

**DOCKETED**

<b>Docket Number:</b>	21-AFC-02
<b>Project Title:</b>	Willow Rock Energy Storage Center
<b>TN #:</b>	262295
<b>Document Title:</b>	Willow Rock NOI Application Rev
<b>Description:</b>	N/A
<b>Filer:</b>	Kathryn Stevens
<b>Organization:</b>	WSP USA Inc.
<b>Submitter Role:</b>	Applicant Consultant
<b>Submission Date:</b>	3/21/2025 4:07:09 PM
<b>Docketed Date:</b>	3/21/2025

**ATTACHMENT 3  
TO WQ ORDER  
NO. 2003-0003-DWQ**

**State of California  
State Water Resources Control Board**

**NOTICE OF INTENT  
TO COMPLY WITH THE TERMS OF WATER QUALITY ORDER NO. 2003-0003-DWQ  
STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS (WDRs)  
FOR DISCHARGES TO LAND WITH A LOW THREAT TO WATER QUALITY**

Mark Only One Item	1. <input checked="" type="checkbox"/> New Discharge
	2. <input type="checkbox"/> Change of Information-WDID # _____

I. Property Owner

Name <b>GEM A-CAES LLC</b>				
Mailing Address <b>1125 17th Street #700</b>				
City <b>Denver</b>	County <b>Denver</b>	State <b>CO</b>	Zip <b>80202</b>	Phone <b>(719) 650-7280</b>
Contact Person <b>Cody Niehus</b>				

II. Facility Owner

Name <b>GEM A-CAES LLC</b>				
Mailing Address <b>1125 17th Street #700</b>				
City <b>Denver</b>	County <b>Denver</b>	State <b>CO</b>	Zip <b>80202</b>	Phone <b>(719) 650-7280</b>
Contact Person <b>Cody Niehus</b>				

III. Billing Address

Name <b>GEM A-CAES LLC</b>				
Mailing Address <b>1125 17th Street #700</b>				
City <b>Denver</b>	County <b>Denver</b>	State <b>CO</b>	Zip <b>80202</b>	Phone <b>(719) 650-7280</b>
Contact Person <b>Cody Niehus</b>				

STATE USE ONLY

WDID: □□□□□□□□□□	Regional Board Office: □□	Date NOI Received: _____	
			Check #: _____

## IV. Site Operator

Name <b>GEM A-CAES LLC</b>				
Mailing Address <b>1125 17th Street #700</b>				
City <b>Denver</b>	County <b>Denver</b>	State <b>CO</b>	Zip <b>80202</b>	Phone <b>(719) 650-7280</b>
Contact Person <b>Cody Niehus</b>				

## V. Site Location

Street (including address, if any)	
Nearest Cross Street(s) <b>Sierra Hwy and Dawn Rd</b>	
County: <b>Kern</b>	Total Size of Site (acres): <b>87 acres</b>
Township/Range/Section B&M T <u>10 North</u> , R <u>12 West</u> , Section <u>33</u>	
Latitude/Longitude (From Center): <u>118</u> Deg. <u>09</u> Min. <u>25.437</u> Sec. W <u>34</u> Deg. <u>54</u> Min. <u>49.906</u> Sec N.	
Attach a map of at least 1:24000 (1" = 2000") showing the proposed application site (e.g., USGS 7.5" topographic map).	

## VI. Discharge Information

Subject	Notes
Low Threat Discharge Category:	See Table 1 of General Order 2003-0003-DWQ
Description of Operations: This is a temporary discharge to on-site lined ponds of drill cuttings and water expected to last approximately 25 months. Installing up to four vertical shafts to 2,100 feet bgs using a combination of conventional shaft sinking, raise boring, or blind boring methodologies. Blind boring methodology would involve using municipal water and cuttings as the drill mud. Conventional shaft sinking and raise boring methodology does not involve the use of makeup water or generate cuttings at the surface. Groundwater may be encountered in either technique between 0 and 60 feet bgs but the borings will be cased to exclude groundwater. Drilling water will be evaporated or reused, and inert solid waste will be disposed of off-site or on-site after drying.	
Approximate Volume of Discharge (for liquid discharges), or Flowrate: <input checked="" type="checkbox"/> Intermittent Discharge <input type="checkbox"/> Continuous Discharge	Gal/day, gal
Pollutants/Constituents Present in the Discharge and their Approximate Concentration*: Drilling mud if used will consist of municipal water and cuttings. See Attachment A, Summary of Constituent Concentrations in Groundwater	Mg/L
Land Use Zone: <b>Resource management</b>	
Adjacent Land Use Zones: <b>State or Federal land</b>	

Attach additional pages to characterize the discharge if necessary.

- VII. Does the proposed discharge have the potential to adversely impact a scenic vista, substantially damage scenic resources within a state scenic highway, or substantially degrade the existing visual character/quality of the discharge site/surroundings?  
☐ YES ☒ NO
- VIII. Would the proposed discharge conflict with existing zoning for agricultural use or a Williamson Act contract?  
☐ YES ☒ NO
- IX. Does the proposed discharge have the potential to significantly impact an applicable air quality plan, significantly violate any air quality standard or contribute to an existing violation, result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard, or significantly expose sensitive receptors to substantial pollutant concentrations?  
☐ YES ☒ NO
- X. Do any locations within the proposed discharge site contain biologically unique or sensitive natural communities?  
☐ YES ☒ NO
- XI. Does the discharge have the potential to cause a substantial adverse change in the significance of a historical or archeological resource (CCR Section 15064.5), directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, or disturb any human remains?  
☐ YES ☒ NO
- XII. Is the proposed discharge site located on unstable geologic units/soils or expansive soils?  
☐ YES ☒ NO
- XIII. Is the proposed discharge site located on a hazardous materials site, as defined by Government Code Section 65962.5?  
☐ YES ☒ NO
- XIV. Does the proposed discharge have the potential to substantially alter the existing drainage pattern of the discharge site?  
☐ YES ☒ NO
- XV. Does the proposed discharge have the potential to significantly physically divide an established community, significantly conflict with any applicable land use plan/policy/regulation of an agency with jurisdiction over the project, or conflict with any applicable habitat/community conservation plan?  
☐ YES ☒ NO
- XVI. California Environmental Quality Act (CEQA) (If any other public agency has required the project to comply with CEQA, dischargers must submit evidence of CEQA compliance to be eligible for coverage under these General WDRs).
- a. Name of Lead Agency: California Energy Commission
- b. Has a public agency determined that the proposed project is exempt from CEQA?  
☐ YES ☒ NO
- Basis for Exemption/Agency: \_\_\_\_\_
- c. Has a "Notice of Determination" been filed under CEQA?  
☐ YES ☒ NO



If yes, enclose a copy of the CEQA document, Environmental Impact Report (EIR), or Negative Declaration. If no, identify the expected type of CEQA document and expected date of completion.

d. EIR Negative Declaration expected CEQA completion date: \_\_\_\_\_

e. Expected CEQA documents: Prepared by CEC

Please submit the following with the Notice of Intent to the appropriate Regional Water Quality Control Board:

- a. Project map
- b. Evidence of compliance with the CEQA, if any other public agency has required the project to comply with CEQA
- c. First annual fee as described in Finding No. 6
- d. A DMP, as described in Provision C.6

#### XVII. CERTIFICATION

<p>"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the provisions of the General WDRs, including the criteria for eligibility, will be complied with."</p>	
Signature of Owner/Operator	Title
Printed or Typed Name	Date
Signature of Property Owner	Title
Printed or Typed Name	Date
Signature of Site Operator/Manager	Title
Printed or Typed Name	Date

**State Water Resources Control Board**

**NOTICE OF TERMINATION  
TO COMPLY WITH THE TERMS OF WATER QUALITY ORDER NO. 2003-0003-DWQ  
STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS  
FOR DISCHARGES TO LAND WITH A LOW THREAT TO WATER QUALITY  
365**

WDID # _____
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**I. Property Owner**

Name				
Mailing Address				
City	County	State	Zip	Phone
Contact Person				

**II. Facility Owner**

Name				
Mailing Address				
City	County	State	Zip	Phone
Contact Person				

**III. Site Location**

Street (including address, if any)
Nearest Cross Street(s)
County:

**IV. CERTIFICATION**

"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."	
Signature of Facility Owner	Title
Printed or Typed Name	Date
Signature of Property Owner	Title
Printed or Typed Name	Date

**STATE USE ONLY**

WDID: □□□□□□□□□□	Regional Board Office: □ □	Date NOT Received: _____	Date NOT Processed: _____
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**STATE WATER RESOURCES CONTROL BOARD**  
**MONITORING AND REPORTING PROGRAM FOR**  
**WATER QUALITY ORDER NO. 2003-0003-DWQ**  
**STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR**  
**DISCHARGES TO LAND WITH A LOW THREAT TO WATER QUALITY**

**A. MONITORING PROVISIONS:**

1. Unless otherwise approved by the appropriate Regional Water Quality Control Board (Regional Board) Executive Officer, all analyses shall be conducted at a laboratory certified for such analyses by the California Department of Health Services. All analyses shall be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants," promulgated by the U.S. Environmental Protection Agency (USEPA).
2. If the Discharger monitors any constituent more frequently than required by the General WDRs, the monitoring results shall be submitted.
3. The Discharger shall retain records of all monitoring information including all calibration and maintenance records, copies of all reports required by these General WDRs, and records of all data used to complete the application for these General WDRs. Records shall be maintained for a minimum of three years from the date of the sample, measurement, or report. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the appropriate Regional Board Executive Officer.
4. Records of monitoring information shall include the following:
  - a. The date, exact place, and time of sampling or measurements,
  - b. The individual(s) who performed the sampling or measurements,
  - c. The date(s) analyses were performed,
  - d. The individual(s) who performed the analyses,
  - e. The analytical techniques or method used, and
  - f. The results of such analyses.
5. All monitoring instruments and devices that are used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.

**B. DISCHARGE MONITORING:**

1. Wells/boring waste and clear water dischargers shall submit the following information before initiation of discharge at a new site: (a) discharge site address and (b) discharge site latitude and longitude (if known).
2. Monitoring requirements for each discharge category are listed in Table 2. This monitoring program may be modified by the Regional Board Executive Officer.

**Table 2. Monitoring Requirements Specific for each Discharge Category**

CATEGORY	CONSTITUENTS	FREQUENCY
<b>Wells/Boring Waste</b>		
Water Well Development Discharge		
Monitoring Well Purge Water Discharge	Constituents that the monitoring well is used to monitor	Consistent with the frequency of groundwater monitoring
Boring Waste Discharge		
<b>Clear Water Discharges</b>		
Water Main/Water Storage Tank/Water Hydrant Flushing	Approximate volume (gal) at each discharge location and date of each discharge	Semiannually
Pipelines/Tank Hydrostatic Testing Discharge	Approximate volume (gal) at each discharge location and date of each discharge	Semiannually
Commercial and Public Swimming Pools		
<b>Small Dewatering Projects</b>		
Small /Temporary Dewatering Projects (such as excavations during construction)		
<b>Miscellaneous</b>		
Small Inert Solid Waste Disposal Operations	Approximate yd. <sup>3</sup> /day accepted by the site	Semiannually
Evaporative Cooling Water		

