: _____

PRINT NAME Ann Pham

COMPANY FBI

DATE 3/17/25

TIME 15:54

Received by: _____

Samples received at Y oC

Friedman & Bruya, Inc.
5500 4th Ave S.
Seattle WA 98108
(206) 285-8282
office@friedmanandbruya.com

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 503263 CLIENT Crete INITIALS/ DATE: AP 03/17/25

If custody seals are present on cooler, are they intact? [X] NA [] YES [] NO

Cooler/Sample temperature 4 °C Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? [X] YES [] NO

How did samples arrive? [X] Over the Counter [] Picked up by F&BI [] FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? [X] YES [] NO Initials/ Date: (NP) 3/17

Number of days samples have been sitting prior to receipt at laboratory 0 days

Are the samples clearly identified? (explain "no" answer below) [X] YES [] NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) [X] YES [] NO

Were appropriate sample containers used? [X] YES [] NO [] Unknown

If custody seals are present on samples, are they intact? [X] NA [] YES [] NO

Are samples requiring no headspace, headspace free? [X] NA [] YES [] NO

Is the following information provided on the COC, and does it match the sample label? (explain "no" answer below)

- Sample ID's [X] Yes [] No [] Not on COC/label
Date Sampled* [X] Yes [] No [] Not on COC/label
Time Sampled [X] Yes [] No [] Not on COC/label
of Containers [X] Yes [] No
Relinquished [X] Yes [] No
Requested analysis [X] Yes [] On Hold

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? [X] NA [] YES [] NO

Number of unused TO15 canisters** Number of unused TO17 tubes

**Fill out Green manifolds billing sheet

Friedman & Bruya

Michael Erdahl

5500 4th Ave S

Seattle, WA 98108

RE: 503263,

Work Order Number: 2503351

March 25, 2025

Attention Michael Erdahl:

Alliance Technical Group, LLC - Seattle received 6 sample(s) on 3/18/2025 for the analyses presented in the following report.

Cyanide by SM 4500-CN C, E

Ion Chromatography by EPA 300.0

All analyses were performed according to our accredited Quality Assurance program. Please contact the laboratory if you should have any questions about the results.

Alliance Technical Group is committed to accuracy, speed, and customer service. Thank you for choosing Alliance Technical Group's Seattle laboratory team for your analytical needs. We appreciate this opportunity to serve you!

Sincerely,



Brianna Barnes
Project Manager

*DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.4 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910*

Original





CLIENT: Friedman & Bruya
Project: 503263
Work Order: 2503351

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2503351-001	DUP02-031725	03/17/2025 12:02 AM	03/18/2025 3:00 PM
2503351-002	DPT-25	03/17/2025 9:20 AM	03/18/2025 3:00 PM
2503351-003	DPT-26	03/17/2025 10:43 AM	03/18/2025 3:00 PM
2503351-004	DPT-27	03/17/2025 12:08 PM	03/18/2025 3:00 PM
2503351-005	SW-South	03/17/2025 1:50 PM	03/18/2025 3:00 PM
2503351-006	SW-East	03/17/2025 2:30 PM	03/18/2025 3:00 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

CLIENT: Friedman & Bruya

Project: 503263

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- DUP - Sample Duplicate
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MCL - Maximum Contaminant Level
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- REP - Sample Replicate
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: 2503351
Date Reported: 3/25/2025

CLIENT: Friedman & Bruya
Project: 503263

Lab ID: 2503351-001 Collection Date: 3/17/2025 12:02:00 AM
Client Sample ID: DUP02-031725 Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Ion Chromatography by EPA 300.0</u>						
					Batch ID: 47110	Analyst: SS
Fluoride	0.252	0.100		mg/L	1	3/20/2025 7:50:00 PM
Chloride	42.9	2.00	D	mg/L	10	3/21/2025 11:12:00 AM

Lab ID: 2503351-002 Collection Date: 3/17/2025 9:20:00 AM
Client Sample ID: DPT-25 Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Ion Chromatography by EPA 300.0</u>						
					Batch ID: 47110	Analyst: SS
Fluoride	0.151	0.100		mg/L	1	3/20/2025 8:13:00 PM
Chloride	12.8	2.00	D	mg/L	10	3/21/2025 11:35:00 AM

Lab ID: 2503351-003 Collection Date: 3/17/2025 10:43:00 AM
Client Sample ID: DPT-26 Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Ion Chromatography by EPA 300.0</u>						
					Batch ID: 47110	Analyst: SS
Fluoride	0.248	0.100		mg/L	1	3/20/2025 8:37:00 PM
Chloride	8.22	1.00	D	mg/L	5	3/21/2025 11:58:00 AM

Lab ID: 2503351-004 Collection Date: 3/17/2025 12:08:00 PM
Client Sample ID: DPT-27 Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Ion Chromatography by EPA 300.0</u>						
					Batch ID: 47110	Analyst: SS
Fluoride	0.252	0.100		mg/L	1	3/20/2025 9:00:00 PM
Chloride	41.7	2.00	D	mg/L	10	3/21/2025 12:21:00 PM



Analytical Report

Work Order: 2503351
Date Reported: 3/25/2025

CLIENT: Friedman & Bruya
Project: 503263

Lab ID: 2503351-005

Collection Date: 3/17/2025 1:50:00 PM

Client Sample ID: SW-South

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 47110

Analyst: SS

Fluoride	5.70	1.00	D	mg/L	10	3/21/2025 12:44:00 PM
Chloride	80.2	4.00	D	mg/L	20	3/24/2025 8:02:00 PM

Cyanide by SM 4500-CN C, E

Batch ID: 47130

Analyst: NR

Cyanide, Total	ND	0.0500		mg/L	1	3/25/2025 11:43:00 AM
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Lab ID: 2503351-006

Collection Date: 3/17/2025 2:30:00 PM

Client Sample ID: SW-East

Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 47110

Analyst: SS

Fluoride	0.212	0.100		mg/L	1	3/20/2025 10:32:00 PM
Chloride	4.48	0.200		mg/L	1	3/20/2025 10:32:00 PM

Cyanide by SM 4500-CN C, E

Batch ID: 47130

Analyst: NR

Cyanide, Total	ND	0.0500		mg/L	1	3/25/2025 11:47:00 AM
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Work Order: 2503351
 CLIENT: Friedman & Bruya
 Project: 503263

QC SUMMARY REPORT
Cyanide by SM 4500-CN C, E

Sample ID: LCS-47130	SampType: LCS	Units: mg/L			Prep Date: 3/24/2025	RunNo: 98478					
Client ID: LCSW	Batch ID: 47130				Analysis Date: 3/25/2025	SeqNo: 2051784					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, Total	0.225	0.0500	0.2500	0	90.0	71.7	132				

Sample ID: MB-47130	SampType: MBLK	Units: mg/L			Prep Date: 3/24/2025	RunNo: 98478					
Client ID: MBLKW	Batch ID: 47130				Analysis Date: 3/25/2025	SeqNo: 2051786					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, Total	ND	0.0500									

Sample ID: 2503375-001ADUP	SampType: DUP	Units: mg/L			Prep Date: 3/24/2025	RunNo: 98478					
Client ID: BATCH	Batch ID: 47130				Analysis Date: 3/25/2025	SeqNo: 2051788					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, Total	ND	0.0500						0		20	

Sample ID: 2503375-001AMS	SampType: MS	Units: mg/L			Prep Date: 3/24/2025	RunNo: 98478					
Client ID: BATCH	Batch ID: 47130				Analysis Date: 3/25/2025	SeqNo: 2051789					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, Total	0.262	0.0500	0.2500	0	105	41.1	144				

Sample ID: 2503375-001AMSD	SampType: MSD	Units: mg/L			Prep Date: 3/24/2025	RunNo: 98478					
Client ID: BATCH	Batch ID: 47130				Analysis Date: 3/25/2025	SeqNo: 2051790					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, Total	0.266	0.0500	0.2500	0	107	41.1	144	0.2624	1.48	30	

Work Order: 2503351
 CLIENT: Friedman & Bruya
 Project: 503263

QC SUMMARY REPORT
Ion Chromatography by EPA 300.0

Sample ID: LCS-47110	SampType: LCS	Units: mg/L				Prep Date: 3/20/2025	RunNo: 98466				
Client ID: LCSW	Batch ID: 47110					Analysis Date: 3/20/2025	SeqNo: 2051539				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.484	0.100	0.5000	0	96.8	90	110				
Chloride	0.725	0.200	0.7500	0	96.7	90	110				

Sample ID: MB-47110	SampType: MBLK	Units: mg/L				Prep Date: 3/20/2025	RunNo: 98466				
Client ID: MBLKW	Batch ID: 47110					Analysis Date: 3/20/2025	SeqNo: 2051540				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.100									
Chloride	ND	0.200									

Sample ID: 2503372-001ADUP	SampType: DUP	Units: mg/L				Prep Date: 3/20/2025	RunNo: 98466				
Client ID: BATCH	Batch ID: 47110					Analysis Date: 3/20/2025	SeqNo: 2051554				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.770	0.100						0.7780	1.03	20	
Chloride	9.18	0.200						9.204	0.207	20	E

Sample ID: 2503372-001AMS	SampType: MS	Units: mg/L				Prep Date: 3/20/2025	RunNo: 98466				
Client ID: BATCH	Batch ID: 47110					Analysis Date: 3/20/2025	SeqNo: 2051555				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	1.29	0.100	0.5000	0.7780	103	80	120				
Chloride	9.80	0.200	0.7500	9.204	79.2	80	120				ES

NOTES:

S - Outlying spike recovery observed. A duplicate analysis was performed and recovered within range.

Sample ID: 2503372-001AMSD	SampType: MSD	Units: mg/L				Prep Date: 3/20/2025	RunNo: 98466				
Client ID: BATCH	Batch ID: 47110					Analysis Date: 3/21/2025	SeqNo: 2051556				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	1.30	0.100	0.5000	0.7780	104	80	120	1.294	0.154	20	

Work Order: 2503351
CLIENT: Friedman & Bruya
Project: 503263

QC SUMMARY REPORT
Ion Chromatography by EPA 300.0

Sample ID: 2503372-001AMSD		SampType: MSD		Units: mg/L		Prep Date: 3/20/2025		RunNo: 98466			
Client ID: BATCH		Batch ID: 47110				Analysis Date: 3/21/2025		SeqNo: 2051556			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	9.81	0.200	0.7500	9.204	80.8	80	120	9.798	0.122	20	E

Sample ID: 2503384-001DDUP		SampType: DUP		Units: mg/L		Prep Date: 3/20/2025		RunNo: 98466			
Client ID: BATCH		Batch ID: 47110				Analysis Date: 3/21/2025		SeqNo: 2051559			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.100						0		20	
Chloride	7.70	0.200						7.706	0.0389	20	E

Sample ID: 2503384-001DMS		SampType: MS		Units: mg/L		Prep Date: 3/20/2025		RunNo: 98466			
Client ID: BATCH		Batch ID: 47110				Analysis Date: 3/21/2025		SeqNo: 2051560			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.520	0.100	0.5000	0.03300	97.4	80	120				
Chloride	8.33	0.200	0.7500	7.706	83.5	80	120				E

Client Name: FB	Work Order Number: 2503351
Logged by: Clare Griggs	Date Received: 3/18/2025 3:00:00 PM

Chain of Custody

1. Is Chain of Custody complete? Yes No Not Present
2. How was the sample delivered? Client

Log In

3. Custody Seals present on shipping container/cooler?
(Refer to comments for Custody Seals not intact) Yes No Not Present
4. Was an attempt made to cool the samples? Yes No NA
5. Were all items received at a temperature of >2°C to 6°C * Yes No NA
6. Sample(s) in proper container(s)? Yes No
7. Sufficient sample volume for indicated test(s)? Yes No
8. Are samples properly preserved? Yes No
9. Was preservative added to bottles? Yes No NA
10. Is there headspace in the VOA vials? Yes No NA
11. Did all samples containers arrive in good condition(unbroken)? Yes No
12. Does paperwork match bottle labels? Yes No
13. Are matrices correctly identified on Chain of Custody? Yes No
14. Is it clear what analyses were requested? Yes No
15. Were all hold times (except field parameters, pH e.g.) able to be met? Yes No

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes No NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

17. Additional remarks:

Item Information

Item #	Temp °C
Sample	4.9

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

2503351

Page # 1 of 1

Send Report To Michael Erdahl
 Company Friedman and Bruya, Inc.
 Address 5500 4th Ave S
 City, State, ZIP Seattle, WA 98108
 Phone # (206) 285-8282 merdahl@friedmanandbruya.com

SUBCONTRACTER ATG		PROJECT NAME/NO. 503263	PO # F-131
REMARKS EIM			

TURNAROUND TIME <input checked="" type="checkbox"/> Standard TAT RUSH _____ Rush charges authorized by: _____	SAMPLE DISPOSAL Dispose after 30 days Return samples Will call with instructions
--	---

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED			Notes
						Chloride	Fluoride	Cyanide	
DUP02-031725		3/17/2025	0002	water	1	x	x		
DPT-25		3/17/2025	0920	water	1	x	x		
DPT-26		3/17/2025	1043	water	1	x	x		
DPT-27		3/17/2025	1208	water	1	x	x		
SW-South		3/17/2025	1350	water	2	x	x	x	
SW-East		3/17/2025	1430	water	2	x	x	x	

Friedman & Bruya, Inc. 3012 16th Avenue West Seattle, WA 98119-2029 Ph. (206) 285-8282 Fax (206) 283-5044	Relinquished by: 	SIGNATURE	Michael Erdahl	PRINT NAME	Friedman & Bruya	COMPANY	3/18/25	DATE	0732	TIME
	Received by: 			Nathan Keller		ATG				1500
	Received by:									

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya
Ann Webber-Bruya
Michael Erdahl
Vineta Mills
Eric Young

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

May 8, 2025

Rusty Jones, Project Manager
Crete Consulting
16300 Christensen Road, Suite 214
Tukwila, WA 98188

Dear Mr Jones:

Included are the results from the testing of material submitted on April 30, 2025 from the Maralco SRI, F&BI 504490 project. There is 1 page included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Grant Hainsworth, Jamie Stevens
CTC0508R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 30, 2025 by Friedman & Bruya, Inc. from the Crete Consulting Maralco SRI, F&BI 504490 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Crete Consulting</u>
504490 -01	MW14
504490 -02	MW13

The samples were sent to Alliance Technical Group for fluoride and chloride testing. The report is enclosed.

504490

SAMPLE CHAIN OF CUSTODY

04/30/2025 35

Page # 1 of 1

Report To Jones/Hainsworth/Stevens
Company CRETE Consulting Inc.
Address _____
City, State, ZIP _____
Phone 832-3301359 Email _____

SAMPLERS (signature) Rusty Jones
PROJECT NAME MARALCO SRT
PO # MARALCO
REMARKS CRETE
INVOICE TO CRETE

Project specific RIs? - Yes / No

TURNAROUND TIME
 Standard turnaround
 RUSH
Rush charges authorized by: _____
SAMPLE DISPOSAL
 Archive samples
 Other _____
Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED								Notes											
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Fluoride Chloride												
MW14	01	4/30/2025	0953	ALKS WATER	1																				
MW13	02	↓	0856	↓	1																				

samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Reinquinshed by: <u>R. Jones</u>	<u>Rusty Jones</u>	<u>CRETE</u>	<u>4/30/2025</u>	<u>1125</u>
Received by: <u>M. Hainsworth</u>	<u>M. Hainsworth</u>	<u>CRETE</u>	<u>4/30/2025</u>	<u>1125</u>
Reinquinshed by:				
Received by:				

Friedman & Bruya, Inc.
5500 4th Ave S.
Seattle WA 98108
(206) 285-8282
office@friedmanandbruya.com

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 504490 CLIENT Crete INITIALS/DATE: (NP) 4/30/25

If custody seals are present on cooler, are they intact? NA YES NO

Cooler/Sample temperature _____ °C
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? YES NO

How did samples arrive?
 Over the Counter Picked up by F&BI FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? YES NO Initials/Date: (NP) 4/30
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 0 days

Are the samples clearly identified? (explain "no" answer below) YES NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) YES NO

Were appropriate sample containers used? YES NO Unknown

If custody seals are present on samples, are they intact? NA YES NO

Are samples requiring no headspace, headspace free? NA YES NO

Is the following information provided on the COC, and does it match the sample label?
(explain "no" answer below)

Sample ID's	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	_____	<input type="checkbox"/> Not on COC/label
Date Sampled	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	_____	<input type="checkbox"/> Not on COC/label
Time Sampled	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>-02 no time on label</u>	<input type="checkbox"/> Not on COC/label
# of Containers	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	_____	<input type="checkbox"/> Not on COC/label
Relinquished	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	_____	
Requested analysis	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> On Hold	_____	

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? NA YES NO

Number of unused TO15 canisters** _____ Number of unused TO17 tubes _____

**Fill out Green manifolds billing sheet

Friedman & Bruya

Michael Erdahl
5500 4th Ave S
Seattle, WA 98108

RE: 504490,

Work Order Number: 2504720

May 07, 2025

Attention Michael Erdahl:

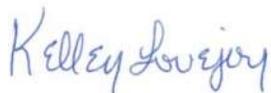
Alliance Technical Group, LLC - Seattle received 2 sample(s) on 4/30/2025 for the analyses presented in the following report.

Ion Chromatography by EPA 300.0

All analyses were performed according to our accredited Quality Assurance program. Please contact the laboratory if you should have any questions about the results.

Alliance Technical Group is committed to accuracy, speed, and customer service. Thank you for choosing Alliance Technical Group's Seattle laboratory team for your analytical needs. We appreciate this opportunity to serve you!

Sincerely,



Kelley Lovejoy
Project Manager

*DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.4 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910*

Original





Date: 05/07/2025

CLIENT: Friedman & Bruya
Project: 504490
Work Order: 2504720

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2504720-001	MW14	04/30/2025 12:00 AM	04/30/2025 3:00 PM
2504720-002	MW13	04/30/2025 12:00 AM	04/30/2025 3:00 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Original

CLIENT: Friedman & Bruya

Project: 504490

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- DUP - Sample Duplicate
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MCL - Maximum Contaminant Level
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- REP - Sample Replicate
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: **2504720**
 Date Reported: **5/7/2025**

CLIENT: Friedman & Bruya
Project: 504490

Lab ID: 2504720-001
Client Sample ID: MW14

Collection Date: 4/30/2025
Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Ion Chromatography by EPA 300.0

Batch ID: 47573 Analyst: OP

Fluoride	0.100	0.100		mg/L	1	4/30/2025 10:31:00 PM
Chloride	4.79	0.200		mg/L	1	4/30/2025 10:31:00 PM

Lab ID: 2504720-002
Client Sample ID: MW13

Collection Date: 4/30/2025
Matrix: Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Ion Chromatography by EPA 300.0

Batch ID: 47573 Analyst: OP

Fluoride	0.109	0.100		mg/L	1	4/30/2025 10:54:00 PM
Chloride	2.48	0.200		mg/L	1	4/30/2025 10:54:00 PM

Work Order: 2504720
 CLIENT: Friedman & Bruya
 Project: 504490

QC SUMMARY REPORT
Ion Chromatography by EPA 300.0

Sample ID: MB-47573	SampType: MBLK	Units: mg/L			Prep Date: 4/30/2025	RunNo: 99402					
Client ID: MBLKW	Batch ID: 47573				Analysis Date: 4/30/2025	SeqNo: 2070337					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.100									
Chloride	ND	0.200									

Sample ID: LCS-47573	SampType: LCS	Units: mg/L			Prep Date: 4/30/2025	RunNo: 99402					
Client ID: LCSW	Batch ID: 47573				Analysis Date: 4/30/2025	SeqNo: 2070338					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.477	0.100	0.5000	0	95.4	90	110				
Chloride	0.720	0.200	0.7500	0	96.0	90	110				

Sample ID: 2504714-001ADUP	SampType: DUP	Units: mg/L			Prep Date: 4/30/2025	RunNo: 99402					
Client ID: BATCH	Batch ID: 47573				Analysis Date: 4/30/2025	SeqNo: 2070340					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.162	0.100						0.1630	0.615	20	
Chloride	4.43	0.200						4.416	0.271	20	

Sample ID: 2504714-001AMS	SampType: MS	Units: mg/L			Prep Date: 4/30/2025	RunNo: 99402					
Client ID: BATCH	Batch ID: 47573				Analysis Date: 4/30/2025	SeqNo: 2070341					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.630	0.100	0.5000	0.1630	93.4	80	120				
Chloride	4.96	0.200	0.7500	4.416	72.4	80	120				S

NOTES:

S - Outlying spike recovery observed. A duplicate analysis was performed and recovered within range.

Sample ID: 2504714-001AMSD	SampType: MSD	Units: mg/L			Prep Date: 4/30/2025	RunNo: 99402					
Client ID: BATCH	Batch ID: 47573				Analysis Date: 4/30/2025	SeqNo: 2070342					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.655	0.100	0.5000	0.1630	98.4	80	120	0.6300	3.89	20	

Work Order: 2504720
CLIENT: Friedman & Bruya
Project: 504490

QC SUMMARY REPORT
Ion Chromatography by EPA 300.0

Sample ID: 2504714-001AMSD	SampType: MSD	Units: mg/L	Prep Date: 4/30/2025	RunNo: 99402							
Client ID: BATCH	Batch ID: 47573		Analysis Date: 4/30/2025	SeqNo: 2070342							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	5.18	0.200	0.7500	4.416	102	80	120	4.959	4.44	20	

Client Name: FB	Work Order Number: 2504720
Logged by: Morgan Wilson	Date Received: 4/30/2025 3:00:00 PM

Chain of Custody

1. Is Chain of Custody complete? Yes No Not Present
2. How was the sample delivered? Courier

Log In

3. Custody Seals present on shipping container/cooler?
(Refer to comments for Custody Seals not intact) Yes No Not Present
4. Was an attempt made to cool the samples? Yes No NA
5. Were all items received at a temperature of >2°C to 6°C * Yes No NA
6. Sample(s) in proper container(s)? Yes No
7. Sufficient sample volume for indicated test(s)? Yes No
8. Are samples properly preserved? Yes No
9. Was preservative added to bottles? Yes No NA
10. Is there headspace in the VOA vials? Yes No NA
11. Did all samples containers arrive in good condition(unbroken)? Yes No
12. Does paperwork match bottle labels? Yes No
13. Are matrices correctly identified on Chain of Custody? Yes No
14. Is it clear what analyses were requested? Yes No
15. Were all hold times (except field parameters, pH e.g.) able to be met? Yes No

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes No NA

Person Notified: <input style="width: 90%;" type="text"/>	Date: <input style="width: 90%;" type="text"/>
By Whom: <input style="width: 90%;" type="text"/>	Via: <input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding: <input style="width: 95%;" type="text"/>	
Client Instructions: <input style="width: 95%;" type="text"/>	

17. Additional remarks:

Item Information

Item #	Temp °C
Sample	3.6

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya
Ann Webber-Bruya
Michael Erdahl
Vineta Mills
Eric Young

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

April 24, 2025

Rusty Jones, Project Manager
Crete Consulting
16300 Christensen Road, Suite 214
Tukwila, WA 98188

Dear Mr Jones:

Included are the results from the testing of material submitted on April 21, 2025 from the Maralco Property, F&BI 504336 project. There are 9 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Grant Hainsworth, Jamie Stevens
CTC0424R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 21, 2025 by Friedman & Bruya, Inc. from the Crete Consulting Maralco Property, F&BI 504336 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Crete Consulting</u>
504336 -01	OSA-03S-SW1
504336 -02	OSA-03S-SW2
504336 -03	OSA-03S-B3

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/24/25
Date Received: 04/21/25
Project: Maralco Property, F&BI 504336
Date Extracted: 04/22/25
Date Analyzed: 04/23/25

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES11
USING EPA METHOD 8021B GC11**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Surrogate (% Recovery)</u> (Limit 50-150)
OSA-03S-SW2 504336-02	<0.02	<0.02	0.034	0.20	115
Method Blank 05-925 MB	<0.02	<0.02	<0.02	<0.06	115

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/24/25
Date Received: 04/21/25
Project: Maralco Property, F&BI 504336
Date Extracted: 04/21/25
Date Analyzed: 04/21/25

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-D_x**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
OSA-03S-SW1 504336-01	<50	<250	103
OSA-03S-SW2 504336-02	530	<250	105
OSA-03S-B3 504336-03	<50	<250	102
Method Blank 05-988 MB	<50	<250	108

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	OSA-03S-SW2	Client:	Crete Consulting
Date Received:	04/21/25	Project:	Maralco Property, F&BI 504336
Date Extracted:	04/23/25	Lab ID:	504336-02
Date Analyzed:	04/23/25	Data File:	042314.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	106	50	150
Benz(a)anthracene-d12	108	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	<0.005
Benz(a)anthracene	<0.005
Chrysene	<0.005
Benzo(a)pyrene	<0.005
Benzo(b)fluoranthene	<0.005
Benzo(k)fluoranthene	<0.005
Indeno(1,2,3-cd)pyrene	<0.005
Dibenz(a,h)anthracene	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	Method Blank	Client:	Crete Consulting
Date Received:	Not Applicable	Project:	Maralco Property, F&BI 504336
Date Extracted:	04/23/25	Lab ID:	05-0994 mb
Date Analyzed:	04/23/25	Data File:	042308.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	112	50	150
Benz(a)anthracene-d12	100	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	<0.005
Benz(a)anthracene	<0.005
Chrysene	<0.005
Benzo(a)pyrene	<0.005
Benzo(b)fluoranthene	<0.005
Benzo(k)fluoranthene	<0.005
Indeno(1,2,3-cd)pyrene	<0.005
Dibenz(a,h)anthracene	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/24/25

Date Received: 04/21/25

Project: Maralco Property, F&BI 504336

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
AND XYLENES
USING EPA METHOD 8021B**

Laboratory Code: 504278-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	1.0	81	70-130
Toluene	mg/kg (ppm)	1.0	81	70-130
Ethylbenzene	mg/kg (ppm)	1.0	85	70-130
Xylenes	mg/kg (ppm)	3.0	90	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/24/25

Date Received: 04/21/25

Project: Maralco Property, F&BI 504336

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-D_x**

Laboratory Code: 504329-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	850	91	81	64-136	12

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	90	78-121

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/24/25

Date Received: 04/21/25

Project: Maralco Property, F&BI 504336

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL
SAMPLES FOR PAHS BY EPA METHOD 8270E SIM**

Laboratory Code: 504336-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.5	<0.005	100	92	50-150	8
2-Methylnaphthalene	mg/kg (ppm)	0.5	<0.005	99	92	50-150	7
1-Methylnaphthalene	mg/kg (ppm)	0.5	<0.005	101	93	50-150	8
Benz(a)anthracene	mg/kg (ppm)	0.5	<0.005	105	105	50-150	0
Chrysene	mg/kg (ppm)	0.5	<0.005	99	99	50-150	0
Benzo(b)fluoranthene	mg/kg (ppm)	0.5	<0.005	92	94	10-187	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.5	<0.005	107	108	47-148	1
Benzo(a)pyrene	mg/kg (ppm)	0.5	<0.005	94	93	33-158	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.5	<0.005	89	80	50-150	11
Dibenz(a,h)anthracene	mg/kg (ppm)	0.5	<0.005	88	75	50-150	16

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.5	101	64-124
2-Methylnaphthalene	mg/kg (ppm)	0.5	91	63-118
1-Methylnaphthalene	mg/kg (ppm)	0.5	93	62-122
Benz(a)anthracene	mg/kg (ppm)	0.5	98	67-122
Chrysene	mg/kg (ppm)	0.5	98	70-130
Benzo(b)fluoranthene	mg/kg (ppm)	0.5	99	70-130
Benzo(k)fluoranthene	mg/kg (ppm)	0.5	100	70-130
Benzo(a)pyrene	mg/kg (ppm)	0.5	92	62-113
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.5	100	65-130
Dibenz(a,h)anthracene	mg/kg (ppm)	0.5	98	61-133

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. The value reported is an estimate.
- c - The presence of the analyte may be due to carryover from previous sample injections.
- cf - The sample was centrifuged prior to analysis.
- d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv - Insufficient sample volume was available to achieve normal reporting limits.
- f - The sample was laboratory filtered prior to analysis.
- fb - The analyte was detected in the method blank.
- fc - The analyte is a common laboratory and field contaminant.
- hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs - Headspace was present in the container used for analysis.
- ht - The analysis was performed outside the method or client-specified holding time requirement.
- ip - Recovery fell outside of control limits due to sample matrix effects.
- j - The analyte concentration is reported between the method detection limit and the lowest calibration point. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- k - The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

5049336

SAMPLE CHAIN OF CUSTODY 04/21/85 VS A1/A1

Report To Jones, Hainsworth, Stevens

Company CRETE Consulting

Address _____

City, State, ZIP _____

Phone 832-330-1359 Email _____

SAMPLERS (signature) <u>Rusty Jones</u>		R. Jones	
PROJECT NAME	<u>Muralco Property</u>	PO #	
REMARKS		INVOICE TO	<u>CRETE</u>
Project specific RIs? - Yes / No			

Page # 1 of 1

TURNAROUND TIME
 Standard turnaround
 RUSH
 Rush charges authorized by: _____

SAMPLE DISPOSAL
 Archive samples
 Other _____
 Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes						
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082		cPAHs and naphthalenes					
03A-035-SW1	01A-E	4/21/85	0920	GRAB Soil	5	X													other analysis
03A-035-SW2	02 ↓		0925		5	X		A											Pending these
03A-033-B3	03 ↓		0935		5	X													prelim. results.

Friedman & Bryya, Inc.
 5500 4th Ave S.
 Seattle WA 98108
 (206) 285-8282
 office@friedmanandbryya.com

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by: <u>R. Jones</u>		<u>Rusty Jones</u>		<u>CRETE</u>		<u>4/21/85</u>		<u>11:35</u>	
Received by: <u>AW</u>		<u>And Pham</u>		<u>FBI</u>		<u>4/21/85</u>		<u>11:35</u>	
Relinquished by:									
Received by:									

A-per RI 04/22/25
 ME 48 hr TAT
 Notes

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 504336 CLIENT Crete INITIALS/ DATE: AP 4/21/25

If custody seals are present on cooler, are they intact? NA YES NO

Cooler/Sample temperature _____ Thermometer ID: 4 °C Fluke 96312917

Were samples received on ice/cold packs? YES NO

How did samples arrive? Over the Counter Picked up by F&BI FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? YES NO Initials/ Date: AP 4/21/25
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 0 days

Are the samples clearly identified? (explain "no" answer below) YES NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) YES NO

Were appropriate sample containers used? YES NO Unknown

If custody seals are present on samples, are they intact? NA YES NO

Are samples requiring no headspace, headspace free? NA YES NO

Is the following information provided on the COC, and does it match the sample label? (explain "no" answer below)

- Sample ID's Yes No _____ Not on COC/label
- Date Sampled Yes No _____ Not on COC/label
- Time Sampled Yes No _____ Not on COC/label
- # of Containers Yes No _____
- Relinquished Yes No _____
- Requested analysis Yes On Hold _____

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? NA YES NO

Number of unused TO15 canisters** _____ Number of unused TO17 tubes _____

**Fill out Green manifolds billing sheet

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya
Ann Webber-Bruya
Michael Erdahl
Vineta Mills
Eric Young

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

April 24, 2025

Grant Hainsworth, Project Manager
Crete Consulting
16300 Christensen Road, Suite 214
Tukwila, WA 98188

Dear Mr Hainsworth:

Included are the results from the testing of material submitted on April 17, 2025 from the Bridge Maralco, F&BI 504278 project. There are 9 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Rusty Jones, Jamie Stevens
CTC0424R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 17, 2025 by Friedman & Bruya, Inc. from the Crete Consulting Bridge Maralco, F&BI 504278 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Crete Consulting</u>
504278 -01	OSA-03N-WSW
504278 -02	OSA-03N-ESW
504278 -03	OSA-03N-B
504278 -04	OSA-03S-B

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/24/25
Date Received: 04/17/25
Project: Bridge Maralco, F&BI 504278
Date Extracted: 04/22/25
Date Analyzed: 04/22/25

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES
USING EPA METHOD 8021B**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Surrogate (% Recovery)</u> (Limit 50-150)
OSA-03N-WSW 504278-01	<0.02	<0.02	<0.02	<0.06	110
Method Blank 05-925 MB	<0.02	<0.02	<0.02	<0.06	115

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/24/25
Date Received: 04/17/25
Project: Bridge Maralco, F&BI 504278
Date Extracted: 04/17/25
Date Analyzed: 04/17/25

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-D_x**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
OSA-03N-WSW 504278-01	130	<250	111
OSA-03N-ESW 504278-02	<50	<250	110
OSA-03N-B 504278-03	97	<250	109
OSA-03S-B 504278-04	3,800	<250	116
Method Blank 05-917 MB	<50	<250	109

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	OSA-03N-WSW	Client:	Crete Consulting
Date Received:	04/17/25	Project:	Bridge Maralco, F&BI 504278
Date Extracted:	04/21/25	Lab ID:	504278-01
Date Analyzed:	04/21/25	Data File:	042128.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	100	50	150
Benz(a)anthracene-d12	102	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	0.0052
Benz(a)anthracene	<0.005
Chrysene	<0.005
Benzo(a)pyrene	<0.005
Benzo(b)fluoranthene	<0.005
Benzo(k)fluoranthene	<0.005
Indeno(1,2,3-cd)pyrene	<0.005
Dibenz(a,h)anthracene	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	Method Blank	Client:	Crete Consulting
Date Received:	Not Applicable	Project:	Bridge Maralco, F&BI 504278
Date Extracted:	04/21/25	Lab ID:	05-0991 mb
Date Analyzed:	04/21/25	Data File:	042118.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	102	50	150
Benz(a)anthracene-d12	99	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	<0.005
Benz(a)anthracene	<0.005
Chrysene	<0.005
Benzo(a)pyrene	<0.005
Benzo(b)fluoranthene	<0.005
Benzo(k)fluoranthene	<0.005
Indeno(1,2,3-cd)pyrene	<0.005
Dibenz(a,h)anthracene	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/24/25

Date Received: 04/17/25

Project: Bridge Maralco, F&BI 504278

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
AND XYLENES
USING EPA METHOD 8021B**

Laboratory Code: 504278-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	1.0	81	70-130
Toluene	mg/kg (ppm)	1.0	81	70-130
Ethylbenzene	mg/kg (ppm)	1.0	85	70-130
Xylenes	mg/kg (ppm)	3.0	90	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/24/25

Date Received: 04/17/25

Project: Bridge Maralco, F&BI 504278

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-D_x**

Laboratory Code: 504257-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	108	112	64-136	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	106	78-121

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/24/25

Date Received: 04/17/25

Project: Bridge Maralco, F&BI 504278

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL
SAMPLES FOR PAHS BY EPA METHOD 8270E SIM**

Laboratory Code: 504290-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.5	<0.005	95	87	50-150	9
2-Methylnaphthalene	mg/kg (ppm)	0.5	<0.005	89	89	50-150	0
1-Methylnaphthalene	mg/kg (ppm)	0.5	<0.005	90	90	50-150	0
Benz(a)anthracene	mg/kg (ppm)	0.5	<0.005	89	91	50-150	2
Chrysene	mg/kg (ppm)	0.5	<0.005	92	95	50-150	3
Benzo(b)fluoranthene	mg/kg (ppm)	0.5	<0.005	81	82	10-187	1
Benzo(k)fluoranthene	mg/kg (ppm)	0.5	<0.005	93	97	47-148	4
Benzo(a)pyrene	mg/kg (ppm)	0.5	<0.005	82	84	33-158	2
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.5	<0.005	80	88	50-150	10
Dibenz(a,h)anthracene	mg/kg (ppm)	0.5	<0.005	77	85	50-150	10

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.5	87	64-124
2-Methylnaphthalene	mg/kg (ppm)	0.5	88	63-118
1-Methylnaphthalene	mg/kg (ppm)	0.5	89	62-122
Benz(a)anthracene	mg/kg (ppm)	0.5	93	67-122
Chrysene	mg/kg (ppm)	0.5	95	70-130
Benzo(b)fluoranthene	mg/kg (ppm)	0.5	86	70-130
Benzo(k)fluoranthene	mg/kg (ppm)	0.5	96	70-130
Benzo(a)pyrene	mg/kg (ppm)	0.5	87	62-113
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.5	86	65-130
Dibenz(a,h)anthracene	mg/kg (ppm)	0.5	83	61-133

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. The value reported is an estimate.
- c - The presence of the analyte may be due to carryover from previous sample injections.
- cf - The sample was centrifuged prior to analysis.
- d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv - Insufficient sample volume was available to achieve normal reporting limits.
- f - The sample was laboratory filtered prior to analysis.
- fb - The analyte was detected in the method blank.
- fc - The analyte is a common laboratory and field contaminant.
- hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs - Headspace was present in the container used for analysis.
- ht - The analysis was performed outside the method or client-specified holding time requirement.
- ip - Recovery fell outside of control limits due to sample matrix effects.
- j - The analyte concentration is reported between the method detection limit and the lowest calibration point. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- k - The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

504278

SAMPLE CHAIN OF CUSTODY

04/17/25 VS A1/A2

Page # 1 of 1

TURNAROUND TIME

Standard turnaround

RUSH 24hr DX

Rush charges authorized by:

SAMPLE DISPOSAL

Archive samples

Other

Default: Dispose after 30 days

Report To Grant Jamie Lusty

Company CRETE Consulting

Address _____

City, State, ZIP _____

Phone _____ Email _____

SAMPLERS (signature) Grant Jamie Lusty

PROJECT NAME BRIDGE MANDERS

PO # _____

REMARKS

INVOICE TO

Project specific RIs? - Yes / No

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Notes
OSA-03N-WSW	01A-F	4/17/25	1010	Soil	6	X		A					*RUSH Dx-24hr
OSA-03N-ESW	02	"	1020	"	6	X							- other analytes
OSA-03N-B	03	"	1155	"	6	X							may be assigned
OSA-03S-B	04	"	1205	"	6	X							depending on results
													Samples received at 10°C

SIGNATURE

Relinquished by: Grant Jamie Lusty

Received by: Grant Jamie Lusty

Relinquished by: _____

Received by: _____

PRINT NAME

Grant Hainsworth

Matt Truony

COMPANY

CRETE

F&B

DATE TIME

4/17/25 12:45

4/17/25 12:45

Friedman & Bruya, Inc.
5500 4th Ave S.
Seattle WA 98108
(206) 285-8282
office@friedmanandbruya.com

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 504278 CLIENT Crete INITIALS/ DATE: NT 4/17/25

If custody seals are present on cooler, are they intact? NA YES NO

Cooler/Sample temperature _____ Thermometer ID: 19 °C Fluke 96312917

Were samples received on ice/cold packs? YES NO

How did samples arrive?
 Over the Counter Picked up by F&BI FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? YES NO Initials/ Date: AP 4/17/25
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 0 days

Are the samples clearly identified? (explain "no" answer below) YES NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) YES NO

Were appropriate sample containers used? YES NO Unknown

If custody seals are present on samples, are they intact? NA YES NO

Are samples requiring no headspace, headspace free? NA YES NO

Is the following information provided on the COC, and does it match the sample label? (explain "no" answer below)

- Sample ID's Yes No _____ Not on COC/label
- Date Sampled Yes No _____ Not on COC/label
- Time Sampled Yes No _____ Not on COC/label
- # of Containers Yes No _____
- Relinquished Yes No _____
- Requested analysis Yes On Hold _____

Other comments (use a separate page if needed)
Time on labels 12:05 for OSA-03N-B(-03A→F) & 11:55 for OSA-03S-B(-04A→F)

Air Samples: Were any additional canisters/tubes received? NA YES NO

Number of unused TO15 canisters** _____ Number of unused TO17 tubes _____

**Fill out Green manifolds billing sheet

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya
Ann Webber-Bruya
Michael Erdahl
Vineta Mills
Eric Young

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

April 10, 2025

Jamie Stevens, Project Manager
Crete Consulting
16300 Christensen Road, Suite 214
Tukwila, WA 98188

Dear Ms Stevens:

Included are the results from the testing of material submitted on April 4, 2025 from the Bridge Maralco, F&BI 504095 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Rusty Jones, Grant Hainsworth
CTC0410R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 4, 2025 by Friedman & Bruya, Inc. from the Crete Consulting Bridge Maralco, F&BI 504095 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Crete Consulting</u>
504095 -01	OAS-03B
504095 -02	OAS-03SW
504095 -03	OAS-04

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/10/25
Date Received: 04/04/25
Project: Bridge Maralco, F&BI 504095
Date Extracted: 04/09/25
Date Analyzed: 04/09/25

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING METHODS 8021B AND NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-150)
OAS-03B 504095-01	<0.02	<0.02	<0.02	<0.06	<5	84
OAS-04 504095-03	<0.02	<0.02	<0.02	<0.06	<5	83
Method Blank 05-678 MB	<0.02	<0.02	<0.02	<0.06	<5	73

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/10/25
Date Received: 04/04/25
Project: Bridge Maralco, F&BI 504095
Date Extracted: 04/07/25
Date Analyzed: 04/07/25

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-D_x**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
OAS-03B 504095-01	<50	<250	107
OAS-03SW 504095-02	13,000	650 x	134
OAS-04 504095-03	<50	<250	108
Method Blank 05-833 MB	<50	<250	110

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	OAS-03B	Client:	Crete Consulting
Date Received:	04/04/25	Project:	Bridge Maralco, F&BI 504095
Date Extracted:	04/08/25	Lab ID:	504095-01
Date Analyzed:	04/09/25	Data File:	040836.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	105	50	150
Benz(a)anthracene-d12	100	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	<0.005
Benz(a)anthracene	<0.005
Chrysene	<0.005
Benzo(a)pyrene	<0.005
Benzo(b)fluoranthene	<0.005
Benzo(k)fluoranthene	<0.005
Indeno(1,2,3-cd)pyrene	<0.005
Dibenz(a,h)anthracene	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	OAS-04	Client:	Crete Consulting
Date Received:	04/04/25	Project:	Bridge Maralco, F&BI 504095
Date Extracted:	04/08/25	Lab ID:	504095-03
Date Analyzed:	04/09/25	Data File:	040837.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	108	50	150
Benz(a)anthracene-d12	97	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	<0.005
Benz(a)anthracene	<0.005
Chrysene	<0.005
Benzo(a)pyrene	<0.005
Benzo(b)fluoranthene	<0.005
Benzo(k)fluoranthene	<0.005
Indeno(1,2,3-cd)pyrene	<0.005
Dibenz(a,h)anthracene	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E SIM

Client Sample ID:	Method Blank	Client:	Crete Consulting
Date Received:	Not Applicable	Project:	Bridge Maralco, F&BI 504095
Date Extracted:	04/08/25	Lab ID:	05-0838 mb
Date Analyzed:	04/08/25	Data File:	040824.D
Matrix:	Soil	Instrument:	GCMS14
Units:	mg/kg (ppm) Dry Weight	Operator:	DBA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	96	50	150
Benz(a)anthracene-d12	101	50	150

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.005
1-Methylnaphthalene	<0.005
Benz(a)anthracene	<0.005
Chrysene	<0.005
Benzo(a)pyrene	<0.005
Benzo(b)fluoranthene	<0.005
Benzo(k)fluoranthene	<0.005
Indeno(1,2,3-cd)pyrene	<0.005
Dibenz(a,h)anthracene	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/10/25

Date Received: 04/04/25

Project: Bridge Maralco, F&BI 504095

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 504095-03 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Benzene	mg/kg (ppm)	<0.02	<0.02	nm
Toluene	mg/kg (ppm)	<0.02	<0.02	nm
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nm
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	1.0	96	70-130
Toluene	mg/kg (ppm)	1.0	98	70-130
Ethylbenzene	mg/kg (ppm)	1.0	95	70-130
Xylenes	mg/kg (ppm)	3.0	93	70-130
Gasoline	mg/kg (ppm)	40	95	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/10/25

Date Received: 04/04/25

Project: Bridge Maralco, F&BI 504095

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-D_x**

Laboratory Code: 504095-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	96	100	64-136	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	94	78-121

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/10/25

Date Received: 04/04/25

Project: Bridge Maralco, F&BI 504095

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL
SAMPLES FOR PAHS BY EPA METHOD 8270E SIM**

Laboratory Code: 504049-12 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.5	<0.005	94	94	50-150	0
2-Methylnaphthalene	mg/kg (ppm)	0.5	<0.005	95	93	50-150	2
1-Methylnaphthalene	mg/kg (ppm)	0.5	<0.005	96	94	50-150	2
Benz(a)anthracene	mg/kg (ppm)	0.5	<0.005	102	102	50-150	0
Chrysene	mg/kg (ppm)	0.5	<0.005	98	100	50-150	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.5	<0.005	98	98	10-187	0
Benzo(k)fluoranthene	mg/kg (ppm)	0.5	<0.005	105	109	47-148	4
Benzo(a)pyrene	mg/kg (ppm)	0.5	<0.005	95	94	33-158	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.5	<0.005	102	88	50-150	15
Dibenz(a,h)anthracene	mg/kg (ppm)	0.5	<0.005	98	85	50-150	14

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.5	93	64-124
2-Methylnaphthalene	mg/kg (ppm)	0.5	97	63-118
1-Methylnaphthalene	mg/kg (ppm)	0.5	96	62-122
Benz(a)anthracene	mg/kg (ppm)	0.5	100	67-122
Chrysene	mg/kg (ppm)	0.5	97	70-130
Benzo(b)fluoranthene	mg/kg (ppm)	0.5	95	70-130
Benzo(k)fluoranthene	mg/kg (ppm)	0.5	104	70-130
Benzo(a)pyrene	mg/kg (ppm)	0.5	93	62-113
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.5	104	65-130
Dibenz(a,h)anthracene	mg/kg (ppm)	0.5	98	61-133