**C. REPORT SCHEDULE:**

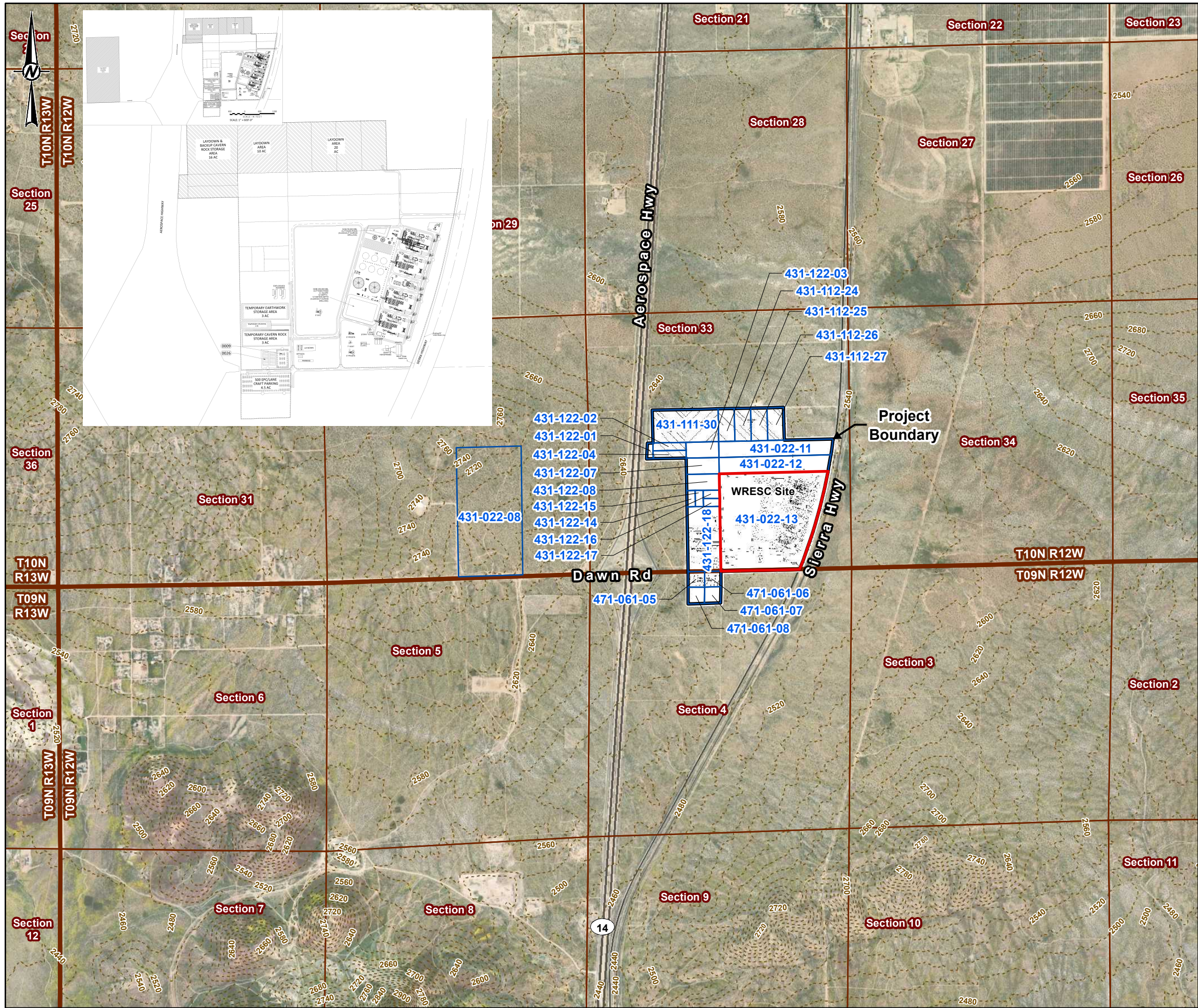
Monitoring reports shall be submitted to the Regional Board Executive Officer in accordance with the following schedule:

<u>Reporting Frequency</u>	<u>Report Period</u>	<u>Report Due</u>
Quarterly	January-March April-June July-September October-December	May 15 August 15 November 15 February 15
Semiannually	January-June July-December	August 15 February 15

## FIGURES



PATH: G:\Hydro\Arct\099\_PROJ\ECT\301406639.003\_01\_0102\_F21\_Bowl\_WRESC\_W\_Berm.mxd PRINTED ON: 2024-05-17 AT: 4:46:56 PM



**LEGEND**

- WRESC Site
- Other Project Parcel
- Project Boundary
- PLSS Township and Range
- PLSS Section

**KEY MAP**

**REFERENCE(S)**

- WRESC SITE RENDERING - KIEWIT 2024
- PLSS - CALIFORNIA STATE GEOPORTAL PLSS DB, 2023
- PARCEL BOUNDARIES - KERN COUNTY, 2023
- COORDINATE SYSTEM: NAD 1983 STATE PLANE CALIFORNIA V FIPS 0405 FEET
- MAP SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEBCO, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

**CLIENT**

GEM A-CAES LLC

**PROJECT**

WILLOW ROCK ENERGY STORAGE CENTER  
SUPPLEMENTAL AFC

**TITLE**

WRESC SITE AND CONSTRUCTION LAYDOWN/PARKING – WITH  
ARCHITECTURAL BERM OPTION

CONSULTANT	YYYY-MM-DD	2024-05-17
DESIGNED	MK	
PREPARED	MK	
REVIEWED	SCH	
APPROVED	VG/LL	

**PROJECT NO.** 31406639.003 **CONTROL** 01 **REV.** 1 **FIGURE** 2-1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B





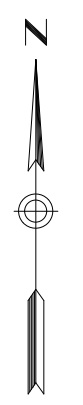
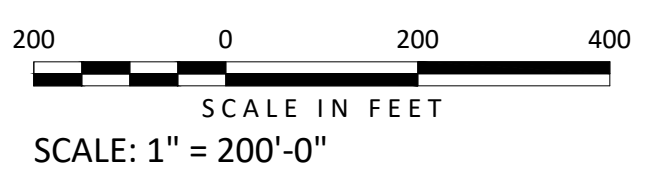


NOTES:  
1. TWO OPTIONS FOR THE MINING/CAVERN SHAFTS ARE DEPICTED AS FOLLOWS:  
OPTION A - ONE 24' MINING SHAFT AND TWO 8' WATER SHAFTS.  
OPTION B - TWO 8' WATER SHAFTS, TWO 8" CONSTRUCTION SHAFTS, AND ONE 8" SHAFT IN PLACE OF THE 24' MINING SHAFT.

LEGEND:  
0009 CONSTRUCTION PARKING  
0026 CONSTRUCTION TRAILERS

- PRELIMINARY -  
NOT FOR CONSTRUCTION

0 ISSUED FOR AFC		T. BIGGERSTAFF		S. GAWER		01-11-24	
REV	DESIGN BY	CHECKED BY	DATE				
HYDROSTOR WILLOW ROCK ENERGY STORAGE CENTER							
 <b>HYDROSTOR</b>							
 <b>Kiewit</b>							
SITE PLAN CONSTRUCTION PHASE - WITH BERM							
ENGINEER/DESIGN ORIGINATOR T. BIGGERSTAFF				DRAWING NUMBER 20045352-SP-001			
LEAD ENG S. GAWER							
ENG MGR S. GAWER							
PROJ MGR J. LUNDQUIST							



\$\$\$LENAMESS  
\$\$\$USERNAMESS  
\$\$\$TIMESS  
\$\$\$DATESS

## TABLES



**Rock Characterization  
DI Wet Results**

Sample Description		STLC <sup>1</sup>	California MCL <sup>2</sup>	Freshwater Chronic Goals <sup>3</sup>	IC_UNALT_01	IC_UNALT_02	IC_ALT_03	IC_ALT_04
Sample Date	units				06/17/24	06/17/24	06/17/24	06/17/24
Antimony (DI WET)	mg/L	15	0.006	0.030	<0.004	<0.004	0.00676	0.00621
Arsenic (DI WET)	mg/L	5	0.01	0.150	0.00412	0.00349	0.0618	0.0562
Barium (DI WET)	mg/L	100	1	NE	0.711	0.617	0.16	0.249
Beryllium (DI WET)	mg/L	1	0.004	0.0027	0.00291	0.00587	0.0149	0.013
Cadmium (DI WET)	mg/L	1	0.005	0.00025	<0.0005	<0.0005	0.000548	<0.0005
Chromium (DI WET)	mg/L	5	0.05	0.180	<0.2	<0.2	<0.2	<0.2
Cobalt (DI WET)	mg/L	80	NE	0.003	<0.2	<0.2	<0.2	<0.2
Copper (DI WET)	mg/L	25	NE	0.009	0.163	<0.1	<0.1	<0.1
Lead (DI WET)	mg/L	5	0.015*	0.0025	0.0221	0.0269	0.0786	0.0871
Mercury (DI WET)	mg/L	0	0.002	0.0008	<0.004	<0.004	<0.004	<0.004
Molybdenum (DI WET)	mg/L	350	NE	0.240	<0.2	<0.2	<0.2	<0.2
Nickel (DI WET)	mg/L	20	0.1	0.052	<0.08	<0.08	<0.08	<0.08
Selenium (DI WET)	mg/L	1	0.05	0.005	<0.001	<0.001	<0.00110	<0.001
Silver (DI WET)	mg/L	5	NE	NE	<0.001	<0.001	<0.001	<0.001
Thallium (DI WET)	mg/L	7	0.002	0.020	0.00146	0.00159	<0.001	<0.001
Vanadium (DI WET)	mg/L	24	NE	0.019	<0.1	<0.1	<0.1	<0.1
Zinc (DI WET)	mg/L	250	NE	0.12	0.437	<0.2	<0.5	<0.2
Fluoride (DI WET)	mg/L	--	2	NE	0.38	0.41	<0.15	<0.15

Notes:

1. Soluble threshold limit concentration California Code of Regulations, Title 22, Chapter 11, Article 3.

2. Maximum Contaminant Level [CCR Title 22, Section 64431]

3. Freshwater Chronic Goals FC2 (source: ESL Workbook Interim Final. Jan 2019. Table GW-2 Aquatic Habitat Screening Levels)

\* = EPA Action Level

Data from rock samples collected from geotechnical boring (D69A-1) advanced within the cavern construction area.

**Rock Characterization  
Total Results**

Sample Description			IC_UNALT_01	IC_UNALT_02	IC_ALT_03	IC_ALT_04
		TTLC <sup>1</sup>				
Sample Date	units		06/17/24	06/17/24	06/17/24	06/17/24
Antimony, total (3050)	mg/Kg	500	<0.202	<0.2	0.398	0.205
Arsenic, total (3050)	mg/Kg	50	1.09	1.42	42.7	33.4
Barium, total (3050)	mg/Kg	10,000	156	122	49.5	62.5
Beryllium, total (3050)	mg/Kg	75	0.371	0.316	0.716	0.902
Cadmium, total (3050)	mg/Kg	100	<0.0253	0.0958	0.146	0.132
Chromium, total (3050)	mg/Kg	2,500	3.3	2.39	<2	2.37
Chromium, Trivalent Total	mg/Kg	--	3	2	<2	2
Cobalt, total (3050)	mg/Kg	8,000	55.6	31.1	32.6	30.1
Copper, total (3050)	mg/Kg	2,500	1.22	<1	5.21	<1
Lead, total (3050)	mg/Kg	1,000	2.81	2.23	7.56	7.59
Mercury by Direct Combustion AA	ng/g	20	25.7	16	113	136
Molybdenum, total (3050)	mg/Kg	3,500	<2.02	<2	<2	<2
Nickel, total (3050)	mg/Kg	2,000	<0.808	<0.8	<0.8	<0.8
Selenium, total (3050)	mg/Kg	100	<0.0505	<0.05	<0.05	<0.05
Silver, total (3050)	mg/Kg	500	0.0523	0.0517	0.0926	<0.05
Thallium, total (3050)	mg/Kg	700	0.232	0.192	0.122	<0.0833
Vanadium, total (3050)	mg/Kg	2,400	42.9	37.6	20.9	38.6
Zinc, total (3050)	mg/Kg	5,000	76.9	68	60.4	69.3
Solids, Percent	%	--	99.8	99.8	99.9	99.8
Chromium, Hexavalent (3060)	mg/Kg	--	<1	<1	<1	<1

Notes:

1. Total threshold limit concentration from California Code of Regulations, Title 22, Chapter 11, Article 3.  
Data from geotechnical borings advanced within the cavern construction area.

## Groundwater Results

Sample Location					Monitoring Well 23E-05		Monitoring Well 23E-11	
Sample Description		Reporting	California	Freshwater	23E-05A	23E-05B	23E-11A	23E-11B
Sample Type		Limit	MCL <sup>1</sup>	Chronic	Primary	Duplicate	Primary	Duplicate
Sample Date	units			Goals <sup>2</sup>	08/21/24	08/21/24	08/21/24	08/21/24
Bromide	mg/L	0.40	NE	NE	1.8	1.8	0.83	0.84
Chloride	mg/L	0.40	NE	NE	550	550	260	270
Fluoride	mg/L	0.40	2	NE	0.45	0.49	1	1.1
Nitrate as N	mg/L	0.40	10	NE	6.2	8.2	9.8	7.6
Nitrite as N	mg/L	0.40	1	NE	ND	ND	ND	ND
Sulfate	mg/L	0.40	NE	NE	310	330	150	170
Mercury	mg/L	0.00020	0.002	0.77	ND	ND	ND	ND
Aluminum	mg/L	0.20	1	NE	3.5	2.8	0.58	0.66
Antimony	mg/L	0.050	0.006	0.030	ND	ND	ND	ND
Arsenic	mg/L	0.040	0.010	0.150	ND	ND	ND	ND
Barium	mg/L	0.080	1	NE	0.11	0.11	0.11	0.11
Beryllium	mg/L	0.010	0.004	0.003	ND	ND	ND	ND
Boron	mg/L	0.16	NE	0.0016	0.17	0.17	0.59	0.57
Cadmium	mg/L	0.0050	0.005	0.00025	ND	ND	ND	ND
Calcium	mg/L	0.40	NE	NE	270	270	110	100
Chromium	mg/L	0.010	0.05	0.18	ND	ND	ND	ND
Cobalt	mg/L	0.010	NE	0.003	ND	ND	ND	ND
Copper	mg/L	0.020	NE	0.009	ND	ND	ND	ND
Iron	mg/L	0.40	NE	NE	3.7	3.7	0.59	0.64
Lead	mg/L	0.010	0.015*	0.0025	0.014	0.015	0.012	0.015
Magnesium	mg/L	0.050	NE	NE	54	53	28	27
Manganese	mg/L	0.010	NE	NE	0.18	0.25	0.11	0.12
Molybdenum	mg/L	0.010	NE	0.240	ND	ND	ND	ND
Nickel	mg/L	0.010	0.1	0.052	ND	ND	ND	ND
Potassium	mg/L	0.50	NE	NE	9.3	9.4	3.4	3.2
Selenium	mg/L	0.050	0.05	0.005	ND	ND	ND	ND
Silica (SiO2)	mg/L	0.80	NE	NE	40	36	46	44
Silver	mg/L	0.010	NE	NE	ND	ND	ND	ND
Sodium	mg/L	1.2	NE	NE	93	93	100	99
Strontium	mg/L	0.010	NE	NE	2.2	2.2	0.83	0.8
Thallium	mg/L	0.020	0.002	0.020	ND	ND	ND	ND
Vanadium	mg/L	0.050	NE	0.019	ND	ND	ND	ND
Zinc	mg/L	0.050	NE	0.12	ND	ND	ND	ND
Hardness as CaCO3	mg/L	0.21	NE	NE	900	900	390	370
pH @ 25 C	pH Units	0.10	NE	NE	7.74	7.64	7.91	7.64
Specific Conductance (EC) @ 25 C	uhmhos/cm	2.0	NE	NE	2300	2300	1300	1300
Total Alkalinity, CaCO3	mg/L	20	NE	NE	75	73	83	80
Bicarbonate, CaCO3	mg/L	20	NE	NE	75	73	83	80
Carbonate, CaCO3	mg/L	20	NE	NE	ND	ND	ND	ND
Hydroxide, CaCO3	mg/L	20	NE	NE	ND	ND	ND	ND
Ammonia as N	mg/L	0.14	NE	NE	ND	ND	ND	ND
Chemical Oxygen Demand	mg/L	20	NE	NE	140	150	29	31
Ferrous Iron	ug/L	50.0	NE	NE	149	ND	ND	117
Total Organic Carbon	mg/L	0.50	NE	NE	ND	ND	ND	ND
Orthophosphate as P	mg/L	0.025	NE	NE	0.84	0.92	0.24	0.3
Phosphorus-Total as P	mg/L	0.025	NE	NE	ND	ND	0.29	0.34
Turbidity	NTU	0.10	NE	NE	450	550	75	60
Total Dissolved Solids	mg/L	10	NE	NE	1800	1800	900	800
Total Suspended Solids	mg/L	10	NE	NE	1000	380	120	87

Notes:

1. Primary Maximum Contaminant Level [CCR Title 22, Section 64431]

2. Freshwater Chronic Goals FC2 (source: ESL Workbook Interim Final. Jan 2019. Table GW-2 Aquatic Habitat Screening Levels)

\* = EPA Action Level

NE = not established

## Grab Groundwater Results

Sample Description		California	Freshwater	BH-3	BH-3	BH-3	BH-3	BH-3
Feet Below Ground Surface (ft bgs)		MCL <sup>1</sup>	Chronic	2,380	1,600	1,180	970	380
Sample Date	units		Goals <sup>2</sup>	10/09/23	10/10/23	10/10/23	10/11/23	10/11/23
Total Recoverable Calcium	mg/L	NE	NE	26	20	22	16	14
Total Recoverable Magnesium	mg/L	NE	NE	3.6	3.8	2.6	3.4	4.4
Total Recoverable Sodium	mg/L	2	NE	87	73	79	57	50
Bicarbonate, CaCO3	mg/L	10	NE	170	73	61	56	51
Carbonate, CaCO3	mg/L	1	NE	21	ND < 4.1	7	10	9.7
Chloride	mg/L	NE	NE	55	31	33	31	29
Fluoride	mg/L	0.002	NE	0.51	0.57	0.93	1	1.2
Nitrate as N	mg/L	1	NE	0.57	ND < 0.10	ND < 0.024	ND < 0.024	ND < 0.024
Sulfate	mg/L	0.006	NE	ND < 0.024	52	53	52	47
MBAS	mg/L	0.010	NE	65	0.17	ND < 0.024	0.027 J	0.14
Total Cyanide	mg/L	1	0.0052	0.16 J	0.049 J	ND < 0.0017	ND < 0.0017	0.0030 J
Nitrite as N	mg/L	0.004	NE	0.0017 J	ND < 0.81	0.0087 J	ND < 0.0050	ND < 0.0050
Perchlorate	mg/L	NE	0.6	0.0079 J	0.0002	0.00012 J	ND < 0.81	ND < 0.000020
Hexavalent Chromium	mg/L	0.005	0.011	0.00026	0.0002	0.00012 J	0.00012 J	ND < 0.00020
Total Recoverable Aluminum	mg/L	NE	NE	0.13	0.21	0.26	0.20	0.11
Total Recoverable Antimony	mg/L	0.05	0.01	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005
Total Recoverable Arsenic	mg/L	NE	0.01	ND < 0.0078	ND < 0.0078	ND < 0.0078	ND < 0.0078	ND < 0.0078
Total Recoverable Beryllium	mg/L	NE	0.004	ND < 0.00077	ND < 0.00077	ND < 0.00077	ND < 0.00077	ND < 0.00077
Total Recoverable Boron	mg/L	NE	NE	0.15	0.14	0.13	0.11	0.027
Total Recoverable Cadmium	mg/L	NE	0.005	ND < 0.0011	ND < 0.0011	ND < 0.0011	ND < 0.0011	ND < 0.0011
Total Recoverable Chromium	mg/L	NE	0.05	0.017	0.011	0.0074 J	0.0098 J	0.0052 J
Total Recoverable Copper	mg/L	NE	NE	0.006 J	0.0028 J	ND < 0.0012	0.0076 J	0.0029 J
Total Recoverable Iron	mg/L	NE	NE	3.8	4.3	3.0	9.7	5.6
Total Recoverable Manganese	mg/L	0.1	NE	0.19	0.34	0.15	0.21	0.13
Total Recoverable Mercury	mg/L	NE	0.002	ND < 0.000022	ND < 0.000022	0.000037 J	0.000055 J	0.000029 J
Total Recoverable Nickel	mg/L	0.05	0.10	0.0059 J	0.0061 J	ND < 0.0023	0.0037 J	0.0029 J
Total Recoverable Selenium	mg/L	NE	0.05	ND < 0.027	ND < 0.027	ND < 0.027	ND < 0.027	ND < 0.027
Total Recoverable Silver	mg/L	NE	NE	ND < 0.0001	ND < 0.0001	ND < 0.0001	ND < 0.0001	ND < 0.0001
Total Recoverable Thallium	mg/L	NE	0.002	ND < 0.011	ND < 0.011	ND < 0.011	ND < 0.011	ND < 0.011
Total Recoverable Zinc	mg/L	NE	NE	1.4	1.2	0.38	1.3	1.5
Asbestos	mg/L	0.002	NE	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005

### Notes:

1. Maximum Contaminant Level [CCR Title 22, Section 64431]

2. Freshwater Chronic Goals FC2 (source: ESL Workbook Interim Final. Jan 2019. Table GW-2 Aquatic Habitat Screening Levels)

Grab water samples collected from boring BH-3

J = estimated value

NE = not established

ND = not detected

Nitrate, nitrite, and MBAS analyzed past hold time

# DISCHARGE MONITORING PLAN

### **Description of Operations**

The project involves installing up to four vertical shafts, each reaching depths of up to 2,100 feet below the ground. These shafts, with diameters ranging from 8 to 20 feet, will be created using a combination of conventional shaft sinking, raise boring or blind boring methodologies. For blind boring, municipal makeup water and cuttings will be used as drill mud. In contrast, conventional sinking and raise boring does not require makeup water. Groundwater may be encountered in either drilling methodology between 30 and 60 feet below ground surface, but the excavations will be cased to restrict interaction with groundwater. Conventional shaft sinking and raise boring will produce solid rock waste similar to the materials expected during cavern construction that do not need a storage pond, which will be hauled offsite by offtakers. If blind boring is used, any water collected in the cuttings pond will be evaporated or reused, and the inert solid materials will be transported offsite.

### **Purpose**

The Discharge Monitoring Plan as provided complies with the Statewide General Waste Discharge Requirements (WDRs) for Discharges to Land with a Low Threat to Water Quality as provided under Order No. 2003-0003-DWQ.

### **Potential Pollutants and Reported Concentrations**

The drilling fluid, in case a blind-boring method is utilized, will be composed of municipal water and cuttings generated from the boring process. Potential pollutants in the drilling fluid and boring wastes discharged to the cuttings pond may include constituents found in groundwater, municipal water, and drill cuttings. Liquids will be evaporated or reused, and cutting pond solids will be collected and disposed. The cuttings storage pond will be lined with an impermeable and impact-resistant High Density Polyethylene (HDPE) liner of adequate thickness. A summary of those constituent concentrations is provided in the attached Notice of Intent.

### **Monitoring Locations and Frequencies**

Cuttings pond solids and semi-solids will be sampled on a quarterly basis. During construction, each quarter, at least one representative sample per every 5,000 cubic yards of the residual inert solid waste from the shaft construction will be collected and analyzed for the following:

- Title 22, California Assessment Manual (CAM 17) total metals by EPA 6020

- pH by EPA 150-1

All analyses will be performed by a State of California certified laboratory and conducted in accordance with the latest edition of “Guidelines Establishing Test Procedures for Analysis of Pollutants” issued by the EPA.

### **Reporting Schedule**

As part of this Discharge Monitoring Plan, a semi-annual report will be completed and submitted to the Lahontan Regional Water Quality Control Board (RWQCB) in accordance with the below schedule:

Monitoring Period	Report Due Date
First Half of Year (January to June)	August 15
Second Half of Year (July to December)	February 15 of subsequent year

Additionally, any analytical reports from sampling activities conducted within the monitoring period will be submitted along with the semi-annual report. Information on the following will be included on the Chain of Custody:

- Date, place, and time of sampling
- Sampling purpose
- Personnel conducting the sampling
- Date of analysis
- Personnel conducting the analysis
- Analytical techniques used

The semi-annual report will also include the following statement:

“The undersigned certify under penalty of the law that we have personally examined and are familiar with the information submitted in this document and all attachments and that based on our inquiry of those individuals immediately responsible for obtaining the information, we believe that the information is true, accurate, and complete. We are aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”

In instances where no drilling activity is conducted within the reporting period, the semi-annual report will be submitted with a “no on-site drilling activity” designation for that period.

# LABORATORY ANALYTICAL REPORTS



July 23, 2024

Report to:  
Tristan Bates  
Agapito Associates, Inc.  
715 Horizon Dr.  
Suite 340  
Grand Junction, CO 81506

Bill to:  
Linda Patterson  
Agapito and Associates Inc.  
715 Horizon Drive  
Suite 340  
Grand Junction, CO 81506

Project ID:  
ACZ Project ID: L88471

Tristan Bates:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on June 19, 2024. This project has been assigned to ACZ's project number, L88471. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L88471. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after August 22, 2024. If the samples are determined to be hazardous, additional charges apply for disposal (typically \$11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

*Madeleine Murray*  
Madeleine Murray has reviewed  
and approved this report.



Agapito and Associates Inc.

July 23, 2024

Project ID:

ACZ Project ID: L88471

**Sample Receipt**

ACZ Laboratories, Inc. (ACZ) received 4 miscellaneous samples from Agapito and Associates Inc. on June 19, 2024. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L88471. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

**Holding Times**

All analyses were performed within EPA recommended holding times except for parameters flagged with an "H4", which were extracted past the extraction holding time but analyzed with the analysis holding time.

**Sample Analysis**

These samples were analyzed for inorganic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports. The following required further detail not provided by the Extended Qualifier Report:

1. The below is from WG592237, Qualifier: N1, Applies to: L88471-01 through -04/CHROMIUM - MS1 (matrix spike) recovery was below acceptance limits. Recovery of the control sample (LCSS) and other matrix spike (MS2) was within limits. Samples may be redigested and reanalyzed at client's request.