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. The value reported is an estimate.
- c - The presence of the analyte may be due to carryover from previous sample injections.
- cf - The sample was centrifuged prior to analysis.
- d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv - Insufficient sample volume was available to achieve normal reporting limits.
- f - The sample was laboratory filtered prior to analysis.
- fb - The analyte was detected in the method blank.
- fc - The analyte is a common laboratory and field contaminant.
- hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs - Headspace was present in the container used for analysis.
- ht - The analysis was performed outside the method or client-specified holding time requirement.
- ip - Recovery fell outside of control limits due to sample matrix effects.
- j - The analyte concentration is reported between the method detection limit and the lowest calibration point. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- k - The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

504095

SAMPLE CHAIN OF CUSTODY

04/04/05

VS A 1 / A 1

Page # 1 of 1

TURNAROUND TIME

Standard turnaround

RUSH 24 hr

Rush charges authorized by:

SAMPLE DISPOSAL

Archive samples

Other

Default: Dispose after 30 days

Report To Jamie, Grant, Busby

Company Crete Consulting

Address

City, State, ZIP Tukwila, WA

Phone

Email

SAMPLER'S Signature

PROJECT NAME

BRIDGE

MFLA Co

REMARKS

INVOICE TO

Project specific RIs? - Yes / No

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Notes
OAS-03B	01A-F	4/4/05	1330	So. 1	6	X	A	A		A	A		* Hold For Follow-up
OAS-03SW	02 ↓	4/4/05	1340	1	6	X							ANALYSES
OAS-04	03 ↓	4/4/05	1410	1	6	X	A	A		A			ANALYSES
													DR 24h TAT

Samples received at 4 o/c

A-2-day per JS
04/08/25 ME
Notes

Friedman & Bruya, Inc.
5500 4th Ave S.
Seattle WA 98108
(206) 285-8282
office@friedmanandbruya.com

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by: [Signature]

Grant Hainsworth

CRETE

4/4/05

2:55

Received by: [Signature]

Griffiths

CRB

4/4/05

1:25

Received by:

504095

SAMPLE CHAIN OF CUSTODY

04/04/25

VS A1/A1

Page # 1 of 1

Report To James, Grant, Lustry
 Company Crete Consulting
 Address _____
 City, State, ZIP Tukwila, WA
 Phone _____ Email _____

SAMPLER'S (signature) <u>Scott Hainsworth</u>	PROJECT NAME <u>BRIDGE</u>	PO # _____
REMARKS <u>NAALCO</u>	INVOICE TO _____	
Project specific RIs? - Yes / No _____		

TURNAROUND TIME _____

Standard turnaround
 RUSH 24hr
 Rush charges authorized by: _____

SAMPLE DISPOSAL
 Archive samples
 Other _____
 Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED							Notes	
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082		
OAS-03B	01A-F	4/4/25	1330	So. 1	6	X								* HOLD FOR FOLLOW-UP
OAS-03SW	02 ↓		1340		6	X								ANALYSES
OAS-04	03 ↓		1410		6	X								ANALYSES
														DATE 24h TRF

Samples received at _____ 4 o'clock

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Grant Hainsworth</u>	Grant Hainsworth	CRETE	4/4/25	2:55
Received by: <u>Scott Hainsworth</u>	Scott Hainsworth	CRETE	4/4/25	1:55
Relinquished by: _____	_____	_____	_____	_____
Received by: _____	_____	_____	_____	_____

Friedman & Bruya, Inc.
 5500 4th Ave S.
 Seattle WA 98108
 (206) 285-8282
 office@friedmanandbruya.com

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 504095 CLIENT Crete INITIALS/ DATE: AP 4/4/25

If custody seals are present on cooler, are they intact? NA YES NO

Cooler/Sample temperature _____ Thermometer ID: 4 °C
Fluke 96312917

Were samples received on ice/cold packs? YES NO

How did samples arrive?
 Over the Counter Picked up by F&BI FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? YES NO Initials/ Date: AP 4/4/25
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 0 days

Are the samples clearly identified? (explain "no" answer below) YES NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) YES NO

Were appropriate sample containers used? YES NO Unknown

If custody seals are present on samples, are they intact? NA YES NO

Are samples requiring no headspace, headspace free? NA YES NO

Is the following information provided on the COC, and does it match the sample label?
(explain "no" answer below)

- | | | | |
|--------------------|---|-------|---|
| Sample ID's | <input type="checkbox"/> Yes <input type="checkbox"/> No | _____ | <input type="checkbox"/> Not on COC/label |
| Date Sampled | <input type="checkbox"/> Yes <input type="checkbox"/> No | _____ | <input type="checkbox"/> Not on COC/label |
| Time Sampled | <input type="checkbox"/> Yes <input type="checkbox"/> No | _____ | <input type="checkbox"/> Not on COC/label |
| # of Containers | <input type="checkbox"/> Yes <input type="checkbox"/> No | _____ | |
| Relinquished | <input type="checkbox"/> Yes <input type="checkbox"/> No | _____ | |
| Requested analysis | <input type="checkbox"/> Yes <input type="checkbox"/> On Hold | _____ | |

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? NA YES NO

Number of unused TO15 canisters** _____ Number of unused TO17 tubes _____
**Fill out Green manifolds billing sheet

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya
Ann Webber-Bruya
Michael Erdahl
Vineta Mills
Eric Young

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

April 7, 2025

Rusty Jones, Project Manager
Crete Consulting
16300 Christensen Road, Suite 214
Tukwila, WA 98188

Dear Mr Jones:

Included are the results from the testing of material submitted on April 3, 2025 from the Maralco IA, F&BI 504062 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Rusty Jones, Grant Hainsworth, Ben Starr, Jamie Stevens
CTC0407R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 3, 2025 by Friedman & Bruya, Inc. from the Crete Consulting Maralco IA, F&BI 504062 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Crete Consulting</u>
504062 -01	OSA-01
504062 -02	OSA-02
504062 -03	OSA-03

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/07/25
Date Received: 04/03/25
Project: Maralco IA, F&BI 504062
Date Extracted: 04/03/25
Date Analyzed: 04/03/25

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-D_x**

Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
OSA-01 504062-01	<50	<250	107
OSA-02 504062-02	<50	<250	114
OSA-03 504062-03	7,700	430 x	121
Method Blank 05-824 MB	<50	<250	108

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/07/25

Date Received: 04/03/25

Project: Maralco IA, F&BI 504062

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-D_x**

Laboratory Code: 504044-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	(Wet wt) Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	96	96	64-136	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	98	78-121

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. The value reported is an estimate.
- c - The presence of the analyte may be due to carryover from previous sample injections.
- cf - The sample was centrifuged prior to analysis.
- d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv - Insufficient sample volume was available to achieve normal reporting limits.
- f - The sample was laboratory filtered prior to analysis.
- fb - The analyte was detected in the method blank.
- fc - The analyte is a common laboratory and field contaminant.
- hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs - Headspace was present in the container used for analysis.
- ht - The analysis was performed outside the method or client-specified holding time requirement.
- ip - Recovery fell outside of control limits due to sample matrix effects.
- j - The analyte concentration is reported between the method detection limit and the lowest calibration point. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- k - The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 504062 CLIENT Crete INITIALS/ DATE: AP 4/13/25

If custody seals are present on cooler, are they intact? NA YES NO

Cooler/Sample temperature 6 °C
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? YES NO

How did samples arrive?
 Over the Counter Picked up by F&BI FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? YES NO Initials/ Date: AP 4/13/25
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 0 days

Are the samples clearly identified? (explain "no" answer below) YES NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) YES NO

Were appropriate sample containers used? YES NO Unknown

If custody seals are present on samples, are they intact? NA YES NO

Are samples requiring no headspace, headspace free? NA YES NO

Is the following information provided on the COC, and does it match the sample label? (explain "no" answer below)

- Sample ID's Yes No _____ Not on COC/label
- Date Sampled Yes No _____ Not on COC/label
- Time Sampled Yes No _____ Not on COC/label
- # of Containers Yes No _____
- Relinquished Yes No _____
- Requested analysis Yes On Hold _____

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? NA YES NO

Number of unused TO15 canisters** _____ Number of unused TO17 tubes _____

**Fill out Green manifolds billing sheet

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya
Ann Webber-Bruya
Michael Erdahl
Vineta Mills
Eric Young

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

April 10, 2025

Rusty Jones, Project Manager
Crete Consulting
16300 Christensen Road, Suite 214
Tukwila, WA 98188

Dear Mr Jones:

Included are the additional results from the testing of material submitted on April 3, 2025 from the Maralco IA, F&BI 504062 project. There are 16 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Grant Hainsworth, Jamie Stevens
CTC0410R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 3, 2025 by Friedman & Bruya, Inc. from the Crete Consulting Maralco IA, F&BI 504062 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Crete Consulting</u>
504062 -01	OSA-01
504062 -02	OSA-02
504062 -03	OSA-03

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/10/25
Date Received: 04/03/25
Project: Maralco IA, F&BI 504062
Date Extracted: 04/08/25
Date Analyzed: 04/08/25

**RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
USING METHOD NWTPH-Gx**

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate (% Recovery) (Limit 50-150)
OSA-02 504062-02	<5	89
Method Blank 05-0676 MB	<5	77

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	OSA-02	Client:	Crete Consulting
Date Received:	04/03/25	Project:	Maralco IA, F&BI 504062
Date Extracted:	04/08/25	Lab ID:	504062-02 1/0.5
Date Analyzed:	04/08/25	Data File:	040809.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	106	79	128
Toluene-d8	102	84	121
4-Bromofluorobenzene	93	84	116

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.002
Chloroethane	<0.1
1,1-Dichloroethene	<0.002
Hexane	<0.25
Methylene chloride	<0.4
Methyl t-butyl ether (MTBE)	<0.002
trans-1,2-Dichloroethene	<0.002
1,1-Dichloroethane	<0.002
cis-1,2-Dichloroethene	<0.002
1,2-Dichloroethane (EDC)	<0.003
1,1,1-Trichloroethane	<0.002
Benzene	<0.002
Trichloroethene	<0.002
Toluene	<0.004
Tetrachloroethene	<0.002
1,2-Dibromoethane (EDB)	<0.005
Ethylbenzene	<0.002
m,p-Xylene	<0.004
o-Xylene	<0.002
Naphthalene	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition LL

Client Sample ID:	Method Blank	Client:	Crete Consulting
Date Received:	Not Applicable	Project:	Maralco IA, F&BI 504062
Date Extracted:	04/08/25	Lab ID:	05-0773 mb 1/0.5
Date Analyzed:	04/08/25	Data File:	040808.D
Matrix:	Soil	Instrument:	GCMS11
Units:	mg/kg (ppm) Dry Weight	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	79	128
Toluene-d8	98	84	121
4-Bromofluorobenzene	103	84	116

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.002
Chloroethane	<0.1
1,1-Dichloroethene	<0.002
Hexane	<0.25
Methylene chloride	<0.4 k
Methyl t-butyl ether (MTBE)	<0.002
trans-1,2-Dichloroethene	<0.002
1,1-Dichloroethane	<0.002
cis-1,2-Dichloroethene	<0.002
1,2-Dichloroethane (EDC)	<0.003
1,1,1-Trichloroethane	<0.002
Benzene	<0.002
Trichloroethene	<0.002
Toluene	<0.004
Tetrachloroethene	<0.002
1,2-Dibromoethane (EDB)	<0.005
Ethylbenzene	<0.002
m,p-Xylene	<0.004
o-Xylene	<0.002
Naphthalene	<0.01

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	OSA-02	Client:	Crete Consulting
Date Received:	04/03/25	Project:	Maralco IA, F&BI 504062
Date Extracted:	04/08/25	Lab ID:	504062-02
Date Analyzed:	04/09/25	Data File:	040909.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	84	24	133
Terphenyl-d14	95	41	138

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.0025
1-Methylnaphthalene	<0.0025
Benz(a)anthracene	<0.005
Chrysene	<0.0025
Benzo(a)pyrene	<0.0025
Benzo(b)fluoranthene	<0.0025
Benzo(k)fluoranthene	<0.0025
Indeno(1,2,3-cd)pyrene	<0.005
Dibenz(a,h)anthracene	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	Method Blank	Client:	Crete Consulting
Date Received:	Not Applicable	Project:	Maralco IA, F&BI 504062
Date Extracted:	04/08/25	Lab ID:	05-0836 mb2
Date Analyzed:	04/09/25	Data File:	040908.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Nitrobenzene-d5	93	24	133
Terphenyl-d14	103	41	138

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.005
2-Methylnaphthalene	<0.0025
1-Methylnaphthalene	<0.0025
Benz(a)anthracene	<0.005
Chrysene	<0.0025
Benzo(a)pyrene	<0.0025
Benzo(b)fluoranthene	<0.0025
Benzo(k)fluoranthene	<0.0025
Indeno(1,2,3-cd)pyrene	<0.005
Dibenz(a,h)anthracene	<0.005

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client Sample ID:	OSA-02	Client:	Crete Consulting
Date Received:	04/03/25	Project:	Maralco IA, F&BI 504062
Date Extracted:	04/08/25	Lab ID:	504062-02
Date Analyzed:	04/08/25	Data File:	504062-02.080
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Lead	1.9
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client Sample ID:	Method Blank	Client:	Crete Consulting
Date Received:	NA	Project:	Maralco IA, F&BI 504062
Date Extracted:	04/08/25	Lab ID:	I5-295 mb
Date Analyzed:	04/08/25	Data File:	I5-295 mb.069
Matrix:	Soil	Instrument:	ICPMS3
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
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Lead	<1
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	OSA-02	Client:	Crete Consulting
Date Received:	04/03/25	Project:	Maralco IA, F&BI 504062
Date Extracted:	04/09/25	Lab ID:	504062-02 1/30
Date Analyzed:	04/09/25	Data File:	040913.D
Matrix:	Soil	Instrument:	GC12
Units:	mg/kg (ppm) Dry Weight	Operator:	JH

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	68	41	139
Decachlorobiphenyl	60	48	145

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	<0.02
Aroclor 1260	<0.02
Aroclor 1262	<0.02
Aroclor 1268	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Method Blank	Client:	Crete Consulting
Date Received:	Not Applicable	Project:	Maralco IA, F&BI 504062
Date Extracted:	04/09/25	Lab ID:	05-0848 mb 1/30
Date Analyzed:	04/09/25	Data File:	040907.D
Matrix:	Soil	Instrument:	GC12
Units:	mg/kg (ppm) Dry Weight	Operator:	JH

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Tetrachlorometaxylene	77	41	139
Decachlorobiphenyl	72	48	145

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.02
Aroclor 1232	<0.02
Aroclor 1016	<0.02
Aroclor 1242	<0.02
Aroclor 1248	<0.02
Aroclor 1254	<0.02
Aroclor 1260	<0.02
Aroclor 1262	<0.02
Aroclor 1268	<0.02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/10/25

Date Received: 04/03/25

Project: Maralco IA, F&BI 504062

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR TPH AS GASOLINE
USING METHOD NWTPH-G_x**

Laboratory Code: 504024-02 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (Limit 20)
Gasoline	mg/kg (ppm)	<5	<5	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	mg/kg (ppm)	40	95	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/10/25
 Date Received: 04/03/25
 Project: Maralco IA, F&BI 504062

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
 FOR VOLATILES BY EPA METHOD 8260D**

Laboratory Code: 504049-22 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	2	0.0010	67	65	28-122	3
Chloroethane	mg/kg (ppm)	2	0.050	76	72	35-125	5
1,1-Dichloroethene	mg/kg (ppm)	2	0.050	84	81	50-150	4
Hexane	mg/kg (ppm)	2	0.25	74	70	50-150	6
Methylene chloride	mg/kg (ppm)	2	0.25	85	82	50-150	4
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	0.050	87	83	50-150	5
trans-1,2-Dichloroethene	mg/kg (ppm)	2	0.050	83	79	50-150	5
1,1-Dichloroethane	mg/kg (ppm)	2	0.050	86	82	50-150	5
cis-1,2-Dichloroethene	mg/kg (ppm)	2	0.050	86	83	50-150	4
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	0.010	88	85	50-150	3
1,1,1-Trichloroethane	mg/kg (ppm)	2	0.050	85	82	50-150	4
Benzene	mg/kg (ppm)	2	0.017	88	85	50-150	3
Trichloroethene	mg/kg (ppm)	2	0.0025	87	83	50-150	5
Toluene	mg/kg (ppm)	2	0.050	86	86	50-150	0
Tetrachloroethene	mg/kg (ppm)	2	0.025	89	89	50-150	0
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	0.00050	88	88	50-150	0
Ethylbenzene	mg/kg (ppm)	2	0.050	89	89	50-150	0
m,p-Xylene	mg/kg (ppm)	4	0.10	88	88	50-150	0
o-Xylene	mg/kg (ppm)	2	0.050	88	89	50-150	1
Naphthalene	mg/kg (ppm)	2	0.050	75	77	50-150	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2	83	35-135
Chloroethane	mg/kg (ppm)	2	89	21-147
1,1-Dichloroethene	mg/kg (ppm)	2	96	49-138
Hexane	mg/kg (ppm)	2	97	61-141
Methylene chloride	mg/kg (ppm)	2	93	25-146
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2	98	65-129
trans-1,2-Dichloroethene	mg/kg (ppm)	2	95	62-126
1,1-Dichloroethane	mg/kg (ppm)	2	97	64-131
cis-1,2-Dichloroethene	mg/kg (ppm)	2	96	62-127
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2	101	73-123
1,1,1-Trichloroethane	mg/kg (ppm)	2	98	66-125
Benzene	mg/kg (ppm)	2	101	70-130
Trichloroethene	mg/kg (ppm)	2	96	62-116
Toluene	mg/kg (ppm)	2	100	70-130
Tetrachloroethene	mg/kg (ppm)	2	102	69-131
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2	105	70-130
Ethylbenzene	mg/kg (ppm)	2	105	70-130
m,p-Xylene	mg/kg (ppm)	4	103	70-130
o-Xylene	mg/kg (ppm)	2	102	70-130
Naphthalene	mg/kg (ppm)	2	88	69-119

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/10/25

Date Received: 04/03/25

Project: Maralco IA, F&BI 504062

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR SEMIVOLATILES BY EPA METHOD 8270E**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.83	82	96	59-105	16
2-Methylnaphthalene	mg/kg (ppm)	0.83	88	99	62-108	12
1-Methylnaphthalene	mg/kg (ppm)	0.83	88	98	62-108	11
Benz(a)anthracene	mg/kg (ppm)	0.83	101	105	64-116	4
Chrysene	mg/kg (ppm)	0.83	90	94	66-119	4
Benzo(a)pyrene	mg/kg (ppm)	0.83	99	103	62-116	4
Benzo(b)fluoranthene	mg/kg (ppm)	0.83	101	101	61-118	0
Benzo(k)fluoranthene	mg/kg (ppm)	0.83	98	106	65-119	8
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.83	114	114	67-136	0
Dibenz(a,h)anthracene	mg/kg (ppm)	0.83	115	114	67-135	1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/10/25

Date Received: 04/03/25

Project: Maralco IA, F&BI 504062

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 6020B**

Laboratory Code: 504062-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Lead	mg/kg (ppm)	50	1.56	93	92	75-125	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	mg/kg (ppm)	50	95	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/10/25

Date Received: 04/03/25

Project: Maralco IA, F&BI 504062

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES FOR
POLYCHLORINATED BIPHENYLS AS
AROCLOR 1016/1260 BY EPA METHOD 8082A**

Laboratory Code: 503460-02 1/30 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Control Limits	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	0.25	<0.02	67	74	50-150	10
Aroclor 1260	mg/kg (ppm)	0.25	<0.02	65	75	50-150	14

Laboratory Code: Laboratory Control Sample 1/30

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Aroclor 1016	mg/kg (ppm)	0.25	86	50-138
Aroclor 1260	mg/kg (ppm)	0.25	89	54-146

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca - The calibration results for the analyte were outside of acceptance criteria, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. The value reported is an estimate.
- c - The presence of the analyte may be due to carryover from previous sample injections.
- cf - The sample was centrifuged prior to analysis.
- d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv - Insufficient sample volume was available to achieve normal reporting limits.
- f - The sample was laboratory filtered prior to analysis.
- fb - The analyte was detected in the method blank.
- fc - The analyte is a common laboratory and field contaminant.
- hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs - Headspace was present in the container used for analysis.
- ht - The analysis was performed outside the method or client-specified holding time requirement.
- ip - Recovery fell outside of control limits due to sample matrix effects.
- j - The analyte concentration is reported between the method detection limit and the lowest calibration point. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- k - The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

504062

SAMPLE CHAIN OF CUSTODY

04/08/25

VS A1/A1

Page # 1 of 1

Report To Tones/Hainsworth/Steens

Company CRETE Consulting

Address _____

City, State, ZIP _____

Phone 832.330.1359 Email _____

SAMPLERS (signature) <u>Rusty Tones</u>	<u>R. Jones</u>
PROJECT NAME <u>Maraco IA</u>	PO # <u>MARACO</u>
REMARKS	INVOICE TO <u>CRETE</u>
Project specific RIs? - Yes / No	

TURNAROUND TIME Standard turnaround <u>CRUSH 24 Hour</u>
Rush charges authorized by: _____
SAMPLE DISPOSAL <input type="checkbox"/> Archive samples <input type="checkbox"/> Other _____
Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED								DATE	TIME	
						NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	cVOCs and Gas Target VOCs EPA 8260	cPAHs and naphthalenes PAHs EPA 8270	PCBs EPA 8082	Lead			
OSA-01	01A-E	4/3/2025	0910	soil	5	X										Hand for additional analysis!
OSA-02	02 ↓	↓	1050	↓	5	X	A			A	A	A				
OSA-03	03 ↓	↓	1150	↓	5	X										

SIGNATURE		PRINT NAME		COMPANY		DATE		TIME	
Relinquished by:	<u>R. Jones</u>	<u>Rusty Jones</u>		<u>CRETE</u>	<u>4/3/2025</u>	<u>1338</u>			
Received by:	<u>AK</u>	<u>Amk Pham</u>		<u>FBI</u>	<u>4/8/25</u>	<u>18:38</u>			
Relinquished by:									
Received by:									

Friedman & Bruya, Inc.
5500 4th Ave S.
Seattle WA 98108
(206) 285-8282
office@friedmanandbruya.com

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 504062 CLIENT Crete INITIALS/ DATE: AP 4/13/25

If custody seals are present on cooler, are they intact? NA YES NO

Cooler/Sample temperature 6 °C
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? YES NO

How did samples arrive?
 Over the Counter Picked up by F&BI FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? YES NO Initials/ Date: AP 4/13/25
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 0 days

Are the samples clearly identified? (explain "no" answer below) YES NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) YES NO

Were appropriate sample containers used? YES NO Unknown

If custody seals are present on samples, are they intact? NA YES NO

Are samples requiring no headspace, headspace free? NA YES NO

Is the following information provided on the COC, and does it match the sample label? (explain "no" answer below)

- Sample ID's Yes No _____ Not on COC/label
- Date Sampled Yes No _____ Not on COC/label
- Time Sampled Yes No _____ Not on COC/label
- # of Containers Yes No _____
- Relinquished Yes No _____
- Requested analysis Yes On Hold _____

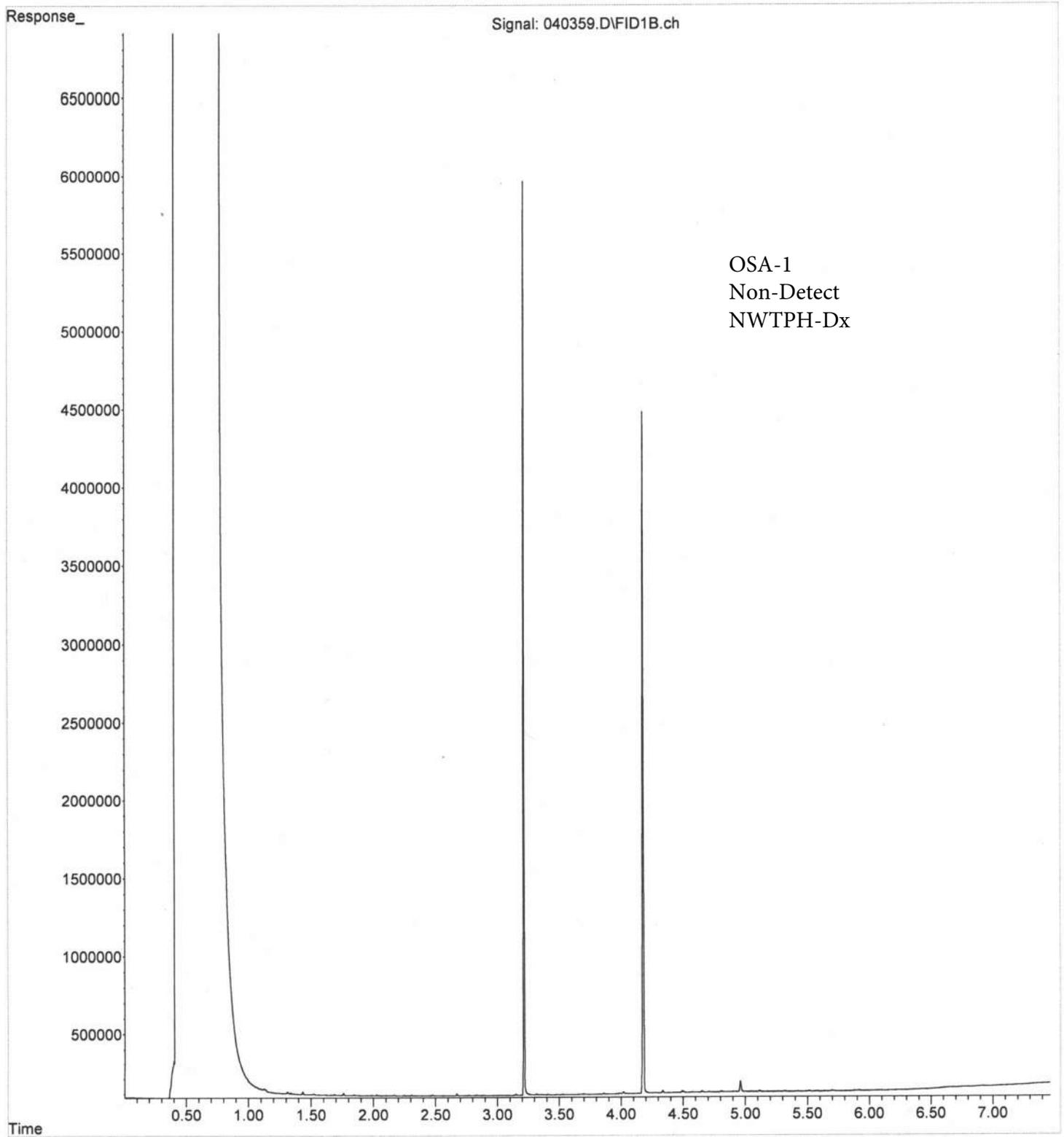
Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? NA YES NO

Number of unused TO15 canisters** _____ Number of unused TO17 tubes _____
**Fill out Green manifolds billing sheet

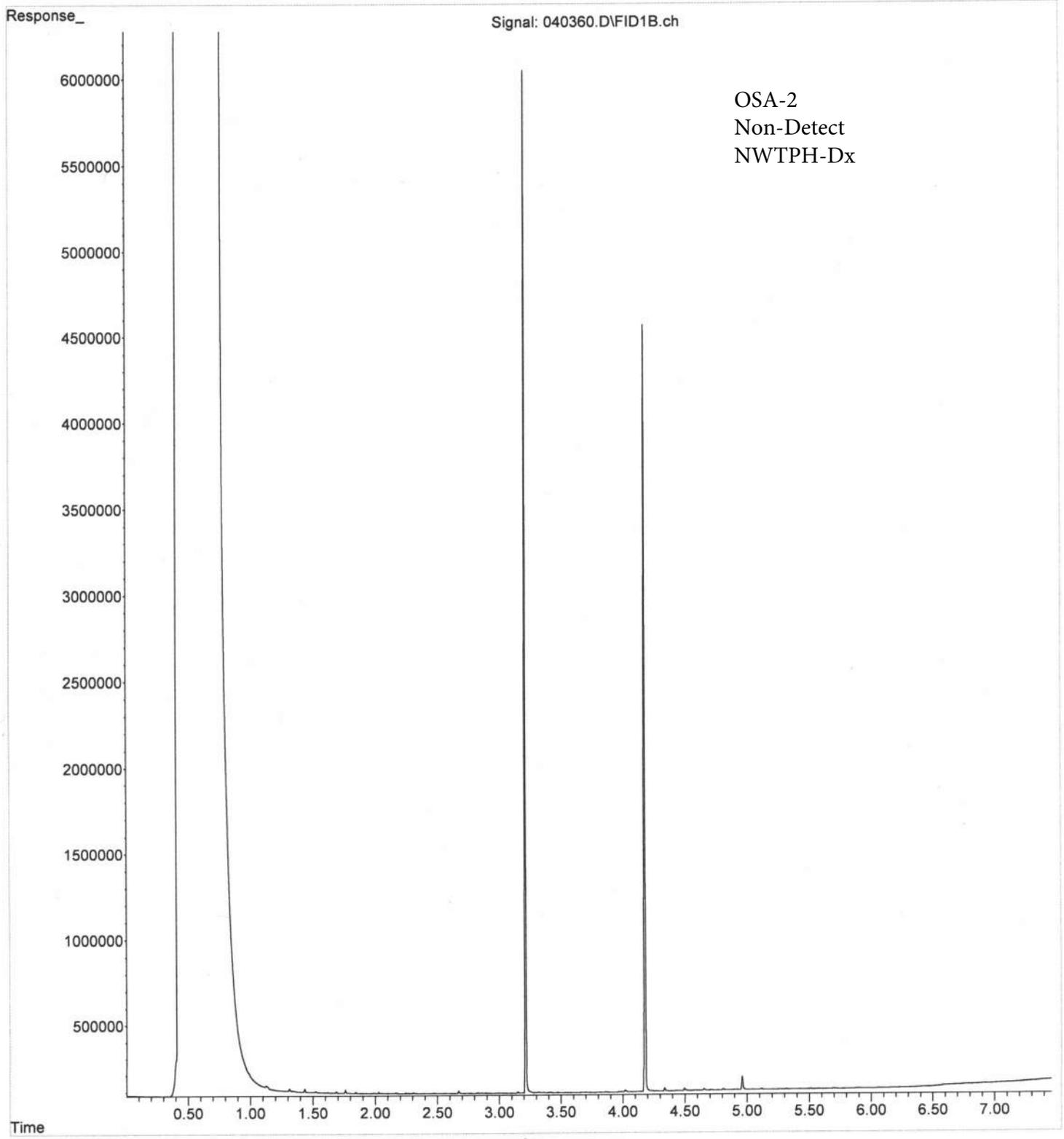
File :N:\Proc_GC13\04-03-25\040359.D
Operator : TL
Acquired : 03 Apr 2025 09:17 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 504062-01
Misc Info :
Vial Number: 54

ERR



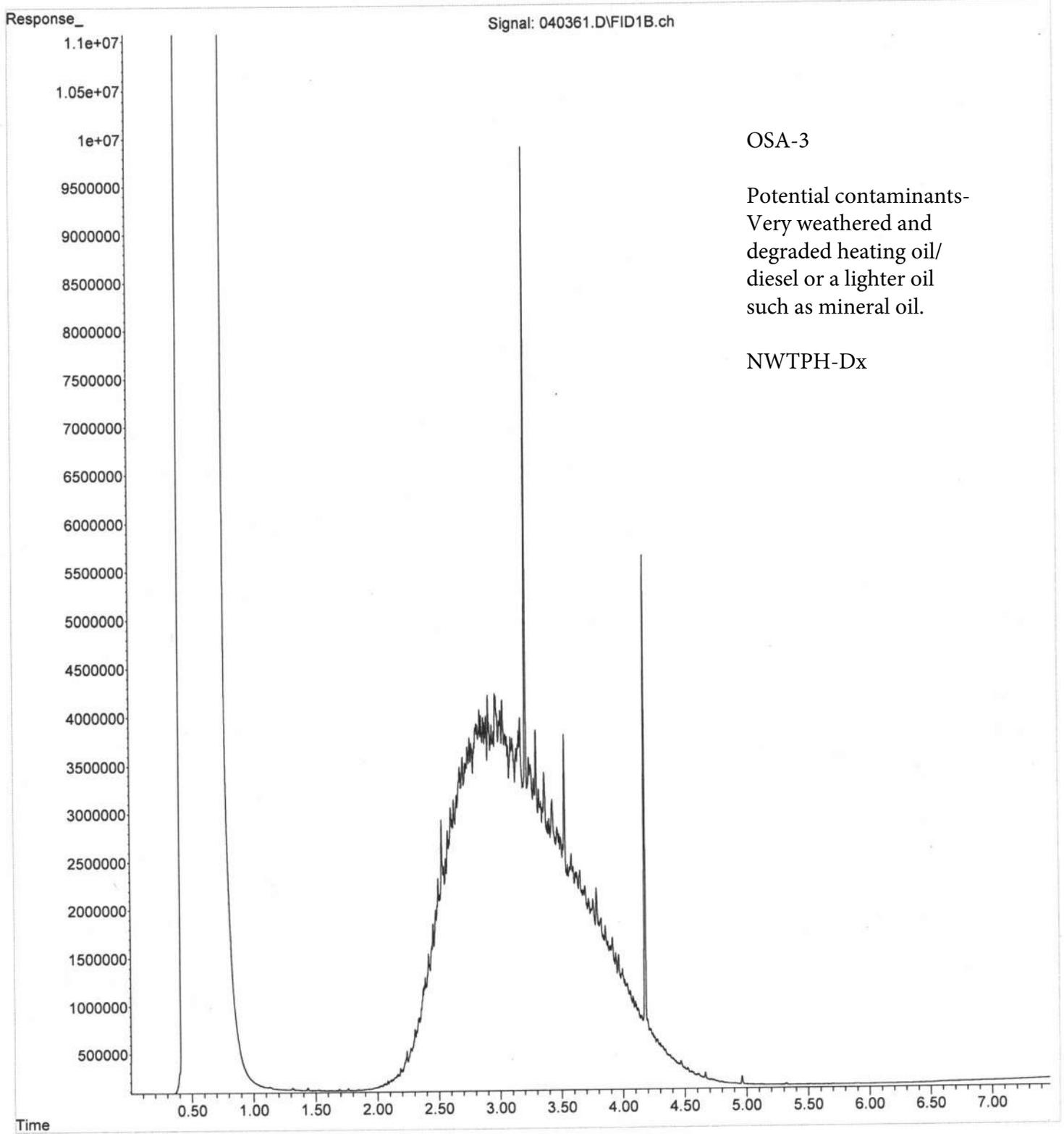
File :N:\Proc_GC13\04-03-25\040360.D
Operator : TL
Acquired : 03 Apr 2025 09:28 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 504062-02
Misc Info :
Vial Number: 55

ERR



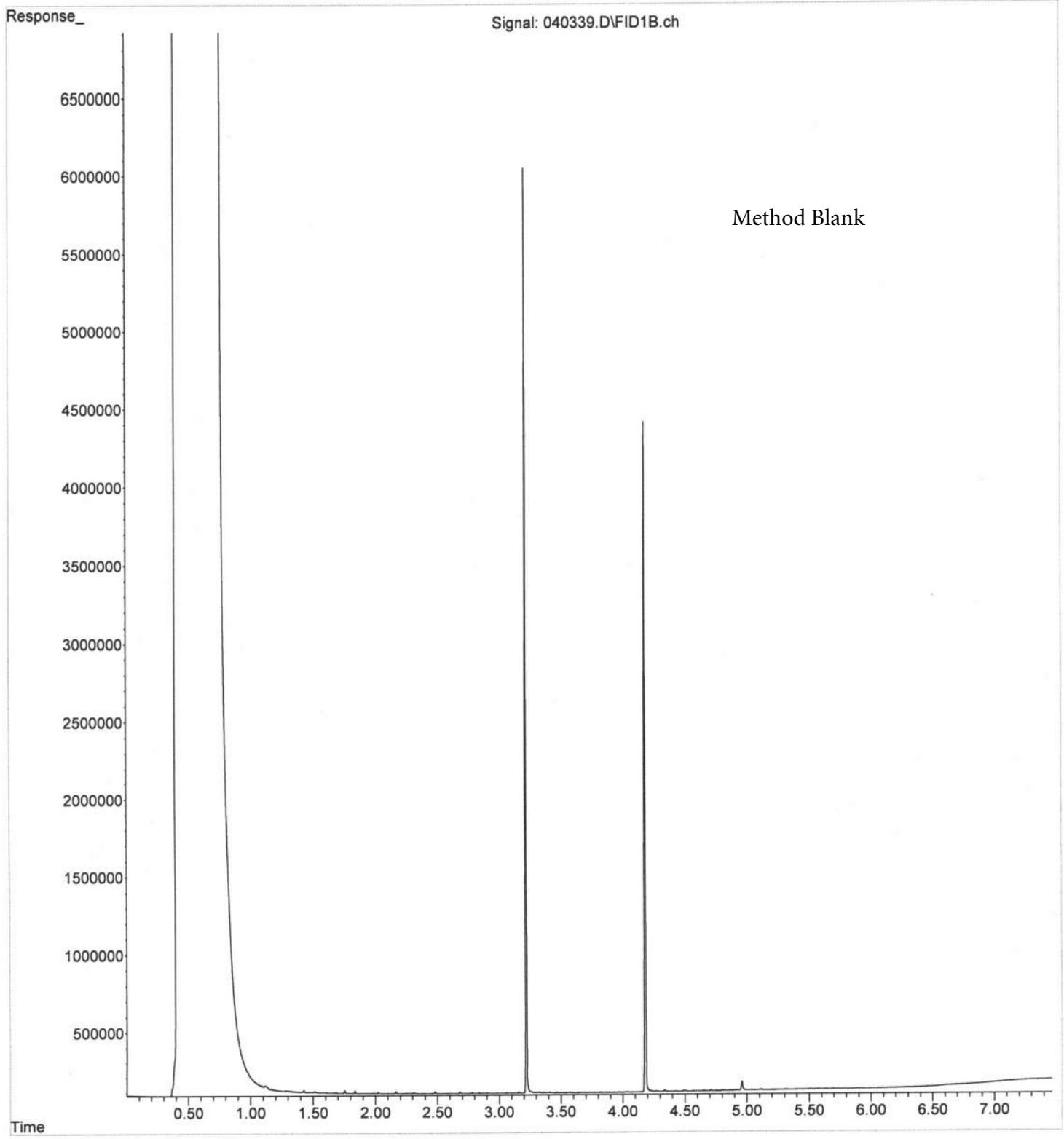
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Operator : TL
Acquired : 03 Apr 2025 09:39 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 504062-03
Misc Info :
Vial Number: 56

ERR



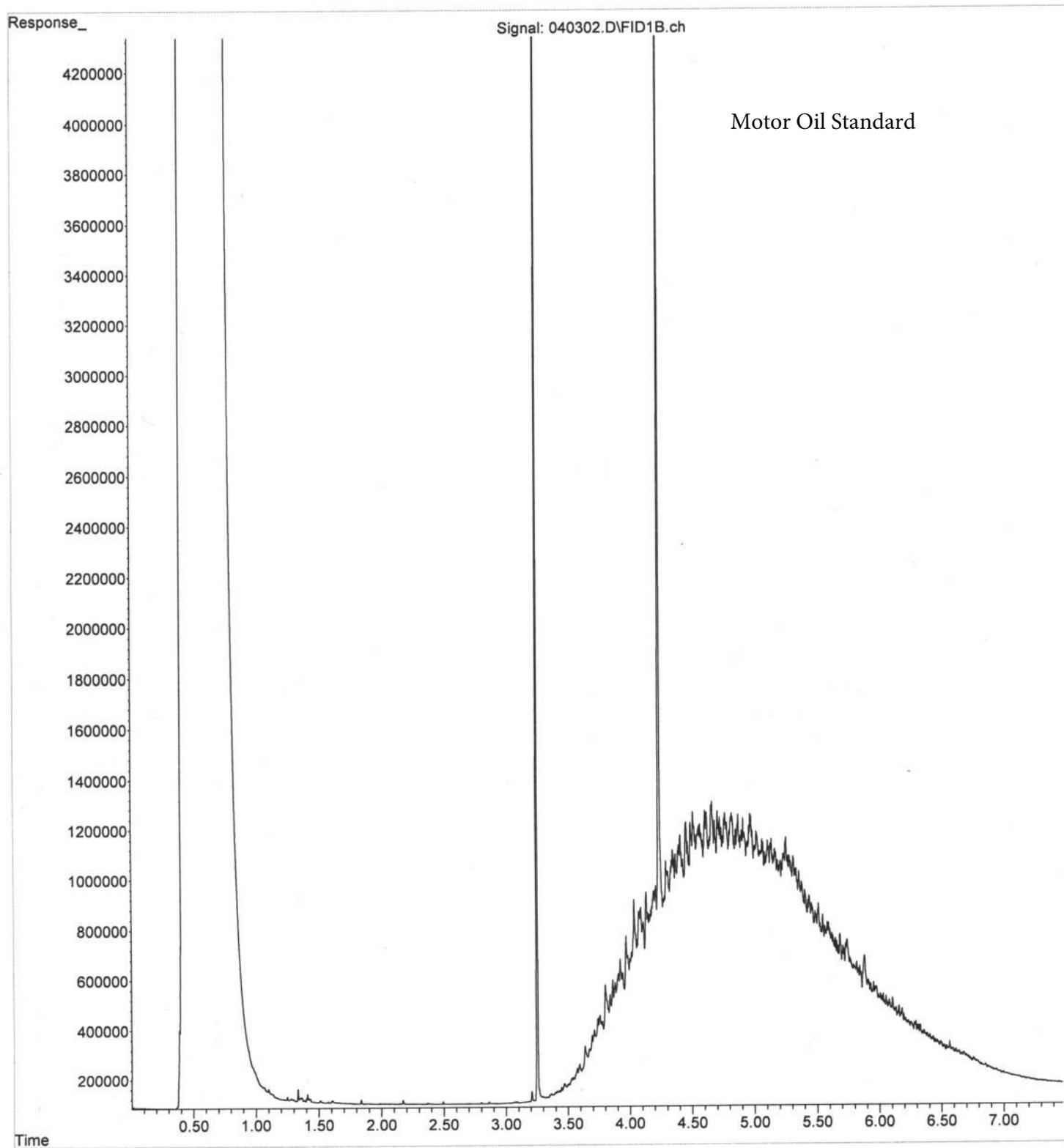
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Operator : TL
Acquired : 03 Apr 2025 05:32 pm using AcqMethod Dx.M
Instrument : GC13
Sample Name: 05-824 mb
Misc Info :
Vial Number: 36

ERR



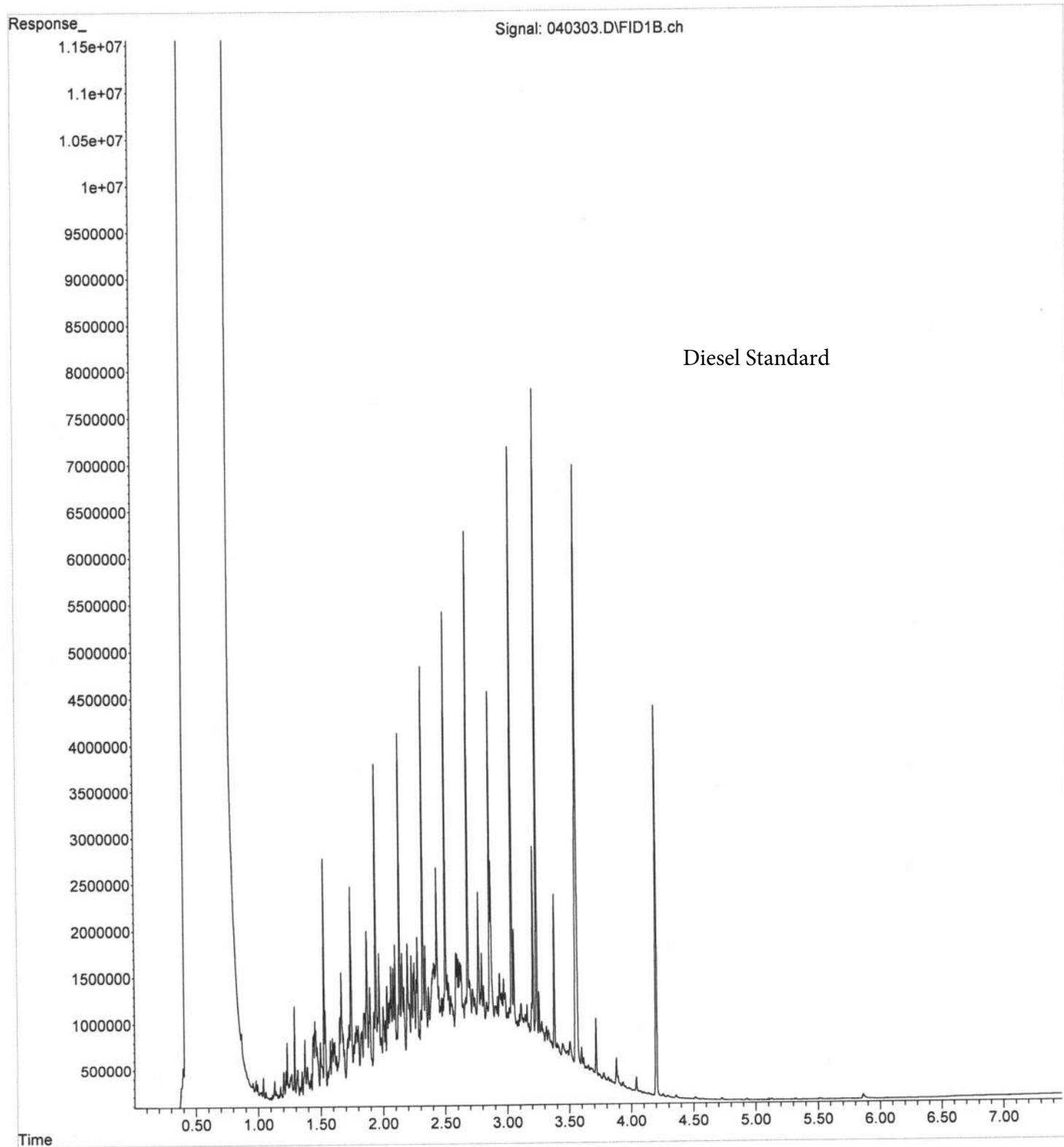
File :N:\Proc_GC13\04-03-25\040302.D
Operator : TL
Acquired : 03 Apr 2025 08:18 am using AcqMethod Dx.M
Instrument : GC13
Sample Name: 500 MO 74-194B
Misc Info :
Vial Number: 2

ERR



File :N:\Proc_GC13\04-03-25\040303.D
Operator : TL
Acquired : 03 Apr 2025 08:29 am using AcqMethod Dx.M
Instrument : GC13
Sample Name: 500 Dx 74-61E
Misc Info :
Vial Number: 3

ERR





13751 Lake City Way NE, Ste 108, Seattle, WA 98125 • USA • T:206-632-6206 • info@brooksapplied.com

June 23, 2025

Crete Consulting
ATTN: Rusty Jones
108 S. Washington Street, Suite 300
Seattle, WA 98104
832-330-1359
rusty.jones@creteconsulting.com

RE: Project CRC-SE2501
Client Project: Maralco

Dear Rusty Jones,

On May 23, 2025, Brooks Applied Labs (BAL) received fifteen (15) sets of aqueous samples. The samples were logged-in for the analyses of for total recoverable and dissolved silver (Ag), aluminum (Al), arsenic (As), barium (Ba), cadmium (Cd), cobalt (Co), chromium (Cr), copper (Cu), iron (Fe), manganese (Mn), nickel (Ni), lead (Pb), antimony (Sb), selenium (Se), vanadium (V), zinc (Zn), and mercury (Hg) according to the chain-of-custody form. All samples were received and stored according to BAL SOPs and EPA methodology.

All dissolved samples were 0.45 μ m filtered prior to receipt at BAL.

Total Recoverable and Dissolved Metals Quantitation by ICP-QQQ-MS

All aqueous samples were digested on a hotblock via modified EPA Method 1638 with nitric and hydrochloric acids. Trace metals were analyzed using inductively coupled plasma triple quadrupole mass spectrometry (ICP-QQQ-MS). The ICP-QQQ-MS uses advanced interference removal techniques to ensure accuracy of the sample results. For more information, please visit the *Interference Reduction Technology* section on our website, www.brooksapplied.com.

In instances where the native sample result and/or the associated duplicate (DUP) result were below the MDL the RPD was not calculated (N/C).

In instances where a matrix spike/matrix spike duplicate (MS/MSD) set was spiked at a level less than the native sample, the recoveries are not considered valid indicators of data quality. However, these results are reported as a demonstration of precision. When the spiking levels were $\leq 25\%$ of the native sample concentrations, the recoveries were not reported (NR). No sample results were qualified on the basis of the MS or MSD recoveries.

Some of the total results were less than the corresponding dissolved result. In all of these cases, the total and dissolved samples meet RPD, or the results met secondary criteria (within 5x the MRL and within the MRL of each other) and no further action was required.

The method blank (BLK) B251148-BLK3 had a Ba concentration that was above the acceptance limit. All sample results were greater than 10x the concentration of this BLK, and no further action was required.

The method blanks (BLK) B251148-BLK2 and B251148-BLK3 had V concentrations that were above the acceptance limit. All sample results were greater than 10x the concentration of these BLKs, and no further action was required.

The duplicate (DUP) B251148-DUP1 performed on sample 2505417-01 had a relative percent difference (RPD) for Se that above the acceptance limit (21%). The DUP result and the native result met secondary criteria (within 5x the MRL and within the MRL of each other) and no further action was required.

Total and Dissolved Mercury using MERX

Each aqueous fraction submitted for Hg analysis was prepared and analyzed in accordance with EPA Method 1631. Samples were oxidized with bromine monochloride (BrCl) and then analyzed with stannous chloride (SnCl₂) reduction, dual gold amalgamation, and cold vapor atomic fluorescence spectroscopy (CVAFS) detection using a Brooks Rand Instrument's MERX-T CVAFS Mercury Automated-Analyzer.

Sample results reported for mercury were method blank corrected, while all other results were not method blank corrected, as described in the calculations section of the relevant BAL SOP(s). All results were evaluated using reporting limits adjusted to account for sample aliquot size. Please refer to the *Sample Results* page for sample-specific MDLs, MRLs, and other details.

All data was reported without qualification and all associated quality control sample results met the acceptance criteria.

BAL verifies that the reported results of all analyses for which the laboratory is accredited meet the requirements of the accrediting body, unless otherwise noted in the report narrative. For more information regarding accreditations please see the *Report Information* and *Batch Summary* pages. This report must be used in its entirety for interpretation of results.

Please feel free to contact us if you have any questions regarding this report.

Sincerely,



Amy Goodall
Project Manager
Brooks Applied Labs
amy@brooksapplied.com



Report Information

General Disclaimers

Test results are based solely upon the sample submitted to Brooks Applied Labs in the condition it was received. This report shall not be reproduced or copied, except in full, without written approval of the laboratory. Brooks Applied Labs is not responsible for the consequences arising from the use of a partial report.

Laboratory Accreditation

BAL maintains accreditation with various state and national agencies for select test methods. For a current list of BAL accreditations, please visit our website at <http://www.brooksapplied.com/resources/certificates-permits/>. The reported analyte/matrix/method combination shall be considered outside BAL's scopes of accreditation unless otherwise identified as ISO, TNI, or ISO,TNI in the tables. It is the responsibility of the client to verify whether a specific accreditation is required for the intended data use.

ISO: ISO/IEC 17025:2017 accredited test method. Issued by ANSI National Accreditation Board (ANAB), #ADE-1447.02

TNI: NELAP accredited test method. Issued by the State of Florida Department of Health, #E87982.

ISO,TNI: Test method is accredited under both the ISO/IEC 17025:2017 and NELAP accreditations referenced above.

Field Quality Control Samples

Please be notified that certain EPA methods require the collection of field quality control samples of an appropriate type and frequency; failure to do so is considered a deviation from some methods and for compliance purposes should only be done with the approval of regulatory authorities. Please see the specific EPA methods for details regarding required field quality control samples.

Common Abbreviations

AR	as received	MS	matrix spike
BAL	Brooks Applied Labs	MSD	matrix spike duplicate
BLK	method blank	ND	non-detect
BS	blank spike	NR	non-reportable
CAL	calibration standard	N/C	not calculated
CCB	continuing calibration blank	PS	post preparation spike
CCV	continuing calibration verification	REC	percent recovery
COC	chain of custody record	RPD	relative percent difference
D	dissolved fraction	SCV	secondary calibration verification
DUP	duplicate	SOP	standard operating procedure
IBL	instrument blank	SRM	reference material
ICV	initial calibration verification	T	total fraction
MDL	method detection limit	TR	total recoverable fraction
MRL	method reporting limit		

Definition of Data Qualifiers

E	An estimated value due to the presence of interferences. A full explanation is presented in the narrative.
H	Holding time and/or preservation requirements not met. Please see narrative for explanation.
J	Detected by the instrument, the result is > the MDL but ≤ the MRL. Result is reported and considered an estimate.
J-1	Estimated value. A full explanation is presented in the narrative.
M	Duplicate precision (RPD) was not within acceptance criteria. Please see narrative for explanation.
N	Spike recovery was not within acceptance criteria. Please see narrative for explanation.
R	Rejected, unusable value. A full explanation is presented in the narrative.
U	Result is ≤ the MDL or client requested reporting limit (CRRL). Result reported as the MDL or CRRL.
X	Result is not BLK-corrected and is within 10x the absolute value of the highest detectable BLK in the batch. Result is estimated.
Z	Holding time and/or preservation requirements not established for this method; however, BAL recommendations for holding time were not followed. Please see narrative for explanation.



Sample Information

Sample	Lab ID	Report Matrix	Type	Sampled	Received
MW5R2	2505417-01	Grab Water	Sample	05/20/2025	05/23/2025
MW5R2	2505417-02	Grab Water	Sample	05/20/2025	05/23/2025
MW3R	2505417-03	Grab Water	Sample	05/20/2025	05/23/2025
MW3R	2505417-04	Grab Water	Sample	05/20/2025	05/23/2025
MW8R	2505417-05	Grab Water	Sample	05/20/2025	05/23/2025
MW8R	2505417-06	Grab Water	Sample	05/20/2025	05/23/2025
MW1	2505417-07	Grab Water	Sample	05/20/2025	05/23/2025
MW1	2505417-08	Grab Water	Sample	05/20/2025	05/23/2025
MW4R	2505417-09	Grab Water	Sample	05/20/2025	05/23/2025
MW4R	2505417-10	Grab Water	Sample	05/20/2025	05/23/2025
MW10	2505417-11	Grab Water	Sample	05/21/2025	05/23/2025
MW10	2505417-12	Grab Water	Sample	05/21/2025	05/23/2025
MW9R	2505417-13	Grab Water	Sample	05/21/2025	05/23/2025
MW9R	2505417-14	Grab Water	Sample	05/21/2025	05/23/2025
MW2	2505417-15	Grab Water	Sample	05/21/2025	05/23/2025
MW2	2505417-16	Grab Water	Sample	05/21/2025	05/23/2025
MW11	2505417-17	Grab Water	Sample	05/21/2025	05/23/2025
MW11	2505417-18	Grab Water	Sample	05/21/2025	05/23/2025
DUP-0525	2505417-19	Grab Water	Field Duplicate	05/22/2025	05/23/2025
DUP-0525	2505417-20	Grab Water	Field Duplicate	05/22/2025	05/23/2025
MW6R	2505417-21	Grab Water	Sample	05/22/2025	05/23/2025
MW6R	2505417-22	Grab Water	Sample	05/22/2025	05/23/2025
MW12	2505417-23	Grab Water	Sample	05/22/2025	05/23/2025
MW12	2505417-24	Grab Water	Sample	05/22/2025	05/23/2025
MW7	2505417-25	Grab Water	Sample	05/22/2025	05/23/2025
MW7	2505417-26	Grab Water	Sample	05/22/2025	05/23/2025
MW13	2505417-27	Grab Water	Sample	05/23/2025	05/23/2025
MW13	2505417-28	Grab Water	Sample	05/23/2025	05/23/2025
MW14	2505417-29	Grab Water	Sample	05/23/2025	05/23/2025
MW14	2505417-30	Grab Water	Sample	05/23/2025	05/23/2025



Batch Summary

Analyte	Lab Matrix	Method	Accred.	Prepared	Analyzed	Batch	Sequence
Ag	Water	EPA 1638 Mod	ISO,TNI	05/28/25	05/29/25	B251148	S250505
Al	Water	EPA 1638 Mod	ISO,TNI	05/28/25	05/29/25	B251148	S250505
As	Water	EPA 1638 Mod	ISO,TNI	05/28/25	05/29/25	B251148	S250505
Ba	Water	EPA 1638 Mod	ISO,TNI	05/28/25	05/29/25	B251148	S250505
Cd	Water	EPA 1638 Mod	ISO,TNI	05/28/25	05/29/25	B251148	S250505
Co	Water	EPA 1638 Mod	ISO,TNI	05/28/25	05/29/25	B251148	S250505
Cr	Water	EPA 1638 Mod	ISO,TNI	05/28/25	05/29/25	B251148	S250505
Cu	Water	EPA 1638 Mod	ISO,TNI	05/28/25	05/29/25	B251148	S250505
Fe	Water	EPA 1638 Mod	ISO,TNI	05/28/25	05/29/25	B251148	S250505
Hg	Water	EPA 1631 E	ISO,TNI	05/27/25	05/28/25	B251152	S250508
Hg	Water	EPA 1631 E	ISO,TNI	05/27/25	05/28/25	B251153	S250508
Mn	Water	EPA 1638 Mod	ISO,TNI	05/28/25	05/29/25	B251148	S250505
Ni	Water	EPA 1638 Mod	ISO,TNI	05/28/25	05/29/25	B251148	S250505
Pb	Water	EPA 1638 Mod	ISO,TNI	05/28/25	05/29/25	B251148	S250505
Sb	Water	EPA 1638 Mod	ISO,TNI	05/28/25	05/29/25	B251148	S250505
Se	Water	EPA 1638 Mod	ISO,TNI	05/28/25	05/29/25	B251148	S250505
V	Water	EPA 1638 Mod	ISO,TNI	05/28/25	05/29/25	B251148	S250505
Zn	Water	EPA 1638 Mod	ISO,TNI	05/28/25	05/29/25	B251148	S250505



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
MW5R2										
2505417-01	Ag	Grab Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-01	Al	Grab Water	TR	1300		12.1	24.2	µg/L	B251148	S250505
2505417-01	As	Grab Water	TR	22.8		0.222	0.727	µg/L	B251148	S250505
2505417-01	Ba	Grab Water	TR	70.7		0.354	0.707	µg/L	B251148	S250505
2505417-01	Cd	Grab Water	TR	≤ 0.061	U	0.061	0.182	µg/L	B251148	S250505
2505417-01	Co	Grab Water	TR	2.04		0.131	0.455	µg/L	B251148	S250505
2505417-01	Cr	Grab Water	TR	7.03		1.72	6.06	µg/L	B251148	S250505
2505417-01	Cu	Grab Water	TR	9.06		0.909	1.82	µg/L	B251148	S250505
2505417-01	Fe	Grab Water	TR	36100		18.2	54.5	µg/L	B251148	S250505
2505417-01	Hg	Grab Water	TR	19.0		0.14	0.42	ng/L	B251152	S250508
2505417-01	Mn	Grab Water	TR	2330		0.909	1.82	µg/L	B251148	S250505
2505417-01	Ni	Grab Water	TR	2.76	J	1.21	3.64	µg/L	B251148	S250505
2505417-01	Pb	Grab Water	TR	1.33		0.091	0.182	µg/L	B251148	S250505
2505417-01	Sb	Grab Water	TR	2.88		0.051	0.152	µg/L	B251148	S250505
2505417-01	Se	Grab Water	TR	0.600		0.242	0.505	µg/L	B251148	S250505
2505417-01	V	Grab Water	TR	59.8		0.131	0.455	µg/L	B251148	S250505
2505417-01	Zn	Grab Water	TR	≤ 12.1	U	12.1	24.2	µg/L	B251148	S250505
MW5R2										
2505417-02	Ag	Grab Water	D	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-02	Al	Grab Water	D	611		12.1	24.2	µg/L	B251148	S250505
2505417-02	As	Grab Water	D	20.8		0.222	0.727	µg/L	B251148	S250505
2505417-02	Ba	Grab Water	D	65.3		0.354	0.707	µg/L	B251148	S250505
2505417-02	Cd	Grab Water	D	≤ 0.061	U	0.061	0.182	µg/L	B251148	S250505
2505417-02	Co	Grab Water	D	1.80		0.131	0.455	µg/L	B251148	S250505
2505417-02	Cr	Grab Water	D	4.99	J	1.72	6.06	µg/L	B251148	S250505
2505417-02	Cu	Grab Water	D	≤ 0.909	U	0.909	1.82	µg/L	B251148	S250505
2505417-02	Fe	Grab Water	D	34900		18.2	54.5	µg/L	B251148	S250505
2505417-02	Hg	Grab Water	D	4.49		0.14	0.42	ng/L	B251152	S250508
2505417-02	Mn	Grab Water	D	2390		0.909	1.82	µg/L	B251148	S250505
2505417-02	Ni	Grab Water	D	2.06	J	1.21	3.64	µg/L	B251148	S250505
2505417-02	Pb	Grab Water	D	≤ 0.091	U	0.091	0.182	µg/L	B251148	S250505
2505417-02	Sb	Grab Water	D	2.78		0.051	0.152	µg/L	B251148	S250505
2505417-02	Se	Grab Water	D	0.502	J	0.242	0.505	µg/L	B251148	S250505
2505417-02	V	Grab Water	D	43.5		0.131	0.455	µg/L	B251148	S250505
2505417-02	Zn	Grab Water	D	≤ 12.1	U	12.1	24.2	µg/L	B251148	S250505



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
MW3R										
2505417-03	Ag	Grab Water	TR	0.077	J	0.051	0.152	µg/L	B251148	S250505
2505417-03	Al	Grab Water	TR	2630		12.1	24.2	µg/L	B251148	S250505
2505417-03	As	Grab Water	TR	3.57		0.222	0.727	µg/L	B251148	S250505
2505417-03	Ba	Grab Water	TR	29.1		0.354	0.707	µg/L	B251148	S250505
2505417-03	Cd	Grab Water	TR	≤ 0.061	U	0.061	0.182	µg/L	B251148	S250505
2505417-03	Co	Grab Water	TR	2.56		0.131	0.455	µg/L	B251148	S250505
2505417-03	Cr	Grab Water	TR	2.01	J	1.72	6.06	µg/L	B251148	S250505
2505417-03	Cu	Grab Water	TR	25.3		0.909	1.82	µg/L	B251148	S250505
2505417-03	Fe	Grab Water	TR	1690		18.2	54.5	µg/L	B251148	S250505
2505417-03	Hg	Grab Water	TR	41.2		0.13	0.41	ng/L	B251152	S250508
2505417-03	Mn	Grab Water	TR	170		0.909	1.82	µg/L	B251148	S250505
2505417-03	Ni	Grab Water	TR	5.06		1.21	3.64	µg/L	B251148	S250505
2505417-03	Pb	Grab Water	TR	0.445		0.091	0.182	µg/L	B251148	S250505
2505417-03	Sb	Grab Water	TR	0.509		0.051	0.152	µg/L	B251148	S250505
2505417-03	Se	Grab Water	TR	0.815		0.242	0.505	µg/L	B251148	S250505
2505417-03	V	Grab Water	TR	10.9		0.131	0.455	µg/L	B251148	S250505
2505417-03	Zn	Grab Water	TR	≤ 12.1	U	12.1	24.2	µg/L	B251148	S250505
MW3R										
2505417-04	Ag	Grab Water	D	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-04	Al	Grab Water	D	1580		12.1	24.2	µg/L	B251148	S250505
2505417-04	As	Grab Water	D	3.17		0.222	0.727	µg/L	B251148	S250505
2505417-04	Ba	Grab Water	D	24.3		0.354	0.707	µg/L	B251148	S250505
2505417-04	Cd	Grab Water	D	≤ 0.061	U	0.061	0.182	µg/L	B251148	S250505
2505417-04	Co	Grab Water	D	2.25		0.131	0.455	µg/L	B251148	S250505
2505417-04	Cr	Grab Water	D	≤ 1.72	U	1.72	6.06	µg/L	B251148	S250505
2505417-04	Cu	Grab Water	D	4.27		0.909	1.82	µg/L	B251148	S250505
2505417-04	Fe	Grab Water	D	1120		18.2	54.5	µg/L	B251148	S250505
2505417-04	Hg	Grab Water	D	9.32		0.13	0.41	ng/L	B251152	S250508
2505417-04	Mn	Grab Water	D	159		0.909	1.82	µg/L	B251148	S250505
2505417-04	Ni	Grab Water	D	4.40		1.21	3.64	µg/L	B251148	S250505
2505417-04	Pb	Grab Water	D	≤ 0.091	U	0.091	0.182	µg/L	B251148	S250505
2505417-04	Sb	Grab Water	D	0.474		0.051	0.152	µg/L	B251148	S250505
2505417-04	Se	Grab Water	D	0.731		0.242	0.505	µg/L	B251148	S250505
2505417-04	V	Grab Water	D	7.95		0.131	0.455	µg/L	B251148	S250505
2505417-04	Zn	Grab Water	D	≤ 12.1	U	12.1	24.2	µg/L	B251148	S250505



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
MW8R										
2505417-05	Ag	Grab Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-05	Al	Grab Water	TR	128		12.1	24.2	µg/L	B251148	S250505
2505417-05	As	Grab Water	TR	20.3		0.222	0.727	µg/L	B251148	S250505
2505417-05	Ba	Grab Water	TR	22.7		0.354	0.707	µg/L	B251148	S250505
2505417-05	Cd	Grab Water	TR	0.082	J	0.061	0.182	µg/L	B251148	S250505
2505417-05	Co	Grab Water	TR	2.01		0.131	0.455	µg/L	B251148	S250505
2505417-05	Cr	Grab Water	TR	≤ 1.72	U	1.72	6.06	µg/L	B251148	S250505
2505417-05	Cu	Grab Water	TR	1.54	J	0.909	1.82	µg/L	B251148	S250505
2505417-05	Fe	Grab Water	TR	33100		18.2	54.5	µg/L	B251148	S250505
2505417-05	Hg	Grab Water	TR	3.76		0.13	0.41	ng/L	B251152	S250508
2505417-05	Mn	Grab Water	TR	1430		0.909	1.82	µg/L	B251148	S250505
2505417-05	Ni	Grab Water	TR	1.75	J	1.21	3.64	µg/L	B251148	S250505
2505417-05	Pb	Grab Water	TR	≤ 0.091	U	0.091	0.182	µg/L	B251148	S250505
2505417-05	Sb	Grab Water	TR	0.075	J	0.051	0.152	µg/L	B251148	S250505
2505417-05	Se	Grab Water	TR	≤ 0.242	U	0.242	0.505	µg/L	B251148	S250505
2505417-05	V	Grab Water	TR	3.88		0.131	0.455	µg/L	B251148	S250505
2505417-05	Zn	Grab Water	TR	≤ 12.1	U	12.1	24.2	µg/L	B251148	S250505
MW8R										
2505417-06	Ag	Grab Water	D	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-06	Al	Grab Water	D	≤ 12.1	U	12.1	24.2	µg/L	B251148	S250505
2505417-06	As	Grab Water	D	18.0		0.222	0.727	µg/L	B251148	S250505
2505417-06	Ba	Grab Water	D	16.1		0.354	0.707	µg/L	B251148	S250505
2505417-06	Cd	Grab Water	D	≤ 0.061	U	0.061	0.182	µg/L	B251148	S250505
2505417-06	Co	Grab Water	D	1.99		0.131	0.455	µg/L	B251148	S250505
2505417-06	Cr	Grab Water	D	≤ 1.72	U	1.72	6.06	µg/L	B251148	S250505
2505417-06	Cu	Grab Water	D	≤ 0.909	U	0.909	1.82	µg/L	B251148	S250505
2505417-06	Fe	Grab Water	D	31500		18.2	54.5	µg/L	B251148	S250505
2505417-06	Hg	Grab Water	D	1.59		0.13	0.41	ng/L	B251152	S250508
2505417-06	Mn	Grab Water	D	1410		0.909	1.82	µg/L	B251148	S250505
2505417-06	Ni	Grab Water	D	1.65	J	1.21	3.64	µg/L	B251148	S250505
2505417-06	Pb	Grab Water	D	≤ 0.091	U	0.091	0.182	µg/L	B251148	S250505
2505417-06	Sb	Grab Water	D	0.091	J	0.051	0.152	µg/L	B251148	S250505
2505417-06	Se	Grab Water	D	0.252	J	0.242	0.505	µg/L	B251148	S250505
2505417-06	V	Grab Water	D	3.17		0.131	0.455	µg/L	B251148	S250505
2505417-06	Zn	Grab Water	D	≤ 12.1	U	12.1	24.2	µg/L	B251148	S250505



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
MW1										
2505417-07	Ag	Grab Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-07	Al	Grab Water	TR	121		12.1	24.2	µg/L	B251148	S250505
2505417-07	As	Grab Water	TR	1.54		0.222	0.727	µg/L	B251148	S250505
2505417-07	Ba	Grab Water	TR	6.07		0.354	0.707	µg/L	B251148	S250505
2505417-07	Cd	Grab Water	TR	≤ 0.061	U	0.061	0.182	µg/L	B251148	S250505
2505417-07	Co	Grab Water	TR	3.24		0.131	0.455	µg/L	B251148	S250505
2505417-07	Cr	Grab Water	TR	≤ 1.72	U	1.72	6.06	µg/L	B251148	S250505
2505417-07	Cu	Grab Water	TR	1.75	J	0.909	1.82	µg/L	B251148	S250505
2505417-07	Fe	Grab Water	TR	4000		18.2	54.5	µg/L	B251148	S250505
2505417-07	Hg	Grab Water	TR	3.15		0.13	0.41	ng/L	B251152	S250508
2505417-07	Mn	Grab Water	TR	135		0.909	1.82	µg/L	B251148	S250505
2505417-07	Ni	Grab Water	TR	6.20		1.21	3.64	µg/L	B251148	S250505
2505417-07	Pb	Grab Water	TR	0.338		0.091	0.182	µg/L	B251148	S250505
2505417-07	Sb	Grab Water	TR	0.060	J	0.051	0.152	µg/L	B251148	S250505
2505417-07	Se	Grab Water	TR	≤ 0.242	U	0.242	0.505	µg/L	B251148	S250505
2505417-07	V	Grab Water	TR	8.90		0.131	0.455	µg/L	B251148	S250505
2505417-07	Zn	Grab Water	TR	≤ 12.1	U	12.1	24.2	µg/L	B251148	S250505
MW1										
2505417-08	Ag	Grab Water	D	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-08	Al	Grab Water	D	22.0	J	12.1	24.2	µg/L	B251148	S250505
2505417-08	As	Grab Water	D	1.39		0.222	0.727	µg/L	B251148	S250505
2505417-08	Ba	Grab Water	D	5.37		0.354	0.707	µg/L	B251148	S250505
2505417-08	Cd	Grab Water	D	≤ 0.061	U	0.061	0.182	µg/L	B251148	S250505
2505417-08	Co	Grab Water	D	3.28		0.131	0.455	µg/L	B251148	S250505
2505417-08	Cr	Grab Water	D	≤ 1.72	U	1.72	6.06	µg/L	B251148	S250505
2505417-08	Cu	Grab Water	D	≤ 0.909	U	0.909	1.82	µg/L	B251148	S250505
2505417-08	Fe	Grab Water	D	3790		18.2	54.5	µg/L	B251148	S250505
2505417-08	Hg	Grab Water	D	0.57		0.13	0.41	ng/L	B251152	S250508
2505417-08	Mn	Grab Water	D	130		0.909	1.82	µg/L	B251148	S250505
2505417-08	Ni	Grab Water	D	6.30		1.21	3.64	µg/L	B251148	S250505
2505417-08	Pb	Grab Water	D	≤ 0.091	U	0.091	0.182	µg/L	B251148	S250505
2505417-08	Sb	Grab Water	D	0.053	J	0.051	0.152	µg/L	B251148	S250505
2505417-08	Se	Grab Water	D	≤ 0.242	U	0.242	0.505	µg/L	B251148	S250505
2505417-08	V	Grab Water	D	6.83		0.131	0.455	µg/L	B251148	S250505
2505417-08	Zn	Grab Water	D	≤ 12.1	U	12.1	24.2	µg/L	B251148	S250505



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
MW4R										
2505417-09	Ag	Grab Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-09	Al	Grab Water	TR	48.3		12.1	24.2	µg/L	B251148	S250505
2505417-09	As	Grab Water	TR	8.37		0.222	0.727	µg/L	B251148	S250505
2505417-09	Ba	Grab Water	TR	45.3		0.354	0.707	µg/L	B251148	S250505
2505417-09	Cd	Grab Water	TR	≤ 0.061	U	0.061	0.182	µg/L	B251148	S250505
2505417-09	Co	Grab Water	TR	0.521		0.131	0.455	µg/L	B251148	S250505
2505417-09	Cr	Grab Water	TR	2.64	J	1.72	6.06	µg/L	B251148	S250505
2505417-09	Cu	Grab Water	TR	≤ 0.909	U	0.909	1.82	µg/L	B251148	S250505
2505417-09	Fe	Grab Water	TR	62700		18.2	54.5	µg/L	B251148	S250505
2505417-09	Hg	Grab Water	TR	1.44		0.14	0.42	ng/L	B251152	S250508
2505417-09	Mn	Grab Water	TR	3430		2.27	4.55	µg/L	B251148	S250505
2505417-09	Ni	Grab Water	TR	≤ 1.21	U	1.21	3.64	µg/L	B251148	S250505
2505417-09	Pb	Grab Water	TR	≤ 0.091	U	0.091	0.182	µg/L	B251148	S250505
2505417-09	Sb	Grab Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-09	Se	Grab Water	TR	0.292	J	0.242	0.505	µg/L	B251148	S250505
2505417-09	V	Grab Water	TR	10.6		0.131	0.455	µg/L	B251148	S250505
2505417-09	Zn	Grab Water	TR	≤ 12.1	U	12.1	24.2	µg/L	B251148	S250505
MW4R										
2505417-10	Ag	Grab Water	D	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-10	Al	Grab Water	D	24.4		12.1	24.2	µg/L	B251148	S250505
2505417-10	As	Grab Water	D	8.02		0.222	0.727	µg/L	B251148	S250505
2505417-10	Ba	Grab Water	D	45.5		0.354	0.707	µg/L	B251148	S250505
2505417-10	Cd	Grab Water	D	≤ 0.061	U	0.061	0.182	µg/L	B251148	S250505
2505417-10	Co	Grab Water	D	0.546		0.131	0.455	µg/L	B251148	S250505
2505417-10	Cr	Grab Water	D	2.42	J	1.72	6.06	µg/L	B251148	S250505
2505417-10	Cu	Grab Water	D	≤ 0.909	U	0.909	1.82	µg/L	B251148	S250505
2505417-10	Fe	Grab Water	D	62700		18.2	54.5	µg/L	B251148	S250505
2505417-10	Hg	Grab Water	D	0.86		0.14	0.42	ng/L	B251152	S250508
2505417-10	Mn	Grab Water	D	3430		2.27	4.55	µg/L	B251148	S250505
2505417-10	Ni	Grab Water	D	≤ 1.21	U	1.21	3.64	µg/L	B251148	S250505
2505417-10	Pb	Grab Water	D	≤ 0.091	U	0.091	0.182	µg/L	B251148	S250505
2505417-10	Sb	Grab Water	D	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-10	Se	Grab Water	D	0.272	J	0.242	0.505	µg/L	B251148	S250505
2505417-10	V	Grab Water	D	9.62		0.131	0.455	µg/L	B251148	S250505
2505417-10	Zn	Grab Water	D	≤ 12.1	U	12.1	24.2	µg/L	B251148	S250505



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
MW10										
2505417-11	Ag	Grab Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-11	Al	Grab Water	TR	617		12.1	24.2	µg/L	B251148	S250505
2505417-11	As	Grab Water	TR	2.37		0.222	0.727	µg/L	B251148	S250505
2505417-11	Ba	Grab Water	TR	62.8		0.354	0.707	µg/L	B251148	S250505
2505417-11	Cd	Grab Water	TR	0.235		0.061	0.182	µg/L	B251148	S250505
2505417-11	Co	Grab Water	TR	9.38		0.131	0.455	µg/L	B251148	S250505
2505417-11	Cr	Grab Water	TR	≤ 1.72	U	1.72	6.06	µg/L	B251148	S250505
2505417-11	Cu	Grab Water	TR	7.40		0.909	1.82	µg/L	B251148	S250505
2505417-11	Fe	Grab Water	TR	7570		18.2	54.5	µg/L	B251148	S250505
2505417-11	Hg	Grab Water	TR	5.64		0.13	0.41	ng/L	B251152	S250508
2505417-11	Mn	Grab Water	TR	2390		0.909	1.82	µg/L	B251148	S250505
2505417-11	Ni	Grab Water	TR	9.15		1.21	3.64	µg/L	B251148	S250505
2505417-11	Pb	Grab Water	TR	0.120	J	0.091	0.182	µg/L	B251148	S250505
2505417-11	Sb	Grab Water	TR	0.099	J	0.051	0.152	µg/L	B251148	S250505
2505417-11	Se	Grab Water	TR	≤ 0.242	U	0.242	0.505	µg/L	B251148	S250505
2505417-11	V	Grab Water	TR	2.28		0.131	0.455	µg/L	B251148	S250505
2505417-11	Zn	Grab Water	TR	13.9	J	12.1	24.2	µg/L	B251148	S250505
MW10										
2505417-12	Ag	Grab Water	D	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-12	Al	Grab Water	D	26.2		12.1	24.2	µg/L	B251148	S250505
2505417-12	As	Grab Water	D	1.56		0.222	0.727	µg/L	B251148	S250505
2505417-12	Ba	Grab Water	D	58.6		0.354	0.707	µg/L	B251148	S250505
2505417-12	Cd	Grab Water	D	0.206		0.061	0.182	µg/L	B251148	S250505
2505417-12	Co	Grab Water	D	9.56		0.131	0.455	µg/L	B251148	S250505
2505417-12	Cr	Grab Water	D	≤ 1.72	U	1.72	6.06	µg/L	B251148	S250505
2505417-12	Cu	Grab Water	D	6.00		0.909	1.82	µg/L	B251148	S250505
2505417-12	Fe	Grab Water	D	6720		18.2	54.5	µg/L	B251148	S250505
2505417-12	Hg	Grab Water	D	3.60		0.13	0.41	ng/L	B251152	S250508
2505417-12	Mn	Grab Water	D	2400		0.909	1.82	µg/L	B251148	S250505
2505417-12	Ni	Grab Water	D	8.75		1.21	3.64	µg/L	B251148	S250505
2505417-12	Pb	Grab Water	D	≤ 0.091	U	0.091	0.182	µg/L	B251148	S250505
2505417-12	Sb	Grab Water	D	0.068	J	0.051	0.152	µg/L	B251148	S250505
2505417-12	Se	Grab Water	D	≤ 0.242	U	0.242	0.505	µg/L	B251148	S250505
2505417-12	V	Grab Water	D	1.47		0.131	0.455	µg/L	B251148	S250505
2505417-12	Zn	Grab Water	D	12.8	J	12.1	24.2	µg/L	B251148	S250505



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
MW9R										
2505417-13	Ag	Grab Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-13	Al	Grab Water	TR	3150		12.1	24.2	µg/L	B251148	S250505
2505417-13	As	Grab Water	TR	5.31		0.222	0.727	µg/L	B251148	S250505
2505417-13	Ba	Grab Water	TR	134		0.354	0.707	µg/L	B251148	S250505
2505417-13	Cd	Grab Water	TR	≤ 0.061	U	0.061	0.182	µg/L	B251148	S250505
2505417-13	Co	Grab Water	TR	3.14		0.131	0.455	µg/L	B251148	S250505
2505417-13	Cr	Grab Water	TR	3.46	J	1.72	6.06	µg/L	B251148	S250505
2505417-13	Cu	Grab Water	TR	6.02		0.909	1.82	µg/L	B251148	S250505
2505417-13	Fe	Grab Water	TR	120000		18.2	54.5	µg/L	B251148	S250505
2505417-13	Hg	Grab Water	TR	6.68		0.14	0.42	ng/L	B251152	S250508
2505417-13	Mn	Grab Water	TR	2940		2.27	4.55	µg/L	B251148	S250505
2505417-13	Ni	Grab Water	TR	3.40	J	1.21	3.64	µg/L	B251148	S250505
2505417-13	Pb	Grab Water	TR	0.845		0.091	0.182	µg/L	B251148	S250505
2505417-13	Sb	Grab Water	TR	1.67		0.051	0.152	µg/L	B251148	S250505
2505417-13	Se	Grab Water	TR	≤ 0.242	U	0.242	0.505	µg/L	B251148	S250505
2505417-13	V	Grab Water	TR	9.43		0.131	0.455	µg/L	B251148	S250505
2505417-13	Zn	Grab Water	TR	76.5		12.1	24.2	µg/L	B251148	S250505
MW9R										
2505417-14	Ag	Grab Water	D	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-14	Al	Grab Water	D	≤ 12.1	U	12.1	24.2	µg/L	B251148	S250505
2505417-14	As	Grab Water	D	4.82		0.222	0.727	µg/L	B251148	S250505
2505417-14	Ba	Grab Water	D	121		0.354	0.707	µg/L	B251148	S250505
2505417-14	Cd	Grab Water	D	≤ 0.061	U	0.061	0.182	µg/L	B251148	S250505
2505417-14	Co	Grab Water	D	2.00		0.131	0.455	µg/L	B251148	S250505
2505417-14	Cr	Grab Water	D	≤ 1.72	U	1.72	6.06	µg/L	B251148	S250505
2505417-14	Cu	Grab Water	D	≤ 0.909	U	0.909	1.82	µg/L	B251148	S250505
2505417-14	Fe	Grab Water	D	120000		18.2	54.5	µg/L	B251148	S250505
2505417-14	Hg	Grab Water	D	0.62		0.14	0.42	ng/L	B251152	S250508
2505417-14	Mn	Grab Water	D	2900		2.27	4.55	µg/L	B251148	S250505
2505417-14	Ni	Grab Water	D	≤ 1.21	U	1.21	3.64	µg/L	B251148	S250505
2505417-14	Pb	Grab Water	D	≤ 0.091	U	0.091	0.182	µg/L	B251148	S250505
2505417-14	Sb	Grab Water	D	1.72		0.051	0.152	µg/L	B251148	S250505
2505417-14	Se	Grab Water	D	≤ 0.242	U	0.242	0.505	µg/L	B251148	S250505
2505417-14	V	Grab Water	D	0.959		0.131	0.455	µg/L	B251148	S250505
2505417-14	Zn	Grab Water	D	70.5		12.1	24.2	µg/L	B251148	S250505



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
MW2										
2505417-15	Ag	Grab Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-15	Al	Grab Water	TR	160		12.1	24.2	µg/L	B251148	S250505
2505417-15	As	Grab Water	TR	1.17		0.222	0.727	µg/L	B251148	S250505
2505417-15	Ba	Grab Water	TR	5.93		0.354	0.707	µg/L	B251148	S250505
2505417-15	Cd	Grab Water	TR	≤ 0.061	U	0.061	0.182	µg/L	B251148	S250505
2505417-15	Co	Grab Water	TR	1.80		0.131	0.455	µg/L	B251148	S250505
2505417-15	Cr	Grab Water	TR	≤ 1.72	U	1.72	6.06	µg/L	B251148	S250505
2505417-15	Cu	Grab Water	TR	1.70	J	0.909	1.82	µg/L	B251148	S250505
2505417-15	Fe	Grab Water	TR	3970		18.2	54.5	µg/L	B251148	S250505
2505417-15	Hg	Grab Water	TR	3.21		0.13	0.41	ng/L	B251152	S250508
2505417-15	Mn	Grab Water	TR	184		0.909	1.82	µg/L	B251148	S250505
2505417-15	Ni	Grab Water	TR	4.33		1.21	3.64	µg/L	B251148	S250505
2505417-15	Pb	Grab Water	TR	0.149	J	0.091	0.182	µg/L	B251148	S250505
2505417-15	Sb	Grab Water	TR	0.094	J	0.051	0.152	µg/L	B251148	S250505
2505417-15	Se	Grab Water	TR	≤ 0.242	U	0.242	0.505	µg/L	B251148	S250505
2505417-15	V	Grab Water	TR	3.91		0.131	0.455	µg/L	B251148	S250505
2505417-15	Zn	Grab Water	TR	≤ 12.1	U	12.1	24.2	µg/L	B251148	S250505
MW2										
2505417-16	Ag	Grab Water	D	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-16	Al	Grab Water	D	20.0	J	12.1	24.2	µg/L	B251148	S250505
2505417-16	As	Grab Water	D	1.11		0.222	0.727	µg/L	B251148	S250505
2505417-16	Ba	Grab Water	D	4.09		0.354	0.707	µg/L	B251148	S250505
2505417-16	Cd	Grab Water	D	≤ 0.061	U	0.061	0.182	µg/L	B251148	S250505
2505417-16	Co	Grab Water	D	1.63		0.131	0.455	µg/L	B251148	S250505
2505417-16	Cr	Grab Water	D	≤ 1.72	U	1.72	6.06	µg/L	B251148	S250505
2505417-16	Cu	Grab Water	D	≤ 0.909	U	0.909	1.82	µg/L	B251148	S250505
2505417-16	Fe	Grab Water	D	3760		18.2	54.5	µg/L	B251148	S250505
2505417-16	Hg	Grab Water	D	0.98		0.13	0.41	ng/L	B251152	S250508
2505417-16	Mn	Grab Water	D	185		0.909	1.82	µg/L	B251148	S250505
2505417-16	Ni	Grab Water	D	3.95		1.21	3.64	µg/L	B251148	S250505
2505417-16	Pb	Grab Water	D	≤ 0.091	U	0.091	0.182	µg/L	B251148	S250505
2505417-16	Sb	Grab Water	D	0.095	J	0.051	0.152	µg/L	B251148	S250505
2505417-16	Se	Grab Water	D	≤ 0.242	U	0.242	0.505	µg/L	B251148	S250505
2505417-16	V	Grab Water	D	3.04		0.131	0.455	µg/L	B251148	S250505
2505417-16	Zn	Grab Water	D	≤ 12.1	U	12.1	24.2	µg/L	B251148	S250505



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
MW11										
2505417-17	Ag	Grab Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-17	Al	Grab Water	TR	184		12.1	24.2	µg/L	B251148	S250505
2505417-17	As	Grab Water	TR	0.416	J	0.222	0.727	µg/L	B251148	S250505
2505417-17	Ba	Grab Water	TR	5.53		0.354	0.707	µg/L	B251148	S250505
2505417-17	Cd	Grab Water	TR	≤ 0.061	U	0.061	0.182	µg/L	B251148	S250505
2505417-17	Co	Grab Water	TR	1.42		0.131	0.455	µg/L	B251148	S250505
2505417-17	Cr	Grab Water	TR	≤ 1.72	U	1.72	6.06	µg/L	B251148	S250505
2505417-17	Cu	Grab Water	TR	2.54		0.909	1.82	µg/L	B251148	S250505
2505417-17	Fe	Grab Water	TR	284		18.2	54.5	µg/L	B251148	S250505
2505417-17	Hg	Grab Water	TR	1.11		0.13	0.41	ng/L	B251152	S250508
2505417-17	Mn	Grab Water	TR	150		0.909	1.82	µg/L	B251148	S250505
2505417-17	Ni	Grab Water	TR	2.67	J	1.21	3.64	µg/L	B251148	S250505
2505417-17	Pb	Grab Water	TR	≤ 0.091	U	0.091	0.182	µg/L	B251148	S250505
2505417-17	Sb	Grab Water	TR	0.082	J	0.051	0.152	µg/L	B251148	S250505
2505417-17	Se	Grab Water	TR	≤ 0.242	U	0.242	0.505	µg/L	B251148	S250505
2505417-17	V	Grab Water	TR	1.35		0.131	0.455	µg/L	B251148	S250505
2505417-17	Zn	Grab Water	TR	≤ 12.1	U	12.1	24.2	µg/L	B251148	S250505
MW11										
2505417-18	Ag	Grab Water	D	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-18	Al	Grab Water	D	30.0		12.1	24.2	µg/L	B251148	S250505
2505417-18	As	Grab Water	D	0.316	J	0.222	0.727	µg/L	B251148	S250505
2505417-18	Ba	Grab Water	D	4.36		0.354	0.707	µg/L	B251148	S250505
2505417-18	Cd	Grab Water	D	≤ 0.061	U	0.061	0.182	µg/L	B251148	S250505
2505417-18	Co	Grab Water	D	1.29		0.131	0.455	µg/L	B251148	S250505
2505417-18	Cr	Grab Water	D	≤ 1.72	U	1.72	6.06	µg/L	B251148	S250505
2505417-18	Cu	Grab Water	D	2.54		0.909	1.82	µg/L	B251148	S250505
2505417-18	Fe	Grab Water	D	52.1	J	18.2	54.5	µg/L	B251148	S250505
2505417-18	Hg	Grab Water	D	0.39	J	0.13	0.41	ng/L	B251152	S250508
2505417-18	Mn	Grab Water	D	134		0.909	1.82	µg/L	B251148	S250505
2505417-18	Ni	Grab Water	D	2.26	J	1.21	3.64	µg/L	B251148	S250505
2505417-18	Pb	Grab Water	D	≤ 0.091	U	0.091	0.182	µg/L	B251148	S250505
2505417-18	Sb	Grab Water	D	0.066	J	0.051	0.152	µg/L	B251148	S250505
2505417-18	Se	Grab Water	D	≤ 0.242	U	0.242	0.505	µg/L	B251148	S250505
2505417-18	V	Grab Water	D	0.910		0.131	0.455	µg/L	B251148	S250505
2505417-18	Zn	Grab Water	D	≤ 12.1	U	12.1	24.2	µg/L	B251148	S250505



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
DUP-0525										
2505417-19	Ag	Grab Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-19	Al	Grab Water	TR	83.9		12.1	24.2	µg/L	B251148	S250505
2505417-19	As	Grab Water	TR	0.361	J	0.222	0.727	µg/L	B251148	S250505
2505417-19	Ba	Grab Water	TR	43.0		0.354	0.707	µg/L	B251148	S250505
2505417-19	Cd	Grab Water	TR	≤ 0.061	U	0.061	0.182	µg/L	B251148	S250505
2505417-19	Co	Grab Water	TR	0.160	J	0.131	0.455	µg/L	B251148	S250505
2505417-19	Cr	Grab Water	TR	≤ 1.72	U	1.72	6.06	µg/L	B251148	S250505
2505417-19	Cu	Grab Water	TR	3.65		0.909	1.82	µg/L	B251148	S250505
2505417-19	Fe	Grab Water	TR	202		18.2	54.5	µg/L	B251148	S250505
2505417-19	Hg	Grab Water	TR	2.17		0.13	0.41	ng/L	B251152	S250508
2505417-19	Mn	Grab Water	TR	18.2		0.909	1.82	µg/L	B251148	S250505
2505417-19	Ni	Grab Water	TR	≤ 1.21	U	1.21	3.64	µg/L	B251148	S250505
2505417-19	Pb	Grab Water	TR	≤ 0.091	U	0.091	0.182	µg/L	B251148	S250505
2505417-19	Sb	Grab Water	TR	0.515		0.051	0.152	µg/L	B251148	S250505
2505417-19	Se	Grab Water	TR	≤ 0.242	U	0.242	0.505	µg/L	B251148	S250505
2505417-19	V	Grab Water	TR	1.53		0.131	0.455	µg/L	B251148	S250505
2505417-19	Zn	Grab Water	TR	≤ 12.1	U	12.1	24.2	µg/L	B251148	S250505
DUP-0525										
2505417-20	Ag	Grab Water	D	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-20	Al	Grab Water	D	50.8		12.1	24.2	µg/L	B251148	S250505
2505417-20	As	Grab Water	D	0.269	J	0.222	0.727	µg/L	B251148	S250505
2505417-20	Ba	Grab Water	D	43.9		0.354	0.707	µg/L	B251148	S250505
2505417-20	Cd	Grab Water	D	≤ 0.061	U	0.061	0.182	µg/L	B251148	S250505
2505417-20	Co	Grab Water	D	0.147	J	0.131	0.455	µg/L	B251148	S250505
2505417-20	Cr	Grab Water	D	≤ 1.72	U	1.72	6.06	µg/L	B251148	S250505
2505417-20	Cu	Grab Water	D	3.18		0.909	1.82	µg/L	B251148	S250505
2505417-20	Fe	Grab Water	D	42.4	J	18.2	54.5	µg/L	B251148	S250505
2505417-20	Hg	Grab Water	D	1.28		0.13	0.41	ng/L	B251152	S250508
2505417-20	Mn	Grab Water	D	19.3		0.909	1.82	µg/L	B251148	S250505
2505417-20	Ni	Grab Water	D	≤ 1.21	U	1.21	3.64	µg/L	B251148	S250505
2505417-20	Pb	Grab Water	D	≤ 0.091	U	0.091	0.182	µg/L	B251148	S250505
2505417-20	Sb	Grab Water	D	0.460		0.051	0.152	µg/L	B251148	S250505
2505417-20	Se	Grab Water	D	≤ 0.242	U	0.242	0.505	µg/L	B251148	S250505
2505417-20	V	Grab Water	D	1.06		0.131	0.455	µg/L	B251148	S250505
2505417-20	Zn	Grab Water	D	≤ 12.1	U	12.1	24.2	µg/L	B251148	S250505