### Agapito and Associates Inc.

Project ID:

Sample ID: IC\_UNALT\_01

ACZ Sample ID: **L88471-01**

Date Sampled: 06/17/24 11:54

Date Received: 06/19/24

Sample Matrix: Soil

#### Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (WET)	EPA 6020B	10	<0.004	U	*	mg/L	0.004	0.02	07/02/24 16:26	jrj
Antimony, total (3050)	EPA 6020B	505	<0.202	U	*	mg/Kg	0.202	1.01	07/02/24 19:30	jrj
Arsenic (WET)	EPA 6020B	10	0.00412	B	*	mg/L	0.002	0.01	07/02/24 16:26	jrj
Arsenic, total (3050)	EPA 6020B	505	1.09			mg/Kg	0.101	0.505	07/02/24 19:30	jrj
Barium (WET)	EPA 6010D	10	0.711		*	mg/L	0.09	0.35	07/18/24 22:59	wtc
Barium, total (3050)	EPA 6010D	101	156		*	mg/Kg	0.909	3.54	07/11/24 23:37	msp
Beryllium (WET)	EPA 6020B	10	0.00291		*	mg/L	0.001	0.0025	07/02/24 16:26	jrj
Beryllium, total (3050)	EPA 6020B	505	0.371		*	mg/Kg	0.0505	0.126	07/02/24 19:30	jrj
Cadmium (WET)	EPA 6020B	10	<0.0005	U	*	mg/L	0.0005	0.0025	07/02/24 16:26	jrj
Cadmium, total (3050)	EPA 6020B	505	<0.0253	U	*	mg/Kg	0.0253	0.126	07/02/24 19:30	jrj
Chromium (WET)	EPA 6010D	10	<0.2	U	*	mg/L	0.2	0.5	07/18/24 22:59	wtc
Chromium, total (3050)	EPA 6010D	101	3.30	B	*	mg/Kg	2.02	5.05	07/11/24 23:37	msp
Chromium, Trivalent Total	Calculation (Total - Hexavalent)		3	B		mg/Kg	2	5	07/23/24 0:00	calc
Cobalt (WET)	EPA 6010D	10	<0.2	U	*	mg/L	0.2	0.5	07/18/24 22:59	wtc
Cobalt, total (3050)	EPA 6010D	101	55.6			mg/Kg	2.02	5.05	07/11/24 23:37	msp
Copper (WET)	EPA 6010D	10	0.163	B	*	mg/L	0.1	0.5	07/18/24 22:59	wtc
Copper, total (3050)	EPA 6010D	101	1.22	B		mg/Kg	1.01	5.05	07/11/24 23:37	msp
Lead (WET)	EPA 6020B	10	0.0221			mg/L	0.001	0.005	07/02/24 16:26	jrj
Lead, total (3050)	EPA 6020B	505	2.81			mg/Kg	0.0505	0.253	07/02/24 19:30	jrj
Mercury (WET)	EPA 7470A	20	<0.004	U	*	mg/L	0.004	0.02	07/02/24 15:14	aeH
Mercury by Direct Combustion AA	EPA 7473	1	25.7		*	ng/g	2.71	13.55	07/09/24 12:37	aeH
Molybdenum (WET)	EPA 6010D	10	<0.2	U	*	mg/L	0.2	1	07/18/24 22:59	wtc
Molybdenum, total (3050)	EPA 6010D	101	<2.02	U		mg/Kg	2.02	10.1	07/11/24 23:37	msp
Nickel (WET)	EPA 6010D	10	<0.08	U	*	mg/L	0.08	0.4	07/18/24 22:59	wtc
Nickel, total (3050)	EPA 6010D	101	<0.808	U	*	mg/Kg	0.808	4.04	07/11/24 23:37	msp
Selenium (WET)	EPA 6020B	10	<0.001	U	*	mg/L	0.001	0.0025	07/02/24 16:26	jrj
Selenium, total (3050)	EPA 6020B	505	<0.0505	U		mg/Kg	0.0505	0.126	07/02/24 19:30	jrj
Silver (WET)	EPA 6020B	10	<0.001	U	*	mg/L	0.001	0.005	07/02/24 16:26	jrj
Silver, total (3050)	EPA 6020B	505	0.0523	B	*	mg/Kg	0.0505	0.253	07/02/24 19:30	jrj
Thallium (WET)	EPA 6020B	10	0.00146	B	*	mg/L	0.001	0.005	07/02/24 16:26	jrj
Thallium, total (3050)	EPA 6020B	505	0.232	B		mg/Kg	0.0505	0.253	07/02/24 19:30	jrj
Vanadium (WET)	EPA 6010D	10	<0.1	U	*	mg/L	0.1	0.25	07/18/24 22:59	wtc
Vanadium, total (3050)	EPA 6010D	101	42.9		*	mg/Kg	1.01	2.53	07/11/24 23:37	msp
Zinc (WET)	EPA 6010D	10	0.437	B	*	mg/L	0.2	0.5	07/18/24 22:59	wtc
Zinc, total (3050)	EPA 6010D	101	76.9			mg/Kg	2.02	5.05	07/11/24 23:37	msp

#### Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	D2216-80	1	99.8		*	%	0.1	0.5	06/25/24 17:43	rsh

**Agapito and Associates Inc.**

Project ID:

Sample ID: IC\_UNALT\_01

ACZ Sample ID: **L88471-01**

Date Sampled: 06/17/24 11:54

Date Received: 06/19/24

Sample Matrix: Soil

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972								06/24/24 13:34	rsh
Crush and Pulverize	EPA 600/2-78-054 3.1.3								06/24/24 13:30	rsh
Crush and Pulverize (Ring & Puck)	EPA 600/2-78-054 3.1.3								06/24/24 20:48	bdc
Digestion - Alkaline	EPA 3060A								06/25/24 10:15	rsh
Digestion - Hot Plate	EPA 3050B								07/01/24 14:16	rsh
Digestion - Hot Plate	EPA 3050B								07/01/24 14:16	rsh
Waste Extraction Test	California Method, Title 22								06/27/24 10:00	lfp

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Chromium, Hexavalent (3060)	EPA 7196A	200	<1	U	*	mg/Kg	1	4	07/01/24 15:39	ptw
Fluoride (WET)	SM 4500-F C-2011	1	0.38		*	mg/L	0.15	0.35	07/02/24 11:44	emk

### Agapito and Associates Inc.

Project ID:

Sample ID: IC\_UNALT\_02

ACZ Sample ID: **L88471-02**

Date Sampled: 06/17/24 11:54

Date Received: 06/19/24

Sample Matrix: Soil

### Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (WET)	EPA 6020B	10	<0.004	U	*	mg/L	0.004	0.02	07/02/24 16:30	jrj
Antimony, total (3050)	EPA 6020B	500	<0.2	U	*	mg/Kg	0.2	1	07/02/24 19:32	jrj
Arsenic (WET)	EPA 6020B	10	0.00349	B	*	mg/L	0.002	0.01	07/02/24 16:30	jrj
Arsenic, total (3050)	EPA 6020B	500	1.42			mg/Kg	0.1	0.5	07/02/24 19:32	jrj
Barium (WET)	EPA 6010D	10	0.617		*	mg/L	0.09	0.35	07/18/24 23:07	wtc
Barium, total (3050)	EPA 6010D	100	122		*	mg/Kg	0.9	3.5	07/11/24 23:48	msp
Beryllium (WET)	EPA 6020B	20	0.00587		*	mg/L	0.002	0.005	07/08/24 14:21	jrj
Beryllium, total (3050)	EPA 6020B	500	0.316		*	mg/Kg	0.05	0.125	07/02/24 19:32	jrj
Cadmium (WET)	EPA 6020B	10	<0.0005	U	*	mg/L	0.0005	0.0025	07/02/24 16:30	jrj
Cadmium, total (3050)	EPA 6020B	500	0.0958	B	*	mg/Kg	0.025	0.125	07/02/24 19:32	jrj
Chromium (WET)	EPA 6010D	10	<0.2	U	*	mg/L	0.2	0.5	07/18/24 23:07	wtc
Chromium, total (3050)	EPA 6010D	100	2.39	B	*	mg/Kg	2	5	07/11/24 23:48	msp
Chromium, Trivalent Total	Calculation (Total - Hexavalent)		2	B		mg/Kg	2	5	07/23/24 0:00	calc
Cobalt (WET)	EPA 6010D	10	<0.2	U	*	mg/L	0.2	0.5	07/18/24 23:07	wtc
Cobalt, total (3050)	EPA 6010D	100	31.1			mg/Kg	2	5	07/11/24 23:48	msp
Copper (WET)	EPA 6010D	10	<0.1	U	*	mg/L	0.1	0.5	07/18/24 23:07	wtc
Copper, total (3050)	EPA 6010D	100	<1	U		mg/Kg	1	5	07/11/24 23:48	msp
Lead (WET)	EPA 6020B	10	0.0269			mg/L	0.001	0.005	07/02/24 16:30	jrj
Lead, total (3050)	EPA 6020B	500	2.23			mg/Kg	0.05	0.25	07/02/24 19:32	jrj
Mercury (WET)	EPA 7470A	20	<0.004	U	*	mg/L	0.004	0.02	07/02/24 15:16	aeh
Mercury by Direct Combustion AA	EPA 7473	1	16		*	ng/g	2.03	10.15	07/09/24 12:53	aeh
Molybdenum (WET)	EPA 6010D	10	<0.2	U	*	mg/L	0.2	1	07/18/24 23:07	wtc
Molybdenum, total (3050)	EPA 6010D	100	<2	U		mg/Kg	2	10	07/11/24 23:48	msp
Nickel (WET)	EPA 6010D	10	<0.08	U	*	mg/L	0.08	0.4	07/18/24 23:07	wtc
Nickel, total (3050)	EPA 6010D	100	<0.8	U	*	mg/Kg	0.8	4	07/11/24 23:48	msp
Selenium (WET)	EPA 6020B	10	<0.001	U	*	mg/L	0.001	0.0025	07/02/24 16:30	jrj
Selenium, total (3050)	EPA 6020B	500	<0.05	U		mg/Kg	0.05	0.125	07/02/24 19:32	jrj
Silver (WET)	EPA 6020B	10	<0.001	U	*	mg/L	0.001	0.005	07/02/24 16:30	jrj
Silver, total (3050)	EPA 6020B	500	0.0517	B	*	mg/Kg	0.05	0.25	07/02/24 19:32	jrj
Thallium (WET)	EPA 6020B	10	0.00159	B	*	mg/L	0.001	0.005	07/02/24 16:30	jrj
Thallium, total (3050)	EPA 6020B	500	0.192	B		mg/Kg	0.05	0.25	07/02/24 19:32	jrj
Vanadium (WET)	EPA 6010D	10	<0.1	U	*	mg/L	0.1	0.25	07/18/24 23:07	wtc
Vanadium, total (3050)	EPA 6010D	100	37.6		*	mg/Kg	1	2.5	07/11/24 23:48	msp
Zinc (WET)	EPA 6010D	10	<0.2	U	*	mg/L	0.2	0.5	07/18/24 23:07	wtc
Zinc, total (3050)	EPA 6010D	100	68.0			mg/Kg	2	5	07/11/24 23:48	msp

### Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	D2216-80	1	99.8		*	%	0.1	0.5	06/25/24 23:50	rsh

**Agapito and Associates Inc.**

Project ID:

Sample ID: IC\_UNALT\_02

ACZ Sample ID: **L88471-02**

Date Sampled: 06/17/24 11:54

Date Received: 06/19/24

Sample Matrix: Soil

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972								06/24/24 13:42	rsh
Crush and Pulverize	EPA 600/2-78-054 3.1.3								06/24/24 13:40	rsh
Crush and Pulverize (Ring & Puck)	EPA 600/2-78-054 3.1.3								06/25/24 0:42	bdc
Digestion - Alkaline	EPA 3060A								06/25/24 10:16	rsh
Digestion - Hot Plate	EPA 3050B								07/01/24 14:42	rsh
Digestion - Hot Plate	EPA 3050B								07/01/24 14:42	rsh
Waste Extraction Test	California Method, Title 22								06/27/24 20:24	lfp

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Chromium, Hexavalent (3060)	EPA 7196A	200	<1	U	*	mg/Kg	1	4	07/01/24 15:42	ptw
Fluoride (WET)	SM 4500-F C-2011	1	0.41		*	mg/L	0.15	0.35	07/02/24 11:55	emk

### Agapito and Associates Inc.

Project ID:

Sample ID: IC\_ALT\_03

ACZ Sample ID: **L88471-03**

Date Sampled: 06/17/24 11:54

Date Received: 06/19/24

Sample Matrix: Soil

#### Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (WET)	EPA 6020B	10	0.00676	B	*	mg/L	0.004	0.02	07/02/24 16:35	jrj
Antimony, total (3050)	EPA 6020B	500	0.398	B	*	mg/Kg	0.2	1	07/02/24 19:34	jrj
Arsenic (WET)	EPA 6020B	10	0.0618		*	mg/L	0.002	0.01	07/02/24 16:35	jrj
Arsenic, total (3050)	EPA 6020B	500	42.7			mg/Kg	0.1	0.5	07/02/24 19:34	jrj
Barium (WET)	EPA 6010D	10	0.160	B	*	mg/L	0.09	0.35	07/18/24 23:18	wtc
Barium, total (3050)	EPA 6010D	100	49.5		*	mg/Kg	0.9	3.5	07/11/24 23:52	msp
Beryllium (WET)	EPA 6020B	20	0.0149		*	mg/L	0.002	0.005	07/08/24 14:26	jrj
Beryllium, total (3050)	EPA 6020B	500	0.716		*	mg/Kg	0.05	0.125	07/02/24 19:34	jrj
Cadmium (WET)	EPA 6020B	10	0.000548	B	*	mg/L	0.0005	0.0025	07/02/24 16:35	jrj
Cadmium, total (3050)	EPA 6020B	500	0.146		*	mg/Kg	0.025	0.125	07/02/24 19:34	jrj
Chromium (WET)	EPA 6010D	10	<0.2	U	*	mg/L	0.2	0.5	07/18/24 23:18	wtc
Chromium, total (3050)	EPA 6010D	100	<2	U	*	mg/Kg	2	5	07/11/24 23:52	msp
Chromium, Trivalent Total	Calculation (Total - Hexavalent)		<2	U		mg/Kg	2	5	07/23/24 0:00	calc
Cobalt (WET)	EPA 6010D	10	<0.2	U	*	mg/L	0.2	0.5	07/18/24 23:18	wtc
Cobalt, total (3050)	EPA 6010D	100	32.6			mg/Kg	2	5	07/11/24 23:52	msp
Copper (WET)	EPA 6010D	10	<0.1	U	*	mg/L	0.1	0.5	07/18/24 23:18	wtc
Copper, total (3050)	EPA 6010D	100	5.21			mg/Kg	1	5	07/11/24 23:52	msp
Lead (WET)	EPA 6020B	10	0.0786			mg/L	0.001	0.005	07/02/24 16:35	jrj
Lead, total (3050)	EPA 6020B	500	7.56			mg/Kg	0.05	0.25	07/02/24 19:34	jrj
Mercury (WET)	EPA 7470A	20	<0.004	U	*	mg/L	0.004	0.02	07/02/24 15:17	aeh
Mercury by Direct Combustion AA	EPA 7473	1	113		*	ng/g	2.69	13.45	07/09/24 13:01	aeh
Molybdenum (WET)	EPA 6010D	10	<0.2	U	*	mg/L	0.2	1	07/18/24 23:18	wtc
Molybdenum, total (3050)	EPA 6010D	100	<2	U		mg/Kg	2	10	07/11/24 23:52	msp
Nickel (WET)	EPA 6010D	10	<0.08	U	*	mg/L	0.08	0.4	07/18/24 23:18	wtc
Nickel, total (3050)	EPA 6010D	100	<0.8	U	*	mg/Kg	0.8	4	07/11/24 23:52	msp
Selenium (WET)	EPA 6020B	10	0.00110	B	*	mg/L	0.001	0.0025	07/02/24 16:35	jrj
Selenium, total (3050)	EPA 6020B	500	<0.05	U		mg/Kg	0.05	0.125	07/02/24 19:34	jrj
Silver (WET)	EPA 6020B	10	<0.001	U	*	mg/L	0.001	0.005	07/02/24 16:35	jrj
Silver, total (3050)	EPA 6020B	500	0.0926	B	*	mg/Kg	0.05	0.25	07/02/24 19:34	jrj
Thallium (WET)	EPA 6020B	10	<0.001	U	*	mg/L	0.001	0.005	07/02/24 16:35	jrj
Thallium, total (3050)	EPA 6020B	500	0.122	B		mg/Kg	0.05	0.25	07/02/24 19:34	jrj
Vanadium (WET)	EPA 6010D	10	<0.1	U	*	mg/L	0.1	0.25	07/18/24 23:18	wtc
Vanadium, total (3050)	EPA 6010D	100	20.9		*	mg/Kg	1	2.5	07/11/24 23:52	msp
Zinc (WET)	EPA 6010D	10	<0.2	U	*	mg/L	0.2	0.5	07/18/24 23:18	wtc
Zinc, total (3050)	EPA 6010D	100	60.4			mg/Kg	2	5	07/11/24 23:52	msp

#### Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	D2216-80	1	99.9		*	%	0.1	0.5	06/26/24 2:53	rsh

**Agapito and Associates Inc.**

Project ID:

Sample ID: IC\_ALT\_03

ACZ Sample ID: **L88471-03**

Date Sampled: 06/17/24 11:54

Date Received: 06/19/24

Sample Matrix: Soil

## Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972								06/24/24 13:51	rsh
Crush and Pulverize	EPA 600/2-78-054 3.1.3								06/24/24 13:50	rsh
Crush and Pulverize (Ring & Puck)	EPA 600/2-78-054 3.1.3								06/25/24 4:36	bdc
Digestion - Alkaline	EPA 3060A								06/25/24 10:17	rsh
Digestion - Hot Plate	EPA 3050B								07/01/24 15:08	rsh
Digestion - Hot Plate	EPA 3050B								07/01/24 15:08	rsh
Waste Extraction Test	California Method, Title 22								06/28/24 1:36	lfp

## Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Chromium, Hexavalent (3060)	EPA 7196A	200	<1	U	*	mg/Kg	1	4	07/01/24 15:52	ptw
Fluoride (WET)	SM 4500-F C-2011	1	<0.15	U	*	mg/L	0.15	0.35	07/02/24 11:58	emk



### Agapito and Associates Inc.

Project ID:

Sample ID: IC\_ALT\_04

ACZ Sample ID: **L88471-04**

Date Sampled: 06/17/24 11:54

Date Received: 06/19/24

Sample Matrix: Soil

#### Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Antimony (WET)	EPA 6020B	10	0.00621	B	*	mg/L	0.004	0.02	07/02/24 16:40	jrj
Antimony, total (3050)	EPA 6020B	500	0.205	B	*	mg/Kg	0.2	1	07/02/24 19:35	jrj
Arsenic (WET)	EPA 6020B	10	0.0562		*	mg/L	0.002	0.01	07/02/24 16:40	jrj
Arsenic, total (3050)	EPA 6020B	500	33.4			mg/Kg	0.1	0.5	07/02/24 19:35	jrj
Barium (WET)	EPA 6010D	10	0.249	B	*	mg/L	0.09	0.35	07/18/24 23:22	wtc
Barium, total (3050)	EPA 6010D	100	62.5		*	mg/Kg	0.9	3.5	07/11/24 23:59	msp
Beryllium (WET)	EPA 6020B	20	0.0130		*	mg/L	0.002	0.005	07/08/24 14:31	jrj
Beryllium, total (3050)	EPA 6020B	500	0.902		*	mg/Kg	0.05	0.125	07/02/24 19:35	jrj
Cadmium (WET)	EPA 6020B	10	<0.0005	U	*	mg/L	0.0005	0.0025	07/02/24 16:40	jrj
Cadmium, total (3050)	EPA 6020B	500	0.132		*	mg/Kg	0.025	0.125	07/02/24 19:35	jrj
Chromium (WET)	EPA 6010D	10	<0.2	U	*	mg/L	0.2	0.5	07/18/24 23:22	wtc
Chromium, total (3050)	EPA 6010D	100	2.37	B	*	mg/Kg	2	5	07/11/24 23:59	msp
Chromium, Trivalent Total	Calculation (Total - Hexavalent)		2	B		mg/Kg	2	5	07/23/24 0:00	calc
Cobalt (WET)	EPA 6010D	10	<0.2	U	*	mg/L	0.2	0.5	07/18/24 23:22	wtc
Cobalt, total (3050)	EPA 6010D	100	30.1			mg/Kg	2	5	07/11/24 23:59	msp
Copper (WET)	EPA 6010D	10	<0.1	U	*	mg/L	0.1	0.5	07/18/24 23:22	wtc
Copper, total (3050)	EPA 6010D	100	<1	U		mg/Kg	1	5	07/11/24 23:59	msp
Lead (WET)	EPA 6020B	10	0.0871			mg/L	0.001	0.005	07/02/24 16:40	jrj
Lead, total (3050)	EPA 6020B	500	7.59			mg/Kg	0.05	0.25	07/02/24 19:35	jrj
Mercury (WET)	EPA 7470A	20	<0.004	U	*	mg/L	0.004	0.02	07/02/24 15:22	aeh
Mercury by Direct Combustion AA	EPA 7473	1	136		*	ng/g	2.73	13.65	07/09/24 13:09	aeh
Molybdenum (WET)	EPA 6010D	10	<0.2	U	*	mg/L	0.2	1	07/18/24 23:22	wtc
Molybdenum, total (3050)	EPA 6010D	100	<2	U		mg/Kg	2	10	07/11/24 23:59	msp
Nickel (WET)	EPA 6010D	10	<0.08	U	*	mg/L	0.08	0.4	07/18/24 23:22	wtc
Nickel, total (3050)	EPA 6010D	100	<0.8	U	*	mg/Kg	0.8	4	07/11/24 23:59	msp
Selenium (WET)	EPA 6020B	10	<0.001	U	*	mg/L	0.001	0.0025	07/02/24 16:40	jrj
Selenium, total (3050)	EPA 6020B	500	<0.05	U		mg/Kg	0.05	0.125	07/02/24 19:35	jrj
Silver (WET)	EPA 6020B	10	<0.001	U	*	mg/L	0.001	0.005	07/02/24 16:40	jrj
Silver, total (3050)	EPA 6020B	500	<0.05	U	*	mg/Kg	0.05	0.25	07/02/24 19:35	jrj
Thallium (WET)	EPA 6020B	10	<0.001	U	*	mg/L	0.001	0.005	07/02/24 16:40	jrj
Thallium, total (3050)	EPA 6020B	500	0.0833	B		mg/Kg	0.05	0.25	07/02/24 19:35	jrj
Vanadium (WET)	EPA 6010D	10	<0.1	U	*	mg/L	0.1	0.25	07/18/24 23:22	wtc
Vanadium, total (3050)	EPA 6010D	100	38.6		*	mg/Kg	1	2.5	07/11/24 23:59	msp
Zinc (WET)	EPA 6010D	10	<0.2	U	*	mg/L	0.2	0.5	07/18/24 23:22	wtc
Zinc, total (3050)	EPA 6010D	100	69.3			mg/Kg	2	5	07/11/24 23:59	msp

#### Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	D2216-80	1	99.8		*	%	0.1	0.5	06/26/24 5:56	rsh

**Agapito and Associates Inc.**

Project ID:

Sample ID: IC\_ALT\_04

ACZ Sample ID: **L88471-04**

Date Sampled: 06/17/24 11:54

Date Received: 06/19/24

Sample Matrix: Soil

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972								06/24/24 13:59	rsh
Crush and Pulverize	EPA 600/2-78-054 3.1.3								06/24/24 14:00	rsh
Crush and Pulverize (Ring & Puck)	EPA 600/2-78-054 3.1.3								06/25/24 8:30	bdc
Digestion - Alkaline	EPA 3060A								06/25/24 10:18	rsh
Digestion - Hot Plate	EPA 3050B								07/01/24 15:34	rsh
Digestion - Hot Plate	EPA 3050B								07/01/24 15:34	rsh
Waste Extraction Test	California Method, Title 22								06/28/24 6:48	lfp

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Chromium, Hexavalent (3060)	EPA 7196A	200	<1	U	*	mg/Kg	1	4	07/01/24 15:56	ptw
Fluoride (WET)	SM 4500-F C-2011	1	<0.15	U	*	mg/L	0.15	0.35	07/02/24 12:03	emk


**Report Header Explanations**

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

**QC Sample Types**

<i>AS</i>	Analytical Spike (Post Digestion)	<i>LCSWD</i>	Laboratory Control Sample - Water Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LFB</i>	Laboratory Fortified Blank
<i>CCB</i>	Continuing Calibration Blank	<i>LFM</i>	Laboratory Fortified Matrix
<i>CCV</i>	Continuing Calibration Verification standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>ICB</i>	Initial Calibration Blank	<i>MS</i>	Matrix Spike
<i>ICV</i>	Initial Calibration Verification standard	<i>MSD</i>	Matrix Spike Duplicate
<i>ICSAB</i>	Inter-element Correction Standard - A plus B solutions	<i>PBS</i>	Prep Blank - Soil
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBW</i>	Prep Blank - Water
<i>LCSSD</i>	Laboratory Control Sample - Soil Duplicate	<i>PQV</i>	Practical Quantitation Verification standard
<i>LCSW</i>	Laboratory Control Sample - Water	<i>SDL</i>	Serial Dilution

**QC Sample Type Explanations**

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

**ACZ Qualifiers (Qual)**

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

**Method References**

(1)	EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2)	EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3)	EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4)	EPA SW-846. Test Methods for Evaluating Solid Waste.
(5)	Standard Methods for the Examination of Water and Wastewater.

**Comments**

(1)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2)	Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3)	Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4)	An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5)	If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:

<https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf>

Agapito and Associates Inc.