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
MW6R										
2505417-21	Ag	Grab Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-21	Al	Grab Water	TR	232		12.1	24.2	µg/L	B251148	S250505
2505417-21	As	Grab Water	TR	1.85		0.222	0.727	µg/L	B251148	S250505
2505417-21	Ba	Grab Water	TR	122		0.354	0.707	µg/L	B251148	S250505
2505417-21	Cd	Grab Water	TR	0.124	J	0.061	0.182	µg/L	B251148	S250505
2505417-21	Co	Grab Water	TR	36.0		0.131	0.455	µg/L	B251148	S250505
2505417-21	Cr	Grab Water	TR	≤ 1.72	U	1.72	6.06	µg/L	B251148	S250505
2505417-21	Cu	Grab Water	TR	0.994	J	0.909	1.82	µg/L	B251148	S250505
2505417-21	Fe	Grab Water	TR	7000		18.2	54.5	µg/L	B251148	S250505
2505417-21	Hg	Grab Water	TR	1.17		0.13	0.41	ng/L	B251153	S250508
2505417-21	Mn	Grab Water	TR	1700		0.909	1.82	µg/L	B251148	S250505
2505417-21	Ni	Grab Water	TR	40.0		1.21	3.64	µg/L	B251148	S250505
2505417-21	Pb	Grab Water	TR	≤ 0.091	U	0.091	0.182	µg/L	B251148	S250505
2505417-21	Sb	Grab Water	TR	0.052	J	0.051	0.152	µg/L	B251148	S250505
2505417-21	Se	Grab Water	TR	≤ 0.242	U	0.242	0.505	µg/L	B251148	S250505
2505417-21	V	Grab Water	TR	1.43		0.131	0.455	µg/L	B251148	S250505
2505417-21	Zn	Grab Water	TR	18.8	J	12.1	24.2	µg/L	B251148	S250505
MW6R										
2505417-22	Ag	Grab Water	D	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-22	Al	Grab Water	D	191		12.1	24.2	µg/L	B251148	S250505
2505417-22	As	Grab Water	D	2.08		0.222	0.727	µg/L	B251148	S250505
2505417-22	Ba	Grab Water	D	120		0.354	0.707	µg/L	B251148	S250505
2505417-22	Cd	Grab Water	D	0.112	J	0.061	0.182	µg/L	B251148	S250505
2505417-22	Co	Grab Water	D	36.3		0.131	0.455	µg/L	B251148	S250505
2505417-22	Cr	Grab Water	D	≤ 1.72	U	1.72	6.06	µg/L	B251148	S250505
2505417-22	Cu	Grab Water	D	≤ 0.909	U	0.909	1.82	µg/L	B251148	S250505
2505417-22	Fe	Grab Water	D	7310		18.2	54.5	µg/L	B251148	S250505
2505417-22	Hg	Grab Water	D	0.58		0.13	0.41	ng/L	B251153	S250508
2505417-22	Mn	Grab Water	D	1710		0.909	1.82	µg/L	B251148	S250505
2505417-22	Ni	Grab Water	D	39.1		1.21	3.64	µg/L	B251148	S250505
2505417-22	Pb	Grab Water	D	≤ 0.091	U	0.091	0.182	µg/L	B251148	S250505
2505417-22	Sb	Grab Water	D	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-22	Se	Grab Water	D	≤ 0.242	U	0.242	0.505	µg/L	B251148	S250505
2505417-22	V	Grab Water	D	1.26		0.131	0.455	µg/L	B251148	S250505
2505417-22	Zn	Grab Water	D	19.0	J	12.1	24.2	µg/L	B251148	S250505



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
MW12										
2505417-23	Ag	Grab Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-23	Al	Grab Water	TR	42.5		12.1	24.2	µg/L	B251148	S250505
2505417-23	As	Grab Water	TR	7.18		0.222	0.727	µg/L	B251148	S250505
2505417-23	Ba	Grab Water	TR	56.9		0.354	0.707	µg/L	B251148	S250505
2505417-23	Cd	Grab Water	TR	≤ 0.061	U	0.061	0.182	µg/L	B251148	S250505
2505417-23	Co	Grab Water	TR	0.988		0.131	0.455	µg/L	B251148	S250505
2505417-23	Cr	Grab Water	TR	2.73	J	1.72	6.06	µg/L	B251148	S250505
2505417-23	Cu	Grab Water	TR	≤ 0.909	U	0.909	1.82	µg/L	B251148	S250505
2505417-23	Fe	Grab Water	TR	117000		18.2	54.5	µg/L	B251148	S250505
2505417-23	Hg	Grab Water	TR	0.30	J	0.14	0.42	ng/L	B251153	S250508
2505417-23	Mn	Grab Water	TR	3020		2.27	4.55	µg/L	B251148	S250505
2505417-23	Ni	Grab Water	TR	≤ 1.21	U	1.21	3.64	µg/L	B251148	S250505
2505417-23	Pb	Grab Water	TR	≤ 0.091	U	0.091	0.182	µg/L	B251148	S250505
2505417-23	Sb	Grab Water	TR	0.077	J	0.051	0.152	µg/L	B251148	S250505
2505417-23	Se	Grab Water	TR	≤ 0.242	U	0.242	0.505	µg/L	B251148	S250505
2505417-23	V	Grab Water	TR	6.61		0.131	0.455	µg/L	B251148	S250505
2505417-23	Zn	Grab Water	TR	≤ 12.1	U	12.1	24.2	µg/L	B251148	S250505
MW12										
2505417-24	Ag	Grab Water	D	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-24	Al	Grab Water	D	14.6	J	12.1	24.2	µg/L	B251148	S250505
2505417-24	As	Grab Water	D	7.14		0.222	0.727	µg/L	B251148	S250505
2505417-24	Ba	Grab Water	D	55.2		0.354	0.707	µg/L	B251148	S250505
2505417-24	Cd	Grab Water	D	≤ 0.061	U	0.061	0.182	µg/L	B251148	S250505
2505417-24	Co	Grab Water	D	0.943		0.131	0.455	µg/L	B251148	S250505
2505417-24	Cr	Grab Water	D	2.54	J	1.72	6.06	µg/L	B251148	S250505
2505417-24	Cu	Grab Water	D	≤ 0.909	U	0.909	1.82	µg/L	B251148	S250505
2505417-24	Fe	Grab Water	D	111000		18.2	54.5	µg/L	B251148	S250505
2505417-24	Hg	Grab Water	D	≤ 0.14	U	0.14	0.42	ng/L	B251153	S250508
2505417-24	Mn	Grab Water	D	2970		2.27	4.55	µg/L	B251148	S250505
2505417-24	Ni	Grab Water	D	≤ 1.21	U	1.21	3.64	µg/L	B251148	S250505
2505417-24	Pb	Grab Water	D	≤ 0.091	U	0.091	0.182	µg/L	B251148	S250505
2505417-24	Sb	Grab Water	D	0.070	J	0.051	0.152	µg/L	B251148	S250505
2505417-24	Se	Grab Water	D	0.244	J	0.242	0.505	µg/L	B251148	S250505
2505417-24	V	Grab Water	D	6.03		0.131	0.455	µg/L	B251148	S250505
2505417-24	Zn	Grab Water	D	≤ 12.1	U	12.1	24.2	µg/L	B251148	S250505



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
MW7										
2505417-25	Ag	Grab Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-25	Al	Grab Water	TR	85.7		12.1	24.2	µg/L	B251148	S250505
2505417-25	As	Grab Water	TR	0.341	J	0.222	0.727	µg/L	B251148	S250505
2505417-25	Ba	Grab Water	TR	44.2		0.354	0.707	µg/L	B251148	S250505
2505417-25	Cd	Grab Water	TR	≤ 0.061	U	0.061	0.182	µg/L	B251148	S250505
2505417-25	Co	Grab Water	TR	0.150	J	0.131	0.455	µg/L	B251148	S250505
2505417-25	Cr	Grab Water	TR	≤ 1.72	U	1.72	6.06	µg/L	B251148	S250505
2505417-25	Cu	Grab Water	TR	3.73		0.909	1.82	µg/L	B251148	S250505
2505417-25	Fe	Grab Water	TR	216		18.2	54.5	µg/L	B251148	S250505
2505417-25	Hg	Grab Water	TR	2.05		0.13	0.41	ng/L	B251153	S250508
2505417-25	Mn	Grab Water	TR	18.4		0.909	1.82	µg/L	B251148	S250505
2505417-25	Ni	Grab Water	TR	≤ 1.21	U	1.21	3.64	µg/L	B251148	S250505
2505417-25	Pb	Grab Water	TR	≤ 0.091	U	0.091	0.182	µg/L	B251148	S250505
2505417-25	Sb	Grab Water	TR	0.488		0.051	0.152	µg/L	B251148	S250505
2505417-25	Se	Grab Water	TR	≤ 0.242	U	0.242	0.505	µg/L	B251148	S250505
2505417-25	V	Grab Water	TR	1.52		0.131	0.455	µg/L	B251148	S250505
2505417-25	Zn	Grab Water	TR	≤ 12.1	U	12.1	24.2	µg/L	B251148	S250505
MW7										
2505417-26	Ag	Grab Water	D	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-26	Al	Grab Water	D	50.4		12.1	24.2	µg/L	B251148	S250505
2505417-26	As	Grab Water	D	0.263	J	0.222	0.727	µg/L	B251148	S250505
2505417-26	Ba	Grab Water	D	43.1		0.354	0.707	µg/L	B251148	S250505
2505417-26	Cd	Grab Water	D	≤ 0.061	U	0.061	0.182	µg/L	B251148	S250505
2505417-26	Co	Grab Water	D	0.151	J	0.131	0.455	µg/L	B251148	S250505
2505417-26	Cr	Grab Water	D	≤ 1.72	U	1.72	6.06	µg/L	B251148	S250505
2505417-26	Cu	Grab Water	D	3.43		0.909	1.82	µg/L	B251148	S250505
2505417-26	Fe	Grab Water	D	45.1	J	18.2	54.5	µg/L	B251148	S250505
2505417-26	Hg	Grab Water	D	1.10		0.13	0.41	ng/L	B251153	S250508
2505417-26	Mn	Grab Water	D	19.3		0.909	1.82	µg/L	B251148	S250505
2505417-26	Ni	Grab Water	D	≤ 1.21	U	1.21	3.64	µg/L	B251148	S250505
2505417-26	Pb	Grab Water	D	≤ 0.091	U	0.091	0.182	µg/L	B251148	S250505
2505417-26	Sb	Grab Water	D	0.471		0.051	0.152	µg/L	B251148	S250505
2505417-26	Se	Grab Water	D	≤ 0.242	U	0.242	0.505	µg/L	B251148	S250505
2505417-26	V	Grab Water	D	1.04		0.131	0.455	µg/L	B251148	S250505
2505417-26	Zn	Grab Water	D	≤ 12.1	U	12.1	24.2	µg/L	B251148	S250505



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
MW13										
2505417-27	Ag	Grab Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-27	Al	Grab Water	TR	139		12.1	24.2	µg/L	B251148	S250505
2505417-27	As	Grab Water	TR	1.52		0.222	0.727	µg/L	B251148	S250505
2505417-27	Ba	Grab Water	TR	13.5		0.354	0.707	µg/L	B251148	S250505
2505417-27	Cd	Grab Water	TR	≤ 0.061	U	0.061	0.182	µg/L	B251148	S250505
2505417-27	Co	Grab Water	TR	4.26		0.131	0.455	µg/L	B251148	S250505
2505417-27	Cr	Grab Water	TR	≤ 1.72	U	1.72	6.06	µg/L	B251148	S250505
2505417-27	Cu	Grab Water	TR	1.18	J	0.909	1.82	µg/L	B251148	S250505
2505417-27	Fe	Grab Water	TR	6730		18.2	54.5	µg/L	B251148	S250505
2505417-27	Hg	Grab Water	TR	1.42		0.13	0.41	ng/L	B251153	S250508
2505417-27	Mn	Grab Water	TR	306		0.909	1.82	µg/L	B251148	S250505
2505417-27	Ni	Grab Water	TR	5.18		1.21	3.64	µg/L	B251148	S250505
2505417-27	Pb	Grab Water	TR	≤ 0.091	U	0.091	0.182	µg/L	B251148	S250505
2505417-27	Sb	Grab Water	TR	0.082	J	0.051	0.152	µg/L	B251148	S250505
2505417-27	Se	Grab Water	TR	≤ 0.242	U	0.242	0.505	µg/L	B251148	S250505
2505417-27	V	Grab Water	TR	3.77		0.131	0.455	µg/L	B251148	S250505
2505417-27	Zn	Grab Water	TR	13.9	J	12.1	24.2	µg/L	B251148	S250505
MW13										
2505417-28	Ag	Grab Water	D	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-28	Al	Grab Water	D	26.7		12.1	24.2	µg/L	B251148	S250505
2505417-28	As	Grab Water	D	1.45		0.222	0.727	µg/L	B251148	S250505
2505417-28	Ba	Grab Water	D	13.0		0.354	0.707	µg/L	B251148	S250505
2505417-28	Cd	Grab Water	D	≤ 0.061	U	0.061	0.182	µg/L	B251148	S250505
2505417-28	Co	Grab Water	D	4.48		0.131	0.455	µg/L	B251148	S250505
2505417-28	Cr	Grab Water	D	≤ 1.72	U	1.72	6.06	µg/L	B251148	S250505
2505417-28	Cu	Grab Water	D	≤ 0.909	U	0.909	1.82	µg/L	B251148	S250505
2505417-28	Fe	Grab Water	D	6080		18.2	54.5	µg/L	B251148	S250505
2505417-28	Hg	Grab Water	D	0.34	J	0.13	0.41	ng/L	B251153	S250508
2505417-28	Mn	Grab Water	D	316		0.909	1.82	µg/L	B251148	S250505
2505417-28	Ni	Grab Water	D	5.29		1.21	3.64	µg/L	B251148	S250505
2505417-28	Pb	Grab Water	D	≤ 0.091	U	0.091	0.182	µg/L	B251148	S250505
2505417-28	Sb	Grab Water	D	0.067	J	0.051	0.152	µg/L	B251148	S250505
2505417-28	Se	Grab Water	D	≤ 0.242	U	0.242	0.505	µg/L	B251148	S250505
2505417-28	V	Grab Water	D	3.15		0.131	0.455	µg/L	B251148	S250505
2505417-28	Zn	Grab Water	D	12.3	J	12.1	24.2	µg/L	B251148	S250505



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
MW14										
2505417-29	Ag	Grab Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-29	Al	Grab Water	TR	95.0		12.1	24.2	µg/L	B251148	S250505
2505417-29	As	Grab Water	TR	0.342	J	0.222	0.727	µg/L	B251148	S250505
2505417-29	Ba	Grab Water	TR	9.88		0.354	0.707	µg/L	B251148	S250505
2505417-29	Cd	Grab Water	TR	≤ 0.061	U	0.061	0.182	µg/L	B251148	S250505
2505417-29	Co	Grab Water	TR	0.319	J	0.131	0.455	µg/L	B251148	S250505
2505417-29	Cr	Grab Water	TR	≤ 1.72	U	1.72	6.06	µg/L	B251148	S250505
2505417-29	Cu	Grab Water	TR	7.19		0.909	1.82	µg/L	B251148	S250505
2505417-29	Fe	Grab Water	TR	91.5		18.2	54.5	µg/L	B251148	S250505
2505417-29	Hg	Grab Water	TR	1.92		0.13	0.41	ng/L	B251153	S250508
2505417-29	Mn	Grab Water	TR	17.3		0.909	1.82	µg/L	B251148	S250505
2505417-29	Ni	Grab Water	TR	1.55	J	1.21	3.64	µg/L	B251148	S250505
2505417-29	Pb	Grab Water	TR	0.098	J	0.091	0.182	µg/L	B251148	S250505
2505417-29	Sb	Grab Water	TR	0.290		0.051	0.152	µg/L	B251148	S250505
2505417-29	Se	Grab Water	TR	≤ 0.242	U	0.242	0.505	µg/L	B251148	S250505
2505417-29	V	Grab Water	TR	0.770		0.131	0.455	µg/L	B251148	S250505
2505417-29	Zn	Grab Water	TR	17.9	J	12.1	24.2	µg/L	B251148	S250505
MW14										
2505417-30	Ag	Grab Water	D	≤ 0.051	U	0.051	0.152	µg/L	B251148	S250505
2505417-30	Al	Grab Water	D	21.7	J	12.1	24.2	µg/L	B251148	S250505
2505417-30	As	Grab Water	D	0.308	J	0.222	0.727	µg/L	B251148	S250505
2505417-30	Ba	Grab Water	D	9.39		0.354	0.707	µg/L	B251148	S250505
2505417-30	Cd	Grab Water	D	≤ 0.061	U	0.061	0.182	µg/L	B251148	S250505
2505417-30	Co	Grab Water	D	0.327	J	0.131	0.455	µg/L	B251148	S250505
2505417-30	Cr	Grab Water	D	≤ 1.72	U	1.72	6.06	µg/L	B251148	S250505
2505417-30	Cu	Grab Water	D	6.62		0.909	1.82	µg/L	B251148	S250505
2505417-30	Fe	Grab Water	D	≤ 18.2	U	18.2	54.5	µg/L	B251148	S250505
2505417-30	Hg	Grab Water	D	0.99		0.13	0.41	ng/L	B251153	S250508
2505417-30	Mn	Grab Water	D	16.0		0.909	1.82	µg/L	B251148	S250505
2505417-30	Ni	Grab Water	D	1.41	J	1.21	3.64	µg/L	B251148	S250505
2505417-30	Pb	Grab Water	D	≤ 0.091	U	0.091	0.182	µg/L	B251148	S250505
2505417-30	Sb	Grab Water	D	0.280		0.051	0.152	µg/L	B251148	S250505
2505417-30	Se	Grab Water	D	≤ 0.242	U	0.242	0.505	µg/L	B251148	S250505
2505417-30	V	Grab Water	D	0.588		0.131	0.455	µg/L	B251148	S250505
2505417-30	Zn	Grab Water	D	19.1	J	12.1	24.2	µg/L	B251148	S250505



Accuracy & Precision Summary

Batch: B251148
 Lab Matrix: Water
 Method: EPA 1638 Mod

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B251148-BS1	Blank Spike, (2522021)						
	Ag		5.556	5.690	µg/L	102% 75-125	
	Al		555.6	638.9	µg/L	115% 75-125	
	As		55.56	57.38	µg/L	103% 75-125	
	Ba		55.56	59.18	µg/L	107% 75-125	
	Cd		5.556	5.743	µg/L	103% 75-125	
	Co		55.56	58.01	µg/L	104% 75-125	
	Cr		55.56	58.54	µg/L	105% 75-125	
	Cu		55.56	58.28	µg/L	105% 75-125	
	Fe		555.6	559.7	µg/L	101% 75-125	
	Mn		55.56	56.35	µg/L	101% 75-125	
	Ni		55.56	57.29	µg/L	103% 75-125	
	Pb		5.556	5.810	µg/L	105% 75-125	
	Sb		5.556	5.651	µg/L	102% 75-125	
	Se		55.56	55.72	µg/L	100% 75-125	
	V		55.56	57.62	µg/L	104% 75-125	
	Zn		55.56	56.88	µg/L	102% 75-125	
B251148-BS2	Blank Spike, (2522021)						
	Ag		5.556	5.799	µg/L	104% 75-125	
	Al		555.6	637.7	µg/L	115% 75-125	
	As		55.56	57.27	µg/L	103% 75-125	
	Ba		55.56	59.96	µg/L	108% 75-125	
	Cd		5.556	5.754	µg/L	104% 75-125	
	Co		55.56	57.87	µg/L	104% 75-125	
	Cr		55.56	58.36	µg/L	105% 75-125	
	Cu		55.56	58.13	µg/L	105% 75-125	
	Fe		555.6	559.2	µg/L	101% 75-125	
	Mn		55.56	56.97	µg/L	103% 75-125	
	Ni		55.56	57.74	µg/L	104% 75-125	
	Pb		5.556	5.811	µg/L	105% 75-125	
	Sb		5.556	5.743	µg/L	103% 75-125	
	Se		55.56	54.89	µg/L	99% 75-125	
	V		55.56	57.24	µg/L	103% 75-125	
	Zn		55.56	57.23	µg/L	103% 75-125	



Accuracy & Precision Summary

Batch: B251148
 Lab Matrix: Water
 Method: EPA 1638 Mod

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B251148-SRM1	Reference Material (2452045, NIST 1643f)						
	Ba		518.2	556.2	µg/L	107% 75-125	
	Sb		55.45	58.80	µg/L	106% 75-125	
B251148-SRM2	Reference Material (2452045, NIST 1643f)						
	Ba		518.2	565.4	µg/L	109% 75-125	
	Sb		55.45	57.49	µg/L	104% 75-125	
B251148-SRM3	Reference Material (2452045, NIST 1643f)						
	Ag		0.9703	1.023	µg/L	105% 75-125	
	Al		133.8	135.0	µg/L	101% 75-125	
	As		57.42	59.61	µg/L	104% 75-125	
	Cd		5.890	6.015	µg/L	102% 75-125	
	Co		25.30	25.90	µg/L	102% 75-125	
	Cr		18.50	19.61	µg/L	106% 75-125	
	Cu		21.66	22.27	µg/L	103% 75-125	
	Fe		93.44	95.77	µg/L	102% 75-125	
	Mn		37.14	38.40	µg/L	103% 75-125	
	Ni		59.80	59.65	µg/L	100% 75-125	
	Pb		18.49	19.53	µg/L	106% 75-125	
	Se		11.70	11.29	µg/L	97% 75-125	
V		36.07	37.62	µg/L	104% 75-125		
Zn		74.40	77.15	µg/L	104% 75-125		



Accuracy & Precision Summary

Batch: B251148
 Lab Matrix: Water
 Method: EPA 1638 Mod

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B251148-SRM4	Reference Material (2452045, NIST 1643f)						
	Ag		0.9703	1.029	µg/L	106% 75-125	
	Al		133.8	138.2	µg/L	103% 75-125	
	As		57.42	59.32	µg/L	103% 75-125	
	Cd		5.890	6.221	µg/L	106% 75-125	
	Co		25.30	25.98	µg/L	103% 75-125	
	Cr		18.50	19.99	µg/L	108% 75-125	
	Cu		21.66	22.82	µg/L	105% 75-125	
	Fe		93.44	98.43	µg/L	105% 75-125	
	Mn		37.14	39.30	µg/L	106% 75-125	
	Ni		59.80	60.96	µg/L	102% 75-125	
	Pb		18.49	19.72	µg/L	107% 75-125	
	Se		11.70	11.61	µg/L	99% 75-125	
	V		36.07	38.25	µg/L	106% 75-125	
	Zn		74.40	78.48	µg/L	105% 75-125	
B251148-DUP1	Duplicate, (2505417-01)						
	Ag	ND		ND	µg/L		N/C 20
	Al	1303		1235	µg/L		5% 20
	As	22.83		22.61	µg/L		0.9% 20
	Ba	70.72		69.03	µg/L		2% 20
	Cd	ND		ND	µg/L		N/C 20
	Co	2.045		2.088	µg/L		2% 20
	Cr	7.027		6.903	µg/L		2% 20
	Cu	9.059		9.179	µg/L		1% 20
	Fe	36060		35810	µg/L		0.7% 20
	Mn	2326		2344	µg/L		0.8% 20
	Ni	2.758		2.752	µg/L		0.2% 20
	Pb	1.332		1.281	µg/L		4% 20
	Sb	2.884		2.854	µg/L		1% 20
	Se	0.600		0.485	µg/L		21% 20
	V	59.79		59.29	µg/L		0.8% 20
	Zn	ND		ND	µg/L		N/C 20



Accuracy & Precision Summary

Batch: B251148
 Lab Matrix: Water
 Method: EPA 1638 Mod

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B251148-MS1	Matrix Spike, (2505417-01)						
	Ag	ND	5.612	5.677	µg/L	101% 75-125	
	Al	1303	561.2	1923	µg/L	111% 75-125	
	As	22.83	56.12	80.63	µg/L	103% 75-125	
	Ba	70.72	56.12	129.4	µg/L	105% 75-125	
	Cd	ND	5.612	5.827	µg/L	104% 75-125	
	Co	2.045	56.12	59.40	µg/L	102% 75-125	
	Cr	7.027	56.12	65.99	µg/L	105% 75-125	
	Cu	9.059	56.12	67.57	µg/L	104% 75-125	
	Fe	36060	561.2	35850	µg/L	NR 75-125	
	Mn	2326	56.12	2361	µg/L	NR 75-125	
	Ni	2.758	56.12	59.76	µg/L	102% 75-125	
	Pb	1.332	5.612	7.066	µg/L	102% 75-125	
	Sb	2.884	5.612	8.634	µg/L	102% 75-125	
	Se	0.600	56.12	57.41	µg/L	101% 75-125	
	V	59.79	56.12	115.2	µg/L	99% 75-125	
	Zn	ND	56.12	62.34	µg/L	111% 75-125	
B251148-MSD1	Matrix Spike Duplicate, (2505417-01)						
	Ag	ND	5.612	5.652	µg/L	101% 75-125	0.5% 20
	Al	1303	561.2	1987	µg/L	122% 75-125	3% 20
	As	22.83	56.12	82.33	µg/L	106% 75-125	2% 20
	Ba	70.72	56.12	130.0	µg/L	106% 75-125	0.5% 20
	Cd	ND	5.612	5.728	µg/L	102% 75-125	2% 20
	Co	2.045	56.12	60.92	µg/L	105% 75-125	3% 20
	Cr	7.027	56.12	66.47	µg/L	106% 75-125	0.7% 20
	Cu	9.059	56.12	67.69	µg/L	104% 75-125	0.2% 20
	Fe	36060	561.2	36680	µg/L	NR 75-125	N/C 20
	Mn	2326	56.12	2409	µg/L	NR 75-125	N/C 20
	Ni	2.758	56.12	61.29	µg/L	104% 75-125	3% 20
	Pb	1.332	5.612	7.057	µg/L	102% 75-125	0.1% 20
	Sb	2.884	5.612	8.722	µg/L	104% 75-125	1% 20
	Se	0.600	56.12	57.87	µg/L	102% 75-125	0.8% 20
	V	59.79	56.12	120.1	µg/L	107% 75-125	4% 20
	Zn	ND	56.12	62.92	µg/L	112% 75-125	0.9% 20



Accuracy & Precision Summary

Batch: B251148
 Lab Matrix: Water
 Method: EPA 1638 Mod

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B251148-DUP2	Duplicate, (2505417-03)						
	Ag	0.077		0.076	µg/L		1% 20
	Al	2627		2656	µg/L		1% 20
	As	3.573		3.630	µg/L		2% 20
	Ba	29.12		29.68	µg/L		2% 20
	Cd	ND		ND	µg/L		N/C 20
	Co	2.556		2.661	µg/L		4% 20
	Cr	2.007		2.079	µg/L		4% 20
	Cu	25.32		26.29	µg/L		4% 20
	Fe	1690		1749	µg/L		3% 20
	Mn	169.5		171.9	µg/L		1% 20
	Ni	5.062		5.149	µg/L		2% 20
	Pb	0.445		0.450	µg/L		1% 20
	Sb	0.509		0.523	µg/L		3% 20
	Se	0.815		0.839	µg/L		3% 20
	V	10.93		11.36	µg/L		4% 20
	Zn	ND		ND	µg/L		N/C 20
B251148-MS2	Matrix Spike, (2505417-03)						
	Ag	0.077	5.612	5.669	µg/L	100% 75-125	
	Al	2627	561.2	3226	µg/L	NR 75-125	
	As	3.573	56.12	63.58	µg/L	107% 75-125	
	Ba	29.12	56.12	88.57	µg/L	106% 75-125	
	Cd	ND	5.612	5.902	µg/L	105% 75-125	
	Co	2.556	56.12	61.66	µg/L	105% 75-125	
	Cr	2.007	56.12	59.75	µg/L	103% 75-125	
	Cu	25.32	56.12	83.84	µg/L	104% 75-125	
	Fe	1690	561.2	2342	µg/L	116% 75-125	
	Mn	169.5	56.12	228.2	µg/L	105% 75-125	
	Ni	5.062	56.12	62.66	µg/L	103% 75-125	
	Pb	0.445	5.612	6.173	µg/L	102% 75-125	
	Sb	0.509	5.612	6.358	µg/L	104% 75-125	
	Se	0.815	56.12	56.86	µg/L	100% 75-125	
	V	10.93	56.12	71.25	µg/L	107% 75-125	
	Zn	ND	56.12	62.09	µg/L	111% 75-125	



Accuracy & Precision Summary

Batch: B251148
 Lab Matrix: Water
 Method: EPA 1638 Mod

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B251148-MSD2	Matrix Spike Duplicate, (2505417-03)						
	Ag	0.077	5.612	5.614	µg/L	99% 75-125	1% 20
	Al	2627	561.2	3102	µg/L	NR 75-125	N/C 20
	As	3.573	56.12	61.36	µg/L	103% 75-125	4% 20
	Ba	29.12	56.12	87.61	µg/L	104% 75-125	1% 20
	Cd	ND	5.612	5.577	µg/L	99% 75-125	6% 20
	Co	2.556	56.12	59.05	µg/L	101% 75-125	4% 20
	Cr	2.007	56.12	59.84	µg/L	103% 75-125	0.2% 20
	Cu	25.32	56.12	83.50	µg/L	104% 75-125	0.4% 20
	Fe	1690	561.2	2230	µg/L	96% 75-125	5% 20
	Mn	169.5	56.12	222.4	µg/L	94% 75-125	3% 20
	Ni	5.062	56.12	61.31	µg/L	100% 75-125	2% 20
	Pb	0.445	5.612	5.937	µg/L	98% 75-125	4% 20
	Sb	0.509	5.612	6.189	µg/L	101% 75-125	3% 20
	Se	0.815	56.12	56.03	µg/L	98% 75-125	1% 20
	V	10.93	56.12	68.07	µg/L	102% 75-125	5% 20
	Zn	ND	56.12	63.20	µg/L	113% 75-125	2% 20
	B251148-DUP3	Duplicate, (2505417-05)					
Ag		ND		ND	µg/L		N/C 20
Al		127.5		135.5	µg/L		6% 20
As		20.35		20.29	µg/L		0.3% 20
Ba		22.68		23.03	µg/L		2% 20
Cd		0.082		0.071	µg/L		14% 20
Co		2.010		2.026	µg/L		0.8% 20
Cr		ND		ND	µg/L		N/C 20
Cu		1.544		1.655	µg/L		7% 20
Fe		33120		33460	µg/L		1% 20
Mn		1431		1442	µg/L		0.8% 20
Ni		1.751		1.886	µg/L		7% 20
Pb		ND		ND	µg/L		N/C 20
Sb		0.075		0.078	µg/L		4% 20
Se		ND		ND	µg/L		N/C 20
V	3.881		3.731	µg/L		4% 20	
Zn	ND		ND	µg/L		N/C 20	



Accuracy & Precision Summary

Batch: B251148
 Lab Matrix: Water
 Method: EPA 1638 Mod

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B251148-MS3	Matrix Spike, (2505417-05)						
	Ag	ND	5.612	5.775	µg/L	103% 75-125	
	Al	127.5	561.2	769.5	µg/L	114% 75-125	
	As	20.35	56.12	78.65	µg/L	104% 75-125	
	Ba	22.68	56.12	83.27	µg/L	108% 75-125	
	Cd	0.082	5.612	5.954	µg/L	105% 75-125	
	Co	2.010	56.12	59.70	µg/L	103% 75-125	
	Cr	ND	56.12	60.76	µg/L	108% 75-125	
	Cu	1.544	56.12	61.51	µg/L	107% 75-125	
	Fe	33120	561.2	33950	µg/L	NR 75-125	
	Mn	1431	56.12	1490	µg/L	NR 75-125	
	Ni	1.751	56.12	59.42	µg/L	103% 75-125	
	Pb	ND	5.612	5.947	µg/L	106% 75-125	
	Sb	0.075	5.612	5.989	µg/L	105% 75-125	
	Se	ND	56.12	55.17	µg/L	98% 75-125	
	V	3.881	56.12	60.89	µg/L	102% 75-125	
	Zn	ND	56.12	61.21	µg/L	109% 75-125	
B251148-MSD3	Matrix Spike Duplicate, (2505417-05)						
	Ag	ND	5.612	5.656	µg/L	101% 75-125	2% 20
	Al	127.5	561.2	728.0	µg/L	107% 75-125	6% 20
	As	20.35	56.12	77.22	µg/L	101% 75-125	2% 20
	Ba	22.68	56.12	81.77	µg/L	105% 75-125	2% 20
	Cd	0.082	5.612	5.862	µg/L	103% 75-125	2% 20
	Co	2.010	56.12	58.78	µg/L	101% 75-125	2% 20
	Cr	ND	56.12	58.75	µg/L	105% 75-125	3% 20
	Cu	1.544	56.12	59.97	µg/L	104% 75-125	3% 20
	Fe	33120	561.2	33760	µg/L	NR 75-125	N/C 20
	Mn	1431	56.12	1441	µg/L	NR 75-125	N/C 20
	Ni	1.751	56.12	58.52	µg/L	101% 75-125	2% 20
	Pb	ND	5.612	5.806	µg/L	103% 75-125	2% 20
	Sb	0.075	5.612	5.714	µg/L	100% 75-125	5% 20
	Se	ND	56.12	56.00	µg/L	100% 75-125	1% 20
	V	3.881	56.12	60.84	µg/L	101% 75-125	0.08% 20
	Zn	ND	56.12	58.62	µg/L	104% 75-125	4% 20



Accuracy & Precision Summary

Batch: B251152
 Lab Matrix: Water
 Method: EPA 1631 E

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B251152-MS1	Matrix Spike (2505417-04) Hg	9.32	20.41	29.13	ng/L	97% 71-125	
B251152-MSD1	Matrix Spike Duplicate (2505417-04) Hg	9.32	20.41	29.44	ng/L	99% 71-125	1% 24
B251152-MS2	Matrix Spike (2505417-16) Hg	0.98	20.41	20.27	ng/L	95% 71-125	
B251152-MSD2	Matrix Spike Duplicate (2505417-16) Hg	0.98	20.41	20.28	ng/L	95% 71-125	0.03% 24



Accuracy & Precision Summary

Batch: B251153
Lab Matrix: Water
Method: EPA 1631 E

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B251153-MS1	Matrix Spike (2505417-30) Hg	0.99	20.41	20.57	ng/L	96% 71-125	
B251153-MSD1	Matrix Spike Duplicate (2505417-30) Hg	0.99	20.41	20.65	ng/L	96% 71-125	0.4% 24



Method Blanks & Reporting Limits

Batch: B251148
Matrix: Water
Method: EPA 1638 Mod
Analyte: Ag

Sample	Result	Units	
B251148-BLK1	0.0007	µg/L	
B251148-BLK2	0.0001	µg/L	
B251148-BLK3	0.00006	µg/L	
B251148-BLK4	0.0004	µg/L	
Average:	0.000		MDL: 0.005
Limit:	0.015		MRL: 0.015

Analyte: Al

Sample	Result	Units	
B251148-BLK1	0.847	µg/L	
B251148-BLK2	1.36	µg/L	
B251148-BLK3	1.07	µg/L	
B251148-BLK4	1.44	µg/L	
Average:	1.180		MDL: 1.20
Limit:	2.400		MRL: 2.40

Analyte: As

Sample	Result	Units	
B251148-BLK1	0.054	µg/L	
B251148-BLK2	0.055	µg/L	
B251148-BLK3	0.052	µg/L	
B251148-BLK4	0.056	µg/L	
Average:	0.054		MDL: 0.022
Limit:	0.072		MRL: 0.072



Method Blanks & Reporting Limits

Analyte: Ba

Sample	Result	Units	
B251148-BLK1	0.053	µg/L	
B251148-BLK2	0.068	µg/L	
B251148-BLK3	0.116	µg/L	
B251148-BLK4	0.065	µg/L	
Average:	0.075		MDL: 0.035
Limit:	0.070		MRL: 0.070

Analyte: Cd

Sample	Result	Units	
B251148-BLK1	0.005	µg/L	
B251148-BLK2	0.004	µg/L	
B251148-BLK3	0.004	µg/L	
B251148-BLK4	0.004	µg/L	
Average:	0.004		MDL: 0.006
Limit:	0.018		MRL: 0.018

Analyte: Co

Sample	Result	Units	
B251148-BLK1	0.039	µg/L	
B251148-BLK2	0.042	µg/L	
B251148-BLK3	0.040	µg/L	
B251148-BLK4	0.040	µg/L	
Average:	0.040		MDL: 0.013
Limit:	0.045		MRL: 0.045

Analyte: Cr

Sample	Result	Units	
B251148-BLK1	0.057	µg/L	
B251148-BLK2	0.075	µg/L	
B251148-BLK3	0.060	µg/L	
B251148-BLK4	0.048	µg/L	
Average:	0.060		MDL: 0.170
Limit:	0.600		MRL: 0.600



Method Blanks & Reporting Limits

Analyte: Cu

Sample	Result	Units	
B251148-BLK1	0.047	µg/L	
B251148-BLK2	0.053	µg/L	
B251148-BLK3	0.057	µg/L	
B251148-BLK4	0.040	µg/L	
Average:	0.049		MDL: 0.090
Limit:	0.180		MRL: 0.180

Analyte: Fe

Sample	Result	Units	
B251148-BLK1	0.403	µg/L	
B251148-BLK2	0.641	µg/L	
B251148-BLK3	0.408	µg/L	
B251148-BLK4	0.414	µg/L	
Average:	0.466		MDL: 1.80
Limit:	5.400		MRL: 5.40

Analyte: Mn

Sample	Result	Units	
B251148-BLK1	0.053	µg/L	
B251148-BLK2	0.055	µg/L	
B251148-BLK3	0.059	µg/L	
B251148-BLK4	0.052	µg/L	
Average:	0.055		MDL: 0.090
Limit:	0.180		MRL: 0.180

Analyte: Ni

Sample	Result	Units	
B251148-BLK1	0.046	µg/L	
B251148-BLK2	0.058	µg/L	
B251148-BLK3	0.049	µg/L	
B251148-BLK4	0.050	µg/L	
Average:	0.051		MDL: 0.120
Limit:	0.360		MRL: 0.360



Method Blanks & Reporting Limits

Analyte: Pb

Sample	Result	Units	
B251148-BLK1	0.006	µg/L	
B251148-BLK2	0.006	µg/L	
B251148-BLK3	0.006	µg/L	
B251148-BLK4	0.007	µg/L	
Average:	0.006		MDL: 0.009
Limit:	0.018		MRL: 0.018

Analyte: Sb

Sample	Result	Units	
B251148-BLK1	0.002	µg/L	
B251148-BLK2	0.004	µg/L	
B251148-BLK3	0.002	µg/L	
B251148-BLK4	0.003	µg/L	
Average:	0.003		MDL: 0.005
Limit:	0.015		MRL: 0.015

Analyte: Se

Sample	Result	Units	
B251148-BLK1	0.048	µg/L	
B251148-BLK2	0.049	µg/L	
B251148-BLK3	0.047	µg/L	
B251148-BLK4	0.037	µg/L	
Average:	0.045		MDL: 0.024
Limit:	0.050		MRL: 0.050

Analyte: V

Sample	Result	Units	
B251148-BLK1	0.045	µg/L	
B251148-BLK2	0.046	µg/L	
B251148-BLK3	0.046	µg/L	
B251148-BLK4	0.044	µg/L	
Average:	0.045		MDL: 0.013
Limit:	0.045		MRL: 0.045



Method Blanks & Reporting Limits

Analyte: Zn

Sample	Result	Units	
B251148-BLK1	0.231	µg/L	
B251148-BLK2	0.314	µg/L	
B251148-BLK3	0.399	µg/L	
B251148-BLK4	0.295	µg/L	
Average:	0.310		MDL: 1.20
Limit:	2.400		MRL: 2.40



Method Blanks & Reporting Limits

Batch: B251152
Matrix: Water
Method: EPA 1631 E
Analyte: Hg

Sample	Result	Units		
B251152-BLK1	0.11	ng/L		
B251152-BLK2	0.10	ng/L		
B251152-BLK3	0.10	ng/L		
B251152-BLK4	0.10	ng/L		
Average: 0.10			Standard Deviation: 0.01	MDL: 0.13
Limit: 0.50			Limit: 0.13	MRL: 0.40



Method Blanks & Reporting Limits

Batch: B251153
Matrix: Water
Method: EPA 1631 E
Analyte: Hg

Sample	Result	Units			
B251153-BLK1	0.18	ng/L			
B251153-BLK2	0.15	ng/L			
B251153-BLK3	0.16	ng/L			
B251153-BLK4	0.16	ng/L			
Average: 0.16			Standard Deviation: 0.01	MDL: 0.13	
Limit: 0.50			Limit: 0.13	MRL: 0.40	

Project ID: CRC-SE2501
PM: Amy Goodall



BAL Report 2505417
Client PM: Rusty Jones
Client Project: MARALCO SRI

Sample Containers

Lab ID: 2505417-01		Report Matrix: Grab Water			Collected: 05/20/2025		
Sample: MW5R2		Sample Type: Sample			Received: 05/23/2025		
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	25-0028	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417

Lab ID: 2505417-02		Report Matrix: Grab Water			Collected: 05/20/2025		
Sample: MW5R2		Sample Type: Sample			Received: 05/23/2025		
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417

Lab ID: 2505417-03		Report Matrix: Grab Water			Collected: 05/20/2025		
Sample: MW3R		Sample Type: Sample			Received: 05/23/2025		
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417

Lab ID: 2505417-04		Report Matrix: Grab Water			Collected: 05/20/2025		
Sample: MW3R		Sample Type: Sample			Received: 05/23/2025		
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417



Sample Containers

Lab ID: 2505417-05		Report Matrix: Grab Water			Collected: 05/20/2025		
Sample: MW8R		Sample Type: Sample			Received: 05/23/2025		
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417

Lab ID: 2505417-06		Report Matrix: Grab Water			Collected: 05/20/2025		
Sample: MW8R		Sample Type: Sample			Received: 05/23/2025		
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417

Lab ID: 2505417-07		Report Matrix: Grab Water			Collected: 05/20/2025		
Sample: MW1		Sample Type: Sample			Received: 05/23/2025		
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417

Lab ID: 2505417-08		Report Matrix: Grab Water			Collected: 05/20/2025		
Sample: MW1		Sample Type: Sample			Received: 05/23/2025		
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417



Sample Containers

Lab ID: 2505417-09		Report Matrix: Grab Water			Collected: 05/20/2025		
Sample: MW4R		Sample Type: Sample			Received: 05/23/2025		
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417

Lab ID: 2505417-10		Report Matrix: Grab Water			Collected: 05/20/2025		
Sample: MW4R		Sample Type: Sample			Received: 05/23/2025		
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417

Lab ID: 2505417-11		Report Matrix: Grab Water			Collected: 05/21/2025		
Sample: MW10		Sample Type: Sample			Received: 05/23/2025		
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417

Lab ID: 2505417-12		Report Matrix: Grab Water			Collected: 05/21/2025		
Sample: MW10		Sample Type: Sample			Received: 05/23/2025		
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417



Sample Containers

Lab ID: 2505417-13		Report Matrix: Grab Water			Collected: 05/21/2025		
Sample: MW9R		Sample Type: Sample			Received: 05/23/2025		
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417

Lab ID: 2505417-14		Report Matrix: Grab Water			Collected: 05/21/2025		
Sample: MW9R		Sample Type: Sample			Received: 05/23/2025		
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417

Lab ID: 2505417-15		Report Matrix: Grab Water			Collected: 05/21/2025		
Sample: MW2		Sample Type: Sample			Received: 05/23/2025		
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417

Lab ID: 2505417-16		Report Matrix: Grab Water			Collected: 05/21/2025		
Sample: MW2		Sample Type: Sample			Received: 05/23/2025		
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417



Sample Containers

Lab ID: 2505417-17		Report Matrix: Grab Water			Collected: 05/21/2025		
Sample: MW11		Sample Type: Sample			Received: 05/23/2025		
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417

Lab ID: 2505417-18		Report Matrix: Grab Water			Collected: 05/21/2025		
Sample: MW11		Sample Type: Sample			Received: 05/23/2025		
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417

Lab ID: 2505417-19		Report Matrix: Grab Water			Collected: 05/22/2025		
Sample: DUP-0525		Sample Type: Field Duplicate			Received: 05/23/2025		
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	25-0028	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417

Lab ID: 2505417-20		Report Matrix: Grab Water			Collected: 05/22/2025		
Sample: DUP-0525		Sample Type: Field Duplicate			Received: 05/23/2025		
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417



Sample Containers

Lab ID: 2505417-21		Report Matrix: Grab Water				Collected: 05/22/2025	
Sample: MW6R		Sample Type: Sample				Received: 05/23/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417

Lab ID: 2505417-22		Report Matrix: Grab Water				Collected: 05/22/2025	
Sample: MW6R		Sample Type: Sample				Received: 05/23/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417

Lab ID: 2505417-23		Report Matrix: Grab Water				Collected: 05/22/2025	
Sample: MW12		Sample Type: Sample				Received: 05/23/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417

Lab ID: 2505417-24		Report Matrix: Grab Water				Collected: 05/22/2025	
Sample: MW12		Sample Type: Sample				Received: 05/23/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417



Sample Containers

Lab ID: 2505417-25		Report Matrix: Grab Water			Collected: 05/22/2025		
Sample: MW7		Sample Type: Sample			Received: 05/23/2025		
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417

Lab ID: 2505417-26		Report Matrix: Grab Water			Collected: 05/22/2025		
Sample: MW7		Sample Type: Sample			Received: 05/23/2025		
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417

Lab ID: 2505417-27		Report Matrix: Grab Water			Collected: 05/23/2025		
Sample: MW13		Sample Type: Sample			Received: 05/23/2025		
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417

Lab ID: 2505417-28		Report Matrix: Grab Water			Collected: 05/23/2025		
Sample: MW13		Sample Type: Sample			Received: 05/23/2025		
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417



Sample Containers

Lab ID: 2505417-29		Report Matrix: Grab Water				Collected: 05/23/2025	
Sample: MW14		Sample Type: Sample				Received: 05/23/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417

Lab ID: 2505417-30		Report Matrix: Grab Water				Collected: 05/23/2025	
Sample: MW14		Sample Type: Sample				Received: 05/23/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2505417
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2505417

Shipping Containers

Cooler - 2505417

Received: May 23, 2025 13:16
Tracking No: n/a via Customer Drop-Off
Coolant Type: Ice
Temperature: 2.9 °C

Description: Cooler
Damaged in transit? No
Returned to client? No
Comments: SCTH-1

Custody seals present? No
Custody seals intact? No
COC present? Yes



Chain-of-Custody Form

Ship samples to:
 13751 Lake City Way NE, Suite 108
 Seattle, WA 98125

BAL Report 2505417

Received by: ASD (BAL) For BAL use only Date: 23 MAY 2025
 Work Order ID: _____ Time: 1316
 Project ID: _____

Client: CRETE Consulting PO Number: MARALCO Mailing Address: _____
 Contact: Rusty Jones Phone: 832.330.1359
 Client Project ID: Maralco SRI Email: rusty.jones@creteconsulting.com Receipt Confirmation? (Yes/No)
 Samples Collected By: Rusty Jones R. Jones BAL PM: Amy Goodall

Requested TAT (business days)		Collection		Client Sample Info					BAL Analyses Required						Comments	
<input checked="" type="checkbox"/> 20 (standard) <input type="checkbox"/> 15* <input type="checkbox"/> 10* <input type="checkbox"/> 5* <input type="checkbox"/> Other _____ <small>*Surcharges may apply to expedited TATs</small>		Date	Time	Matrix Type	Number of Containers	Field Filtered? (Yes/No)	Preservation Type HCl/HNO ₃ /Other	Total Hg, EPA 1631	Methyl Hg, EPA 1630	ICP-MS Metals (specify)	As Species (specify) InOrg, III, V, MMA, DMA	Se Species (specify) Se(IV), Se(VI), SeCN, Unknown	Filtration	Other (specify) <u>1631 Mod. T/D Project Metals</u>	Other (specify)	Total and Dissolved Analysis on all samples Conductivities (uS/cm) Specify Here
Sample ID																
1	MW5RZ	5/20/2025	1030	GRAB WATER	4	Y+N	NONE	X					X		3163 uS/cm	
2	MW3R		1122		4			X					X		1745	
3	MWBR		1212		4			X					X		369.9	
4	MW1		1307		4			X					X		127.7	
5	MW4R		1404		4			X					X		1442	
6	MW10	5/21/2025	0920		4			X					X		985	
7	MW9R		1020		4			X					X		1810	
8	MW2		1130		4			X					X		113.9	
9	MW11		1218		4			X					X		155.2 uS/cm	
10	DUP-0525	5/22/2025	0001		4			X					X			
Trip Blank													X			

Relinquished By: R. Jones Date: 5/23/2025 Time: 1316 Relinquished By: _____ Date: _____ Time: _____
 Received By: ASD (BAL) Date: 5/23/2025 Time: 1316 Total Number of Packages: _____



Chain-of-Custody Form

Ship samples to:
 13751 Lake City Way NE, Suite 108
 Seattle, WA 98125

BAL Report 2505417

Received by: ASD (BAL) For BAL use only Date: 23 MAY 2025
 Work Order ID: _____ Time: 1316
 Project ID: _____

Client: CRETE Consulting PO Number: MARALCO Mailing Address: _____
 Contact: Rusty Jones Phone: 425.330.1359
 Client Project ID: Maralco SPI Email: rusty.jones@creteconsulting.com Email Receipt Confirmation? (Yes/No)
 Samples Collected By: Rusty Jones R. Jones BAL PM: Amy Goodall

Requested TAT (business days)	Collection		Client Sample Info				BAL Analyses Required						Comments				
	Date	Time	Matrix Type	Number of Containers	Field Filtered? (Yes/No)	Preservation Type HCl/HNO ₃ /Other	Total Hg, EPA 1631 <i>And Dissolved</i>	Methyl Hg, EPA 1630	ICP-MS Metals (specify)	As Species (specify) InOrg, III, V, MMA, DMA	Se Species (specify) Se(IV), Se(VI), SeCN, Unknown	Filtration		Other (specify) <i>1631d TD Project Metals</i>	Other (specify)		
<input checked="" type="checkbox"/> 20 (standard) <input type="checkbox"/> 15* <input type="checkbox"/> 10* <input type="checkbox"/> 5* <input type="checkbox"/> Other _____ <small>*Surcharges may apply to expedited TATs</small>																	
Sample ID	1	MW6R	5/22/2025	1007	GRAB WATER	4	Y+N	NONE	X						X		Total and Dissolved Metals on all samples (uS/cm) Conductivities Specify Here
	2	MW12		1102		4			X						X		1806 uS/cm
	3	MW7		1203		4			X						X		109
	4	MW13	5/23/2025	0931		4			X						X		374.7
	5	MW14		1018		4			X						Y		115.6
	6																157.2
	7																
	8																
	9																
	10																
	Trip Blank																
Relinquished By: <u>R. Jones</u>	Date: <u>5/22/2025</u>	Time: <u>1316</u>	Relinquished By: _____	Date: _____	Time: _____	Total Number of Packages: _____											
Received By: <u>ASD (BAL)</u>	Date: <u>5/23/2025</u>	Time: <u>1316</u>															



13751 Lake City Way NE, Ste 108, Seattle, WA 98125 • USA • T:206-632-6206 • info@brooksapplied.com

May 29, 2025

Crete Consulting
ATTN: Rusty Jones
108 S. Washington Street, Suite 300
Seattle, WA 98104
832-330-1359
rusty.jones@creteconsulting.com

RE: Project CRC-SE2501
Client Project: Maralco

Dear Rusty Jones,

On April 30, 2025, Brooks Applied Labs (BAL) received two (2) sets of aqueous samples. The samples were logged-in for the analyses of for total recoverable and dissolved silver (Ag), aluminum (Al), arsenic (As), barium (Ba), cadmium (Cd), cobalt (Co), chromium (Cr), copper (Cu), iron (Fe), manganese (Mn), nickel (Ni), lead (Pb), antimony (Sb), selenium (Se), vanadium (V), zinc (Zn), and mercury (Hg) according to the chain-of-custody form. All samples were received and stored according to BAL SOPs and EPA methodology.

All dissolved samples were 0.45µm filtered prior to receipt at BAL.

Total Recoverable and Dissolved Metals Quantitation by ICP-QQQ-MS

All aqueous samples were digested on a hotblock via modified EPA Method 1638 with nitric and hydrochloric acids. Trace metals were analyzed using inductively coupled plasma triple quadrupole mass spectrometry (ICP-QQQ-MS). The ICP-QQQ-MS uses advanced interference removal techniques to ensure accuracy of the sample results. For more information, please visit the *Interference Reduction Technology* section on our website, www.brooksapplied.com.

In instances where the native sample result and/or the associated duplicate (DUP) result were below the MDL the RPD was not calculated (N/C).

Some of the total results were less than the corresponding dissolved result. In all of these cases, the total and dissolved samples meet RPD, or the results met secondary criteria (within 5x the MRL and within the MRL of each other) and no further action was required.

Total and Dissolved Mercury using MERX

Each aqueous fraction submitted for Hg analysis was prepared and analyzed in accordance with EPA Method 1631. Samples were oxidized with bromine monochloride (BrCl) and then analyzed with stannous chloride (SnCl₂) reduction, dual gold amalgamation, and cold vapor atomic fluorescence spectroscopy (CVAFS) detection using a Brooks Rand Instrument's MERX-T CVAFS Mercury Automated-Analyzer.

All samples were originally analyzed in sequence S250427. The original matrix spike and matrix spike duplicate (MS/MSD) were not appropriately spiked and could not be reported from the original analysis. Sample 2504430-01 was reanalyzed in sequence S250439 with a new MS/MSD that were prepped with the appropriate spike amount. The reported Hg result for sample 2504430-01 is from this reanalysis.

Sample results reported for mercury were method blank corrected, while all other results were not method blank corrected, as described in the calculations section of the relevant BAL SOP(s). All results were evaluated using reporting limits adjusted to account for sample aliquot size. Please refer to the *Sample Results* page for sample-specific MDLs, MRLs, and other details.

All data was reported without qualification and all associated quality control sample results met the acceptance criteria.

BAL verifies that the reported results of all analyses for which the laboratory is accredited meet the requirements of the accrediting body, unless otherwise noted in the report narrative. For more information regarding accreditations please see the *Report Information* and *Batch Summary* pages. This report must be used in its entirety for interpretation of results.

Please feel free to contact us if you have any questions regarding this report.

Sincerely,

A handwritten signature in cursive script that reads "Amy Goodall". The signature is written in black ink and is positioned to the left of the typed name and contact information.

Amy Goodall
Project Manager
Brooks Applied Labs
amy@brooksapplied.com



Report Information

General Disclaimers

Test results are based solely upon the sample submitted to Brooks Applied Labs in the condition it was received. This report shall not be reproduced or copied, except in full, without written approval of the laboratory. Brooks Applied Labs is not responsible for the consequences arising from the use of a partial report.

Laboratory Accreditation

BAL maintains accreditation with various state and national agencies for select test methods. For a current list of BAL accreditations, please visit our website at <http://www.brooksapplied.com/resources/certificates-permits/>. The reported analyte/matrix/method combination shall be considered outside BAL's scopes of accreditation unless otherwise identified as ISO, TNI, or ISO,TNI in the tables. It is the responsibility of the client to verify whether a specific accreditation is required for the intended data use.

ISO: ISO/IEC 17025:2017 accredited test method. Issued by ANSI National Accreditation Board (ANAB), #ADE-1447.02

TNI: NELAP accredited test method. Issued by the State of Florida Department of Health, #E87982.

ISO,TNI: Test method is accredited under both the ISO/IEC 17025:2017 and NELAP accreditations referenced above.

Field Quality Control Samples

Please be notified that certain EPA methods require the collection of field quality control samples of an appropriate type and frequency; failure to do so is considered a deviation from some methods and for compliance purposes should only be done with the approval of regulatory authorities. Please see the specific EPA methods for details regarding required field quality control samples.

Common Abbreviations

AR	as received	MS	matrix spike
BAL	Brooks Applied Labs	MSD	matrix spike duplicate
BLK	method blank	ND	non-detect
BS	blank spike	NR	non-reportable
CAL	calibration standard	N/C	not calculated
CCB	continuing calibration blank	PS	post preparation spike
CCV	continuing calibration verification	REC	percent recovery
COC	chain of custody record	RPD	relative percent difference
D	dissolved fraction	SCV	secondary calibration verification
DUP	duplicate	SOP	standard operating procedure
IBL	instrument blank	SRM	reference material
ICV	initial calibration verification	T	total fraction
MDL	method detection limit	TR	total recoverable fraction
MRL	method reporting limit		

Definition of Data Qualifiers

E	An estimated value due to the presence of interferences. A full explanation is presented in the narrative.
H	Holding time and/or preservation requirements not met. Please see narrative for explanation.
J	Detected by the instrument, the result is > the MDL but ≤ the MRL. Result is reported and considered an estimate.
J-1	Estimated value. A full explanation is presented in the narrative.
M	Duplicate precision (RPD) was not within acceptance criteria. Please see narrative for explanation.
N	Spike recovery was not within acceptance criteria. Please see narrative for explanation.
R	Rejected, unusable value. A full explanation is presented in the narrative.
U	Result is ≤ the MDL or client requested reporting limit (CRRL). Result reported as the MDL or CRRL.
X	Result is not BLK-corrected and is within 10x the absolute value of the highest detectable BLK in the batch. Result is estimated.
Z	Holding time and/or preservation requirements not established for this method; however, BAL recommendations for holding time were not followed. Please see narrative for explanation.



Sample Information

Sample	Lab ID	Report Matrix	Type	Sampled	Received
MW14	2504430-01	Water	Sample	04/30/2025	04/30/2025
MW14	2504430-02	Water	Sample	04/30/2025	04/30/2025
MW13	2504430-03	Water	Sample	04/30/2025	04/30/2025
MW13	2504430-04	Water	Sample	04/30/2025	04/30/2025

Batch Summary

Analyte	Lab Matrix	Method	Accred.	Prepared	Analyzed	Batch	Sequence
Ag	Water	EPA 1638 Mod	ISO,TNI	05/05/25	05/06/25	B250962	S250425
Al	Water	EPA 1638 Mod	ISO,TNI	05/05/25	05/06/25	B250962	S250425
As	Water	EPA 1638 Mod	ISO,TNI	05/05/25	05/06/25	B250962	S250425
Ba	Water	EPA 1638 Mod	ISO,TNI	05/05/25	05/06/25	B250962	S250425
Cd	Water	EPA 1638 Mod	ISO,TNI	05/05/25	05/06/25	B250962	S250425
Co	Water	EPA 1638 Mod	ISO,TNI	05/05/25	05/06/25	B250962	S250425
Cr	Water	EPA 1638 Mod	ISO,TNI	05/05/25	05/06/25	B250962	S250425
Cu	Water	EPA 1638 Mod	ISO,TNI	05/05/25	05/06/25	B250962	S250425
Fe	Water	EPA 1638 Mod	ISO,TNI	05/05/25	05/06/25	B250962	S250425
Hg	Water	EPA 1631 E	ISO,TNI	05/02/25	05/05/25	B250976	S250427
Hg	Water	EPA 1631 E	ISO,TNI	05/02/25	05/07/25	B250976	S250439
Mn	Water	EPA 1638 Mod	ISO,TNI	05/05/25	05/06/25	B250962	S250425
Ni	Water	EPA 1638 Mod	ISO,TNI	05/05/25	05/06/25	B250962	S250425
Pb	Water	EPA 1638 Mod	ISO,TNI	05/05/25	05/06/25	B250962	S250425
Sb	Water	EPA 1638 Mod	ISO,TNI	05/05/25	05/06/25	B250962	S250425
Se	Water	EPA 1638 Mod	ISO,TNI	05/05/25	05/06/25	B250962	S250425
V	Water	EPA 1638 Mod	ISO,TNI	05/05/25	05/06/25	B250962	S250425
Zn	Water	EPA 1638 Mod	ISO,TNI	05/05/25	05/06/25	B250962	S250425



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
MW14										
2504430-01	Ag	Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B250962	S250425
2504430-01	Al	Water	TR	132		12.1	24.2	µg/L	B250962	S250425
2504430-01	As	Water	TR	1.02		0.222	0.727	µg/L	B250962	S250425
2504430-01	Ba	Water	TR	12.3		0.354	0.707	µg/L	B250962	S250425
2504430-01	Cd	Water	TR	0.083	J	0.061	0.182	µg/L	B250962	S250425
2504430-01	Co	Water	TR	1.07		0.131	0.455	µg/L	B250962	S250425
2504430-01	Cr	Water	TR	≤ 1.72	U	1.72	6.06	µg/L	B250962	S250425
2504430-01	Cu	Water	TR	5.05		0.909	1.82	µg/L	B250962	S250425
2504430-01	Fe	Water	TR	433		18.2	54.5	µg/L	B250962	S250425
2504430-01	Hg	Water	TR	2.73		0.33	1.02	ng/L	B250976	S250439
2504430-01	Mn	Water	TR	67.7		0.909	1.82	µg/L	B250962	S250425
2504430-01	Ni	Water	TR	1.95	J	1.21	3.64	µg/L	B250962	S250425
2504430-01	Pb	Water	TR	≤ 0.091	U	0.091	0.182	µg/L	B250962	S250425
2504430-01	Sb	Water	TR	0.335		0.051	0.152	µg/L	B250962	S250425
2504430-01	Se	Water	TR	≤ 0.242	U	0.242	0.505	µg/L	B250962	S250425
2504430-01	V	Water	TR	1.05		0.131	0.455	µg/L	B250962	S250425
2504430-01	Zn	Water	TR	52.4		12.1	24.2	µg/L	B250962	S250425
MW14										
2504430-02	Ag	Water	D	≤ 0.051	U	0.051	0.152	µg/L	B250962	S250425
2504430-02	Al	Water	D	21.1	J	12.1	24.2	µg/L	B250962	S250425
2504430-02	As	Water	D	0.873		0.222	0.727	µg/L	B250962	S250425
2504430-02	Ba	Water	D	11.2		0.354	0.707	µg/L	B250962	S250425
2504430-02	Cd	Water	D	0.072	J	0.061	0.182	µg/L	B250962	S250425
2504430-02	Co	Water	D	0.955		0.131	0.455	µg/L	B250962	S250425
2504430-02	Cr	Water	D	≤ 1.72	U	1.72	6.06	µg/L	B250962	S250425
2504430-02	Cu	Water	D	4.41		0.909	1.82	µg/L	B250962	S250425
2504430-02	Fe	Water	D	283		18.2	54.5	µg/L	B250962	S250425
2504430-02	Hg	Water	D	1.57		0.13	0.41	ng/L	B250976	S250427
2504430-02	Mn	Water	D	60.9		0.909	1.82	µg/L	B250962	S250425
2504430-02	Ni	Water	D	1.74	J	1.21	3.64	µg/L	B250962	S250425
2504430-02	Pb	Water	D	≤ 0.091	U	0.091	0.182	µg/L	B250962	S250425
2504430-02	Sb	Water	D	0.292		0.051	0.152	µg/L	B250962	S250425
2504430-02	Se	Water	D	≤ 0.242	U	0.242	0.505	µg/L	B250962	S250425
2504430-02	V	Water	D	0.675		0.131	0.455	µg/L	B250962	S250425
2504430-02	Zn	Water	D	50.1		12.1	24.2	µg/L	B250962	S250425



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
MW13										
2504430-03	Ag	Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B250962	S250425
2504430-03	Al	Water	TR	1210		12.1	24.2	µg/L	B250962	S250425
2504430-03	As	Water	TR	2.04		0.222	0.727	µg/L	B250962	S250425
2504430-03	Ba	Water	TR	16.7		0.354	0.707	µg/L	B250962	S250425
2504430-03	Cd	Water	TR	≤ 0.061	U	0.061	0.182	µg/L	B250962	S250425
2504430-03	Co	Water	TR	3.16		0.131	0.455	µg/L	B250962	S250425
2504430-03	Cr	Water	TR	≤ 1.72	U	1.72	6.06	µg/L	B250962	S250425
2504430-03	Cu	Water	TR	1.98		0.909	1.82	µg/L	B250962	S250425
2504430-03	Fe	Water	TR	8760		18.2	54.5	µg/L	B250962	S250425
2504430-03	Hg	Water	TR	2.66		0.13	0.41	ng/L	B250976	S250427
2504430-03	Mn	Water	TR	345		0.909	1.82	µg/L	B250962	S250425
2504430-03	Ni	Water	TR	3.25	J	1.21	3.64	µg/L	B250962	S250425
2504430-03	Pb	Water	TR	0.310		0.091	0.182	µg/L	B250962	S250425
2504430-03	Sb	Water	TR	0.097	J	0.051	0.152	µg/L	B250962	S250425
2504430-03	Se	Water	TR	≤ 0.242	U	0.242	0.505	µg/L	B250962	S250425
2504430-03	V	Water	TR	4.40		0.131	0.455	µg/L	B250962	S250425
2504430-03	Zn	Water	TR	14.5	J	12.1	24.2	µg/L	B250962	S250425
MW13										
2504430-04	Ag	Water	D	≤ 0.051	U	0.051	0.152	µg/L	B250962	S250425
2504430-04	Al	Water	D	16.5	J	12.1	24.2	µg/L	B250962	S250425
2504430-04	As	Water	D	2.07		0.222	0.727	µg/L	B250962	S250425
2504430-04	Ba	Water	D	13.6		0.354	0.707	µg/L	B250962	S250425
2504430-04	Cd	Water	D	≤ 0.061	U	0.061	0.182	µg/L	B250962	S250425
2504430-04	Co	Water	D	3.13		0.131	0.455	µg/L	B250962	S250425
2504430-04	Cr	Water	D	≤ 1.72	U	1.72	6.06	µg/L	B250962	S250425
2504430-04	Cu	Water	D	≤ 0.909	U	0.909	1.82	µg/L	B250962	S250425
2504430-04	Fe	Water	D	9390		18.2	54.5	µg/L	B250962	S250425
2504430-04	Hg	Water	D	0.17	J	0.13	0.41	ng/L	B250976	S250427
2504430-04	Mn	Water	D	357		0.909	1.82	µg/L	B250962	S250425
2504430-04	Ni	Water	D	3.17	J	1.21	3.64	µg/L	B250962	S250425
2504430-04	Pb	Water	D	≤ 0.091	U	0.091	0.182	µg/L	B250962	S250425
2504430-04	Sb	Water	D	0.093	J	0.051	0.152	µg/L	B250962	S250425
2504430-04	Se	Water	D	≤ 0.242	U	0.242	0.505	µg/L	B250962	S250425
2504430-04	V	Water	D	3.66		0.131	0.455	µg/L	B250962	S250425
2504430-04	Zn	Water	D	12.5	J	12.1	24.2	µg/L	B250962	S250425



Accuracy & Precision Summary

Batch: B250962
 Lab Matrix: Water
 Method: EPA 1638 Mod

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B250962-BS1	Blank Spike, (2518015)						
		Ag		5.556	5.754	µg/L	104% 75-125
		Al		555.6	505.4	µg/L	91% 75-125
		As		55.56	57.71	µg/L	104% 75-125
		Ba		55.56	59.26	µg/L	107% 75-125
		Cd		5.556	5.800	µg/L	104% 75-125
		Co		55.56	56.68	µg/L	102% 75-125
		Cr		55.56	55.89	µg/L	101% 75-125
		Cu		55.56	57.57	µg/L	104% 75-125
		Fe		555.6	551.1	µg/L	99% 75-125
		Mn		55.56	59.81	µg/L	108% 75-125
		Ni		55.56	56.73	µg/L	102% 75-125
		Pb		5.556	5.723	µg/L	103% 75-125
		Sb		5.556	5.946	µg/L	107% 75-125
		Se		55.56	57.33	µg/L	103% 75-125
		V		55.56	56.01	µg/L	101% 75-125
		Zn		55.56	58.89	µg/L	106% 75-125
B250962-SRM1	Reference Material (2440039, NIST 1643f)						
		Ba		518.2	550.8	µg/L	106% 75-125
		Sb		55.45	56.22	µg/L	101% 75-125
B250962-SRM2	Reference Material (2440039, NIST 1643f)						
		Ag		0.9703	0.981	µg/L	101% 75-125
		Al		133.8	124.3	µg/L	93% 75-125
		As		57.42	58.48	µg/L	102% 75-125
		Cd		5.890	5.793	µg/L	98% 75-125
		Co		25.30	25.14	µg/L	99% 75-125
		Cr		18.50	19.68	µg/L	106% 75-125
		Cu		21.66	23.66	µg/L	109% 75-125
		Fe		93.44	95.24	µg/L	102% 75-125
		Mn		37.14	40.81	µg/L	110% 75-125
		Ni		59.80	60.89	µg/L	102% 75-125
		Pb		18.49	17.99	µg/L	97% 75-125
		Se		11.70	11.79	µg/L	101% 75-125
		V		36.07	36.51	µg/L	101% 75-125
	Zn		74.40	81.34	µg/L	109% 75-125	



Accuracy & Precision Summary

Batch: B250962
Lab Matrix: Water
Method: EPA 1638 Mod

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B250962-DUP1	Duplicate, (2504430-01)						
	Ag	ND		ND	µg/L		N/C 20
	Al	131.6		139.3	µg/L		6% 20
	As	1.015		0.999	µg/L		2% 20
	Ba	12.31		12.92	µg/L		5% 20
	Cd	0.083		0.087	µg/L		5% 20
	Co	1.065		1.061	µg/L		0.4% 20
	Cr	ND		ND	µg/L		N/C 20
	Cu	5.049		5.421	µg/L		7% 20
	Fe	433.1		426.7	µg/L		1% 20
	Mn	67.69		71.54	µg/L		6% 20
	Ni	1.952		2.151	µg/L		10% 20
	Pb	ND		ND	µg/L		N/C 20
	Sb	0.335		0.316	µg/L		6% 20
	Se	ND		ND	µg/L		N/C 20
	V	1.055		1.074	µg/L		2% 20
	Zn	52.38		56.02	µg/L		7% 20
B250962-MS1	Matrix Spike, (2504430-01)						
	Ag	ND	5.612	6.049	µg/L	108% 75-125	
	Al	131.6	561.2	712.9	µg/L	104% 75-125	
	As	1.015	56.12	61.44	µg/L	108% 75-125	
	Ba	12.31	56.12	74.60	µg/L	111% 75-125	
	Cd	0.083	5.612	6.335	µg/L	111% 75-125	
	Co	1.065	56.12	61.94	µg/L	108% 75-125	
	Cr	ND	56.12	59.94	µg/L	107% 75-125	
	Cu	5.049	56.12	65.26	µg/L	107% 75-125	
	Fe	433.1	561.2	1037	µg/L	108% 75-125	
	Mn	67.69	56.12	129.2	µg/L	110% 75-125	
	Ni	1.952	56.12	61.06	µg/L	105% 75-125	
	Pb	ND	5.612	5.956	µg/L	106% 75-125	
	Sb	0.335	5.612	6.500	µg/L	110% 75-125	
	Se	ND	56.12	61.80	µg/L	110% 75-125	
	V	1.055	56.12	61.08	µg/L	107% 75-125	
	Zn	52.38	56.12	113.9	µg/L	110% 75-125	



Accuracy & Precision Summary

Batch: B250962
 Lab Matrix: Water
 Method: EPA 1638 Mod

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B250962-MSD1	Matrix Spike Duplicate, (2504430-01)						
	Ag	ND	5.612	5.671	µg/L	101% 75-125	6% 20
	Al	131.6	561.2	669.0	µg/L	96% 75-125	6% 20
	As	1.015	56.12	57.05	µg/L	100% 75-125	7% 20
	Ba	12.31	56.12	70.90	µg/L	104% 75-125	5% 20
	Cd	0.083	5.612	5.699	µg/L	100% 75-125	11% 20
	Co	1.065	56.12	56.93	µg/L	100% 75-125	8% 20
	Cr	ND	56.12	57.41	µg/L	102% 75-125	4% 20
	Cu	5.049	56.12	62.77	µg/L	103% 75-125	4% 20
	Fe	433.1	561.2	964.4	µg/L	95% 75-125	7% 20
	Mn	67.69	56.12	124.6	µg/L	101% 75-125	4% 20
	Ni	1.952	56.12	58.29	µg/L	100% 75-125	5% 20
	Pb	ND	5.612	5.499	µg/L	98% 75-125	8% 20
	Sb	0.335	5.612	6.107	µg/L	103% 75-125	6% 20
	Se	ND	56.12	55.77	µg/L	99% 75-125	10% 20
	V	1.055	56.12	56.46	µg/L	99% 75-125	8% 20
	Zn	52.38	56.12	111.2	µg/L	105% 75-125	2% 20



Accuracy & Precision Summary

Batch: B250976
Lab Matrix: Water
Method: EPA 1631 E

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B250976-MS3	Matrix Spike (2504430-01) Hg	2.73	51.02	51.78	ng/L	96% 71-125	
B250976-MSD3	Matrix Spike Duplicate (2504430-01) Hg	2.73	51.02	51.36	ng/L	95% 71-125	0.8% 24



Method Blanks & Reporting Limits

Batch: B250962
Matrix: Water
Method: EPA 1638 Mod
Analyte: Ag

Sample	Result	Units	
B250962-BLK1	-0.0003	µg/L	
B250962-BLK2	0.00009	µg/L	
B250962-BLK3	-0.0007	µg/L	
B250962-BLK4	-0.0005	µg/L	
Average:	0.000		MDL: 0.005
Limit:	0.015		MRL: 0.015

Analyte: Al

Sample	Result	Units	
B250962-BLK1	0.303	µg/L	
B250962-BLK2	0.412	µg/L	
B250962-BLK3	0.141	µg/L	
B250962-BLK4	0.228	µg/L	
Average:	0.271		MDL: 1.20
Limit:	2.400		MRL: 2.40

Analyte: As

Sample	Result	Units	
B250962-BLK1	0.007	µg/L	
B250962-BLK2	0.008	µg/L	
B250962-BLK3	0.007	µg/L	
B250962-BLK4	0.007	µg/L	
Average:	0.007		MDL: 0.022
Limit:	0.072		MRL: 0.072



Method Blanks & Reporting Limits

Analyte: Ba

Sample	Result	Units	
B250962-BLK1	0.008	µg/L	
B250962-BLK2	0.025	µg/L	
B250962-BLK3	0.007	µg/L	
B250962-BLK4	0.012	µg/L	
Average:	0.013		MDL: 0.035
Limit:	0.070		MRL: 0.070

Analyte: Cd

Sample	Result	Units	
B250962-BLK1	0.0004	µg/L	
B250962-BLK2	-0.0002	µg/L	
B250962-BLK3	-0.0005	µg/L	
B250962-BLK4	-0.0001	µg/L	
Average:	0.000		MDL: 0.006
Limit:	0.018		MRL: 0.018

Analyte: Co

Sample	Result	Units	
B250962-BLK1	0.003	µg/L	
B250962-BLK2	0.002	µg/L	
B250962-BLK3	0.002	µg/L	
B250962-BLK4	0.0004	µg/L	
Average:	0.002		MDL: 0.013
Limit:	0.045		MRL: 0.045

Analyte: Cr

Sample	Result	Units	
B250962-BLK1	0.022	µg/L	
B250962-BLK2	0.027	µg/L	
B250962-BLK3	0.023	µg/L	
B250962-BLK4	0.022	µg/L	
Average:	0.024		MDL: 0.170
Limit:	0.600		MRL: 0.600



Method Blanks & Reporting Limits

Analyte: Cu

Sample	Result	Units	
B250962-BLK1	0.005	µg/L	
B250962-BLK2	0.015	µg/L	
B250962-BLK3	0.005	µg/L	
B250962-BLK4	0.012	µg/L	
Average:	0.009		MDL: 0.090
Limit:	0.180		MRL: 0.180

Analyte: Fe

Sample	Result	Units	
B250962-BLK1	0.404	µg/L	
B250962-BLK2	0.636	µg/L	
B250962-BLK3	0.293	µg/L	
B250962-BLK4	0.401	µg/L	
Average:	0.434		MDL: 1.80
Limit:	5.400		MRL: 5.40

Analyte: Mn

Sample	Result	Units	
B250962-BLK1	0.016	µg/L	
B250962-BLK2	0.017	µg/L	
B250962-BLK3	0.016	µg/L	
B250962-BLK4	0.015	µg/L	
Average:	0.016		MDL: 0.090
Limit:	0.180		MRL: 0.180

Analyte: Ni

Sample	Result	Units	
B250962-BLK1	0.033	µg/L	
B250962-BLK2	0.034	µg/L	
B250962-BLK3	0.033	µg/L	
B250962-BLK4	0.033	µg/L	
Average:	0.033		MDL: 0.120
Limit:	0.360		MRL: 0.360



Method Blanks & Reporting Limits

Analyte: Pb

Sample	Result	Units	
B250962-BLK1	0.001	µg/L	
B250962-BLK2	0.002	µg/L	
B250962-BLK3	0.001	µg/L	
B250962-BLK4	0.002	µg/L	
Average:	0.002		MDL: 0.009
Limit:	0.018		MRL: 0.018

Analyte: Sb

Sample	Result	Units	
B250962-BLK1	0.0006	µg/L	
B250962-BLK2	0.0008	µg/L	
B250962-BLK3	0.0002	µg/L	
B250962-BLK4	0.0003	µg/L	
Average:	0.000		MDL: 0.005
Limit:	0.015		MRL: 0.015

Analyte: Se

Sample	Result	Units	
B250962-BLK1	0.005	µg/L	
B250962-BLK2	0.005	µg/L	
B250962-BLK3	0.002	µg/L	
B250962-BLK4	0.008	µg/L	
Average:	0.005		MDL: 0.024
Limit:	0.050		MRL: 0.050

Analyte: V

Sample	Result	Units	
B250962-BLK1	0.0001	µg/L	
B250962-BLK2	0.0004	µg/L	
B250962-BLK3	-0.0003	µg/L	
B250962-BLK4	0.003	µg/L	
Average:	0.001		MDL: 0.013
Limit:	0.045		MRL: 0.045



Method Blanks & Reporting Limits

Analyte: Zn

Sample	Result	Units	
B250962-BLK1	0.154	µg/L	
B250962-BLK2	0.274	µg/L	
B250962-BLK3	0.138	µg/L	
B250962-BLK4	0.304	µg/L	
Average:	0.218		MDL: 1.20
Limit:	2.400		MRL: 2.40



Method Blanks & Reporting Limits

Batch: B250976
Matrix: Water
Method: EPA 1631 E
Analyte: Hg

Sample	Result	Units			
B250976-BLK1	0.25	ng/L			
B250976-BLK2	0.19	ng/L			
B250976-BLK3	0.16	ng/L			
B250976-BLK4	0.15	ng/L			
	Average: 0.19		Standard Deviation: 0.05	MDL: 0.13	
	Limit: 0.50		Limit: 0.13	MRL: 0.40	



Sample Containers

Lab ID: 2504430-01
Sample: MW14

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2504430
B	Bottle FLPE Hg	125 mL	23-0112	none	n/a	n/a	Cooler - 2504430

Report Matrix: Water
Sample Type: Sample
Collected: 04/30/2025
Received: 04/30/2025

Lab ID: 2504430-02
Sample: MW14

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2504430
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2504430

Report Matrix: Water
Sample Type: Sample
Collected: 04/30/2025
Received: 04/30/2025

Lab ID: 2504430-03
Sample: MW13

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2504430
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2504430

Report Matrix: Water
Sample Type: Sample
Collected: 04/30/2025
Received: 04/30/2025

Lab ID: 2504430-04
Sample: MW13

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2507066	<2	Cooler - 2504430
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2504430

Report Matrix: Water
Sample Type: Sample
Collected: 04/30/2025
Received: 04/30/2025

Project ID: CRC-SE2501
PM: Amy Goodall



BAL Report 2504430
Client PM: Rusty Jones
Client Project: MARALCO S.R.I.

Shipping Containers

Cooler - 2504430

Received: April 30, 2025 12:07
Tracking No: n/a via Customer Drop-Off
Coolant Type: Ice
Temperature: 2.9 °C

Description: Cooler
Damaged in transit? No
Returned to client? No
Comments: SETH-1

Custody seals present? No
Custody seals intact? No
COC present? Yes



Chain-of-Custody Form

BAL Report 2504430

Received by: ASD (BAL) For BAL use only Date: 30 APR 2025
 Work Order ID: _____ Time: 1207
 Project ID: _____ AD

Ship samples to:
 13751 Lake City Way NE, Suite 108
 Seattle, WA 98125

Client: CRETE Consulting PO Number: MARALCO
 Contact: Rusty Jones Phone: 832.330.1359
 Client Project ID: Maralco S.R.I. Email: _____
 Samples Collected By: Rusty Jones R. Jones

Mailing Address: _____
 Email Receipt Confirmation? (Yes/No)
 BAL PM: Amy Goodall

Requested TAT (business days)	Collection		Client Sample Info				BAL Analyses Required						Comments		
	Date	Time	Matrix Type	Number of Containers	Field Filtered? (Yes/No)	Preservation Type HCl/HNO ₃ /Other	Total Hg, EPA 1631	Methyl Hg, EPA 1630	ICP-MS Metals 1631 (specify) See Project Meta	As Species (specify) InOrg, III, V, MMA, DMA	Se Species (specify) Se(IV), Se(VI), SeCN, Unknown	Filtration		Other (specify)	Other (specify)
<input checked="" type="checkbox"/> 20 (standard) <input type="checkbox"/> 15* <input type="checkbox"/> 10* <input type="checkbox"/> 5* <input type="checkbox"/> Other _____ <small>*Surcharges may apply to expedited TATs</small>															
Sample ID															
1	MW14	4/30/25	0953	WATER	4	Y+N	NONE	X		X					See Project Metals list with Amy Goodall
2	MW13	↓	0856	↓	4	Y+N	↓	X		X					Total + Dissolved
3															
4															
5															
6															
7															
8															
9															
10															
Trip Blank															
Relinquished By: <u>R. Jones</u>	Date: <u>4/30/2025</u>	Time: <u>1207</u>	Relinquished By: _____	Date: _____	Time: _____	Total Number of Packages: _____									
Received By: <u>ASD (BAL)</u>	Date: <u>30 APR 2025</u>	Time: <u>1207</u>													

Page 1 of 1

List Hazardous Contaminants: _____

samples@brooksupplied.com | brooksupplied.com



13751 Lake City Way NE, Ste 108, Seattle, WA 98125 • USA • T:206-632-6206 • info@brooksapplied.com

May 13, 2025

Crete Consulting
ATTN: Rusty Jones
108 S. Washington Street, Suite 300
Seattle, WA 98104
832-330-1359
rusty.jones@creteconsulting.com

RE: Project CRC-SE2501
Client Project: Maralco

Dear Rusty Jones,

On February 28, 2025, Brooks Applied Labs (BAL) received twelve (12) sets of aqueous samples. The samples were logged-in for the analyses of for total recoverable and dissolved silver (Ag), aluminum (Al), arsenic (As), barium (Ba), cadmium (Cd), cobalt (Co), chromium (Cr), copper (Cu), iron (Fe), manganese (Mn), nickel (Ni), lead (Pb), antimony (Sb), selenium (Se), vanadium (V), zinc (Zn), mercury (Hg), and hexavalent chromium [Cr(VI)] according to the chain-of-custody form. All samples were received and stored according to BAL SOPs and EPA methodology.

All dissolved samples were 0.45 μ m filtered prior to receipt at BAL.

Total Recoverable and Dissolved Metals Quantitation by ICP-QQQ-MS

All aqueous samples were digested on a hotblock via modified EPA Method 1638 with nitric and hydrochloric acids. Trace metals were analyzed using inductively coupled plasma triple quadrupole mass spectrometry (ICP-QQQ-MS). The ICP-QQQ-MS uses advanced interference removal techniques to ensure accuracy of the sample results. For more information, please visit the *Interference Reduction Technology* section on our website, www.brooksapplied.com.

In instances where the native sample result and/or the associated duplicate (DUP) result were below the MDL the RPD was not calculated (N/C).

In instances where a matrix spike/matrix spike duplicate (MS/MSD) set was spiked at a level less than the native sample, the recoveries are not considered valid indicators of data quality. However, these results are reported as a demonstration of precision. When the spiking levels were $\leq 25\%$ of the native sample concentrations, the recoveries were not reported (NR). No sample results were qualified on the basis of the MS or MSD recoveries.

The method blanks (BLK), B250480-BLK1 and B250480-BLK3 had Ba concentrations that were above the acceptance limit. All samples had Ba results that were greater than 10x the concentration of these BLKs, and no further action was required.

Some of the total results were less than the corresponding dissolved result. In all of these cases, the total and dissolved samples meet RPD, or the results met secondary criteria (within 5x the MRL and within the MRL of each other) and no further action was required.

The Mn results for samples 2503007-09 and 2503007-10 were above the calibration curve and could not be reported. These samples were reanalyzed in sequence S250219 at a greater dilution. The reported Mn results for these samples were from this reanalysis.

Total and Dissolved Mercury using MERX

Each aqueous fraction submitted for Hg analysis was prepared and analyzed in accordance with EPA Method 1631. Samples were oxidized with bromine monochloride (BrCl) and then analyzed with stannous chloride (SnCl₂) reduction, dual gold amalgamation, and cold vapor atomic fluorescence spectroscopy (CVAFS) detection using a Brooks Rand Instrument's MERX-T CVAFS Mercury Automated-Analyzer.

Hexavalent Chromium Analysis

Hexavalent chromium [Cr(VI)] analysis was performed by ion chromatography inductively coupled plasma collision reaction cell mass spectrometry (IC-ICP-CRC-MS). Chromium species are first chromatographically separated on an ion exchange column and then quantified using inductively coupled plasma collision reaction cell mass spectrometry (ICP-CRC-MS). For more information on this determinative technique, please visit the *Interference Reduction Technology* section on our website.

Sample results reported for mercury were method blank corrected, while all other results were not method blank corrected, as described in the calculations section of the relevant BAL SOP(s). All results were evaluated using reporting limits adjusted to account for sample aliquot size. Please refer to the *Sample Results* page for sample-specific MDLs, MRLs, and other details.

All data was reported without qualification and all associated quality control sample results met the acceptance criteria.

BAL verifies that the reported results of all analyses for which the laboratory is accredited meet the requirements of the accrediting body, unless otherwise noted in the report narrative. For more information regarding accreditations please see the *Report Information* and *Batch Summary* pages. This report must be used in its entirety for interpretation of results.

Please feel free to contact us if you have any questions regarding this report.

Sincerely,



Amy Goodall
Project Manager
Brooks Applied Labs
amy@brooksupplied.com



Report Information

General Disclaimers

Test results are based solely upon the sample submitted to Brooks Applied Labs in the condition it was received. This report shall not be reproduced or copied, except in full, without written approval of the laboratory. Brooks Applied Labs is not responsible for the consequences arising from the use of a partial report.

Laboratory Accreditation

BAL maintains accreditation with various state and national agencies for select test methods. For a current list of BAL accreditations, please visit our website at <http://www.brooksapplied.com/resources/certificates-permits/>. The reported analyte/matrix/method combination shall be considered outside BAL's scopes of accreditation unless otherwise identified as ISO, TNI, or ISO,TNI in the tables. It is the responsibility of the client to verify whether a specific accreditation is required for the intended data use.

ISO: ISO/IEC 17025:2017 accredited test method. Issued by ANSI National Accreditation Board (ANAB), #ADE-1447.02

TNI: NELAP accredited test method. Issued by the State of Florida Department of Health, #E87982.

ISO,TNI: Test method is accredited under both the ISO/IEC 17025:2017 and NELAP accreditations referenced above.

Field Quality Control Samples

Please be notified that certain EPA methods require the collection of field quality control samples of an appropriate type and frequency; failure to do so is considered a deviation from some methods and for compliance purposes should only be done with the approval of regulatory authorities. Please see the specific EPA methods for details regarding required field quality control samples.

Common Abbreviations

AR	as received	MS	matrix spike
BAL	Brooks Applied Labs	MSD	matrix spike duplicate
BLK	method blank	ND	non-detect
BS	blank spike	NR	non-reportable
CAL	calibration standard	N/C	not calculated
CCB	continuing calibration blank	PS	post preparation spike
CCV	continuing calibration verification	REC	percent recovery
COC	chain of custody record	RPD	relative percent difference
D	dissolved fraction	SCV	secondary calibration verification
DUP	duplicate	SOP	standard operating procedure
IBL	instrument blank	SRM	reference material
ICV	initial calibration verification	T	total fraction
MDL	method detection limit	TR	total recoverable fraction
MRL	method reporting limit		

Definition of Data Qualifiers

E	An estimated value due to the presence of interferences. A full explanation is presented in the narrative.
H	Holding time and/or preservation requirements not met. Please see narrative for explanation.
J	Detected by the instrument, the result is > the MDL but ≤ the MRL. Result is reported and considered an estimate.
J-1	Estimated value. A full explanation is presented in the narrative.
M	Duplicate precision (RPD) was not within acceptance criteria. Please see narrative for explanation.
N	Spike recovery was not within acceptance criteria. Please see narrative for explanation.
R	Rejected, unusable value. A full explanation is presented in the narrative.
U	Result is ≤ the MDL or client requested reporting limit (CRRL). Result reported as the MDL or CRRL.
X	Result is not BLK-corrected and is within 10x the absolute value of the highest detectable BLK in the batch. Result is estimated.
Z	Holding time and/or preservation requirements not established for this method; however, BAL recommendations for holding time were not followed. Please see narrative for explanation.