ACZ Project ID: **L88471**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

**Antimony (WET)**

EPA 6020B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG592261</b>													
WG592261ICV	ICV	07/02/24 16:13	MS240613-12	.02002		.01909	mg/L	95	90	110			
WG592261ICB	ICB	07/02/24 16:15				U	mg/L		-0.0012	0.0012			
WG591892PBS	PBS	07/02/24 16:24				U	mg/L		-0.012	0.012			
L88471-01DUP	DUP	07/02/24 16:28			U	U	mg/L				0	20	RA
L88471-02AS	AS	07/02/24 16:31	MS240613-7	.1	U	.10428	mg/L	104	75	125			
L88471-02ASD	ASD	07/02/24 16:33	MS240613-7	.1	U	.10457	mg/L	105	75	125	0	20	

**Antimony, total (3050)**

EPA 6020B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG592342</b>													
WG592342ICV	ICV	07/02/24 18:46	MS240613-12	.02002		.01859	mg/L	93	90	110			
WG592342ICB	ICB	07/02/24 18:48				U	mg/L		-0.0012	0.0012			
WG592193PBS	PBS	07/02/24 18:57				U	mg/Kg		-0.6	0.6			
WG592193LCSS	LCSS	07/02/24 18:59	PCN626768	127		106.74704	mg/Kg		0.0004	255			
WG592193LCSSD	LCSSD	07/02/24 19:00	PCN626768	127		96.225	mg/Kg		0.0004	255	10	20	
L88444-02MS	MS	07/02/24 19:22	MS240613-4	5.05	.568	1.96798	mg/Kg	28	75	125			M2
L88444-02MSD	MSD	07/02/24 19:24	MS240613-4	5.05	.568	1.88214	mg/Kg	26	75	125	4	20	M2

**Arsenic (WET)**

EPA 6020B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG592261</b>													
WG592261ICV	ICV	07/02/24 16:13	MS240613-12	.05		.05028	mg/L	101	90	110			
WG592261ICB	ICB	07/02/24 16:15				U	mg/L		-0.0006	0.0006			
WG591892PBS	PBS	07/02/24 16:24				U	mg/L		-0.006	0.006			
L88471-01DUP	DUP	07/02/24 16:28			.00412	.0041	mg/L				0	20	RA
L88471-02AS	AS	07/02/24 16:31	MS240613-7	.501	.00349	.58088	mg/L	115	75	125			
L88471-02ASD	ASD	07/02/24 16:33	MS240613-7	.501	.00349	.55553	mg/L	110	75	125	4	20	

**Arsenic, total (3050)**

EPA 6020B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG592342</b>													
WG592342ICV	ICV	07/02/24 18:46	MS240613-12	.05		.04928	mg/L	99	90	110			
WG592342ICB	ICB	07/02/24 18:48				U	mg/L		-0.0006	0.0006			
WG592193PBS	PBS	07/02/24 18:57				U	mg/Kg		-0.3	0.3			
WG592193LCSS	LCSS	07/02/24 18:59	PCN626768	311		351.65596	mg/Kg		254	368			
WG592193LCSSD	LCSSD	07/02/24 19:00	PCN626768	311		318.52464	mg/Kg		254	368	10	20	
L88444-02MS	MS	07/02/24 19:22	MS240613-4	25.3005	17.4	46.80291	mg/Kg	116	75	125			
L88444-02MSD	MSD	07/02/24 19:24	MS240613-4	25.3005	17.4	45.07137	mg/Kg	109	75	125	4	20	

**Barium (WET)**

EPA 6010D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG593380</b>													
WG593380ICV	ICV	07/18/24 22:29	II240716-3	2		1.982	mg/L	99	90	110			
WG593380ICB	ICB	07/18/24 22:32				U	mg/L		-0.027	0.027			
WG591892PBS	PBS	07/18/24 22:56				.109	mg/L		-0.27	0.27			
L88471-01DUP	DUP	07/18/24 23:03			.711	.71	mg/L				0	20	RA
L88471-02AS	AS	07/18/24 23:11	II240717-4	5.025	.617	5.523	mg/L	98	75	125			
L88471-02ASD	ASD	07/18/24 23:15	II240717-4	5.025	.617	5.603	mg/L	99	75	125	1	20	

Agapito and Associates Inc.

ACZ Project ID: **L88471**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

**Barium, total (3050)**

EPA 6010D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG592877</b>													
WG592877ICV	ICV	07/11/24 22:38	II240708-1	2		1.955	mg/L	98	90	110			
WG592877ICB	ICB	07/11/24 22:42				U	mg/L		-0.027	0.027			
WG592193PBS	PBS	07/11/24 23:05				2.68	mg/Kg		-2.7	2.7			
WG592193LCSS	LCSS	07/11/24 23:08	PCN626768	304		293.1	mg/Kg		249	359			
WG592193LCSSD	LCSSD	07/11/24 23:12	PCN626768	304		297.6	mg/Kg		249	359	2	20	
L88444-01MS	MS	07/11/24 23:19	II240702-2	50.25	207	318	mg/Kg	221	75	125			M3
L88444-01MSD	MSD	07/11/24 23:23	II240702-2	50.25	207	248.2	mg/Kg	82	75	125	25	20	RD

**Beryllium (WET)**

EPA 6020B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG592261</b>													
WG592261ICV	ICV	07/02/24 16:13	MS240613-12	.05		.048167	mg/L	96	90	110			
WG592261ICB	ICB	07/02/24 16:15				.000088	mg/L		-0.00024	0.00024			
WG591892PBS	PBS	07/02/24 16:24				U	mg/L		-0.0024	0.0024			
L88471-01DUP	DUP	07/02/24 16:28			.00291	.002733	mg/L				6	20	RA
L88471-02AS	AS	07/02/24 16:31	MS240613-7	.5005	.00505	.569724	mg/L	113	75	125			
L88471-02ASD	ASD	07/02/24 16:33	MS240613-7	.5005	.00505	.560853	mg/L	111	75	125	2	20	
<b>WG592583</b>													
WG592583ICV	ICV	07/08/24 14:04	MS240613-12	.05		.049982	mg/L	100	90	110			
WG592583ICB	ICB	07/08/24 14:06				.000099	mg/L		-0.00024	0.00024			
WG591892PBS	PBS	07/08/24 14:15				U	mg/L		-0.0024	0.0024			
L88471-01DUP	DUP	07/08/24 14:19			.0032	.003101	mg/L				3	20	RA
L88471-02AS	AS	07/08/24 14:22	MS240613-7	1.001	.00587	1.176262	mg/L	117	75	125			
L88471-02ASD	ASD	07/08/24 14:24	MS240613-7	1.001	.00587	1.175323	mg/L	117	75	125	0	20	

**Beryllium, total (3050)**

EPA 6020B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG592342</b>													
WG592342ICV	ICV	07/02/24 18:46	MS240613-12	.05		.047865	mg/L	96	90	110			
WG592342ICB	ICB	07/02/24 18:48				U	mg/L		-0.00024	0.00024			
WG592193PBS	PBS	07/02/24 18:57				U	mg/Kg		-0.12	0.12			
WG592193LCSS	LCSS	07/02/24 18:59	PCN626768	169		172.917726	mg/Kg		140	198			
WG592193LCSSD	LCSSD	07/02/24 19:00	PCN626768	169		163.682508	mg/Kg		140	198	5	20	
L88444-02MS	MS	07/02/24 19:22	MS240613-4	25.27525	.493	30.098449	mg/Kg	117	75	125			
L88444-02MSD	MSD	07/02/24 19:24	MS240613-4	25.27525	.493	30.408092	mg/Kg	118	75	125	1	20	

**Cadmium (WET)**

EPA 6020B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG592261</b>													
WG592261ICV	ICV	07/02/24 16:13	MS240613-12	.05		.051535	mg/L	103	90	110			
WG592261ICB	ICB	07/02/24 16:15				U	mg/L		-0.00015	0.00015			
WG591892PBS	PBS	07/02/24 16:24				U	mg/L		-0.0015	0.0015			
L88471-01DUP	DUP	07/02/24 16:28			U	U	mg/L				0	20	RA
L88471-02AS	AS	07/02/24 16:31	MS240613-7	.5005	U	.522741	mg/L	104	75	125			
L88471-02ASD	ASD	07/02/24 16:33	MS240613-7	.5005	U	.513574	mg/L	103	75	125	2	20	

Agapito and Associates Inc.

ACZ Project ID: **L88471**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

**Cadmium, total (3050)**

EPA 6020B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG592342</b>													
WG592342ICV	ICV	07/02/24 18:46	MS240613-12	.05		.050417	mg/L	101	90	110			
WG592342ICB	ICB	07/02/24 18:48				U	mg/L		-0.00015	0.00015			
WG592193PBS	PBS	07/02/24 18:57				U	mg/Kg		-0.075	0.075			
WG592193LCSS	LCSS	07/02/24 18:59	PCN626768	212		25.09074	mg/Kg		175	250			
WG592193LCSSD	LCSSD	07/02/24 19:00	PCN626768	212		209.26493	mg/Kg		175	250	7	20	
L88444-02MS	MS	07/02/24 19:22	MS240613-4	25.27525	.475	29.232354	mg/Kg	114	75	125			
L88444-02MSD	MSD	07/02/24 19:24	MS240613-4	25.27525	.475	29.931141	mg/Kg	117	75	125	2	20	

**Chromium (WET)**

EPA 6010D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG593380</b>													
WG593380ICV	ICV	07/18/24 22:29	II240716-3	2		1.999	mg/L	100	90	110			
WG593380ICB	ICB	07/18/24 22:32				U	mg/L		-0.06	0.06			
WG591892PBS	PBS	07/18/24 22:56				U	mg/L		-0.6	0.6			
L88471-01DUP	DUP	07/18/24 23:03			U	U	mg/L				0	20	RA
L88471-02AS	AS	07/18/24 23:11	II240717-4	5.005	U	5.081	mg/L	102	75	125			
L88471-02ASD	ASD	07/18/24 23:15	II240717-4	5.005	U	5.177	mg/L	103	75	125	2	20	

**Chromium, Hexavalent (3060)**

EPA 7196A

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG592237</b>													
WG592237ICV	ICV	07/01/24 14:32	WC240418-3	.05		.0501	mg/L	100	90	110			
WG592237ICB	ICB	07/01/24 14:34				U	mg/L		-0.005	0.005			
L88421-06MS2	MS	07/01/24 15:01	SI210609-	1261.6002	U	1370.2	mg/Kg	109	75	125			
L88421-12DUP	DUP	07/01/24 15:35			U	U	mg/Kg				0	20	RA
WG591796LCSS	LCSS	07/01/24 15:59	PCN624761	19.9		17.5064	mg/Kg		6.04	33.8			
WG591796PBS	PBS	07/01/24 16:03				U	mg/Kg		-1	1			

**Chromium, total (3050)**

EPA 6010D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG592877</b>													
WG592877ICV	ICV	07/11/24 22:38	II240708-1	2		1.946	mg/L	97	90	110			
WG592877ICB	ICB	07/11/24 22:42				U	mg/L		-0.06	0.06			
WG592193PBS	PBS	07/11/24 23:05				U	mg/Kg		-6	6			
WG592193LCSS	LCSS	07/11/24 23:08	PCN626768	180		174.8	mg/Kg		146	213			
WG592193LCSSD	LCSSD	07/11/24 23:12	PCN626768	180		176	mg/Kg		146	213	1	20	
L88444-01MS	MS	07/11/24 23:19	II240702-2	50.05	67.2	119.7	mg/Kg	105	75	125			
L88444-01MSD	MSD	07/11/24 23:23	II240702-2	50.05	67.2	142.6	mg/Kg	151	75	125	17	20	MA

**Cobalt (WET)**

EPA 6010D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG593380</b>													
WG593380ICV	ICV	07/18/24 22:29	II240716-3	1.992		2.065	mg/L	104	90	110			
WG593380ICB	ICB	07/18/24 22:32				U	mg/L		-0.06	0.06			
WG591892PBS	PBS	07/18/24 22:56				U	mg/L		-0.6	0.6			
L88471-01DUP	DUP	07/18/24 23:03			U	U	mg/L				0	20	RA
L88471-02AS	AS	07/18/24 23:11	II240717-4	5.005	U	4.951	mg/L	99	75	125			
L88471-02ASD	ASD	07/18/24 23:15	II240717-4	5.005	U	4.999	mg/L	100	75	125	1	20	

Agapito and Associates Inc.

ACZ Project ID: **L88471**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

**Cobalt, total (3050)**

EPA 6010D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG592877</b>													
WG592877ICV	ICV	07/11/24 22:38	II240708-1	2.01		1.953	mg/L	97	90	110			
WG592877ICB	ICB	07/11/24 22:42				U	mg/L		-0.06	0.06			
WG592193PBS	PBS	07/11/24 23:05				U	mg/Kg		-6	6			
WG592193LCSS	LCSS	07/11/24 23:08	PCN626768	81.6		81.79	mg/Kg		67.9	95.4			
WG592193LCSSD	LCSSD	07/11/24 23:12	PCN626768	81.6		81.83	mg/Kg		67.9	95.4	0	20	
L88444-01MS	MS	07/11/24 23:19	II240702-2	50.25	15.9	65.82	mg/Kg	99	75	125			
L88444-01MSD	MSD	07/11/24 23:23	II240702-2	50.25	15.9	66.39	mg/Kg	100	75	125	1	20	

**Copper (WET)**

EPA 6010D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG593380</b>													
WG593380ICV	ICV	07/18/24 22:29	II240716-3	2		2.006	mg/L	100	90	110			
WG593380ICB	ICB	07/18/24 22:32				U	mg/L		-0.03	0.03			
WG591892PBS	PBS	07/18/24 22:56				U	mg/L		-0.3	0.3			
L88471-01DUP	DUP	07/18/24 23:03			.163	U	mg/L				200	20	RA
L88471-02AS	AS	07/18/24 23:11	II240717-4	5.005	U	5.093	mg/L	102	75	125			
L88471-02ASD	ASD	07/18/24 23:15	II240717-4	5.005	U	5.166	mg/L	103	75	125	1	20	

**Copper, total (3050)**

EPA 6010D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG592877</b>													
WG592877ICV	ICV	07/11/24 22:38	II240708-1	2		1.99	mg/L	100	90	110			
WG592877ICB	ICB	07/11/24 22:42				U	mg/L		-0.03	0.03			
WG592193PBS	PBS	07/11/24 23:05				1.49	mg/Kg		-3	3			
WG592193LCSS	LCSS	07/11/24 23:08	PCN626768	205		202.8	mg/Kg		170	240			
WG592193LCSSD	LCSSD	07/11/24 23:12	PCN626768	205		203	mg/Kg		170	240	0	20	
L88444-01MS	MS	07/11/24 23:19	II240702-2	50.05	16.2	67.67	mg/Kg	103	75	125			
L88444-01MSD	MSD	07/11/24 23:23	II240702-2	50.05	16.2	68.1	mg/Kg	104	75	125	1	20	

**Fluoride (WET)**

SM 4500-F C-2011

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG592313</b>													
WG592313ICV	ICV	07/02/24 11:15	WC240626-1	2		2.06	mg/L	103	90	110			
WG592313ICB	ICB	07/02/24 11:23				U	mg/L		-0.3	0.3			
WG592313LFB	LFB	07/02/24 11:35	WC240411-1	5		4.98	mg/L	100	90	110			
WG591892PBS	PBS	07/02/24 11:41				U	mg/L		-0.3	0.3			
L88471-01AS	AS	07/02/24 11:47	WC240411-1	5	.38	4.33	mg/L	79	90	110			M2
L88471-01DUP	DUP	07/02/24 11:51			.38	.47	mg/L				21	20	RA

**Lead (WET)**

EPA 6020B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG592261</b>													
WG592261ICV	ICV	07/02/24 16:13	MS240613-12	.05		.04973	mg/L	99	90	110			
WG592261ICB	ICB	07/02/24 16:15				U	mg/L		-0.0003	0.0003			
WG591892PBS	PBS	07/02/24 16:24				U	mg/L		-0.003	0.003			
L88471-01DUP	DUP	07/02/24 16:28			.0221	.02282	mg/L				3	20	
L88471-02AS	AS	07/02/24 16:31	MS240613-7	.5005	.0269	.55518	mg/L	106	75	125			
L88471-02ASD	ASD	07/02/24 16:33	MS240613-7	.5005	.0269	.53761	mg/L	102	75	125	3	20	



Agapito and Associates Inc.