Sample Information

Sample	Lab ID	Report Matrix	Type	Sampled	Received
MW4R	2503007-01	Water	Sample	02/24/2025	02/28/2025
MW4R	2503007-02	Water	Sample	02/24/2025	02/28/2025
MW6R	2503007-03	Water	Sample	02/24/2025	02/28/2025
MW6R	2503007-04	Water	Sample	02/24/2025	02/28/2025
MW10	2503007-05	Water	Sample	02/24/2025	02/28/2025
MW10	2503007-06	Water	Sample	02/24/2025	02/28/2025
MW1	2503007-07	Water	Sample	02/25/2025	02/28/2025
MW1	2503007-08	Water	Sample	02/25/2025	02/28/2025
MW8R	2503007-09	Water	Sample	02/25/2025	02/28/2025
MW8R	2503007-10	Water	Sample	02/25/2025	02/28/2025
MW3R	2503007-11	Water	Sample	02/25/2025	02/28/2025
MW3R	2503007-12	Water	Sample	02/25/2025	02/28/2025
DUP02-0225	2503007-13	Water	Field Duplicate	02/26/2025	02/28/2025
DUP02-0225	2503007-14	Water	Field Duplicate	02/26/2025	02/28/2025
MW9	2503007-15	Water	Sample	02/26/2025	02/28/2025
MW9	2503007-16	Water	Sample	02/26/2025	02/28/2025
MW11	2503007-17	Water	Sample	02/26/2025	02/28/2025
MW11	2503007-18	Water	Sample	02/26/2025	02/28/2025
MW2	2503007-19	Water	Sample	02/26/2025	02/28/2025
MW2	2503007-20	Water	Sample	02/26/2025	02/28/2025
MW5R2	2503007-21	Water	Sample	02/26/2025	02/28/2025
MW5R2	2503007-22	Water	Sample	02/26/2025	02/28/2025
MW7	2503007-23	Water	Sample	02/28/2025	02/28/2025
MW7	2503007-24	Water	Sample	02/28/2025	02/28/2025



Batch Summary

Analyte	Lab Matrix	Method	Accred.	Prepared	Analyzed	Batch	Sequence
Ag	Water	EPA 1638 Mod	ISO,TNI	03/05/25	03/06/25	B250480	S250213
Al	Water	EPA 1638 Mod	ISO,TNI	03/05/25	03/06/25	B250480	S250213
As	Water	EPA 1638 Mod	ISO,TNI	03/05/25	03/06/25	B250480	S250213
Ba	Water	EPA 1638 Mod	ISO,TNI	03/05/25	03/06/25	B250480	S250213
Cd	Water	EPA 1638 Mod	ISO,TNI	03/05/25	03/06/25	B250480	S250213
Co	Water	EPA 1638 Mod	ISO,TNI	03/05/25	03/06/25	B250480	S250213
Cr	Water	EPA 1638 Mod	ISO,TNI	03/05/25	03/06/25	B250480	S250213
Cr(VI)	Water	SOP BAL-4300	ISO,TNI	03/10/25	03/10/25	B250472	S250230
Cu	Water	EPA 1638 Mod	ISO,TNI	03/05/25	03/06/25	B250480	S250213
Fe	Water	EPA 1638 Mod	ISO,TNI	03/05/25	03/06/25	B250480	S250213
Hg	Water	EPA 1631 E	ISO,TNI	03/05/25	03/06/25	B250482	S250221
Hg	Water	EPA 1631 E	ISO,TNI	03/06/25	03/07/25	B250486	S250226
Mn	Water	EPA 1638 Mod	ISO,TNI	03/05/25	03/06/25	B250480	S250213
Mn	Water	EPA 1638 Mod	ISO,TNI	03/05/25	03/07/25	B250480	S250219
Ni	Water	EPA 1638 Mod	ISO,TNI	03/05/25	03/06/25	B250480	S250213
Pb	Water	EPA 1638 Mod	ISO,TNI	03/05/25	03/06/25	B250480	S250213
Sb	Water	EPA 1638 Mod	ISO,TNI	03/05/25	03/06/25	B250480	S250213
Se	Water	EPA 1638 Mod	ISO,TNI	03/05/25	03/06/25	B250480	S250213
V	Water	EPA 1638 Mod	ISO,TNI	03/05/25	03/06/25	B250480	S250213
Zn	Water	EPA 1638 Mod	ISO,TNI	03/05/25	03/06/25	B250480	S250213



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
MW4R										
2503007-01	Ag	Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B250480	S250213
2503007-01	Al	Water	TR	530		12.1	24.2	µg/L	B250480	S250213
2503007-01	As	Water	TR	2.31		0.222	0.727	µg/L	B250480	S250213
2503007-01	Ba	Water	TR	46.9		0.354	0.707	µg/L	B250480	S250213
2503007-01	Cd	Water	TR	≤ 0.061	U	0.061	0.182	µg/L	B250480	S250213
2503007-01	Co	Water	TR	0.705		0.131	0.455	µg/L	B250480	S250213
2503007-01	Cr	Water	TR	2.73	J	1.72	6.06	µg/L	B250480	S250213
2503007-01	Cu	Water	TR	2.72		0.909	1.82	µg/L	B250480	S250213
2503007-01	Fe	Water	TR	18700		18.2	54.5	µg/L	B250480	S250213
2503007-01	Hg	Water	TR	8.87		0.14	0.42	ng/L	B250486	S250226
2503007-01	Mn	Water	TR	1070		0.909	1.82	µg/L	B250480	S250213
2503007-01	Ni	Water	TR	1.49	J	1.21	3.64	µg/L	B250480	S250213
2503007-01	Pb	Water	TR	0.151	J	0.091	0.182	µg/L	B250480	S250213
2503007-01	Sb	Water	TR	0.082	J	0.051	0.152	µg/L	B250480	S250213
2503007-01	Se	Water	TR	0.279	J	0.242	0.505	µg/L	B250480	S250213
2503007-01	V	Water	TR	10.6		0.131	0.455	µg/L	B250480	S250213
2503007-01	Zn	Water	TR	≤ 12.1	U	12.1	24.2	µg/L	B250480	S250213
MW4R										
2503007-02	Ag	Water	D	≤ 0.051	U	0.051	0.152	µg/L	B250480	S250213
2503007-02	Al	Water	D	75.3		12.1	24.2	µg/L	B250480	S250213
2503007-02	As	Water	D	2.02		0.222	0.727	µg/L	B250480	S250213
2503007-02	Ba	Water	D	37.7		0.354	0.707	µg/L	B250480	S250213
2503007-02	Cd	Water	D	≤ 0.061	U	0.061	0.182	µg/L	B250480	S250213
2503007-02	Co	Water	D	0.622		0.131	0.455	µg/L	B250480	S250213
2503007-02	Cr	Water	D	2.00	J	1.72	6.06	µg/L	B250480	S250213
2503007-02	Cu	Water	D	≤ 0.909	U	0.909	1.82	µg/L	B250480	S250213
2503007-02	Fe	Water	D	16800		18.2	54.5	µg/L	B250480	S250213
2503007-02	Hg	Water	D	2.86		0.14	0.42	ng/L	B250486	S250226
2503007-02	Mn	Water	D	1020		0.909	1.82	µg/L	B250480	S250213
2503007-02	Ni	Water	D	1.25	J	1.21	3.64	µg/L	B250480	S250213
2503007-02	Pb	Water	D	≤ 0.091	U	0.091	0.182	µg/L	B250480	S250213
2503007-02	Sb	Water	D	0.066	J	0.051	0.152	µg/L	B250480	S250213
2503007-02	Se	Water	D	0.300	J	0.242	0.505	µg/L	B250480	S250213
2503007-02	V	Water	D	8.21		0.131	0.455	µg/L	B250480	S250213
2503007-02	Zn	Water	D	≤ 12.1	U	12.1	24.2	µg/L	B250480	S250213



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
MW6R										
2503007-03	Ag	Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B250480	S250213
2503007-03	Al	Water	TR	318		12.1	24.2	µg/L	B250480	S250213
2503007-03	As	Water	TR	0.364	J	0.222	0.727	µg/L	B250480	S250213
2503007-03	Ba	Water	TR	140		0.354	0.707	µg/L	B250480	S250213
2503007-03	Cd	Water	TR	0.807		0.061	0.182	µg/L	B250480	S250213
2503007-03	Co	Water	TR	33.4		0.131	0.455	µg/L	B250480	S250213
2503007-03	Cr	Water	TR	≤ 1.72	U	1.72	6.06	µg/L	B250480	S250213
2503007-03	Cu	Water	TR	1.92		0.909	1.82	µg/L	B250480	S250213
2503007-03	Fe	Water	TR	3650		18.2	54.5	µg/L	B250480	S250213
2503007-03	Hg	Water	TR	0.87		0.13	0.41	ng/L	B250486	S250226
2503007-03	Mn	Water	TR	1650		0.909	1.82	µg/L	B250480	S250213
2503007-03	Ni	Water	TR	38.9		1.21	3.64	µg/L	B250480	S250213
2503007-03	Pb	Water	TR	≤ 0.091	U	0.091	0.182	µg/L	B250480	S250213
2503007-03	Sb	Water	TR	0.075	J	0.051	0.152	µg/L	B250480	S250213
2503007-03	Se	Water	TR	≤ 0.242	U	0.242	0.505	µg/L	B250480	S250213
2503007-03	V	Water	TR	0.418	J	0.131	0.455	µg/L	B250480	S250213
2503007-03	Zn	Water	TR	26.7		12.1	24.2	µg/L	B250480	S250213
MW6R										
2503007-04	Ag	Water	D	≤ 0.051	U	0.051	0.152	µg/L	B250480	S250213
2503007-04	Al	Water	D	310		12.1	24.2	µg/L	B250480	S250213
2503007-04	As	Water	D	0.360	J	0.222	0.727	µg/L	B250480	S250213
2503007-04	Ba	Water	D	141		0.354	0.707	µg/L	B250480	S250213
2503007-04	Cd	Water	D	0.718		0.061	0.182	µg/L	B250480	S250213
2503007-04	Co	Water	D	33.3		0.131	0.455	µg/L	B250480	S250213
2503007-04	Cr	Water	D	≤ 1.72	U	1.72	6.06	µg/L	B250480	S250213
2503007-04	Cu	Water	D	3.58		0.909	1.82	µg/L	B250480	S250213
2503007-04	Fe	Water	D	3500		18.2	54.5	µg/L	B250480	S250213
2503007-04	Hg	Water	D	0.54		0.13	0.41	ng/L	B250486	S250226
2503007-04	Mn	Water	D	1680		0.909	1.82	µg/L	B250480	S250213
2503007-04	Ni	Water	D	39.5		1.21	3.64	µg/L	B250480	S250213
2503007-04	Pb	Water	D	≤ 0.091	U	0.091	0.182	µg/L	B250480	S250213
2503007-04	Sb	Water	D	0.055	J	0.051	0.152	µg/L	B250480	S250213
2503007-04	Se	Water	D	≤ 0.242	U	0.242	0.505	µg/L	B250480	S250213
2503007-04	V	Water	D	0.374	J	0.131	0.455	µg/L	B250480	S250213
2503007-04	Zn	Water	D	24.7		12.1	24.2	µg/L	B250480	S250213



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
MW10										
2503007-05	Ag	Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B250480	S250213
2503007-05	Al	Water	TR	106		12.1	24.2	µg/L	B250480	S250213
2503007-05	As	Water	TR	10.2		0.222	0.727	µg/L	B250480	S250213
2503007-05	Ba	Water	TR	26.5		0.354	0.707	µg/L	B250480	S250213
2503007-05	Cd	Water	TR	≤ 0.061	U	0.061	0.182	µg/L	B250480	S250213
2503007-05	Co	Water	TR	0.664		0.131	0.455	µg/L	B250480	S250213
2503007-05	Cr	Water	TR	≤ 1.72	U	1.72	6.06	µg/L	B250480	S250213
2503007-05	Cu	Water	TR	≤ 0.909	U	0.909	1.82	µg/L	B250480	S250213
2503007-05	Fe	Water	TR	21000		18.2	54.5	µg/L	B250480	S250213
2503007-05	Hg	Water	TR	2.03		0.14	0.42	ng/L	B250486	S250226
2503007-05	Mn	Water	TR	1890		0.909	1.82	µg/L	B250480	S250213
2503007-05	Ni	Water	TR	≤ 1.21	U	1.21	3.64	µg/L	B250480	S250213
2503007-05	Pb	Water	TR	≤ 0.091	U	0.091	0.182	µg/L	B250480	S250213
2503007-05	Sb	Water	TR	0.078	J	0.051	0.152	µg/L	B250480	S250213
2503007-05	Se	Water	TR	≤ 0.242	U	0.242	0.505	µg/L	B250480	S250213
2503007-05	V	Water	TR	6.67		0.131	0.455	µg/L	B250480	S250213
2503007-05	Zn	Water	TR	≤ 12.1	U	12.1	24.2	µg/L	B250480	S250213
MW10										
2503007-06	Ag	Water	D	≤ 0.051	U	0.051	0.152	µg/L	B250480	S250213
2503007-06	Al	Water	D	≤ 12.1	U	12.1	24.2	µg/L	B250480	S250213
2503007-06	As	Water	D	9.41		0.222	0.727	µg/L	B250480	S250213
2503007-06	Ba	Water	D	26.8		0.354	0.707	µg/L	B250480	S250213
2503007-06	Cd	Water	D	≤ 0.061	U	0.061	0.182	µg/L	B250480	S250213
2503007-06	Co	Water	D	0.597		0.131	0.455	µg/L	B250480	S250213
2503007-06	Cr	Water	D	≤ 1.72	U	1.72	6.06	µg/L	B250480	S250213
2503007-06	Cu	Water	D	≤ 0.909	U	0.909	1.82	µg/L	B250480	S250213
2503007-06	Fe	Water	D	20200		18.2	54.5	µg/L	B250480	S250213
2503007-06	Hg	Water	D	0.69		0.14	0.42	ng/L	B250486	S250226
2503007-06	Mn	Water	D	1830		0.909	1.82	µg/L	B250480	S250213
2503007-06	Ni	Water	D	≤ 1.21	U	1.21	3.64	µg/L	B250480	S250213
2503007-06	Pb	Water	D	≤ 0.091	U	0.091	0.182	µg/L	B250480	S250213
2503007-06	Sb	Water	D	0.066	J	0.051	0.152	µg/L	B250480	S250213
2503007-06	Se	Water	D	≤ 0.242	U	0.242	0.505	µg/L	B250480	S250213
2503007-06	V	Water	D	5.89		0.131	0.455	µg/L	B250480	S250213
2503007-06	Zn	Water	D	≤ 12.1	U	12.1	24.2	µg/L	B250480	S250213



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
MW1										
2503007-07	Ag	Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B250480	S250213
2503007-07	Al	Water	TR	34.9		12.1	24.2	µg/L	B250480	S250213
2503007-07	As	Water	TR	0.544	J	0.222	0.727	µg/L	B250480	S250213
2503007-07	Ba	Water	TR	7.57		0.354	0.707	µg/L	B250480	S250213
2503007-07	Cd	Water	TR	≤ 0.061	U	0.061	0.182	µg/L	B250480	S250213
2503007-07	Co	Water	TR	4.00		0.131	0.455	µg/L	B250480	S250213
2503007-07	Cr	Water	TR	≤ 1.72	U	1.72	6.06	µg/L	B250480	S250213
2503007-07	Cu	Water	TR	1.70	J	0.909	1.82	µg/L	B250480	S250213
2503007-07	Fe	Water	TR	1340		18.2	54.5	µg/L	B250480	S250213
2503007-07	Hg	Water	TR	1.11		0.13	0.41	ng/L	B250486	S250226
2503007-07	Mn	Water	TR	171		0.909	1.82	µg/L	B250480	S250213
2503007-07	Ni	Water	TR	8.24		1.21	3.64	µg/L	B250480	S250213
2503007-07	Pb	Water	TR	0.159	J	0.091	0.182	µg/L	B250480	S250213
2503007-07	Sb	Water	TR	0.053	J	0.051	0.152	µg/L	B250480	S250213
2503007-07	Se	Water	TR	≤ 0.242	U	0.242	0.505	µg/L	B250480	S250213
2503007-07	V	Water	TR	2.15		0.131	0.455	µg/L	B250480	S250213
2503007-07	Zn	Water	TR	≤ 12.1	U	12.1	24.2	µg/L	B250480	S250213
MW1										
2503007-08	Ag	Water	D	≤ 0.051	U	0.051	0.152	µg/L	B250480	S250213
2503007-08	Al	Water	D	≤ 12.1	U	12.1	24.2	µg/L	B250480	S250213
2503007-08	As	Water	D	0.314	J	0.222	0.727	µg/L	B250480	S250213
2503007-08	Ba	Water	D	7.22		0.354	0.707	µg/L	B250480	S250213
2503007-08	Cd	Water	D	≤ 0.061	U	0.061	0.182	µg/L	B250480	S250213
2503007-08	Co	Water	D	3.85		0.131	0.455	µg/L	B250480	S250213
2503007-08	Cr	Water	D	≤ 1.72	U	1.72	6.06	µg/L	B250480	S250213
2503007-08	Cu	Water	D	0.933	J	0.909	1.82	µg/L	B250480	S250213
2503007-08	Fe	Water	D	872		18.2	54.5	µg/L	B250480	S250213
2503007-08	Hg	Water	D	≤ 0.13	U	0.13	0.41	ng/L	B250486	S250226
2503007-08	Mn	Water	D	154		0.909	1.82	µg/L	B250480	S250213
2503007-08	Ni	Water	D	7.26		1.21	3.64	µg/L	B250480	S250213
2503007-08	Pb	Water	D	≤ 0.091	U	0.091	0.182	µg/L	B250480	S250213
2503007-08	Sb	Water	D	≤ 0.051	U	0.051	0.152	µg/L	B250480	S250213
2503007-08	Se	Water	D	≤ 0.242	U	0.242	0.505	µg/L	B250480	S250213
2503007-08	V	Water	D	1.01		0.131	0.455	µg/L	B250480	S250213
2503007-08	Zn	Water	D	≤ 12.1	U	12.1	24.2	µg/L	B250480	S250213



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
MW8R										
2503007-09	Ag	Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B250480	S250213
2503007-09	Al	Water	TR	20.2	J	12.1	24.2	µg/L	B250480	S250213
2503007-09	As	Water	TR	23.9		0.222	0.727	µg/L	B250480	S250213
2503007-09	Ba	Water	TR	42.3		0.354	0.707	µg/L	B250480	S250213
2503007-09	Cd	Water	TR	≤ 0.061	U	0.061	0.182	µg/L	B250480	S250213
2503007-09	Co	Water	TR	2.74		0.131	0.455	µg/L	B250480	S250213
2503007-09	Cr	Water	TR	≤ 1.72	U	1.72	6.06	µg/L	B250480	S250213
2503007-09	Cu	Water	TR	≤ 0.909	U	0.909	1.82	µg/L	B250480	S250213
2503007-09	Fe	Water	TR	62300		18.2	54.5	µg/L	B250480	S250213
2503007-09	Hg	Water	TR	0.81		0.14	0.42	ng/L	B250486	S250226
2503007-09	Mn	Water	TR	2920		9.09	18.2	µg/L	B250480	S250219
2503007-09	Ni	Water	TR	1.76	J	1.21	3.64	µg/L	B250480	S250213
2503007-09	Pb	Water	TR	≤ 0.091	U	0.091	0.182	µg/L	B250480	S250213
2503007-09	Sb	Water	TR	0.057	J	0.051	0.152	µg/L	B250480	S250213
2503007-09	Se	Water	TR	≤ 0.242	U	0.242	0.505	µg/L	B250480	S250213
2503007-09	V	Water	TR	4.75		0.131	0.455	µg/L	B250480	S250213
2503007-09	Zn	Water	TR	≤ 12.1	U	12.1	24.2	µg/L	B250480	S250213
MW8R										
2503007-10	Ag	Water	D	≤ 0.051	U	0.051	0.152	µg/L	B250480	S250213
2503007-10	Al	Water	D	≤ 12.1	U	12.1	24.2	µg/L	B250480	S250213
2503007-10	As	Water	D	26.6		0.222	0.727	µg/L	B250480	S250213
2503007-10	Ba	Water	D	41.1		0.354	0.707	µg/L	B250480	S250213
2503007-10	Cd	Water	D	≤ 0.061	U	0.061	0.182	µg/L	B250480	S250213
2503007-10	Co	Water	D	2.91		0.131	0.455	µg/L	B250480	S250213
2503007-10	Cr	Water	D	≤ 1.72	U	1.72	6.06	µg/L	B250480	S250213
2503007-10	Cu	Water	D	≤ 0.909	U	0.909	1.82	µg/L	B250480	S250213
2503007-10	Fe	Water	D	68400		18.2	54.5	µg/L	B250480	S250213
2503007-10	Hg	Water	D	0.18	J	0.14	0.42	ng/L	B250486	S250226
2503007-10	Mn	Water	D	3030		9.09	18.2	µg/L	B250480	S250219
2503007-10	Ni	Water	D	1.70	J	1.21	3.64	µg/L	B250480	S250213
2503007-10	Pb	Water	D	≤ 0.091	U	0.091	0.182	µg/L	B250480	S250213
2503007-10	Sb	Water	D	0.059	J	0.051	0.152	µg/L	B250480	S250213
2503007-10	Se	Water	D	≤ 0.242	U	0.242	0.505	µg/L	B250480	S250213
2503007-10	V	Water	D	4.91		0.131	0.455	µg/L	B250480	S250213
2503007-10	Zn	Water	D	≤ 12.1	U	12.1	24.2	µg/L	B250480	S250213



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
MW3R										
2503007-11	Ag	Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B250480	S250213
2503007-11	Al	Water	TR	2120		12.1	24.2	µg/L	B250480	S250213
2503007-11	As	Water	TR	2.24		0.222	0.727	µg/L	B250480	S250213
2503007-11	Ba	Water	TR	16.2		0.354	0.707	µg/L	B250480	S250213
2503007-11	Cd	Water	TR	≤ 0.061	U	0.061	0.182	µg/L	B250480	S250213
2503007-11	Co	Water	TR	1.89		0.131	0.455	µg/L	B250480	S250213
2503007-11	Cr	Water	TR	≤ 1.72	U	1.72	6.06	µg/L	B250480	S250213
2503007-11	Cu	Water	TR	31.6		0.909	1.82	µg/L	B250480	S250213
2503007-11	Fe	Water	TR	453		18.2	54.5	µg/L	B250480	S250213
2503007-11	Hg	Water	TR	26.6		0.14	0.42	ng/L	B250486	S250226
2503007-11	Mn	Water	TR	78.6		0.909	1.82	µg/L	B250480	S250213
2503007-11	Ni	Water	TR	4.95		1.21	3.64	µg/L	B250480	S250213
2503007-11	Pb	Water	TR	0.233		0.091	0.182	µg/L	B250480	S250213
2503007-11	Sb	Water	TR	0.434		0.051	0.152	µg/L	B250480	S250213
2503007-11	Se	Water	TR	0.491	J	0.242	0.505	µg/L	B250480	S250213
2503007-11	V	Water	TR	8.65		0.131	0.455	µg/L	B250480	S250213
2503007-11	Zn	Water	TR	≤ 12.1	U	12.1	24.2	µg/L	B250480	S250213
MW3R										
2503007-12	Ag	Water	D	≤ 0.051	U	0.051	0.152	µg/L	B250480	S250213
2503007-12	Al	Water	D	2040		12.1	24.2	µg/L	B250480	S250213
2503007-12	As	Water	D	1.99		0.222	0.727	µg/L	B250480	S250213
2503007-12	Ba	Water	D	16.0		0.354	0.707	µg/L	B250480	S250213
2503007-12	Cd	Water	D	≤ 0.061	U	0.061	0.182	µg/L	B250480	S250213
2503007-12	Co	Water	D	1.65		0.131	0.455	µg/L	B250480	S250213
2503007-12	Cr	Water	D	≤ 1.72	U	1.72	6.06	µg/L	B250480	S250213
2503007-12	Cu	Water	D	24.8		0.909	1.82	µg/L	B250480	S250213
2503007-12	Fe	Water	D	176		18.2	54.5	µg/L	B250480	S250213
2503007-12	Hg	Water	D	15.3		0.14	0.42	ng/L	B250486	S250226
2503007-12	Mn	Water	D	72.3		0.909	1.82	µg/L	B250480	S250213
2503007-12	Ni	Water	D	4.84		1.21	3.64	µg/L	B250480	S250213
2503007-12	Pb	Water	D	≤ 0.091	U	0.091	0.182	µg/L	B250480	S250213
2503007-12	Sb	Water	D	0.427		0.051	0.152	µg/L	B250480	S250213
2503007-12	Se	Water	D	0.367	J	0.242	0.505	µg/L	B250480	S250213
2503007-12	V	Water	D	6.44		0.131	0.455	µg/L	B250480	S250213
2503007-12	Zn	Water	D	≤ 12.1	U	12.1	24.2	µg/L	B250480	S250213



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
DUP02-0225										
2503007-13	Ag	Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B250480	S250213
2503007-13	Al	Water	TR	1240		12.1	24.2	µg/L	B250480	S250213
2503007-13	As	Water	TR	15.8		0.222	0.727	µg/L	B250480	S250213
2503007-13	Ba	Water	TR	22.8		0.354	0.707	µg/L	B250480	S250213
2503007-13	Cd	Water	TR	≤ 0.061	U	0.061	0.182	µg/L	B250480	S250213
2503007-13	Co	Water	TR	1.31		0.131	0.455	µg/L	B250480	S250213
2503007-13	Cr	Water	TR	6.01	J	1.72	6.06	µg/L	B250480	S250213
2503007-13	Cu	Water	TR	11.6		0.909	1.82	µg/L	B250480	S250213
2503007-13	Fe	Water	TR	14300		18.2	54.5	µg/L	B250480	S250213
2503007-13	Hg	Water	TR	30.1		0.14	0.42	ng/L	B250486	S250226
2503007-13	Mn	Water	TR	776		0.909	1.82	µg/L	B250480	S250213
2503007-13	Ni	Water	TR	3.25	J	1.21	3.64	µg/L	B250480	S250213
2503007-13	Pb	Water	TR	1.27		0.091	0.182	µg/L	B250480	S250213
2503007-13	Sb	Water	TR	2.30		0.051	0.152	µg/L	B250480	S250213
2503007-13	Se	Water	TR	0.538		0.242	0.505	µg/L	B250480	S250213
2503007-13	V	Water	TR	37.4		0.131	0.455	µg/L	B250480	S250213
2503007-13	Zn	Water	TR	≤ 12.1	U	12.1	24.2	µg/L	B250480	S250213
DUP02-0225										
2503007-14	Ag	Water	D	≤ 0.051	U	0.051	0.152	µg/L	B250480	S250213
2503007-14	Al	Water	D	607		12.1	24.2	µg/L	B250480	S250213
2503007-14	As	Water	D	15.0		0.222	0.727	µg/L	B250480	S250213
2503007-14	Ba	Water	D	18.2		0.354	0.707	µg/L	B250480	S250213
2503007-14	Cd	Water	D	≤ 0.061	U	0.061	0.182	µg/L	B250480	S250213
2503007-14	Co	Water	D	1.09		0.131	0.455	µg/L	B250480	S250213
2503007-14	Cr	Water	D	4.45	J	1.72	6.06	µg/L	B250480	S250213
2503007-14	Cr(VI)	Water	D	0.036	J	0.025	0.051	µg/L	B250472	S250230
2503007-14	Cu	Water	D	2.22		0.909	1.82	µg/L	B250480	S250213
2503007-14	Fe	Water	D	13200		18.2	54.5	µg/L	B250480	S250213
2503007-14	Hg	Water	D	8.93		0.14	0.42	ng/L	B250486	S250226
2503007-14	Mn	Water	D	763		0.909	1.82	µg/L	B250480	S250213
2503007-14	Ni	Water	D	2.44	J	1.21	3.64	µg/L	B250480	S250213
2503007-14	Pb	Water	D	0.094	J	0.091	0.182	µg/L	B250480	S250213
2503007-14	Sb	Water	D	2.14		0.051	0.152	µg/L	B250480	S250213
2503007-14	Se	Water	D	0.481	J	0.242	0.505	µg/L	B250480	S250213
2503007-14	V	Water	D	30.1		0.131	0.455	µg/L	B250480	S250213
2503007-14	Zn	Water	D	≤ 12.1	U	12.1	24.2	µg/L	B250480	S250213



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
MW9										
2503007-15	Ag	Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B250480	S250213
2503007-15	Al	Water	TR	58.9		12.1	24.2	µg/L	B250480	S250213
2503007-15	As	Water	TR	3.41		0.222	0.727	µg/L	B250480	S250213
2503007-15	Ba	Water	TR	107		0.354	0.707	µg/L	B250480	S250213
2503007-15	Cd	Water	TR	≤ 0.061	U	0.061	0.182	µg/L	B250480	S250213
2503007-15	Co	Water	TR	5.03		0.131	0.455	µg/L	B250480	S250213
2503007-15	Cr	Water	TR	≤ 1.72	U	1.72	6.06	µg/L	B250480	S250213
2503007-15	Cu	Water	TR	≤ 0.909	U	0.909	1.82	µg/L	B250480	S250213
2503007-15	Fe	Water	TR	87900		18.2	54.5	µg/L	B250480	S250213
2503007-15	Hg	Water	TR	1.35		0.14	0.42	ng/L	B250486	S250226
2503007-15	Mn	Water	TR	2030		0.909	1.82	µg/L	B250480	S250213
2503007-15	Ni	Water	TR	2.40	J	1.21	3.64	µg/L	B250480	S250213
2503007-15	Pb	Water	TR	≤ 0.091	U	0.091	0.182	µg/L	B250480	S250213
2503007-15	Sb	Water	TR	0.155		0.051	0.152	µg/L	B250480	S250213
2503007-15	Se	Water	TR	≤ 0.242	U	0.242	0.505	µg/L	B250480	S250213
2503007-15	V	Water	TR	1.28		0.131	0.455	µg/L	B250480	S250213
2503007-15	Zn	Water	TR	≤ 12.1	U	12.1	24.2	µg/L	B250480	S250213
MW9										
2503007-16	Ag	Water	D	≤ 0.051	U	0.051	0.152	µg/L	B250480	S250213
2503007-16	Al	Water	D	≤ 12.1	U	12.1	24.2	µg/L	B250480	S250213
2503007-16	As	Water	D	3.17		0.222	0.727	µg/L	B250480	S250213
2503007-16	Ba	Water	D	105		0.354	0.707	µg/L	B250480	S250213
2503007-16	Cd	Water	D	≤ 0.061	U	0.061	0.182	µg/L	B250480	S250213
2503007-16	Co	Water	D	4.88		0.131	0.455	µg/L	B250480	S250213
2503007-16	Cr	Water	D	≤ 1.72	U	1.72	6.06	µg/L	B250480	S250213
2503007-16	Cu	Water	D	≤ 0.909	U	0.909	1.82	µg/L	B250480	S250213
2503007-16	Fe	Water	D	83400		18.2	54.5	µg/L	B250480	S250213
2503007-16	Hg	Water	D	0.69		0.14	0.42	ng/L	B250486	S250226
2503007-16	Mn	Water	D	1980		0.909	1.82	µg/L	B250480	S250213
2503007-16	Ni	Water	D	2.47	J	1.21	3.64	µg/L	B250480	S250213
2503007-16	Pb	Water	D	≤ 0.091	U	0.091	0.182	µg/L	B250480	S250213
2503007-16	Sb	Water	D	0.132	J	0.051	0.152	µg/L	B250480	S250213
2503007-16	Se	Water	D	≤ 0.242	U	0.242	0.505	µg/L	B250480	S250213
2503007-16	V	Water	D	0.885		0.131	0.455	µg/L	B250480	S250213
2503007-16	Zn	Water	D	≤ 12.1	U	12.1	24.2	µg/L	B250480	S250213



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
MW11										
2503007-17	Ag	Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B250480	S250213
2503007-17	Al	Water	TR	607		12.1	24.2	µg/L	B250480	S250213
2503007-17	As	Water	TR	3.83		0.222	0.727	µg/L	B250480	S250213
2503007-17	Ba	Water	TR	15.9		0.354	0.707	µg/L	B250480	S250213
2503007-17	Cd	Water	TR	≤ 0.061	U	0.061	0.182	µg/L	B250480	S250213
2503007-17	Co	Water	TR	3.63		0.131	0.455	µg/L	B250480	S250213
2503007-17	Cr	Water	TR	≤ 1.72	U	1.72	6.06	µg/L	B250480	S250213
2503007-17	Cu	Water	TR	4.05		0.909	1.82	µg/L	B250480	S250213
2503007-17	Fe	Water	TR	4270		18.2	54.5	µg/L	B250480	S250213
2503007-17	Hg	Water	TR	2.47		0.14	0.42	ng/L	B250486	S250226
2503007-17	Mn	Water	TR	346		0.909	1.82	µg/L	B250480	S250213
2503007-17	Ni	Water	TR	4.28		1.21	3.64	µg/L	B250480	S250213
2503007-17	Pb	Water	TR	0.239		0.091	0.182	µg/L	B250480	S250213
2503007-17	Sb	Water	TR	0.115	J	0.051	0.152	µg/L	B250480	S250213
2503007-17	Se	Water	TR	≤ 0.242	U	0.242	0.505	µg/L	B250480	S250213
2503007-17	V	Water	TR	2.46		0.131	0.455	µg/L	B250480	S250213
2503007-17	Zn	Water	TR	≤ 12.1	U	12.1	24.2	µg/L	B250480	S250213
MW11										
2503007-18	Ag	Water	D	≤ 0.051	U	0.051	0.152	µg/L	B250480	S250213
2503007-18	Al	Water	D	22.3	J	12.1	24.2	µg/L	B250480	S250213
2503007-18	As	Water	D	4.10		0.222	0.727	µg/L	B250480	S250213
2503007-18	Ba	Water	D	11.6		0.354	0.707	µg/L	B250480	S250213
2503007-18	Cd	Water	D	≤ 0.061	U	0.061	0.182	µg/L	B250480	S250213
2503007-18	Co	Water	D	3.69		0.131	0.455	µg/L	B250480	S250213
2503007-18	Cr	Water	D	≤ 1.72	U	1.72	6.06	µg/L	B250480	S250213
2503007-18	Cu	Water	D	2.07		0.909	1.82	µg/L	B250480	S250213
2503007-18	Fe	Water	D	4560		18.2	54.5	µg/L	B250480	S250213
2503007-18	Hg	Water	D	0.29	J	0.14	0.42	ng/L	B250486	S250226
2503007-18	Mn	Water	D	392		0.909	1.82	µg/L	B250480	S250213
2503007-18	Ni	Water	D	4.26		1.21	3.64	µg/L	B250480	S250213
2503007-18	Pb	Water	D	≤ 0.091	U	0.091	0.182	µg/L	B250480	S250213
2503007-18	Sb	Water	D	0.094	J	0.051	0.152	µg/L	B250480	S250213
2503007-18	Se	Water	D	≤ 0.242	U	0.242	0.505	µg/L	B250480	S250213
2503007-18	V	Water	D	0.808		0.131	0.455	µg/L	B250480	S250213
2503007-18	Zn	Water	D	≤ 12.1	U	12.1	24.2	µg/L	B250480	S250213



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
MW2										
2503007-19	Ag	Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B250480	S250213
2503007-19	Al	Water	TR	399		12.1	24.2	µg/L	B250480	S250213
2503007-19	As	Water	TR	0.849		0.222	0.727	µg/L	B250480	S250213
2503007-19	Ba	Water	TR	5.75		0.354	0.707	µg/L	B250480	S250213
2503007-19	Cd	Water	TR	≤ 0.061	U	0.061	0.182	µg/L	B250480	S250213
2503007-19	Co	Water	TR	0.572		0.131	0.455	µg/L	B250480	S250213
2503007-19	Cr	Water	TR	≤ 1.72	U	1.72	6.06	µg/L	B250480	S250213
2503007-19	Cu	Water	TR	3.12		0.909	1.82	µg/L	B250480	S250213
2503007-19	Fe	Water	TR	1480		18.2	54.5	µg/L	B250480	S250213
2503007-19	Hg	Water	TR	5.39		0.13	0.41	ng/L	B250486	S250226
2503007-19	Mn	Water	TR	31.1		0.909	1.82	µg/L	B250480	S250213
2503007-19	Ni	Water	TR	3.32	J	1.21	3.64	µg/L	B250480	S250213
2503007-19	Pb	Water	TR	0.421		0.091	0.182	µg/L	B250480	S250213
2503007-19	Sb	Water	TR	0.162		0.051	0.152	µg/L	B250480	S250213
2503007-19	Se	Water	TR	0.412	J	0.242	0.505	µg/L	B250480	S250213
2503007-19	V	Water	TR	4.92		0.131	0.455	µg/L	B250480	S250213
2503007-19	Zn	Water	TR	≤ 12.1	U	12.1	24.2	µg/L	B250480	S250213
MW2										
2503007-20	Ag	Water	D	≤ 0.051	U	0.051	0.152	µg/L	B250480	S250213
2503007-20	Al	Water	D	≤ 12.1	U	12.1	24.2	µg/L	B250480	S250213
2503007-20	As	Water	D	≤ 0.222	U	0.222	0.727	µg/L	B250480	S250213
2503007-20	Ba	Water	D	2.71		0.354	0.707	µg/L	B250480	S250213
2503007-20	Cd	Water	D	≤ 0.061	U	0.061	0.182	µg/L	B250480	S250213
2503007-20	Co	Water	D	0.230	J	0.131	0.455	µg/L	B250480	S250213
2503007-20	Cr	Water	D	≤ 1.72	U	1.72	6.06	µg/L	B250480	S250213
2503007-20	Cu	Water	D	1.91		0.909	1.82	µg/L	B250480	S250213
2503007-20	Fe	Water	D	108		18.2	54.5	µg/L	B250480	S250213
2503007-20	Hg	Water	D	1.40		0.13	0.41	ng/L	B250486	S250226
2503007-20	Mn	Water	D	13.5		0.909	1.82	µg/L	B250480	S250213
2503007-20	Ni	Water	D	2.72	J	1.21	3.64	µg/L	B250480	S250213
2503007-20	Pb	Water	D	≤ 0.091	U	0.091	0.182	µg/L	B250480	S250213
2503007-20	Sb	Water	D	0.140	J	0.051	0.152	µg/L	B250480	S250213
2503007-20	Se	Water	D	0.399	J	0.242	0.505	µg/L	B250480	S250213
2503007-20	V	Water	D	1.18		0.131	0.455	µg/L	B250480	S250213
2503007-20	Zn	Water	D	≤ 12.1	U	12.1	24.2	µg/L	B250480	S250213



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
MW5R2										
2503007-21	Ag	Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B250480	S250213
2503007-21	Al	Water	TR	1230		12.1	24.2	µg/L	B250480	S250213
2503007-21	As	Water	TR	16.2		0.222	0.727	µg/L	B250480	S250213
2503007-21	Ba	Water	TR	22.0		0.354	0.707	µg/L	B250480	S250213
2503007-21	Cd	Water	TR	≤ 0.061	U	0.061	0.182	µg/L	B250480	S250213
2503007-21	Co	Water	TR	1.32		0.131	0.455	µg/L	B250480	S250213
2503007-21	Cr	Water	TR	6.08		1.72	6.06	µg/L	B250480	S250213
2503007-21	Cu	Water	TR	11.5		0.909	1.82	µg/L	B250480	S250213
2503007-21	Fe	Water	TR	14700		18.2	54.5	µg/L	B250480	S250213
2503007-21	Hg	Water	TR	31.5		0.14	0.42	ng/L	B250482	S250221
2503007-21	Mn	Water	TR	755		0.909	1.82	µg/L	B250480	S250213
2503007-21	Ni	Water	TR	3.07	J	1.21	3.64	µg/L	B250480	S250213
2503007-21	Pb	Water	TR	0.677		0.091	0.182	µg/L	B250480	S250213
2503007-21	Sb	Water	TR	2.31		0.051	0.152	µg/L	B250480	S250213
2503007-21	Se	Water	TR	0.550		0.242	0.505	µg/L	B250480	S250213
2503007-21	V	Water	TR	38.8		0.131	0.455	µg/L	B250480	S250213
2503007-21	Zn	Water	TR	≤ 12.1	U	12.1	24.2	µg/L	B250480	S250213
MW5R2										
2503007-22	Ag	Water	D	≤ 0.051	U	0.051	0.152	µg/L	B250480	S250213
2503007-22	Al	Water	D	607		12.1	24.2	µg/L	B250480	S250213
2503007-22	As	Water	D	14.2		0.222	0.727	µg/L	B250480	S250213
2503007-22	Ba	Water	D	17.6		0.354	0.707	µg/L	B250480	S250213
2503007-22	Cd	Water	D	≤ 0.061	U	0.061	0.182	µg/L	B250480	S250213
2503007-22	Co	Water	D	1.02		0.131	0.455	µg/L	B250480	S250213
2503007-22	Cr	Water	D	4.57	J	1.72	6.06	µg/L	B250480	S250213
2503007-22	Cr(VI)	Water	D	0.038	J	0.025	0.051	µg/L	B250472	S250230
2503007-22	Cu	Water	D	2.30		0.909	1.82	µg/L	B250480	S250213
2503007-22	Fe	Water	D	12600		18.2	54.5	µg/L	B250480	S250213
2503007-22	Hg	Water	D	8.53		0.14	0.42	ng/L	B250482	S250221
2503007-22	Mn	Water	D	743		0.909	1.82	µg/L	B250480	S250213
2503007-22	Ni	Water	D	2.44	J	1.21	3.64	µg/L	B250480	S250213
2503007-22	Pb	Water	D	0.093	J	0.091	0.182	µg/L	B250480	S250213
2503007-22	Sb	Water	D	2.06		0.051	0.152	µg/L	B250480	S250213
2503007-22	Se	Water	D	0.411	J	0.242	0.505	µg/L	B250480	S250213
2503007-22	V	Water	D	29.3		0.131	0.455	µg/L	B250480	S250213
2503007-22	Zn	Water	D	≤ 12.1	U	12.1	24.2	µg/L	B250480	S250213



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
MW7										
2503007-23	Ag	Water	TR	≤ 0.051	U	0.051	0.152	µg/L	B250480	S250213
2503007-23	Al	Water	TR	369		12.1	24.2	µg/L	B250480	S250213
2503007-23	As	Water	TR	0.936		0.222	0.727	µg/L	B250480	S250213
2503007-23	Ba	Water	TR	72.7		0.354	0.707	µg/L	B250480	S250213
2503007-23	Cd	Water	TR	≤ 0.061	U	0.061	0.182	µg/L	B250480	S250213
2503007-23	Co	Water	TR	0.435	J	0.131	0.455	µg/L	B250480	S250213
2503007-23	Cr	Water	TR	≤ 1.72	U	1.72	6.06	µg/L	B250480	S250213
2503007-23	Cu	Water	TR	5.29		0.909	1.82	µg/L	B250480	S250213
2503007-23	Fe	Water	TR	3300		18.2	54.5	µg/L	B250480	S250213
2503007-23	Hg	Water	TR	4.67		0.14	0.42	ng/L	B250482	S250221
2503007-23	Mn	Water	TR	162		0.909	1.82	µg/L	B250480	S250213
2503007-23	Ni	Water	TR	≤ 1.21	U	1.21	3.64	µg/L	B250480	S250213
2503007-23	Pb	Water	TR	0.235		0.091	0.182	µg/L	B250480	S250213
2503007-23	Sb	Water	TR	0.323		0.051	0.152	µg/L	B250480	S250213
2503007-23	Se	Water	TR	≤ 0.242	U	0.242	0.505	µg/L	B250480	S250213
2503007-23	V	Water	TR	7.34		0.131	0.455	µg/L	B250480	S250213
2503007-23	Zn	Water	TR	≤ 12.1	U	12.1	24.2	µg/L	B250480	S250213
MW7										
2503007-24	Ag	Water	D	≤ 0.051	U	0.051	0.152	µg/L	B250480	S250213
2503007-24	Al	Water	D	204		12.1	24.2	µg/L	B250480	S250213
2503007-24	As	Water	D	0.388	J	0.222	0.727	µg/L	B250480	S250213
2503007-24	Ba	Water	D	68.2		0.354	0.707	µg/L	B250480	S250213
2503007-24	Cd	Water	D	≤ 0.061	U	0.061	0.182	µg/L	B250480	S250213
2503007-24	Co	Water	D	0.394	J	0.131	0.455	µg/L	B250480	S250213
2503007-24	Cr	Water	D	≤ 1.72	U	1.72	6.06	µg/L	B250480	S250213
2503007-24	Cu	Water	D	2.33		0.909	1.82	µg/L	B250480	S250213
2503007-24	Fe	Water	D	2010		18.2	54.5	µg/L	B250480	S250213
2503007-24	Hg	Water	D	0.72		0.14	0.42	ng/L	B250482	S250221
2503007-24	Mn	Water	D	161		0.909	1.82	µg/L	B250480	S250213
2503007-24	Ni	Water	D	≤ 1.21	U	1.21	3.64	µg/L	B250480	S250213
2503007-24	Pb	Water	D	≤ 0.091	U	0.091	0.182	µg/L	B250480	S250213
2503007-24	Sb	Water	D	0.257		0.051	0.152	µg/L	B250480	S250213
2503007-24	Se	Water	D	≤ 0.242	U	0.242	0.505	µg/L	B250480	S250213
2503007-24	V	Water	D	4.78		0.131	0.455	µg/L	B250480	S250213
2503007-24	Zn	Water	D	≤ 12.1	U	12.1	24.2	µg/L	B250480	S250213



Accuracy & Precision Summary

Batch: B250472
Lab Matrix: Water
Method: SOP BAL-4300

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B250472-BS1	Blank Spike, (2432005) Cr(VI)		2.000	2.171	µg/L	109% 75-125	
B250472-DUP1	Duplicate, (2503007-22) Cr(VI)	0.038		0.037	µg/L		3% 25
B250472-MS1	Matrix Spike, (2503007-22) Cr(VI)	0.038	5.051	5.417	µg/L	107% 75-125	
B250472-MSD1	Matrix Spike Duplicate, (2503007-22) Cr(VI)	0.038	5.051	5.471	µg/L	108% 75-125	1% 25



Accuracy & Precision Summary

Batch: B250480
 Lab Matrix: Water
 Method: EPA 1638 Mod

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B250480-BS1	Blank Spike, (2509003)						
	Ag		5.556	5.456	µg/L	98% 75-125	
	Al		5556	5249	µg/L	94% 75-125	
	As		55.56	54.83	µg/L	99% 75-125	
	Ba		55.56	55.34	µg/L	100% 75-125	
	Cd		5.556	5.302	µg/L	95% 75-125	
	Co		55.56	54.35	µg/L	98% 75-125	
	Cr		55.56	54.93	µg/L	99% 75-125	
	Cu		55.56	54.22	µg/L	98% 75-125	
	Fe		5556	5471	µg/L	98% 75-125	
	Mn		55.56	54.91	µg/L	99% 75-125	
	Ni		55.56	53.27	µg/L	96% 75-125	
	Pb		5.556	5.334	µg/L	96% 75-125	
	Sb		5.556	5.386	µg/L	97% 75-125	
	Se		55.56	53.92	µg/L	97% 75-125	
	V		55.56	55.14	µg/L	99% 75-125	
	Zn		55.56	54.59	µg/L	98% 75-125	
B250480-BS2	Blank Spike, (2509003)						
	Ag		5.556	5.392	µg/L	97% 75-125	
	Al		5556	5202	µg/L	94% 75-125	
	As		55.56	54.89	µg/L	99% 75-125	
	Ba		55.56	55.50	µg/L	100% 75-125	
	Cd		5.556	5.406	µg/L	97% 75-125	
	Co		55.56	55.05	µg/L	99% 75-125	
	Cr		55.56	58.69	µg/L	106% 75-125	
	Cu		55.56	57.87	µg/L	104% 75-125	
	Fe		5556	5554	µg/L	100% 75-125	
	Mn		55.56	55.00	µg/L	99% 75-125	
	Ni		55.56	53.09	µg/L	96% 75-125	
	Pb		5.556	5.389	µg/L	97% 75-125	
	Sb		5.556	5.483	µg/L	99% 75-125	
	Se		55.56	54.65	µg/L	98% 75-125	
	V		55.56	55.56	µg/L	100% 75-125	
	Zn		55.56	54.34	µg/L	98% 75-125	



Accuracy & Precision Summary

Batch: B250480
 Lab Matrix: Water
 Method: EPA 1638 Mod

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B250480-SRM1	Reference Material (2440037, NIST 1643f)						
	Ba		518.2	573.5	µg/L	111% 75-125	
	Co		25.30	24.16	µg/L	96% 75-125	
	Sb		55.45	52.94	µg/L	95% 75-125	
B250480-SRM2	Reference Material (2440037, NIST 1643f)						
	Ba		518.2	500.4	µg/L	97% 75-125	
	Co		25.30	24.42	µg/L	97% 75-125	
	Sb		55.45	52.90	µg/L	95% 75-125	
B250480-SRM3	Reference Material (2440037, NIST 1643f)						
	Ag		0.9703	0.973	µg/L	100% 75-125	
	Al		133.8	130.5	µg/L	98% 75-125	
	As		57.42	56.90	µg/L	99% 75-125	
	Cd		5.890	5.739	µg/L	97% 75-125	
	Cr		18.50	18.42	µg/L	100% 75-125	
	Cu		21.66	21.22	µg/L	98% 75-125	
	Fe		93.44	94.22	µg/L	101% 75-125	
	Mn		37.14	37.02	µg/L	100% 75-125	
	Ni		59.80	57.88	µg/L	97% 75-125	
	Pb		18.49	18.10	µg/L	98% 75-125	
	Se		11.70	11.37	µg/L	97% 75-125	
	V		36.07	36.15	µg/L	100% 75-125	
Zn		74.40	74.92	µg/L	101% 75-125		



Accuracy & Precision Summary

Batch: B250480
 Lab Matrix: Water
 Method: EPA 1638 Mod

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B250480-SRM4	Reference Material (2440037, NIST 1643f)						
	Ag		0.9703	0.970	µg/L	100% 75-125	
	Al		133.8	135.0	µg/L	101% 75-125	
	As		57.42	56.92	µg/L	99% 75-125	
	Cd		5.890	5.740	µg/L	97% 75-125	
	Cr		18.50	18.79	µg/L	102% 75-125	
	Cu		21.66	21.54	µg/L	99% 75-125	
	Fe		93.44	96.00	µg/L	103% 75-125	
	Mn		37.14	37.29	µg/L	100% 75-125	
	Ni		59.80	57.54	µg/L	96% 75-125	
	Pb		18.49	18.32	µg/L	99% 75-125	
	Se		11.70	11.33	µg/L	97% 75-125	
	V		36.07	36.57	µg/L	101% 75-125	
	Zn		74.40	75.27	µg/L	101% 75-125	
B250480-DUP1	Duplicate, (2503007-01)						
	Ag	ND		ND	µg/L		N/C 20
	Al	529.9		497.4	µg/L		6% 20
	As	2.311		2.233	µg/L		3% 20
	Ba	46.93		44.79	µg/L		5% 20
	Cd	ND		ND	µg/L		N/C 20
	Co	0.705		0.650	µg/L		8% 20
	Cr	2.728		2.312	µg/L		17% 20
	Cu	2.722		2.586	µg/L		5% 20
	Fe	18680		17890	µg/L		4% 20
	Mn	1066		1020	µg/L		4% 20
	Ni	1.488		1.343	µg/L		10% 20
	Pb	0.151		0.135	µg/L		12% 20
	Sb	0.082		0.087	µg/L		6% 20
	Se	0.279		0.302	µg/L		8% 20
	V	10.63		10.20	µg/L		4% 20
	Zn	ND		ND	µg/L		N/C 20



Accuracy & Precision Summary

Batch: B250480
Lab Matrix: Water
Method: EPA 1638 Mod

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B250480-MS1	Matrix Spike, (2503007-01)						
	Ag	ND	5.612	5.512	µg/L	98% 75-125	
	Al	529.9	5612	5683	µg/L	92% 75-125	
	As	2.311	56.12	57.24	µg/L	98% 75-125	
	Cd	ND	5.612	5.498	µg/L	98% 75-125	
	Co	0.705	56.12	54.98	µg/L	97% 75-125	
	Cr	2.728	56.12	56.07	µg/L	95% 75-125	
	Cu	2.722	56.12	57.30	µg/L	97% 75-125	
	Fe	18680	5612	23310	µg/L	82% 75-125	
	Mn	1066	56.12	1067	µg/L	NR 75-125	
	Ni	1.488	56.12	54.16	µg/L	94% 75-125	
	Pb	0.151	5.612	5.628	µg/L	98% 75-125	
	Sb	0.082	5.612	5.584	µg/L	98% 75-125	
	Se	0.279	56.12	54.51	µg/L	97% 75-125	
	V	10.63	56.12	64.79	µg/L	97% 75-125	
	Zn	ND	56.12	58.19	µg/L	104% 75-125	
B250480-MS4	Matrix Spike, (2503007-01)						
	Ba	46.93	56.12	106.9	µg/L	107% 75-125	
B250480-MSD1	Matrix Spike Duplicate, (2503007-01)						
	Ag	ND	5.612	5.446	µg/L	97% 75-125	1% 20
	Al	529.9	5612	5704	µg/L	92% 75-125	0.4% 20
	As	2.311	56.12	57.98	µg/L	99% 75-125	1% 20
	Cd	ND	5.612	5.736	µg/L	102% 75-125	4% 20
	Co	0.705	56.12	55.38	µg/L	97% 75-125	0.7% 20
	Cr	2.728	56.12	57.29	µg/L	97% 75-125	2% 20
	Cu	2.722	56.12	58.44	µg/L	99% 75-125	2% 20
	Fe	18680	5612	23480	µg/L	85% 75-125	0.7% 20
	Mn	1066	56.12	1075	µg/L	NR 75-125	N/C 20
	Ni	1.488	56.12	54.80	µg/L	95% 75-125	1% 20
	Pb	0.151	5.612	5.611	µg/L	97% 75-125	0.3% 20
	Sb	0.082	5.612	5.587	µg/L	98% 75-125	0.05% 20
	Se	0.279	56.12	54.38	µg/L	96% 75-125	0.2% 20
	V	10.63	56.12	65.65	µg/L	98% 75-125	1% 20
	Zn	ND	56.12	59.03	µg/L	105% 75-125	1% 20



Accuracy & Precision Summary

Batch: B250480
 Lab Matrix: Water
 Method: EPA 1638 Mod

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B250480-MSD4	Matrix Spike Duplicate, (2503007-01)						
	Ba	46.93	56.12	105.7	µg/L	105% 75-125	1% 20
B250480-DUP2	Duplicate, (2503007-03)						
	Ag	ND		ND	µg/L		N/C 20
	Al	317.5		311.8	µg/L		2% 20
	As	0.364		0.324	µg/L		12% 20
	Ba	139.8		136.6	µg/L		2% 20
	Cd	0.807		0.731	µg/L		10% 20
	Co	33.39		32.47	µg/L		3% 20
	Cr	ND		ND	µg/L		N/C 20
	Cu	1.920		1.757	µg/L		9% 20
	Fe	3649		3503	µg/L		4% 20
	Mn	1649		1611	µg/L		2% 20
	Ni	38.87		37.77	µg/L		3% 20
	Pb	ND		ND	µg/L		N/C 20
	Sb	0.075		0.082	µg/L		9% 20
	Se	ND		ND	µg/L		N/C 20
V	0.418		0.413	µg/L		1% 20	
Zn	26.69		25.69	µg/L		4% 20	
B250480-MS2	Matrix Spike, (2503007-03)						
	Ag	ND	5.612	5.552	µg/L	99% 75-125	
	Al	317.5	5612	5560	µg/L	93% 75-125	
	As	0.364	56.12	55.88	µg/L	99% 75-125	
	Ba	139.8	56.12	198.2	µg/L	104% 75-125	
	Cd	0.807	5.612	6.194	µg/L	96% 75-125	
	Co	33.39	56.12	86.94	µg/L	95% 75-125	
	Cr	ND	56.12	55.09	µg/L	98% 75-125	
	Cu	1.920	56.12	56.41	µg/L	97% 75-125	
	Fe	3649	5612	9058	µg/L	96% 75-125	
	Mn	1649	56.12	1727	µg/L	NR 75-125	
	Ni	38.87	56.12	91.88	µg/L	94% 75-125	
	Pb	ND	5.612	5.485	µg/L	98% 75-125	
	Sb	0.075	5.612	5.515	µg/L	97% 75-125	
	Se	ND	56.12	54.33	µg/L	97% 75-125	
V	0.418	56.12	55.87	µg/L	99% 75-125		
Zn	26.69	56.12	82.32	µg/L	99% 75-125		



Accuracy & Precision Summary

Batch: B250480
 Lab Matrix: Water
 Method: EPA 1638 Mod

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B250480-MSD2	Matrix Spike Duplicate, (2503007-03)						
	Ag	ND	5.612	5.584	µg/L	100% 75-125	0.6% 20
	Al	317.5	5612	5685	µg/L	96% 75-125	2% 20
	As	0.364	56.12	57.53	µg/L	102% 75-125	3% 20
	Ba	139.8	56.12	202.1	µg/L	111% 75-125	2% 20
	Cd	0.807	5.612	6.220	µg/L	96% 75-125	0.4% 20
	Co	33.39	56.12	89.64	µg/L	100% 75-125	3% 20
	Cr	ND	56.12	55.94	µg/L	100% 75-125	2% 20
	Cu	1.920	56.12	58.09	µg/L	100% 75-125	3% 20
	Fe	3649	5612	9377	µg/L	102% 75-125	3% 20
	Mn	1649	56.12	1779	µg/L	NR 75-125	N/C 20
	Ni	38.87	56.12	94.96	µg/L	100% 75-125	3% 20
	Pb	ND	5.612	5.609	µg/L	100% 75-125	2% 20
	Sb	0.075	5.612	5.684	µg/L	100% 75-125	3% 20
	Se	ND	56.12	55.84	µg/L	100% 75-125	3% 20
	V	0.418	56.12	57.10	µg/L	101% 75-125	2% 20
	Zn	26.69	56.12	85.67	µg/L	105% 75-125	4% 20
B250480-DUP3	Duplicate, (2503007-05)						
	Ag	ND		ND	µg/L		N/C 20
	Al	106.2		115.1	µg/L		8% 20
	As	10.23		10.17	µg/L		0.6% 20
	Ba	26.51		26.04	µg/L		2% 20
	Cd	ND		ND	µg/L		N/C 20
	Co	0.664		0.633	µg/L		5% 20
	Cr	ND		ND	µg/L		N/C 20
	Cu	ND		ND	µg/L		N/C 20
	Fe	21010		20780	µg/L		1% 20
	Mn	1885		1853	µg/L		2% 20
	Ni	ND		ND	µg/L		N/C 20
	Pb	ND		ND	µg/L		N/C 20
	Sb	0.078		0.076	µg/L		3% 20
	Se	ND		ND	µg/L		N/C 20
	V	6.666		6.559	µg/L		2% 20
	Zn	ND		ND	µg/L		N/C 20



Accuracy & Precision Summary

Batch: B250480
Lab Matrix: Water
Method: EPA 1638 Mod

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B250480-MS3	Matrix Spike, (2503007-05)						
	Ag	ND	5.612	5.554	µg/L	99% 75-125	
	Al	106.2	5612	5313	µg/L	93% 75-125	
	As	10.23	56.12	65.67	µg/L	99% 75-125	
	Ba	26.51	56.12	83.10	µg/L	101% 75-125	
	Cd	ND	5.612	5.426	µg/L	97% 75-125	
	Co	0.664	56.12	55.78	µg/L	98% 75-125	
	Cr	ND	56.12	56.44	µg/L	101% 75-125	
	Cu	ND	56.12	57.19	µg/L	102% 75-125	
	Fe	21010	5612	26460	µg/L	97% 75-125	
	Mn	1885	56.12	1892	µg/L	NR 75-125	
	Ni	ND	56.12	54.13	µg/L	96% 75-125	
	Pb	ND	5.612	5.693	µg/L	101% 75-125	
	Sb	0.078	5.612	5.645	µg/L	99% 75-125	
	Se	ND	56.12	54.37	µg/L	97% 75-125	
	V	6.666	56.12	61.98	µg/L	99% 75-125	
	Zn	ND	56.12	59.19	µg/L	105% 75-125	
B250480-MSD3	Matrix Spike Duplicate, (2503007-05)						
	Ag	ND	5.612	5.499	µg/L	98% 75-125	1% 20
	Al	106.2	5612	5338	µg/L	93% 75-125	0.5% 20
	As	10.23	56.12	65.17	µg/L	98% 75-125	0.8% 20
	Ba	26.51	56.12	83.69	µg/L	102% 75-125	0.7% 20
	Cd	ND	5.612	5.518	µg/L	98% 75-125	2% 20
	Co	0.664	56.12	55.34	µg/L	97% 75-125	0.8% 20
	Cr	ND	56.12	55.89	µg/L	100% 75-125	1% 20
	Cu	ND	56.12	56.79	µg/L	101% 75-125	0.7% 20
	Fe	21010	5612	26350	µg/L	95% 75-125	0.4% 20
	Mn	1885	56.12	1911	µg/L	NR 75-125	N/C 20
	Ni	ND	56.12	54.28	µg/L	97% 75-125	0.3% 20
	Pb	ND	5.612	5.511	µg/L	98% 75-125	3% 20
	Sb	0.078	5.612	5.569	µg/L	98% 75-125	1% 20
	Se	ND	56.12	53.82	µg/L	96% 75-125	1% 20
	V	6.666	56.12	61.25	µg/L	97% 75-125	1% 20
	Zn	ND	56.12	61.08	µg/L	109% 75-125	3% 20



Accuracy & Precision Summary

Batch: B250482
Lab Matrix: Water
Method: EPA 1631 E

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B250482-MS2	Matrix Spike (2503017-02) Hg	0.28	20.41	16.17	ng/L	78% 71-125	
B250482-MSD2	Matrix Spike Duplicate (2503017-02) Hg	0.28	20.41	15.23	ng/L	73% 71-125	6% 24



Accuracy & Precision Summary

Batch: B250486
 Lab Matrix: Water
 Method: EPA 1631 E

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B250486-MS1	Matrix Spike (2503007-03) Hg	0.87	20.41	19.84	ng/L	93% 71-125	
B250486-MSD1	Matrix Spike Duplicate (2503007-03) Hg	0.87	20.41	19.69	ng/L	92% 71-125	0.8% 24
B250486-MS2	Matrix Spike (2503007-15) Hg	1.35	21.05	21.02	ng/L	93% 71-125	
B250486-MSD2	Matrix Spike Duplicate (2503007-15) Hg	1.35	21.05	20.23	ng/L	90% 71-125	4% 24



Method Blanks & Reporting Limits

Batch: B250472
Matrix: Water
Method: SOP BAL-4300
Analyte: Cr(VI)

Sample	Result	Units
B250472-BLK1	0.00	µg/L
B250472-BLK2	0.001	µg/L
B250472-BLK3	0.00	µg/L
B250472-BLK4	0.002	µg/L

Average: 0.001
Limit: 0.010

MDL: 0.005
MRL: 0.010



Method Blanks & Reporting Limits

Batch: B250480
Matrix: Water
Method: EPA 1638 Mod
Analyte: Ag

Sample	Result	Units	
B250480-BLK1	-0.0006	µg/L	
B250480-BLK2	-0.002	µg/L	
B250480-BLK3	-0.002	µg/L	
B250480-BLK4	-0.0006	µg/L	
Average:	-0.001		MDL: 0.005
Limit:	0.015		MRL: 0.015

Analyte: Al

Sample	Result	Units	
B250480-BLK1	0.300	µg/L	
B250480-BLK2	-0.654	µg/L	
B250480-BLK3	0.436	µg/L	
B250480-BLK4	-0.123	µg/L	
Average:	-0.010		MDL: 1.20
Limit:	2.400		MRL: 2.40

Analyte: As

Sample	Result	Units	
B250480-BLK1	0.006	µg/L	
B250480-BLK2	0.011	µg/L	
B250480-BLK3	0.004	µg/L	
B250480-BLK4	0.004	µg/L	
Average:	0.006		MDL: 0.022
Limit:	0.072		MRL: 0.072



Method Blanks & Reporting Limits

Analyte: Ba

Sample	Result	Units	
B250480-BLK1	0.076	µg/L	
B250480-BLK2	0.051	µg/L	
B250480-BLK3	0.071	µg/L	
B250480-BLK4	0.033	µg/L	
Average:	0.058		MDL: 0.035
Limit:	0.070		MRL: 0.070

Analyte: Cd

Sample	Result	Units	
B250480-BLK1	0.0003	µg/L	
B250480-BLK2	-0.0006	µg/L	
B250480-BLK3	-0.0003	µg/L	
B250480-BLK4	-0.0006	µg/L	
Average:	0.000		MDL: 0.006
Limit:	0.018		MRL: 0.018

Analyte: Co

Sample	Result	Units	
B250480-BLK1	0.0006	µg/L	
B250480-BLK2	0.0003	µg/L	
B250480-BLK3	0.0001	µg/L	
B250480-BLK4	-0.0001	µg/L	
Average:	0.000		MDL: 0.013
Limit:	0.045		MRL: 0.045

Analyte: Cr

Sample	Result	Units	
B250480-BLK1	0.0006	µg/L	
B250480-BLK2	-0.001	µg/L	
B250480-BLK3	-0.004	µg/L	
B250480-BLK4	0.004	µg/L	
Average:	0.000		MDL: 0.170
Limit:	0.600		MRL: 0.600



Method Blanks & Reporting Limits

Analyte: Cu

Sample	Result	Units	
B250480-BLK1	0.007	µg/L	
B250480-BLK2	0.0005	µg/L	
B250480-BLK3	0.005	µg/L	
B250480-BLK4	0.039	µg/L	
Average:	0.013		MDL: 0.090
Limit:	0.180		MRL: 0.180

Analyte: Fe

Sample	Result	Units	
B250480-BLK1	0.265	µg/L	
B250480-BLK2	0.146	µg/L	
B250480-BLK3	0.175	µg/L	
B250480-BLK4	0.070	µg/L	
Average:	0.164		MDL: 1.80
Limit:	5.400		MRL: 5.40

Analyte: Mn

Sample	Result	Units	
B250480-BLK1	0.010	µg/L	
B250480-BLK2	0.006	µg/L	
B250480-BLK3	0.011	µg/L	
B250480-BLK4	0.008	µg/L	
Average:	0.009		MDL: 0.090
Limit:	0.180		MRL: 0.180

Analyte: Ni

Sample	Result	Units	
B250480-BLK1	0.005	µg/L	
B250480-BLK2	-0.0004	µg/L	
B250480-BLK3	0.007	µg/L	
B250480-BLK4	0.004	µg/L	
Average:	0.004		MDL: 0.120
Limit:	0.360		MRL: 0.360



Method Blanks & Reporting Limits

Analyte: Pb

Sample	Result	Units	
B250480-BLK1	0.004	µg/L	
B250480-BLK2	0.001	µg/L	
B250480-BLK3	0.002	µg/L	
B250480-BLK4	0.002	µg/L	
Average:	0.002		MDL: 0.009
Limit:	0.018		MRL: 0.018

Analyte: Sb

Sample	Result	Units	
B250480-BLK1	0.003	µg/L	
B250480-BLK2	0.001	µg/L	
B250480-BLK3	0.002	µg/L	
B250480-BLK4	0.0008	µg/L	
Average:	0.002		MDL: 0.005
Limit:	0.015		MRL: 0.015

Analyte: Se

Sample	Result	Units	
B250480-BLK1	-0.0007	µg/L	
B250480-BLK2	0.002	µg/L	
B250480-BLK3	-0.004	µg/L	
B250480-BLK4	-0.006	µg/L	
Average:	-0.002		MDL: 0.024
Limit:	0.050		MRL: 0.050

Analyte: V

Sample	Result	Units	
B250480-BLK1	-0.004	µg/L	
B250480-BLK2	-0.006	µg/L	
B250480-BLK3	-0.005	µg/L	
B250480-BLK4	-0.006	µg/L	
Average:	-0.005		MDL: 0.013
Limit:	0.045		MRL: 0.045



Method Blanks & Reporting Limits

Analyte: Zn

Sample	Result	Units	
B250480-BLK1	0.174	µg/L	
B250480-BLK2	0.094	µg/L	
B250480-BLK3	0.817	µg/L	
B250480-BLK4	0.130	µg/L	
Average:	0.304		MDL: 1.20
Limit:	2.400		MRL: 2.40



Method Blanks & Reporting Limits

Batch: B250482
Matrix: Water
Method: EPA 1631 E
Analyte: Hg

Sample	Result	Units			
B250482-BLK1	0.11	ng/L			
B250482-BLK2	0.17	ng/L			
B250482-BLK3	0.12	ng/L			
B250482-BLK4	0.12	ng/L			
Average: 0.13			Standard Deviation: 0.03	MDL: 0.13	
Limit: 0.50			Limit: 0.13	MRL: 0.40	



Method Blanks & Reporting Limits

Batch: B250486
Matrix: Water
Method: EPA 1631 E
Analyte: Hg

Sample	Result	Units			
B250486-BLK1	0.19	ng/L			
B250486-BLK2	0.19	ng/L			
B250486-BLK3	0.16	ng/L			
B250486-BLK4	0.14	ng/L			
Average:	0.17		Standard Deviation:	0.02	MDL: 0.13
Limit:	0.50		Limit:	0.13	MRL: 0.40

Project ID: CRC-SE2501
PM: Amy Goodall



BAL Report 2503007
Client PM: Rusty Jones
Client Project: MARALCO

Sample Containers

Lab ID: 2503007-01
Sample: MW4R

Report Matrix: Water
Sample Type: Sample

Collected: 02/24/2025
Received: 02/28/2025

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2434035	<2	Cooler - 2503007
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503007

Lab ID: 2503007-02
Sample: MW4R

Report Matrix: Water
Sample Type: Sample

Collected: 02/24/2025
Received: 02/28/2025

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2434035	<2	Cooler - 2503007
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503007

Lab ID: 2503007-03
Sample: MW6R

Report Matrix: Water
Sample Type: Sample

Collected: 02/24/2025
Received: 02/28/2025

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2434035	<2	Cooler - 2503007
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503007

Lab ID: 2503007-04
Sample: MW6R

Report Matrix: Water
Sample Type: Sample

Collected: 02/24/2025
Received: 02/28/2025

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2434035	<2	Cooler - 2503007
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503007



Sample Containers

Lab ID: 2503007-05		Report Matrix: Water				Collected: 02/24/2025	
Sample: MW10		Sample Type: Sample				Received: 02/28/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2434035	<2	Cooler - 2503007
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503007

Lab ID: 2503007-06		Report Matrix: Water				Collected: 02/24/2025	
Sample: MW10		Sample Type: Sample				Received: 02/28/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2434035	<2	Cooler - 2503007
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503007

Lab ID: 2503007-07		Report Matrix: Water				Collected: 02/25/2025	
Sample: MW1		Sample Type: Sample				Received: 02/28/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2434035	<2	Cooler - 2503007
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503007

Lab ID: 2503007-08		Report Matrix: Water				Collected: 02/25/2025	
Sample: MW1		Sample Type: Sample				Received: 02/28/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2434035	<2	Cooler - 2503007
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503007



Sample Containers

Lab ID: 2503007-09		Report Matrix: Water				Collected: 02/25/2025	
Sample: MW8R		Sample Type: Sample				Received: 02/28/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2434035	<2	Cooler - 2503007
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503007

Lab ID: 2503007-10		Report Matrix: Water				Collected: 02/25/2025	
Sample: MW8R		Sample Type: Sample				Received: 02/28/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2434035	<2	Cooler - 2503007
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503007

Lab ID: 2503007-11		Report Matrix: Water				Collected: 02/25/2025	
Sample: MW3R		Sample Type: Sample				Received: 02/28/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2434035	<2	Cooler - 2503007
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503007

Lab ID: 2503007-12		Report Matrix: Water				Collected: 02/25/2025	
Sample: MW3R		Sample Type: Sample				Received: 02/28/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2434035	<2	Cooler - 2503007
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503007



Sample Containers

Lab ID: 2503007-13		Report Matrix: Water				Collected: 02/26/2025	
Sample: DUP02-0225		Sample Type: Field Duplicate				Received: 02/28/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2434035	<2	Cooler - 2503007
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503007

Lab ID: 2503007-14		Report Matrix: Water				Collected: 02/26/2025	
Sample: DUP02-0225		Sample Type: Field Duplicate				Received: 02/28/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2434035	<2	Cooler - 2503007
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503007
C	Bottle HDPE ICP-W	125 mL	24-0111	1.25 mL NH4OH/ (NH4)2SO4 (PP)	2448021	9	Cooler - 2503007

Lab ID: 2503007-15		Report Matrix: Water				Collected: 02/26/2025	
Sample: MW9		Sample Type: Sample				Received: 02/28/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2434035	<2	Cooler - 2503007
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503007

Lab ID: 2503007-16		Report Matrix: Water				Collected: 02/26/2025	
Sample: MW9		Sample Type: Sample				Received: 02/28/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2434035	<2	Cooler - 2503007
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503007



Sample Containers

Lab ID: 2503007-17		Report Matrix: Water				Collected: 02/26/2025	
Sample: MW11		Sample Type: Sample				Received: 02/28/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2434035	<2	Cooler - 2503007
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503007

Lab ID: 2503007-18		Report Matrix: Water				Collected: 02/26/2025	
Sample: MW11		Sample Type: Sample				Received: 02/28/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2434035	<2	Cooler - 2503007
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503007

Lab ID: 2503007-19		Report Matrix: Water				Collected: 02/26/2025	
Sample: MW2		Sample Type: Sample				Received: 02/28/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2434035	<2	Cooler - 2503007
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503007

Lab ID: 2503007-20		Report Matrix: Water				Collected: 02/26/2025	
Sample: MW2		Sample Type: Sample				Received: 02/28/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2434035	<2	Cooler - 2503007
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503007



Sample Containers

Lab ID: 2503007-21		Report Matrix: Water				Collected: 02/26/2025	
Sample: MW5R2		Sample Type: Sample				Received: 02/28/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2434035	<2	Cooler - 2503007
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503007

Lab ID: 2503007-22		Report Matrix: Water				Collected: 02/26/2025	
Sample: MW5R2		Sample Type: Sample				Received: 02/28/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2434035	<2	Cooler - 2503007
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503007
C	Bottle HDPE ICP-W	125 mL	24-0111	1.25 mL NH4OH/ (NH4)2SO4 (PP)	2448021	9	Cooler - 2503007

Lab ID: 2503007-23		Report Matrix: Water				Collected: 02/28/2025	
Sample: MW7		Sample Type: Sample				Received: 02/28/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2434035	<2	Cooler - 2503007
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503007

Lab ID: 2503007-24		Report Matrix: Water				Collected: 02/28/2025	
Sample: MW7		Sample Type: Sample				Received: 02/28/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2434035	<2	Cooler - 2503007
B	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503007

Project ID: CRC-SE2501
PM: Amy Goodall



BAL Report 2503007
Client PM: Rusty Jones
Client Project: MARALCO

Shipping Containers

Cooler - 2503007

Received: February 28, 2025 10:26
Tracking No: N/A via Customer Drop-Off
Coolant Type: Ice
Temperature: 5.7 °C

Description: Cooler
Damaged in transit? No
Returned to client? No
Comments: R-IR-6

Custody seals present? No
Custody seals intact? No
COC present? Yes



Chain-of-Custody Form

Ship samples to:
 13751 Lake City Way NE, Suite 108
 Seattle, WA 98125

Received by: CRU For BAL use only Date: BAL Report 2503007 5
 Work Order ID: _____ Time: 12:54
 Project ID: _____

Client: CRETE Consulting PO Number: MARALCO Mailing Address: _____
 Contact: Rusty Jones Phone: 832.330.1359
 Client Project ID: MARALCO Email: _____ Email Receipt Confirmation? (Yes/No)
 Samples Collected By: Rusty Jones R. Jones BAL PM: Amy Goodall

Requested TAT (business days)	Collection		Client Sample Info				BAL Analyses Required						Comments		
	Date	Time	Matrix Type	Number of Containers	Field Filtered? (Yes/No)	Preservation Type HCl/HNO ₃ /Other	Total Hg, EPA 1631	Methyl Hg, EPA 1630	ICP-MS Metals (specify) ^{SEE LIST} TOTAL/DISS.	As Species (specify) In Org, III, V, MMA, DMA	Se Species (specify) Se(IV), Se(VI), SeCN, Unknown	Filtration		Other (specify) Pre-Filtered Hexavalent Chromium	Other (specify)
<input checked="" type="checkbox"/> 20 (standard) <input type="checkbox"/> 15* <input type="checkbox"/> 10* <input type="checkbox"/> 5* <input type="checkbox"/> Other _____ <small>*Surcharges may apply to expedited TATs</small>															
Sample ID															
1 MW4R	2.24.2025	1140	WATER	4	Y+N	NONE			X						T/D Metals *See project Metals List CRE-SE2501
2 MW6R		1250	↓	4	↓	↓			X						Specify Here 1265 µS/cm
3 MW10		1419	↓	4	↓	↓			X						2455 µS/cm
4 MW1	2.25.2025	1111	WATER	4	Y+N	NONE			X						749 µS/cm
5 MW8R		1312	↓	4	↓	↓			X						239.1 µS/cm
6 MW3R		1412	↓	4	↓	↓			X						1229 µS/cm
7 DUP02-0225	2/26/2025	10002	WATER	5	Y+N	Y, NONE			X				X		1830 µS/cm
8 MW9		1749	↓	4	↓	NONE			X						4428 µS/cm
9 MW11		1420	↓	4	↓	↓			X						321.1 µS/cm
10 MW2		1516	↓	4	↓	↓			X						192.1 µS/cm
Trip Blank															
Relinquished By: <u>R. Jones</u>	Date: <u>2/28/2025</u>	Time: <u>1254</u>	Relinquished By: _____			Date: _____	Time: _____								
Received By: _____	Date: _____	Time: _____	Total Number of Packages: _____												



Chain-of-Custody Form

Ship samples to:
 13751 Lake City Way NE, Suite 108
 Seattle, WA 98125

For BAL use only
 Received by: ERL Date: 2/28/2025 BAL Report 2503007
 Work Order ID: _____ Time: 12:54
 Project ID: _____

Client: CRETE Consulting PO Number: MARALCO Mailing Address: _____
 Contact: Rusty Jones Phone: 832.330.1359
 Client Project ID: MARALC Email: _____ Email Receipt Confirmation? (Yes/No)
 Samples Collected By: Rusty Jones R. Jones BAL PM: Amy Goodall

Requested TAT (business days)	Collection		Client Sample Info				BAL Analyses Required						Comments		
	Date	Time	Matrix Type	Number of Containers	Field Filtered? (Yes/No)	Preservation Type HCl/HNO ₃ /Other	Total Hg, EPA 1631	Methyl Hg, EPA 1630	ICP-MS Metals ^{SEE LIST} (specify) TOTAL/DSS	As Species (specify) In Org, III, V, MMA, DMA	Se Species (specify) Se(IV), Se(VI), SeCN, Unknown	Filtration		Other (specify) FILTERED <u>Hexavalent Chromium</u>	Other (specify)
<input checked="" type="checkbox"/> 20 (standard) <input type="checkbox"/> 15* <input type="checkbox"/> 10* <input type="checkbox"/> 5* <input type="checkbox"/> Other _____ <small>*Surcharges may apply to expedited TATs</small>															
Sample ID															
1	MW5R2	2/26/2025	1904	WATER	5	Y+N	Y, NONE			X			X		T/D Metals *See project metals list.* CRC-GEZS01 Specify Here 1442 μ S/cm 1816 μ S/cm
2	MW7	2/28/2025	1021	WATER	4	Y+N	NONE			X					
3															
4															
5															
6															
7															
8															
9															
10															
Trip Blank															
Relinquished By: <u>R. Jones</u>		Date: <u>2/28/2025</u>		Time: <u>1254</u>		Relinquished By: _____				Date: _____		Time: _____			
Received By: _____		Date: _____		Time: _____		Total Number of Packages: _____									



13751 Lake City Way NE, Ste 108, Seattle, WA 98125 • USA • T:206-632-6206 • info@brooksapplied.com

March 24, 2025

Crete Consulting
ATTN: Rusty Jones
108 S. Washington Street, Suite 300
Seattle, WA 98104
832-330-1359
rusty.jones@creteconsulting.com

RE: Project CRC-SE2501
Client Project: Maralco

Dear Rusty Jones,

On March 18, 2024, Brooks Applied Labs (BAL) received six (6) sets of aqueous samples. The samples were logged-in for the analyses of for total recoverable and dissolved silver (Ag), aluminum (Al), arsenic (As), barium (Ba), cadmium (Cd), cobalt (Co), chromium (Cr), copper (Cu), iron (Fe), manganese (Mn), nickel (Ni), lead (Pb), antimony (Sb), selenium (Se), vanadium (V), zinc (Zn), and mercury (Hg) according to the chain-of-custody form. All samples were received and stored according to BAL SOPs and EPA methodology.

All dissolved samples were 0.45µm filtered prior to receipt at BAL.

Total Recoverable and Dissolved Metals Quantitation by ICP-QQQ-MS

All aqueous samples were digested on a hotblock via modified EPA Method 1638 with nitric and hydrochloric acids. Trace metals were analyzed using inductively coupled plasma triple quadrupole mass spectrometry (ICP-QQQ-MS). The ICP-QQQ-MS uses advanced interference removal techniques to ensure accuracy of the sample results. For more information, please visit the *Interference Reduction Technology* section on our website, www.brooksapplied.com.

All samples were digested in batch B250591 and originally analyzed in sequence S250266. Due to a high CPS RPD, the Al results for sample 2503262-03 were not reported from the original analysis. This sample was reanalyzed in sequence S250272. The reported Al result for sample 2503262-03 is from the reanalysis.

The Fe results for samples 2503262-01, 2503262-02, 2503262-07, 2503262-08, and the batch QC associated with sample 2503262-02 were above the calibration curve and could not be reported. These samples were reanalyzed in sequence S250272 at a greater dilution. The reported Fe results for these samples were from this reanalysis.

The Mn results for samples 2503262-01 through 2503262-08, and the batch QC associated with sample 2503262-02 were above the calibration curve and could not be reported. These samples were reanalyzed in sequence S250272 at a greater dilution. The reported Mn results for these samples were from this reanalysis.

In instances where the native sample result and/or the associated duplicate (DUP) result were below the MDL the RPD was not calculated (N/C).

In instances where a matrix spike/matrix spike duplicate (MS/MSD) set was spiked at a level less than the native sample, the recoveries are not considered valid indicators of data quality. However, these results are reported as a demonstration of precision. When the spiking levels were $\leq 25\%$ of the native sample concentrations, the recoveries were not reported (NR). No sample results were qualified on the basis of the MS or MSD recoveries.

The matrix spike (MS) B250591-MS3 and matrix spike duplicate (MSD) B250591-MSD3 performed on sample 2503262-02 had recoveries for Cu, V, and Zn that were above the acceptance limit. In instances where a matrix spike/matrix spike duplicate (MS/MSD) set was spiked at a level less than the native sample, the recoveries are not considered valid indicators of data quality. However, these results are reported as a demonstration of precision.

The matrix spike duplicate (MSD) B250591-MSD3 performed on sample 2503262-02 had a recovery for Sb that was below the acceptance limit. The Sb result for sample 2503262-02 was qualified **N** for low bias.

The method blank (BLK) B250591-BLK4 had a Ba concentration that was above the acceptance limit. All samples except for sample 2503262-11 had Ba results that were greater than 10x the concentration of this BLK, and no further action was required. Sample 2503262-11 had a Ba result that was above the MRL, but less than 10x the concentration of this BLK. The Ba result for sample 2503262-11 was qualified **X** for potential high bias.

Total and Dissolved Mercury using MERX

Each aqueous fraction submitted for Hg analysis was prepared and analyzed in accordance with EPA Method 1631. Samples were oxidized with bromine monochloride (BrCl) and then analyzed with stannous chloride (SnCl₂) reduction, dual gold amalgamation, and cold vapor atomic fluorescence spectroscopy (CVAFS) detection using a Brooks Rand Instrument's MERX-T CVAFS Mercury Automated-Analyzer.

Sample results reported for mercury were method blank corrected, while all other results were not method blank corrected, as described in the calculations section of the relevant BAL SOP(s). All results were evaluated using reporting limits adjusted to account for sample aliquot size. Please refer to the *Sample Results* page for sample-specific MDLs, MRLs, and other details.

All data was reported without qualification and all associated quality control sample results met the acceptance criteria.

BAL verifies that the reported results of all analyses for which the laboratory is accredited meet the requirements of the accrediting body, unless otherwise noted in the report narrative. For more information regarding accreditations please see the *Report Information* and *Batch Summary* pages. This report must be used in its entirety for interpretation of results.

Please feel free to contact us if you have any questions regarding this report.

Sincerely,

A handwritten signature in black ink that reads "Amy Goodall". The signature is written in a cursive, flowing style.

Amy Goodall
Project Manager
Brooks Applied Labs
amy@brooksapplied.com



Report Information

General Disclaimers

Test results are based solely upon the sample submitted to Brooks Applied Labs in the condition it was received. This report shall not be reproduced or copied, except in full, without written approval of the laboratory. Brooks Applied Labs is not responsible for the consequences arising from the use of a partial report.

Laboratory Accreditation

BAL maintains accreditation with various state and national agencies for select test methods. For a current list of BAL accreditations, please visit our website at <http://www.brooksapplied.com/resources/certificates-permits/>. The reported analyte/matrix/method combination shall be considered outside BAL's scopes of accreditation unless otherwise identified as ISO, TNI, or ISO,TNI in the tables. It is the responsibility of the client to verify whether a specific accreditation is required for the intended data use.

ISO: ISO/IEC 17025:2017 accredited test method. Issued by ANSI National Accreditation Board (ANAB), #ADE-1447.02

TNI: NELAP accredited test method. Issued by the State of Florida Department of Health, #E87982.

ISO,TNI: Test method is accredited under both the ISO/IEC 17025:2017 and NELAP accreditations referenced above.

Field Quality Control Samples

Please be notified that certain EPA methods require the collection of field quality control samples of an appropriate type and frequency; failure to do so is considered a deviation from some methods and for compliance purposes should only be done with the approval of regulatory authorities. Please see the specific EPA methods for details regarding required field quality control samples.

Common Abbreviations

AR	as received	MS	matrix spike
BAL	Brooks Applied Labs	MSD	matrix spike duplicate
BLK	method blank	ND	non-detect
BS	blank spike	NR	non-reportable
CAL	calibration standard	N/C	not calculated
CCB	continuing calibration blank	PS	post preparation spike
CCV	continuing calibration verification	REC	percent recovery
COC	chain of custody record	RPD	relative percent difference
D	dissolved fraction	SCV	secondary calibration verification
DUP	duplicate	SOP	standard operating procedure
IBL	instrument blank	SRM	reference material
ICV	initial calibration verification	T	total fraction
MDL	method detection limit	TR	total recoverable fraction
MRL	method reporting limit		

Definition of Data Qualifiers

E	An estimated value due to the presence of interferences. A full explanation is presented in the narrative.
H	Holding time and/or preservation requirements not met. Please see narrative for explanation.
J	Detected by the instrument, the result is > the MDL but ≤ the MRL. Result is reported and considered an estimate.
J-1	Estimated value. A full explanation is presented in the narrative.
M	Duplicate precision (RPD) was not within acceptance criteria. Please see narrative for explanation.
N	Spike recovery was not within acceptance criteria. Please see narrative for explanation.
R	Rejected, unusable value. A full explanation is presented in the narrative.
U	Result is ≤ the MDL or client requested reporting limit (CRRL). Result reported as the MDL or CRRL.
X	Result is not BLK-corrected and is within 10x the absolute value of the highest detectable BLK in the batch. Result is estimated.
Z	Holding time and/or preservation requirements not established for this method; however, BAL recommendations for holding time were not followed. Please see narrative for explanation.