ACZ Project ID: **L88471**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

**Lead, total (3050)**

EPA 6020B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG592342</b>													
WG592342ICV	ICV	07/02/24 18:46	MS240613-12	.05		.05008	mg/L	100	90	110			
WG592342ICB	ICB	07/02/24 18:48				U	mg/L		-0.0003	0.0003			
WG592193PBS	PBS	07/02/24 18:57				U	mg/Kg		-0.15	0.15			
WG592193LCSS	LCSS	07/02/24 18:59	PCN626768	92.8		99.23888	mg/Kg		75.9	110			
WG592193LCSSD	LCSSD	07/02/24 19:00	PCN626768	92.8		93.85232	mg/Kg		75.9	110	6	20	
L88444-02MS	MS	07/02/24 19:22	MS240613-4	25.27525	11.8	38.55333	mg/Kg	106	75	125			
L88444-02MSD	MSD	07/02/24 19:24	MS240613-4	25.27525	11.8	39.0666	mg/Kg	108	75	125	1	20	

**Mercury (WET)**

EPA 7470A

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG592228</b>													
WG592228ICV	ICV	07/02/24 14:22	HG240528-3	.005		.00507	mg/L	101	90	110			
WG592228ICB	ICB	07/02/24 14:23				U	mg/L		-0.0006	0.0006			
<b>WG592234</b>													
WG592234PBW	PBW	07/02/24 15:11				U	mg/L		-0.00044	0.00044			
WG592234LCSW	LCSW	07/02/24 15:12	HG240619-6	.002002		.00188	mg/L	94	85	115			
WG591892PBS	PBS	07/02/24 15:13				U	mg/L		-0.012	0.012			
L88471-01DUP	DUP	07/02/24 15:15			U	U	mg/L				0	20	D1 RA
L88471-03MS	MS	07/02/24 15:18	HG20XPREP	.04004	U	.033	mg/L	82	85	115			MA
L88471-03MSD	MSD	07/02/24 15:19	HG20XPREP	.04004	U	.0342	mg/L	85	85	115	4	20	

**Mercury by Direct Combustion AA**

EPA 7473

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG585710</b>													
WG585710ICV4	ICV	03/14/24 12:00	HG240312-2	10000		9850	ng/g	99	90	110			
<b>WG592636</b>													
WG592636ICV1	ICV	07/09/24 10:29	HG240312-5	100		102	ng/g	102	90	110			
WG592636ICV2	ICV	07/09/24 10:36	HG240312-5	100		102	ng/g	102	90	110			
WG592636ICV3	ICV	07/09/24 10:42	HG240312-4	1000		1060	ng/g	106	90	110			
WG592636ICV4	ICV	07/09/24 10:52	HG240312-2	10000		9630	ng/g	96	90	110			
WG592636PBS	PBS	07/09/24 11:26				4.49	ng/g		-7.83	7.83			
WG592636LCSS	LCSS	07/09/24 11:34	PCN60050	90		91.3	ng/g		80	120			
WG592636LCSSD	LCSSD	07/09/24 11:42	PCN60050	90		87	ng/g		80	120	5	20	
L88444-01MS	MS	07/09/24 11:58	HG240312-4				ng/g	130	80	120			M1
L88444-02DUP	DUP	07/09/24 12:13			38.8	66.6	ng/g				53	20	RA

**Molybdenum (WET)**

EPA 6010D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG593380</b>													
WG593380ICV	ICV	07/18/24 22:29	II240716-3	2		2.036	mg/L	102	90	110			
WG593380ICB	ICB	07/18/24 22:32				U	mg/L		-0.06	0.06			
WG591892PBS	PBS	07/18/24 22:56				U	mg/L		-0.6	0.6			
L88471-01DUP	DUP	07/18/24 23:03			U	U	mg/L				0	20	RA
L88471-02AS	AS	07/18/24 23:11	II240717-4	5.005	U	5.184	mg/L	104	75	125			
L88471-02ASD	ASD	07/18/24 23:15	II240717-4	5.005	U	5.281	mg/L	106	75	125	2	20	



Agapito and Associates Inc.

ACZ Project ID: **L88471**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

**Molybdenum, total (3050)**

EPA 6010D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG592877</b>													
WG592877ICV	ICV	07/11/24 22:38	II240708-1	2		1.977	mg/L	99	90	110			
WG592877ICB	ICB	07/11/24 22:42				U	mg/L		-0.06	0.06			
WG592193PBS	PBS	07/11/24 23:05				U	mg/Kg		-6	6			
WG592193LCSS	LCSS	07/11/24 23:08	PCN626768	136		135	mg/Kg		108	163			
WG592193LCSSD	LCSSD	07/11/24 23:12	PCN626768	136		136.4	mg/Kg		108	163	1	20	
L88444-01MS	MS	07/11/24 23:19	II240702-2	50.05	U	47.91	mg/Kg	96	75	125			
L88444-01MSD	MSD	07/11/24 23:23	II240702-2	50.05	U	47.76	mg/Kg	95	75	125	0	20	

**Nickel (WET)**

EPA 6010D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG593380</b>													
WG593380ICV	ICV	07/18/24 22:29	II240716-3	2.004		2.051	mg/L	102	90	110			
WG593380ICB	ICB	07/18/24 22:32				U	mg/L		-0.024	0.024			
WG591892PBS	PBS	07/18/24 22:56				U	mg/L		-0.24	0.24			
L88471-01DUP	DUP	07/18/24 23:03			U	U	mg/L				0	20	RA
L88471-02AS	AS	07/18/24 23:11	II240717-4	5.005	U	4.983	mg/L	100	75	125			
L88471-02ASD	ASD	07/18/24 23:15	II240717-4	5.005	U	5.054	mg/L	101	75	125	1	20	

**Nickel, total (3050)**

EPA 6010D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG592877</b>													
WG592877ICV	ICV	07/11/24 22:38	II240708-1	2.004		1.904	mg/L	95	90	110			
WG592877ICB	ICB	07/11/24 22:42				U	mg/L		-0.024	0.024			
WG592193PBS	PBS	07/11/24 23:05				U	mg/Kg		-2.4	2.4			
WG592193LCSS	LCSS	07/11/24 23:08	PCN626768	313		308.5	mg/Kg		258	368			
WG592193LCSSD	LCSSD	07/11/24 23:12	PCN626768	313		309.3	mg/Kg		258	368	0	20	
L88444-01MS	MS	07/11/24 23:19	II240702-2	50.1	80.4	135.4	mg/Kg	110	75	125			
L88444-01MSD	MSD	07/11/24 23:23	II240702-2	50.1	80.4	172.6	mg/Kg	184	75	125	24	20	M1 RD

**Selenium (WET)**

EPA 6020B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG592261</b>													
WG592261ICV	ICV	07/02/24 16:13	MS240613-12	.05		.05063	mg/L	101	90	110			
WG592261ICB	ICB	07/02/24 16:15				U	mg/L		-0.0003	0.0003			
WG591892PBS	PBS	07/02/24 16:24				U	mg/L		-0.003	0.003			
L88471-01DUP	DUP	07/02/24 16:28			U	U	mg/L				0	20	RA
L88471-02AS	AS	07/02/24 16:31	MS240613-7	.5005	U	.65615	mg/L	131	75	125			M1
L88471-02ASD	ASD	07/02/24 16:33	MS240613-7	.5005	U	.63342	mg/L	127	75	125	4	20	M1

Agapito and Associates Inc.

ACZ Project ID: **L88471**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

**Selenium, total (3050)**

EPA 6020B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG592342</b>													
WG592342ICV	ICV	07/02/24 18:46	MS240613-12	.05		.05011	mg/L	100	90	110			
WG592342ICB	ICB	07/02/24 18:48				U	mg/L		-0.0003	0.0003			
WG592193PBS	PBS	07/02/24 18:57				.05669	mg/Kg		-0.15	0.15			
WG592193LCSS	LCSS	07/02/24 18:59	PCN626768	165		189.69897	mg/Kg		133	197			
WG592193LCSSD	LCSSD	07/02/24 19:00	PCN626768	165		176.87471	mg/Kg		133	197	7	20	
L88444-02MS	MS	07/02/24 19:22	MS240613-4	12.637625	.531	14.71767	mg/Kg	112	75	125			
L88444-02MSD	MSD	07/02/24 19:24	MS240613-4	12.637625	.531	14.49305	mg/Kg	110	75	125	2	20	

**Silver (WET)**

EPA 6020B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG592261</b>													
WG592261ICV	ICV	07/02/24 16:13	MS240613-12	.02		.02007	mg/L	100	90	110			
WG592261ICB	ICB	07/02/24 16:15				U	mg/L		-0.0003	0.0003			
WG591892PBS	PBS	07/02/24 16:24				U	mg/L		-0.003	0.003			
L88471-01DUP	DUP	07/02/24 16:28			U	U	mg/L				0	20	RA
L88471-02AS	AS	07/02/24 16:31	MS240613-7	.1	U	.10142	mg/L	101	75	125			
L88471-02ASD	ASD	07/02/24 16:33	MS240613-7	.1	U	.10353	mg/L	104	75	125	2	20	

**Silver, total (3050)**

EPA 6020B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG592342</b>													
WG592342ICV	ICV	07/02/24 18:46	MS240613-12	.02		.01957	mg/L	98	90	110			
WG592342ICB	ICB	07/02/24 18:48				U	mg/L		-0.0003	0.0003			
WG592193PBS	PBS	07/02/24 18:57				U	mg/Kg		-0.15	0.15			
WG592193LCSS	LCSS	07/02/24 18:59	PCN626768	82.4		86.64723	mg/Kg		65.5	99.2			
WG592193LCSSD	LCSSD	07/02/24 19:00	PCN626768	82.4		82.04491	mg/Kg		65.5	99.2	5	20	
L88444-02MS	MS	07/02/24 19:22	MS240613-4	5.05	.107	5.59959	mg/Kg	109	75	125			
L88444-02MSD	MSD	07/02/24 19:24	MS240613-4	5.05	.107	5.7883	mg/Kg	113	75	125	3	20	

**Solids, Percent**

D2216-80

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG591859</b>													
WG591859PBS	PBS	06/25/24 14:40				U	%		-0.1	0.1			
L88471-01DUP	DUP	06/25/24 20:46			99.8	99.8	%				0	20	

**Thallium (WET)**

EPA 6020B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG592261</b>													
WG592261ICV	ICV	07/02/24 16:13	MS240613-12	.05		.05034	mg/L	101	90	110			
WG592261ICB	ICB	07/02/24 16:15				U	mg/L		-0.0003	0.0003			
WG591892PBS	PBS	07/02/24 16:24				U	mg/L		-0.003	0.003			
L88471-01DUP	DUP	07/02/24 16:28			.00146	.00162	mg/L				10	20	RA
L88471-02AS	AS	07/02/24 16:31	MS240613-7	.501	.00159	.52848	mg/L	105	75	125			
L88471-02ASD	ASD	07/02/24 16:33	MS240613-7	.501	.00159	.51096	mg/L	102	75	125	3	20	

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NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