Sample Information

Sample	Lab ID	Report Matrix	Type	Sampled	Received
DUP02-031725	2503262-01	water	Sample	03/17/2025	03/18/2025
DUP02-031725	2503262-02	water	Sample	03/17/2025	03/18/2025
DPT-25	2503262-03	water	Sample	03/17/2025	03/18/2025
DPT-25	2503262-04	water	Sample	03/17/2025	03/18/2025
DPT-26	2503262-05	water	Sample	03/17/2025	03/18/2025
DPT-26	2503262-06	water	Sample	03/17/2025	03/18/2025
DPT-27	2503262-07	water	Sample	03/17/2025	03/18/2025
DPT-27	2503262-08	water	Sample	03/17/2025	03/18/2025
SW-South	2503262-09	water	Sample	03/17/2025	03/18/2025
SW-South	2503262-10	water	Sample	03/17/2025	03/18/2025
SW-EAST	2503262-11	water	Sample	03/17/2025	03/18/2025
SW-EAST	2503262-12	water	Sample	03/17/2025	03/18/2025



Batch Summary

Analyte	Lab Matrix	Method	Accred.	Prepared	Analyzed	Batch	Sequence
Ag	Water	EPA 1638 Mod	ISO,TNI	03/20/25	03/20/25	B250591	S250266
Al	Water	EPA 1638 Mod	ISO,TNI	03/20/25	03/20/25	B250591	S250266
Al	Water	EPA 1638 Mod	ISO,TNI	03/20/25	03/21/25	B250591	S250272
As	Water	EPA 1638 Mod	ISO,TNI	03/20/25	03/20/25	B250591	S250266
Ba	Water	EPA 1638 Mod	ISO,TNI	03/20/25	03/20/25	B250591	S250266
Cd	Water	EPA 1638 Mod	ISO,TNI	03/20/25	03/20/25	B250591	S250266
Co	Water	EPA 1638 Mod	ISO,TNI	03/20/25	03/20/25	B250591	S250266
Cr	Water	EPA 1638 Mod	ISO,TNI	03/20/25	03/20/25	B250591	S250266
Cu	Water	EPA 1638 Mod	ISO,TNI	03/20/25	03/20/25	B250591	S250266
Fe	Water	EPA 1638 Mod	ISO,TNI	03/20/25	03/20/25	B250591	S250266
Fe	Water	EPA 1638 Mod	ISO,TNI	03/20/25	03/21/25	B250591	S250272
Hg	Water	EPA 1631 E	ISO,TNI	03/19/25	03/20/25	B250592	S250268
Mn	Water	EPA 1638 Mod	ISO,TNI	03/20/25	03/21/25	B250591	S250266
Mn	Water	EPA 1638 Mod	ISO,TNI	03/20/25	03/21/25	B250591	S250272
Ni	Water	EPA 1638 Mod	ISO,TNI	03/20/25	03/20/25	B250591	S250266
Pb	Water	EPA 1638 Mod	ISO,TNI	03/20/25	03/20/25	B250591	S250266
Sb	Water	EPA 1638 Mod	ISO,TNI	03/20/25	03/20/25	B250591	S250266
Se	Water	EPA 1638 Mod	ISO,TNI	03/20/25	03/20/25	B250591	S250266
V	Water	EPA 1638 Mod	ISO,TNI	03/20/25	03/20/25	B250591	S250266
Zn	Water	EPA 1638 Mod	ISO,TNI	03/20/25	03/20/25	B250591	S250266



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
DUP02-031725										
2503262-01	Ag	water	D	≤ 0.051	U	0.051	0.152	µg/L	B250591	S250266
2503262-01	Al	water	D	43.8		12.1	24.2	µg/L	B250591	S250266
2503262-01	As	water	D	35.7		0.222	0.727	µg/L	B250591	S250266
2503262-01	Ba	water	D	73.3		0.354	0.707	µg/L	B250591	S250266
2503262-01	Cd	water	D	≤ 0.061	U	0.061	0.182	µg/L	B250591	S250266
2503262-01	Co	water	D	11.5		0.131	0.455	µg/L	B250591	S250266
2503262-01	Cr	water	D	3.67	J	1.72	6.06	µg/L	B250591	S250266
2503262-01	Cu	water	D	≤ 0.909	U	0.909	1.82	µg/L	B250591	S250266
2503262-01	Fe	water	D	136000		182	545	µg/L	B250591	S250272
2503262-01	Hg	water	D	≤ 0.14	U	0.14	0.42	ng/L	B250592	S250268
2503262-01	Mn	water	D	5600		9.09	18.2	µg/L	B250591	S250272
2503262-01	Ni	water	D	5.26		1.21	3.64	µg/L	B250591	S250266
2503262-01	Pb	water	D	≤ 0.091	U	0.091	0.182	µg/L	B250591	S250266
2503262-01	Sb	water	D	0.160		0.051	0.152	µg/L	B250591	S250266
2503262-01	Se	water	D	0.451	J	0.242	0.505	µg/L	B250591	S250266
2503262-01	V	water	D	13.4		0.131	0.455	µg/L	B250591	S250266
2503262-01	Zn	water	D	≤ 12.1	U	12.1	24.2	µg/L	B250591	S250266
DUP02-031725										
2503262-02	Ag	water	TR	0.280		0.051	0.152	µg/L	B250591	S250266
2503262-02	Al	water	TR	44700		12.1	24.2	µg/L	B250591	S250266
2503262-02	As	water	TR	60.8		0.222	0.727	µg/L	B250591	S250266
2503262-02	Ba	water	TR	319		0.354	0.707	µg/L	B250591	S250266
2503262-02	Cd	water	TR	0.585		0.061	0.182	µg/L	B250591	S250266
2503262-02	Co	water	TR	34.1		0.131	0.455	µg/L	B250591	S250266
2503262-02	Cr	water	TR	65.2		1.72	6.06	µg/L	B250591	S250266
2503262-02	Cu	water	TR	121		0.909	1.82	µg/L	B250591	S250266
2503262-02	Fe	water	TR	166000		182	545	µg/L	B250591	S250272
2503262-02	Hg	water	TR	112		0.14	0.42	ng/L	B250592	S250268
2503262-02	Mn	water	TR	5940		9.09	18.2	µg/L	B250591	S250272
2503262-02	Ni	water	TR	51.7		1.21	3.64	µg/L	B250591	S250266
2503262-02	Pb	water	TR	31.3		0.091	0.182	µg/L	B250591	S250266
2503262-02	Sb	water	TR	0.517	N	0.051	0.152	µg/L	B250591	S250266
2503262-02	Se	water	TR	0.922		0.242	0.505	µg/L	B250591	S250266
2503262-02	V	water	TR	163		0.131	0.455	µg/L	B250591	S250266
2503262-02	Zn	water	TR	124		12.1	24.2	µg/L	B250591	S250266



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
DPT-25										
2503262-03	Ag	water	D	≤ 0.051	U	0.051	0.152	µg/L	B250591	S250266
2503262-03	Al	water	D	15.3	J	12.1	24.2	µg/L	B250591	S250272
2503262-03	As	water	D	10.5		0.222	0.727	µg/L	B250591	S250266
2503262-03	Ba	water	D	41.5		0.354	0.707	µg/L	B250591	S250266
2503262-03	Cd	water	D	≤ 0.061	U	0.061	0.182	µg/L	B250591	S250266
2503262-03	Co	water	D	2.56		0.131	0.455	µg/L	B250591	S250266
2503262-03	Cr	water	D	4.38	J	1.72	6.06	µg/L	B250591	S250266
2503262-03	Cu	water	D	≤ 0.909	U	0.909	1.82	µg/L	B250591	S250266
2503262-03	Fe	water	D	81100		18.2	54.5	µg/L	B250591	S250266
2503262-03	Hg	water	D	≤ 0.14	U	0.14	0.42	ng/L	B250592	S250268
2503262-03	Mn	water	D	2020		0.909	1.82	µg/L	B250591	S250272
2503262-03	Ni	water	D	2.26	J	1.21	3.64	µg/L	B250591	S250266
2503262-03	Pb	water	D	≤ 0.091	U	0.091	0.182	µg/L	B250591	S250266
2503262-03	Sb	water	D	0.172		0.051	0.152	µg/L	B250591	S250266
2503262-03	Se	water	D	0.701		0.242	0.505	µg/L	B250591	S250266
2503262-03	V	water	D	14.7		0.131	0.455	µg/L	B250591	S250266
2503262-03	Zn	water	D	≤ 12.1	U	12.1	24.2	µg/L	B250591	S250266
DPT-25										
2503262-04	Ag	water	TR	0.074	J	0.051	0.152	µg/L	B250591	S250266
2503262-04	Al	water	TR	20600		12.1	24.2	µg/L	B250591	S250266
2503262-04	As	water	TR	17.8		0.222	0.727	µg/L	B250591	S250266
2503262-04	Ba	water	TR	150		0.354	0.707	µg/L	B250591	S250266
2503262-04	Cd	water	TR	0.123	J	0.061	0.182	µg/L	B250591	S250266
2503262-04	Co	water	TR	12.5		0.131	0.455	µg/L	B250591	S250266
2503262-04	Cr	water	TR	24.3		1.72	6.06	µg/L	B250591	S250266
2503262-04	Cu	water	TR	44.3		0.909	1.82	µg/L	B250591	S250266
2503262-04	Fe	water	TR	106000		18.2	54.5	µg/L	B250591	S250266
2503262-04	Hg	water	TR	64.3		0.14	0.42	ng/L	B250592	S250268
2503262-04	Mn	water	TR	2660		9.09	18.2	µg/L	B250591	S250272
2503262-04	Ni	water	TR	20.5		1.21	3.64	µg/L	B250591	S250266
2503262-04	Pb	water	TR	6.00		0.091	0.182	µg/L	B250591	S250266
2503262-04	Sb	water	TR	0.269		0.051	0.152	µg/L	B250591	S250266
2503262-04	Se	water	TR	1.19		0.242	0.505	µg/L	B250591	S250266
2503262-04	V	water	TR	62.5		0.131	0.455	µg/L	B250591	S250266
2503262-04	Zn	water	TR	47.9		12.1	24.2	µg/L	B250591	S250266



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
DPT-26										
2503262-05	Ag	water	D	≤ 0.051	U	0.051	0.152	µg/L	B250591	S250266
2503262-05	Al	water	D	55.8		12.1	24.2	µg/L	B250591	S250266
2503262-05	As	water	D	24.4		0.222	0.727	µg/L	B250591	S250266
2503262-05	Ba	water	D	79.0		0.354	0.707	µg/L	B250591	S250266
2503262-05	Cd	water	D	≤ 0.061	U	0.061	0.182	µg/L	B250591	S250266
2503262-05	Co	water	D	6.90		0.131	0.455	µg/L	B250591	S250266
2503262-05	Cr	water	D	3.63	J	1.72	6.06	µg/L	B250591	S250266
2503262-05	Cu	water	D	1.10	J	0.909	1.82	µg/L	B250591	S250266
2503262-05	Fe	water	D	95700		18.2	54.5	µg/L	B250591	S250266
2503262-05	Hg	water	D	≤ 0.14	U	0.14	0.42	ng/L	B250592	S250268
2503262-05	Mn	water	D	6030		9.09	18.2	µg/L	B250591	S250272
2503262-05	Ni	water	D	7.46		1.21	3.64	µg/L	B250591	S250266
2503262-05	Pb	water	D	≤ 0.091	U	0.091	0.182	µg/L	B250591	S250266
2503262-05	Sb	water	D	0.431		0.051	0.152	µg/L	B250591	S250266
2503262-05	Se	water	D	0.566		0.242	0.505	µg/L	B250591	S250266
2503262-05	V	water	D	13.1		0.131	0.455	µg/L	B250591	S250266
2503262-05	Zn	water	D	≤ 12.1	U	12.1	24.2	µg/L	B250591	S250266
DPT-26										
2503262-06	Ag	water	TR	≤ 0.051	U	0.051	0.152	µg/L	B250591	S250266
2503262-06	Al	water	TR	5890		12.1	24.2	µg/L	B250591	S250266
2503262-06	As	water	TR	29.9		0.222	0.727	µg/L	B250591	S250266
2503262-06	Ba	water	TR	114		0.354	0.707	µg/L	B250591	S250266
2503262-06	Cd	water	TR	0.092	J	0.061	0.182	µg/L	B250591	S250266
2503262-06	Co	water	TR	10.1		0.131	0.455	µg/L	B250591	S250266
2503262-06	Cr	water	TR	9.74		1.72	6.06	µg/L	B250591	S250266
2503262-06	Cu	water	TR	17.5		0.909	1.82	µg/L	B250591	S250266
2503262-06	Fe	water	TR	109000		18.2	54.5	µg/L	B250591	S250266
2503262-06	Hg	water	TR	24.2		0.14	0.42	ng/L	B250592	S250268
2503262-06	Mn	water	TR	6110		9.09	18.2	µg/L	B250591	S250272
2503262-06	Ni	water	TR	13.3		1.21	3.64	µg/L	B250591	S250266
2503262-06	Pb	water	TR	4.23		0.091	0.182	µg/L	B250591	S250266
2503262-06	Sb	water	TR	0.540		0.051	0.152	µg/L	B250591	S250266
2503262-06	Se	water	TR	0.678		0.242	0.505	µg/L	B250591	S250266
2503262-06	V	water	TR	28.2		0.131	0.455	µg/L	B250591	S250266
2503262-06	Zn	water	TR	19.2	J	12.1	24.2	µg/L	B250591	S250266



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
DPT-27										
2503262-07	Ag	water	D	≤ 0.051	U	0.051	0.152	µg/L	B250591	S250266
2503262-07	Al	water	D	48.9		12.1	24.2	µg/L	B250591	S250266
2503262-07	As	water	D	36.3		0.222	0.727	µg/L	B250591	S250266
2503262-07	Ba	water	D	77.7		0.354	0.707	µg/L	B250591	S250266
2503262-07	Cd	water	D	≤ 0.061	U	0.061	0.182	µg/L	B250591	S250266
2503262-07	Co	water	D	11.2		0.131	0.455	µg/L	B250591	S250266
2503262-07	Cr	water	D	4.06	J	1.72	6.06	µg/L	B250591	S250266
2503262-07	Cu	water	D	≤ 0.909	U	0.909	1.82	µg/L	B250591	S250266
2503262-07	Fe	water	D	134000		182	545	µg/L	B250591	S250272
2503262-07	Hg	water	D	≤ 0.14	U	0.14	0.42	ng/L	B250592	S250268
2503262-07	Mn	water	D	5600		9.09	18.2	µg/L	B250591	S250272
2503262-07	Ni	water	D	5.49		1.21	3.64	µg/L	B250591	S250266
2503262-07	Pb	water	D	≤ 0.091	U	0.091	0.182	µg/L	B250591	S250266
2503262-07	Sb	water	D	0.197		0.051	0.152	µg/L	B250591	S250266
2503262-07	Se	water	D	0.355	J	0.242	0.505	µg/L	B250591	S250266
2503262-07	V	water	D	13.3		0.131	0.455	µg/L	B250591	S250266
2503262-07	Zn	water	D	≤ 12.1	U	12.1	24.2	µg/L	B250591	S250266
DPT-27										
2503262-08	Ag	water	TR	0.255		0.051	0.152	µg/L	B250591	S250266
2503262-08	Al	water	TR	44100		12.1	24.2	µg/L	B250591	S250266
2503262-08	As	water	TR	56.5		0.222	0.727	µg/L	B250591	S250266
2503262-08	Ba	water	TR	336		0.354	0.707	µg/L	B250591	S250266
2503262-08	Cd	water	TR	0.582		0.061	0.182	µg/L	B250591	S250266
2503262-08	Co	water	TR	32.8		0.131	0.455	µg/L	B250591	S250266
2503262-08	Cr	water	TR	61.8		1.72	6.06	µg/L	B250591	S250266
2503262-08	Cu	water	TR	122		0.909	1.82	µg/L	B250591	S250266
2503262-08	Fe	water	TR	173000		182	545	µg/L	B250591	S250272
2503262-08	Hg	water	TR	113		0.14	0.42	ng/L	B250592	S250268
2503262-08	Mn	water	TR	6180		9.09	18.2	µg/L	B250591	S250272
2503262-08	Ni	water	TR	47.4		1.21	3.64	µg/L	B250591	S250266
2503262-08	Pb	water	TR	31.7		0.091	0.182	µg/L	B250591	S250266
2503262-08	Sb	water	TR	0.551		0.051	0.152	µg/L	B250591	S250266
2503262-08	Se	water	TR	0.894		0.242	0.505	µg/L	B250591	S250266
2503262-08	V	water	TR	166		0.131	0.455	µg/L	B250591	S250266
2503262-08	Zn	water	TR	126		12.1	24.2	µg/L	B250591	S250266



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
SW-South										
2503262-09	Ag	water	D	≤ 0.051	U	0.051	0.152	µg/L	B250591	S250266
2503262-09	Al	water	D	372		12.1	24.2	µg/L	B250591	S250266
2503262-09	As	water	D	2.58		0.222	0.727	µg/L	B250591	S250266
2503262-09	Ba	water	D	21.7		0.354	0.707	µg/L	B250591	S250266
2503262-09	Cd	water	D	≤ 0.061	U	0.061	0.182	µg/L	B250591	S250266
2503262-09	Co	water	D	1.79		0.131	0.455	µg/L	B250591	S250266
2503262-09	Cr	water	D	2.20	J	1.72	6.06	µg/L	B250591	S250266
2503262-09	Cu	water	D	27.0		0.909	1.82	µg/L	B250591	S250266
2503262-09	Fe	water	D	933		18.2	54.5	µg/L	B250591	S250266
2503262-09	Hg	water	D	20.7		0.14	0.42	ng/L	B250592	S250268
2503262-09	Mn	water	D	200		0.909	1.82	µg/L	B250591	S250266
2503262-09	Ni	water	D	5.57		1.21	3.64	µg/L	B250591	S250266
2503262-09	Pb	water	D	0.488		0.091	0.182	µg/L	B250591	S250266
2503262-09	Sb	water	D	1.12		0.051	0.152	µg/L	B250591	S250266
2503262-09	Se	water	D	0.454	J	0.242	0.505	µg/L	B250591	S250266
2503262-09	V	water	D	6.16		0.131	0.455	µg/L	B250591	S250266
2503262-09	Zn	water	D	22.7	J	12.1	24.2	µg/L	B250591	S250266
SW-South										
2503262-10	Ag	water	TR	0.087	J	0.051	0.152	µg/L	B250591	S250266
2503262-10	Al	water	TR	1720		12.1	24.2	µg/L	B250591	S250266
2503262-10	As	water	TR	4.46		0.222	0.727	µg/L	B250591	S250266
2503262-10	Ba	water	TR	33.0		0.354	0.707	µg/L	B250591	S250266
2503262-10	Cd	water	TR	0.129	J	0.061	0.182	µg/L	B250591	S250266
2503262-10	Co	water	TR	2.60		0.131	0.455	µg/L	B250591	S250266
2503262-10	Cr	water	TR	4.73	J	1.72	6.06	µg/L	B250591	S250266
2503262-10	Cu	water	TR	44.9		0.909	1.82	µg/L	B250591	S250266
2503262-10	Fe	water	TR	3730		18.2	54.5	µg/L	B250591	S250266
2503262-10	Hg	water	TR	58.2		0.14	0.42	ng/L	B250592	S250268
2503262-10	Mn	water	TR	242		0.909	1.82	µg/L	B250591	S250266
2503262-10	Ni	water	TR	7.38		1.21	3.64	µg/L	B250591	S250266
2503262-10	Pb	water	TR	2.33		0.091	0.182	µg/L	B250591	S250266
2503262-10	Sb	water	TR	1.27		0.051	0.152	µg/L	B250591	S250266
2503262-10	Se	water	TR	0.537		0.242	0.505	µg/L	B250591	S250266
2503262-10	V	water	TR	16.7		0.131	0.455	µg/L	B250591	S250266
2503262-10	Zn	water	TR	36.5		12.1	24.2	µg/L	B250591	S250266



Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
SW-EAST										
2503262-11	Ag	water	D	≤ 0.051	U	0.051	0.152	µg/L	B250591	S250266
2503262-11	Al	water	D	97.5		12.1	24.2	µg/L	B250591	S250266
2503262-11	As	water	D	0.453	J	0.222	0.727	µg/L	B250591	S250266
2503262-11	Ba	water	D	10.3	X	0.354	0.707	µg/L	B250591	S250266
2503262-11	Cd	water	D	0.143	J	0.061	0.182	µg/L	B250591	S250266
2503262-11	Co	water	D	0.292	J	0.131	0.455	µg/L	B250591	S250266
2503262-11	Cr	water	D	≤ 1.72	U	1.72	6.06	µg/L	B250591	S250266
2503262-11	Cu	water	D	4.62		0.909	1.82	µg/L	B250591	S250266
2503262-11	Fe	water	D	86.0		18.2	54.5	µg/L	B250591	S250266
2503262-11	Hg	water	D	4.55		0.13	0.41	ng/L	B250592	S250268
2503262-11	Mn	water	D	18.2		0.909	1.82	µg/L	B250591	S250266
2503262-11	Ni	water	D	≤ 1.21	U	1.21	3.64	µg/L	B250591	S250266
2503262-11	Pb	water	D	0.251		0.091	0.182	µg/L	B250591	S250266
2503262-11	Sb	water	D	1.36		0.051	0.152	µg/L	B250591	S250266
2503262-11	Se	water	D	≤ 0.242	U	0.242	0.505	µg/L	B250591	S250266
2503262-11	V	water	D	0.828		0.131	0.455	µg/L	B250591	S250266
2503262-11	Zn	water	D	55.8		12.1	24.2	µg/L	B250591	S250266
SW-EAST										
2503262-12	Ag	water	TR	≤ 0.051	U	0.051	0.152	µg/L	B250591	S250266
2503262-12	Al	water	TR	368		12.1	24.2	µg/L	B250591	S250266
2503262-12	As	water	TR	0.541	J	0.222	0.727	µg/L	B250591	S250266
2503262-12	Ba	water	TR	13.6		0.354	0.707	µg/L	B250591	S250266
2503262-12	Cd	water	TR	0.202		0.061	0.182	µg/L	B250591	S250266
2503262-12	Co	water	TR	0.265	J	0.131	0.455	µg/L	B250591	S250266
2503262-12	Cr	water	TR	≤ 1.72	U	1.72	6.06	µg/L	B250591	S250266
2503262-12	Cu	water	TR	7.32		0.909	1.82	µg/L	B250591	S250266
2503262-12	Fe	water	TR	370		18.2	54.5	µg/L	B250591	S250266
2503262-12	Hg	water	TR	5.72		0.13	0.41	ng/L	B250592	S250268
2503262-12	Mn	water	TR	25.3		0.909	1.82	µg/L	B250591	S250266
2503262-12	Ni	water	TR	≤ 1.21	U	1.21	3.64	µg/L	B250591	S250266
2503262-12	Pb	water	TR	0.812		0.091	0.182	µg/L	B250591	S250266
2503262-12	Sb	water	TR	1.60		0.051	0.152	µg/L	B250591	S250266
2503262-12	Se	water	TR	≤ 0.242	U	0.242	0.505	µg/L	B250591	S250266
2503262-12	V	water	TR	1.59		0.131	0.455	µg/L	B250591	S250266
2503262-12	Zn	water	TR	68.5		12.1	24.2	µg/L	B250591	S250266



Accuracy & Precision Summary

Batch: B250591
 Lab Matrix: Water
 Method: EPA 1638 Mod

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B250591-BS1	Blank Spike, (2512022)						
		Ag		5.556	6.153	µg/L	111% 75-125
		Al		5556	5665	µg/L	102% 75-125
		As		55.56	61.66	µg/L	111% 75-125
		Ba		55.56	62.63	µg/L	113% 75-125
		Cd		5.556	6.180	µg/L	111% 75-125
		Co		55.56	60.30	µg/L	109% 75-125
		Cr		55.56	59.39	µg/L	107% 75-125
		Cu		55.56	59.81	µg/L	108% 75-125
		Fe		5556	6153	µg/L	111% 75-125
		Mn		55.56	61.42	µg/L	111% 75-125
		Ni		55.56	58.77	µg/L	106% 75-125
		Pb		5.556	6.171	µg/L	111% 75-125
		Sb		5.556	6.279	µg/L	113% 75-125
		Se		55.56	59.43	µg/L	107% 75-125
		V		55.56	56.39	µg/L	101% 75-125
		Zn		55.56	59.83	µg/L	108% 75-125
B250591-BS2	Blank Spike, (2512022)						
		Ag		5.556	6.242	µg/L	112% 75-125
		Al		5556	5812	µg/L	105% 75-125
		As		55.56	62.69	µg/L	113% 75-125
		Ba		55.56	63.86	µg/L	115% 75-125
		Cd		5.556	6.114	µg/L	110% 75-125
		Co		55.56	62.38	µg/L	112% 75-125
		Cr		55.56	61.16	µg/L	110% 75-125
		Cu		55.56	60.83	µg/L	109% 75-125
		Fe		5556	6337	µg/L	114% 75-125
		Mn		55.56	62.84	µg/L	113% 75-125
		Ni		55.56	60.86	µg/L	110% 75-125
		Pb		5.556	6.129	µg/L	110% 75-125
		Sb		5.556	6.272	µg/L	113% 75-125
		Se		55.56	60.81	µg/L	109% 75-125
		V		55.56	57.13	µg/L	103% 75-125
		Zn		55.56	60.96	µg/L	110% 75-125



Accuracy & Precision Summary

Batch: B250591
 Lab Matrix: Water
 Method: EPA 1638 Mod

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B250591-BS3	Blank Spike, (2512022)						
	Ag		5.556	6.127	µg/L	110% 75-125	
	Al		5556	5625	µg/L	101% 75-125	
	As		55.56	60.85	µg/L	110% 75-125	
	Ba		55.56	62.61	µg/L	113% 75-125	
	Cd		5.556	6.074	µg/L	109% 75-125	
	Co		55.56	60.99	µg/L	110% 75-125	
	Cr		55.56	59.13	µg/L	106% 75-125	
	Cu		55.56	59.89	µg/L	108% 75-125	
	Fe		5556	6169	µg/L	111% 75-125	
	Mn		55.56	61.17	µg/L	110% 75-125	
	Ni		55.56	59.54	µg/L	107% 75-125	
	Pb		5.556	6.040	µg/L	109% 75-125	
	Sb		5.556	6.111	µg/L	110% 75-125	
	Se		55.56	60.23	µg/L	108% 75-125	
	V		55.56	56.70	µg/L	102% 75-125	
	Zn		55.56	59.73	µg/L	108% 75-125	
B250591-SRM1	Reference Material (2440037, NIST 1643f)						
	Ba		518.2	552.0	µg/L	107% 75-125	
	Sb		55.45	57.71	µg/L	104% 75-125	
B250591-SRM2	Reference Material (2440037, NIST 1643f)						
	Ba		518.2	550.5	µg/L	106% 75-125	
	Sb		55.45	57.22	µg/L	103% 75-125	
B250591-SRM3	Reference Material (2440037, NIST 1643f)						
	Ba		518.2	586.7	µg/L	113% 75-125	
	Sb		55.45	61.61	µg/L	111% 75-125	



Accuracy & Precision Summary

Batch: B250591
 Lab Matrix: Water
 Method: EPA 1638 Mod

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B250591-SRM4	Reference Material (2440037, NIST 1643f)						
	Ag		0.9703	1.120	µg/L	115% 75-125	
	Al		133.8	146.3	µg/L	109% 75-125	
	As		57.42	62.63	µg/L	109% 75-125	
	Cd		5.890	6.247	µg/L	106% 75-125	
	Co		25.30	26.81	µg/L	106% 75-125	
	Cr		18.50	19.65	µg/L	106% 75-125	
	Cu		21.66	24.65	µg/L	114% 75-125	
	Fe		93.44	95.92	µg/L	103% 75-125	
	Mn		37.14	42.21	µg/L	114% 75-125	
	Ni		59.80	61.05	µg/L	102% 75-125	
	Pb		18.49	19.77	µg/L	107% 75-125	
	Se		11.70	12.39	µg/L	106% 75-125	
	V		36.07	40.02	µg/L	111% 75-125	
	Zn		74.40	87.61	µg/L	118% 75-125	
B250591-SRM5	Reference Material (2440037, NIST 1643f)						
	Ag		0.9703	1.078	µg/L	111% 75-125	
	Al		133.8	145.0	µg/L	108% 75-125	
	As		57.42	62.09	µg/L	108% 75-125	
	Cd		5.890	6.303	µg/L	107% 75-125	
	Co		25.30	26.70	µg/L	106% 75-125	
	Cr		18.50	19.52	µg/L	106% 75-125	
	Cu		21.66	23.97	µg/L	111% 75-125	
	Fe		93.44	93.79	µg/L	100% 75-125	
	Mn		37.14	41.36	µg/L	111% 75-125	
	Ni		59.80	60.95	µg/L	102% 75-125	
	Pb		18.49	19.78	µg/L	107% 75-125	
	Se		11.70	12.39	µg/L	106% 75-125	
	V		36.07	38.53	µg/L	107% 75-125	
	Zn		74.40	85.05	µg/L	114% 75-125	



Accuracy & Precision Summary

Batch: B250591
 Lab Matrix: Water
 Method: EPA 1638 Mod

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B250591-SRM6	Reference Material (2440037, NIST 1643f)						
	Ag		0.9703	1.141	µg/L	118% 75-125	
	Al		133.8	148.3	µg/L	111% 75-125	
	As		57.42	65.00	µg/L	113% 75-125	
	Cd		5.890	6.460	µg/L	110% 75-125	
	Co		25.30	28.57	µg/L	113% 75-125	
	Cr		18.50	20.88	µg/L	113% 75-125	
	Cu		21.66	24.86	µg/L	115% 75-125	
	Fe		93.44	99.06	µg/L	106% 75-125	
	Mn		37.14	42.93	µg/L	116% 75-125	
	Ni		59.80	64.85	µg/L	108% 75-125	
	Pb		18.49	20.32	µg/L	110% 75-125	
	Se		11.70	12.73	µg/L	109% 75-125	
	V		36.07	40.00	µg/L	111% 75-125	
	Zn		74.40	88.23	µg/L	119% 75-125	
B250591-DUP6	Duplicate, (2503251-05)						
	Ag	ND		ND	µg/L		N/C 20
	Al	5.942		6.125	µg/L		3% 20
	As	0.406		0.446	µg/L		9% 20
	Ba	12.48		12.91	µg/L		3% 20
	Cd	0.013		0.011	µg/L		13% 20
	Co	0.383		0.398	µg/L		4% 20
	Cr	ND		0.173	µg/L		N/C 20
	Cu	3.201		3.395	µg/L		6% 20
	Fe	49.58		51.48	µg/L		4% 20
	Mn	48.66		51.50	µg/L		6% 20
	Ni	2.462		2.536	µg/L		3% 20
	Pb	0.085		0.087	µg/L		3% 20
	Sb	2.185		2.331	µg/L		6% 20
	Se	0.101		0.111	µg/L		9% 20
	V	0.046		0.046	µg/L		0.9% 20
	Zn	22.30		23.49	µg/L		5% 20



Accuracy & Precision Summary

Batch: B250591
 Lab Matrix: Water
 Method: EPA 1638 Mod

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B250591-MS6	Matrix Spike, (2503251-05)						
	Ag	ND	5.612	6.203	µg/L	111% 75-125	
	Al	5.942	5612	6084	µg/L	108% 75-125	
	As	0.406	56.12	61.77	µg/L	109% 75-125	
	Ba	12.48	56.12	77.32	µg/L	116% 75-125	
	Cd	0.013	5.612	6.143	µg/L	109% 75-125	
	Co	0.383	56.12	58.97	µg/L	104% 75-125	
	Cr	ND	56.12	58.80	µg/L	105% 75-125	
	Cu	3.201	56.12	64.94	µg/L	110% 75-125	
	Fe	49.58	5612	6281	µg/L	111% 75-125	
	Mn	48.66	56.12	113.8	µg/L	116% 75-125	
	Ni	2.462	56.12	59.37	µg/L	101% 75-125	
	Pb	0.085	5.612	6.144	µg/L	108% 75-125	
	Sb	2.185	5.612	8.722	µg/L	116% 75-125	
	Se	0.101	56.12	61.39	µg/L	109% 75-125	
	V	0.046	56.12	61.57	µg/L	110% 75-125	
	Zn	22.30	56.12	84.16	µg/L	110% 75-125	
B250591-MSD6	Matrix Spike Duplicate, (2503251-05)						
	Ag	ND	5.612	6.169	µg/L	110% 75-125	0.6% 20
	Al	5.942	5612	6002	µg/L	107% 75-125	1% 20
	As	0.406	56.12	66.27	µg/L	117% 75-125	7% 20
	Ba	12.48	56.12	75.64	µg/L	113% 75-125	2% 20
	Cd	0.013	5.612	6.363	µg/L	113% 75-125	4% 20
	Co	0.383	56.12	62.29	µg/L	110% 75-125	5% 20
	Cr	ND	56.12	63.85	µg/L	114% 75-125	8% 20
	Cu	3.201	56.12	64.23	µg/L	109% 75-125	1% 20
	Fe	49.58	5612	6593	µg/L	117% 75-125	5% 20
	Mn	48.66	56.12	111.5	µg/L	112% 75-125	2% 20
	Ni	2.462	56.12	61.87	µg/L	106% 75-125	4% 20
	Pb	0.085	5.612	6.322	µg/L	111% 75-125	3% 20
	Sb	2.185	5.612	8.872	µg/L	119% 75-125	2% 20
	Se	0.101	56.12	62.25	µg/L	111% 75-125	1% 20
	V	0.046	56.12	60.97	µg/L	109% 75-125	1% 20
	Zn	22.30	56.12	82.63	µg/L	108% 75-125	2% 20



Accuracy & Precision Summary

Batch: B250591
 Lab Matrix: Water
 Method: EPA 1638 Mod

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B250591-DUP3	Duplicate, (2503262-02)						
	Ag	0.280		0.265	µg/L		6% 20
	Al	44670		45660	µg/L		2% 20
	As	60.78		57.27	µg/L		6% 20
	Ba	319.3		329.3	µg/L		3% 20
	Cd	0.585		0.519	µg/L		12% 20
	Co	34.10		32.79	µg/L		4% 20
	Cr	65.24		63.04	µg/L		3% 20
	Cu	120.8		123.5	µg/L		2% 20
	Ni	51.68		48.32	µg/L		7% 20
	Pb	31.34		30.57	µg/L		2% 20
	Sb	0.517		0.511	µg/L		1% 20
	Se	0.922		0.938	µg/L		2% 20
	V	163.0		168.6	µg/L		3% 20
Zn	123.5		127.6	µg/L		3% 20	
B250591-DUP7	Duplicate, (2503262-02)						
	Fe	166200		183000	µg/L		10% 20
	Mn	5941		6560	µg/L		10% 20
B250591-MS3	Matrix Spike, (2503262-02)						
	Ag	0.280	5.612	6.796	µg/L	116% 75-125	
	Al	44670	5612	59550	µg/L	NR 75-125	
	As	60.78	56.12	117.7	µg/L	101% 75-125	
	Ba	319.3	56.12	416.6	µg/L	NR 75-125	
	Cd	0.585	5.612	6.720	µg/L	109% 75-125	
	Co	34.10	56.12	97.41	µg/L	113% 75-125	
	Cr	65.24	56.12	129.1	µg/L	114% 75-125	
	Cu	120.8	56.12	190.2	µg/L	124% 75-125	
	Ni	51.68	56.12	115.5	µg/L	114% 75-125	
	Pb	31.34	5.612	37.50	µg/L	NR 75-125	
	Sb	0.517	5.612	4.806	µg/L	76% 75-125	
	Se	0.922	56.12	60.59	µg/L	106% 75-125	
	V	163.0	56.12	238.9	µg/L	135% 75-125	
Zn	123.5	56.12	198.0	µg/L	133% 75-125		



Accuracy & Precision Summary

Batch: B250591
Lab Matrix: Water
Method: EPA 1638 Mod

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B250591-MS7	Matrix Spike, (2503262-02)						
	Fe	166200	5612	190200	µg/L	NR 75-125	
	Mn	5941	56.12	6626	µg/L	NR 75-125	
B250591-MSD3	Matrix Spike Duplicate, (2503262-02)						
	Ag	0.280	5.612	7.082	µg/L	121% 75-125	4% 20
	Al	44670	5612	62410	µg/L	NR 75-125	N/C 20
	As	60.78	56.12	122.2	µg/L	109% 75-125	4% 20
	Ba	319.3	56.12	433.3	µg/L	NR 75-125	N/C 20
	Cd	0.585	5.612	7.003	µg/L	114% 75-125	4% 20
	Co	34.10	56.12	98.99	µg/L	116% 75-125	2% 20
	Cr	65.24	56.12	134.2	µg/L	123% 75-125	4% 20
	Cu	120.8	56.12	197.2	µg/L	136% 75-125	4% 20
	Ni	51.68	56.12	117.7	µg/L	118% 75-125	2% 20
	Pb	31.34	5.612	39.13	µg/L	NR 75-125	N/C 20
	Sb	0.517	5.612	4.455	µg/L	70% 75-125	8% 20
	Se	0.922	56.12	61.87	µg/L	109% 75-125	2% 20
	V	163.0	56.12	251.5	µg/L	158% 75-125	5% 20
Zn	123.5	56.12	213.2	µg/L	160% 75-125	7% 20	
B250591-MSD7	Matrix Spike Duplicate, (2503262-02)						
	Fe	166200	5612	190100	µg/L	NR 75-125	N/C 20
	Mn	5941	56.12	6786	µg/L	NR 75-125	N/C 20



Accuracy & Precision Summary

Batch: B250592
 Lab Matrix: Water
 Method: EPA 1631 E

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B250592-MS1	Matrix Spike (2503244-01) Hg	0.39	20.41	20.32	ng/L	98% 71-125	
B250592-MSD1	Matrix Spike Duplicate (2503244-01) Hg	0.39	20.41	20.25	ng/L	97% 71-125	0.4% 24
B250592-MS2	Matrix Spike (2503262-11) Hg	4.55	20.41	23.51	ng/L	93% 71-125	
B250592-MSD2	Matrix Spike Duplicate (2503262-11) Hg	4.55	20.41	23.45	ng/L	93% 71-125	0.3% 24



Method Blanks & Reporting Limits

Batch: B250591
Matrix: Water
Method: EPA 1638 Mod
Analyte: Ag

Sample	Result	Units	
B250591-BLK1	0.0007	µg/L	
B250591-BLK2	-0.0002	µg/L	
B250591-BLK3	0.0005	µg/L	
B250591-BLK4	0.001	µg/L	
Average:	0.001		MDL: 0.005
Limit:	0.015		MRL: 0.015

Analyte: Al

Sample	Result	Units	
B250591-BLK1	0.249	µg/L	
B250591-BLK2	0.429	µg/L	
B250591-BLK3	0.202	µg/L	
B250591-BLK4	0.530	µg/L	
Average:	0.353		MDL: 1.20
Limit:	2.400		MRL: 2.40

Analyte: As

Sample	Result	Units	
B250591-BLK1	0.006	µg/L	
B250591-BLK2	0.009	µg/L	
B250591-BLK3	0.007	µg/L	
B250591-BLK4	0.010	µg/L	
Average:	0.008		MDL: 0.022
Limit:	0.072		MRL: 0.072



Method Blanks & Reporting Limits

Analyte: Ba

Sample	Result	Units	
B250591-BLK1	0.051	µg/L	
B250591-BLK2	0.049	µg/L	
B250591-BLK3	0.036	µg/L	
B250591-BLK4	1.05	µg/L	
Average:	0.298		MDL: 0.035
Limit:	0.070		MRL: 0.070

Analyte: Cd

Sample	Result	Units	
B250591-BLK1	-0.0001	µg/L	
B250591-BLK2	-0.0001	µg/L	
B250591-BLK3	-0.0003	µg/L	
B250591-BLK4	0.0004	µg/L	
Average:	0.000		MDL: 0.006
Limit:	0.018		MRL: 0.018

Analyte: Co

Sample	Result	Units	
B250591-BLK1	0.0007	µg/L	
B250591-BLK2	0.0008	µg/L	
B250591-BLK3	0.00009	µg/L	
B250591-BLK4	0.001	µg/L	
Average:	0.001		MDL: 0.013
Limit:	0.045		MRL: 0.045

Analyte: Cr

Sample	Result	Units	
B250591-BLK1	0.004	µg/L	
B250591-BLK2	0.010	µg/L	
B250591-BLK3	0.006	µg/L	
B250591-BLK4	0.015	µg/L	
Average:	0.009		MDL: 0.170
Limit:	0.600		MRL: 0.600



Method Blanks & Reporting Limits

Analyte: Cu

Sample	Result	Units	
B250591-BLK1	0.004	µg/L	
B250591-BLK2	-0.0007	µg/L	
B250591-BLK3	-0.0003	µg/L	
B250591-BLK4	0.009	µg/L	
Average:	0.003		MDL: 0.090
Limit:	0.180		MRL: 0.180

Analyte: Fe

Sample	Result	Units	
B250591-BLK1	0.275	µg/L	
B250591-BLK2	0.295	µg/L	
B250591-BLK3	0.245	µg/L	
B250591-BLK4	0.392	µg/L	
Average:	0.302		MDL: 1.80
Limit:	5.400		MRL: 5.40

Analyte: Mn

Sample	Result	Units	
B250591-BLK1	0.022	µg/L	
B250591-BLK2	0.009	µg/L	
B250591-BLK3	0.007	µg/L	
B250591-BLK4	0.011	µg/L	
Average:	0.012		MDL: 0.090
Limit:	0.180		MRL: 0.180

Analyte: Ni

Sample	Result	Units	
B250591-BLK1	0.004	µg/L	
B250591-BLK2	0.015	µg/L	
B250591-BLK3	0.008	µg/L	
B250591-BLK4	0.060	µg/L	
Average:	0.022		MDL: 0.120
Limit:	0.360		MRL: 0.360



Method Blanks & Reporting Limits

Analyte: Pb

Sample	Result	Units	
B250591-BLK1	0.0004	µg/L	
B250591-BLK2	0.0008	µg/L	
B250591-BLK3	0.00001	µg/L	
B250591-BLK4	0.001	µg/L	
Average:	0.001		MDL: 0.009
Limit:	0.018		MRL: 0.018

Analyte: Sb

Sample	Result	Units	
B250591-BLK1	0.001	µg/L	
B250591-BLK2	0.001	µg/L	
B250591-BLK3	0.001	µg/L	
B250591-BLK4	0.005	µg/L	
Average:	0.002		MDL: 0.005
Limit:	0.015		MRL: 0.015

Analyte: Se

Sample	Result	Units	
B250591-BLK1	0.005	µg/L	
B250591-BLK2	0.003	µg/L	
B250591-BLK3	0.005	µg/L	
B250591-BLK4	0.003	µg/L	
Average:	0.004		MDL: 0.024
Limit:	0.050		MRL: 0.050

Analyte: V

Sample	Result	Units	
B250591-BLK1	0.0007	µg/L	
B250591-BLK2	0.0006	µg/L	
B250591-BLK3	0.0003	µg/L	
B250591-BLK4	0.001	µg/L	
Average:	0.001		MDL: 0.013
Limit:	0.045		MRL: 0.045



Method Blanks & Reporting Limits

Analyte: Zn

Sample	Result	Units	
B250591-BLK1	0.054	µg/L	
B250591-BLK2	0.077	µg/L	
B250591-BLK3	0.023	µg/L	
B250591-BLK4	0.129	µg/L	
Average:	0.071		MDL: 1.20
Limit:	2.400		MRL: 2.40



Method Blanks & Reporting Limits

Batch: B250592

Matrix: Water

Method: EPA 1631 E

Analyte: Hg

Sample	Result	Units			
B250592-BLK1	0.49	ng/L			
B250592-BLK2	0.49	ng/L			
B250592-BLK3	0.37	ng/L			
B250592-BLK4	0.43	ng/L			
Average: 0.45			Standard Deviation: 0.06	MDL: 0.13	
Limit: 0.50			Limit: 0.13	MRL: 0.40	



Sample Containers

Lab ID: 2503262-01		Report Matrix: water				Collected: 03/17/2025	
Sample: DUP02-031725		Sample Type: Sample				Received: 03/18/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503262
B	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2444015	<2	Cooler - 2503262

Lab ID: 2503262-02		Report Matrix: water				Collected: 03/17/2025	
Sample: DUP02-031725		Sample Type: Sample				Received: 03/18/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle FLPE Hg	125 mL	23-0112	none	n/a	n/a	Cooler - 2503262
B	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2444015	<2	Cooler - 2503262

Lab ID: 2503262-03		Report Matrix: water				Collected: 03/17/2025	
Sample: DPT-25		Sample Type: Sample				Received: 03/18/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503262
B	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2444015	<2	Cooler - 2503262

Lab ID: 2503262-04		Report Matrix: water				Collected: 03/17/2025	
Sample: DPT-25		Sample Type: Sample				Received: 03/18/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503262
B	Bottle HDPE ICP-W	125 mL	22T-0033	1% HNO3 (BAL)	2444015	<2	Cooler - 2503262



Sample Containers

Lab ID: 2503262-05		Report Matrix: water				Collected: 03/17/2025	
Sample: DPT-26		Sample Type: Sample				Received: 03/18/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503262
B	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2444015	<2	Cooler - 2503262
Lab ID: 2503262-06		Report Matrix: water				Collected: 03/17/2025	
Sample: DPT-26		Sample Type: Sample				Received: 03/18/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle FLPE Hg	125 mL	23-0039	none	n/a	n/a	Cooler - 2503262
B	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2444015	<2	Cooler - 2503262
Lab ID: 2503262-07		Report Matrix: water				Collected: 03/17/2025	
Sample: DPT-27		Sample Type: Sample				Received: 03/18/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503262
B	Bottle HDPE ICP-W	125 mL	24-0049	1% HNO3 (BAL)	2444015	<2	Cooler - 2503262
Lab ID: 2503262-08		Report Matrix: water				Collected: 03/17/2025	
Sample: DPT-27		Sample Type: Sample				Received: 03/18/2025	
Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle FLPE Hg	125 mL	22-0026	none	n/a	n/a	Cooler - 2503262
B	Bottle HDPE ICP-W	125 mL	22T-0033	1% HNO3 (BAL)	2444015	<2	Cooler - 2503262



Sample Containers

Lab ID: 2503262-09
 Sample: SW-South

Report Matrix: water
 Sample Type: Sample

Collected: 03/17/2025
 Received: 03/18/2025

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle FLPE Hg	125 mL	23-0112	none	n/a	n/a	Cooler - 2503262
B	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2444015	<2	Cooler - 2503262

Lab ID: 2503262-10
 Sample: SW-South

Report Matrix: water
 Sample Type: Sample

Collected: 03/17/2025
 Received: 03/18/2025

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle FLPE Hg	125 mL	23-0039	none	n/a	n/a	Cooler - 2503262
B	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2444015	<2	Cooler - 2503262

Lab ID: 2503262-11
 Sample: SW-EAST

Report Matrix: water
 Sample Type: Sample

Collected: 03/17/2025
 Received: 03/18/2025

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle FLPE Hg	125 mL	23-0112	none	n/a	n/a	Cooler - 2503262
B	Bottle HDPE ICP-W	125 mL	24-0111	1% HNO3 (BAL)	2444015	<2	Cooler - 2503262

Lab ID: 2503262-12
 Sample: SW-EAST

Report Matrix: water
 Sample Type: Sample

Collected: 03/17/2025
 Received: 03/18/2025

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle FLPE Hg	125 mL	23-0120	none	n/a	n/a	Cooler - 2503262
B	Bottle HDPE ICP-W	125 mL	24-0049	1% HNO3 (BAL)	2444015	<2	Cooler - 2503262

Project ID: CRC-SE2501
PM: Amy Goodall



BAL Report 2503262
Client PM: Rusty Jones
Client Project: CRC-SE2501

Shipping Containers

Cooler - 2503262

Received: March 18, 2025 12:55
Tracking No: N/A via Customer Drop-Off
Coolant Type: None
Temperature: 1.9 °C

Description: Cooler
Damaged in transit? No
Returned to client? No
Comments: R-IR-6

Custody seals present? No
Custody seals intact? No
COC present? Yes



Chain-of-Custody Form

Ship samples to:
 13751 Lake City Way NE, Suite 108
 Seattle, WA 98125

Received by: PO For BAL use only BAL Report # 2503262
 Date: 3/17/25
 Work Order ID: _____ Time: 1255
 Project ID: _____

Client: CRETE CONSULTING PO Number: MARALCO Mailing Address: _____
 Contact: Rusty Jones Phone: 832.330.1359
 Client Project ID: Maralco SRT Email: rusty.jones@creteconsulting.com Email Receipt Confirmation? (Yes/No)
 Samples Collected By: Rusty Jones R. Jones BAL PM: Amy Goodall

Requested TAT (business days)	Collection		Client Sample Info					BAL Analyses Required						Comments	
	Date	Time	Matrix Type	Number of Containers	Field Filtered? (Yes/No)	Preservation Type HCl/HNO ₃ /Other	Total Hg, EPA 1631 <i>Total and Dissolved</i>	Methyl Hg, EPA 1630	ICP-MS Metals (specify) <i>Total & Dissolved</i>	As Species (specify) InOrg, III, V, MMA, DMA	Se Species (specify) Se(IV), Se(VI), SeCN, Unknown	Filtration	Other (specify)		Other (specify)
<input type="checkbox"/> 20 (standard) <input type="checkbox"/> 15* <input type="checkbox"/> 10* <input type="checkbox"/> 5* <input checked="" type="checkbox"/> Other <u>Results by 3/24</u> <small>*Surcharges may apply to expedited TATs</small>	Sample ID														
	1	DUP02-031725	3/17/2025	0002	WATER	4	Y+N	NONE	X		X				See project metals list (Methods 1631 and 1631)
	2	DPT-25		0920		4			X		X				Conductivities Specify Here
	3	DPT-26		1043		4			X		X				878 uS/cm
	4	DPT-27		1208		4			X		X				914
	5	SW-SOUTH		1350		4			X		X				888
	6	SW-EAST	✓	1430		4			X		X				500 uS/cm
	7														65.9 uS/cm
	8														
	9														
	10														
	Trip Blank														

Relinquished By: R. Jones Date: 3/18/25 Time: 1255 Relinquished By: _____ Date: _____ Time: _____
 Received By: _____ Date: _____ Time: _____ Total Number of Packages: _____