**Thallium, total (3050)**

EPA 6020B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG592342</b>													
WG592342ICV	ICV	07/02/24 18:46	MS240613-12	.05		.05105	mg/L	102	90	110			
WG592342ICB	ICB	07/02/24 18:48				U	mg/L		-0.0003	0.0003			
WG592193PBS	PBS	07/02/24 18:57				U	mg/Kg		-0.15	0.15			
WG592193LCSS	LCSS	07/02/24 18:59	PCN626768	205		226.36386	mg/Kg		166	245			
WG592193LCSSD	LCSSD	07/02/24 19:00	PCN626768	205		205.27924	mg/Kg		166	245	10	20	
L88444-02MS	MS	07/02/24 19:22	MS240613-4	25.3005	.2	29.52101	mg/Kg	116	75	125			
L88444-02MSD	MSD	07/02/24 19:24	MS240613-4	25.3005	.2	29.61015	mg/Kg	116	75	125	0	20	

**Vanadium (WET)**

EPA 6010D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG593380</b>													
WG593380ICV	ICV	07/18/24 22:29	II240716-3	2		2.027	mg/L	101	90	110			
WG593380ICB	ICB	07/18/24 22:32				U	mg/L		-0.03	0.03			
WG591892PBS	PBS	07/18/24 22:56				U	mg/L		-0.3	0.3			
L88471-01DUP	DUP	07/18/24 23:03			U	U	mg/L				0	20	RA
L88471-02AS	AS	07/18/24 23:11	II240717-4	5.005	U	5.216	mg/L	104	75	125			
L88471-02ASD	ASD	07/18/24 23:15	II240717-4	5.005	U	5.298	mg/L	106	75	125	2	20	

**Vanadium, total (3050)**

EPA 6010D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG592877</b>													
WG592877ICV	ICV	07/11/24 22:38	II240708-1	2		1.99	mg/L	100	90	110			
WG592877ICB	ICB	07/11/24 22:42				U	mg/L		-0.03	0.03			
WG592193PBS	PBS	07/11/24 23:05				U	mg/Kg		-1.5	1.5			
WG592193LCSS	LCSS	07/11/24 23:08	PCN626768	103		103.1	mg/Kg		80.3	126			
WG592193LCSSD	LCSSD	07/11/24 23:12	PCN626768	103		105	mg/Kg		80.3	126	2	20	
L88444-01MS	MS	07/11/24 23:19	II240702-2	50.05	50.7	114.8	mg/Kg	128	75	125			MA
L88444-01MSD	MSD	07/11/24 23:23	II240702-2	50.05	50.7	110.3	mg/Kg	119	75	125	4	20	

**Zinc (WET)**

EPA 6010D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG593380</b>													
WG593380ICV	ICV	07/18/24 22:29	II240716-3	2		1.906	mg/L	95	90	110			
WG593380ICB	ICB	07/18/24 22:32				U	mg/L		-0.06	0.06			
WG591892PBS	PBS	07/18/24 22:56				U	mg/L		-0.6	0.6			
L88471-01DUP	DUP	07/18/24 23:03			.437	.238	mg/L				59	20	RA
L88471-02AS	AS	07/18/24 23:11	II240717-4	5.0045	U	5.216	mg/L	104	75	125			
L88471-02ASD	ASD	07/18/24 23:15	II240717-4	5.0045	U	5.293	mg/L	106	75	125	1	20	

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NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

**Zinc, total (3050)**

EPA 6010D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
<b>WG592877</b>													
WG592877ICV	ICV	07/11/24 22:38	II240708-1	2		1.934	mg/L	97	90	110			
WG592877ICB	ICB	07/11/24 22:42				U	mg/L		-0.06	0.06			
WG592193PBS	PBS	07/11/24 23:05				2.38	mg/Kg		-6	6			
WG592193LCSS	LCSS	07/11/24 23:08	PCN626768	166		166.7	mg/Kg		133	200			
WG592193LCSSD	LCSSD	07/11/24 23:12	PCN626768	166		167.6	mg/Kg		133	200	1	20	
L88444-01MS	MS	07/11/24 23:19	II240702-2	50.045	93.1	147.8	mg/Kg	109	75	125			
L88444-01MSD	MSD	07/11/24 23:23	II240702-2	50.045	93.1	143.4	mg/Kg	101	75	125	3	20	

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L88471-01	WG592261	Antimony (WET)	EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592342	Antimony, total (3050)	EPA 6020B	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG592261	Arsenic (WET)	EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			EPA 6020B	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG593380	Barium (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592877	Barium, total (3050)	EPA 6010D	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			EPA 6010D	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG592261	Beryllium (WET)	EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592342	Beryllium, total (3050)	EPA 6020B	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG592261	Cadmium (WET)	EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
				ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG592342	Cadmium, total (3050)	EPA 6020B	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG593380	Chromium (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
				DA	Sample required dilution due to reactivity.
				H4	Sample was extracted past required extraction holding time, but analyzed within analysis holding time.
				M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
				N1	See Case Narrative.
				Q6	Sample was received above recommended temperature.
	WG592237	Chromium, Hexavalent (3060)	EPA 7196A	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			EPA 7196A	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			EPA 7196A	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592877	Chromium, total (3050)	EPA 6010D	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG593380	Cobalt (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Copper (WET)		RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592313	Fluoride (WET)	SM 4500-F C-2011	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM 4500-F C-2011	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592234	Mercury (WET)	EPA 7470A	D1	Sample required dilution due to matrix.
			EPA 7470A	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
			EPA 7470A	RA	Relative Percent Difference (RPD) was not used for data

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
	WG592636	Mercury by Direct Combustion AA	EPA 7473	M1	validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL). Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			EPA 7473	Q6	Sample was received above recommended temperature.
			EPA 7473	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG593380	Molybdenum (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nickel (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592877	Nickel, total (3050)	EPA 6010D	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			EPA 6010D	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG592261	Selenium (WET)	EPA 6020B	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Silver (WET)	EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Thallium (WET)	EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG593380	Vanadium (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592877	Vanadium, total (3050)	EPA 6010D	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG593380	Zinc (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L88471-02	WG592261	Antimony (WET)	EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592342	Antimony, total (3050)	EPA 6020B	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG592261	Arsenic (WET)	EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			EPA 6020B	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG593380	Barium (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592877	Barium, total (3050)	EPA 6010D	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			EPA 6010D	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG592583	Beryllium (WET)	EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			EPA 6020B	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG592342	Beryllium, total (3050)	EPA 6020B	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG592261	Cadmium (WET)	EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
				ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG592342	Cadmium, total (3050)	EPA 6020B	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG593380	Chromium (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
				DA	Sample required dilution due to reactivity.
	WG592237	Chromium, Hexavalent (3060)	EPA 7196A	H4	Sample was extracted past required extraction holding time, but analyzed within analysis holding time.
			EPA 7196A	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			EPA 7196A	N1	See Case Narrative.
			EPA 7196A	Q6	Sample was received above recommended temperature.
			EPA 7196A	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592877	Chromium, total (3050)	EPA 6010D	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG593380	Cobalt (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Copper (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592313	Fluoride (WET)	SM 4500-F C-2011	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM 4500-F C-2011	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592234	Mercury (WET)	EPA 7470A	D1	Sample required dilution due to matrix.
			EPA 7470A	MA	Recovery for either the spike or spike duplicate was outside

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
					of the acceptance limits; the RPD was within the acceptance limits.
			EPA 7470A	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592636	Mercury by Direct Combustion AA	EPA 7473	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			EPA 7473	Q6	Sample was received above recommended temperature.
			EPA 7473	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG593380	Molybdenum (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nickel (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592877	Nickel, total (3050)	EPA 6010D	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			EPA 6010D	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG592261	Selenium (WET)	EPA 6020B	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Silver (WET)	EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Thallium (WET)	EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG593380	Vanadium (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592877	Vanadium, total (3050)	EPA 6010D	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG593380	Zinc (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).



Agapito and Associates Inc.

ACZ Project ID: **L88471**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L88471-03	WG592261	Antimony (WET)	EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592342	Antimony, total (3050)	EPA 6020B	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG592261	Arsenic (WET)	EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			EPA 6020B	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG593380	Barium (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592877	Barium, total (3050)	EPA 6010D	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			EPA 6010D	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG592583	Beryllium (WET)	EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			EPA 6020B	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG592342	Beryllium, total (3050)	EPA 6020B	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG592261	Cadmium (WET)	EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
				ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG592342	Cadmium, total (3050)	EPA 6020B	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG593380	Chromium (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
				DA	Sample required dilution due to reactivity.
	WG592237	Chromium, Hexavalent (3060)	EPA 7196A	H4	Sample was extracted past required extraction holding time, but analyzed within analysis holding time.
			EPA 7196A	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			EPA 7196A	N1	See Case Narrative.
			EPA 7196A	Q6	Sample was received above recommended temperature.
			EPA 7196A	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592877	Chromium, total (3050)	EPA 6010D	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG593380	Cobalt (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Copper (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592313	Fluoride (WET)	SM 4500-F C-2011	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM 4500-F C-2011	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592234	Mercury (WET)	EPA 7470A	D1	Sample required dilution due to matrix.
			EPA 7470A	MA	Recovery for either the spike or spike duplicate was outside

REPAD.15.06.05.01

Agapito and Associates Inc.

ACZ Project ID: **L88471**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
					of the acceptance limits; the RPD was within the acceptance limits.
			EPA 7470A	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592636	Mercury by Direct Combustion AA	EPA 7473	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			EPA 7473	Q6	Sample was received above recommended temperature.
			EPA 7473	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG593380	Molybdenum (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nickel (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592877	Nickel, total (3050)	EPA 6010D	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			EPA 6010D	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG592261	Selenium (WET)	EPA 6020B	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Silver (WET)	EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Thallium (WET)	EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG593380	Vanadium (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592877	Vanadium, total (3050)	EPA 6010D	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG593380	Zinc (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

Agapito and Associates Inc.

ACZ Project ID: **L88471**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L88471-04	WG592261	Antimony (WET)	EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592342	Antimony, total (3050)	EPA 6020B	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG592261	Arsenic (WET)	EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			EPA 6020B	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG593380	Barium (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592877	Barium, total (3050)	EPA 6010D	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			EPA 6010D	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG592583	Beryllium (WET)	EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
			EPA 6020B	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG592342	Beryllium, total (3050)	EPA 6020B	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG592261	Cadmium (WET)	EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
				ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG592342	Cadmium, total (3050)	EPA 6020B	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG593380	Chromium (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
				DA	Sample required dilution due to reactivity.
	WG592237	Chromium, Hexavalent (3060)	EPA 7196A	H4	Sample was extracted past required extraction holding time, but analyzed within analysis holding time.
			EPA 7196A	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			EPA 7196A	N1	See Case Narrative.
			EPA 7196A	Q6	Sample was received above recommended temperature.
			EPA 7196A	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592877	Chromium, total (3050)	EPA 6010D	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG593380	Cobalt (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Copper (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592313	Fluoride (WET)	SM 4500-F C-2011	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM 4500-F C-2011	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592234	Mercury (WET)	EPA 7470A	D1	Sample required dilution due to matrix.
			EPA 7470A	MA	Recovery for either the spike or spike duplicate was outside

REPAD.15.06.05.01

Agapito and Associates Inc.

ACZ Project ID: **L88471**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
					of the acceptance limits; the RPD was within the acceptance limits.
			EPA 7470A	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592636	Mercury by Direct Combustion AA	EPA 7473	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			EPA 7473	Q6	Sample was received above recommended temperature.
			EPA 7473	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG593380	Molybdenum (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Nickel (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592877	Nickel, total (3050)	EPA 6010D	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			EPA 6010D	RD	For a solid matrix, the duplicate RPD (spike or matrix) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
	WG592261	Selenium (WET)	EPA 6020B	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
			EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Silver (WET)	EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Thallium (WET)	EPA 6020B	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG593380	Vanadium (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG592877	Vanadium, total (3050)	EPA 6010D	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
	WG593380	Zinc (WET)	EPA 6010D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

**Agapito and Associates Inc.**

ACZ Project ID: **L88471**

**Metals Analysis**

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Barium (WET)	EPA 6010D
Chromium (WET)	EPA 6010D
Cobalt (WET)	EPA 6010D
Copper (WET)	EPA 6010D
Molybdenum (WET)	EPA 6010D
Nickel (WET)	EPA 6010D
Silver (WET)	EPA 6020B
Silver, total (3050)	EPA 6020B
Vanadium (WET)	EPA 6010D
Zinc (WET)	EPA 6010D

**Soil Analysis**

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Solids, Percent	D2216-80
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**Wet Chemistry**

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Fluoride (WET)	SM 4500-F C-2011
----------------	------------------

Agapito and Associates Inc.

ACZ Project ID: L88471

Date Received: 06/19/2024 11:11

Received By:

Date Printed: 6/20/2024

#### Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) Is the Chain of Custody form or other directive shipping papers present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) Does this project require special handling procedures such as CLP protocol?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4) Are any samples NRC licensable material?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5) If samples are received past hold time, proceed with requested short hold time analyses?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6) Is the Chain of Custody form complete and accurate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9) Are all labels on containers and are they intact and legible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11) For preserved bottle types, was the pH checked and within limits? <sup>1</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12) Is there sufficient sample volume to perform all requested work?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13) Is the custody seal intact on all containers?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
14) Are samples that require zero headspace acceptable?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15) Are all sample containers appropriate for analytical requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16) Is there an Hg-1631 trip blank present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17) Is there a VOA trip blank present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18) Were all samples received within hold time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NA indicates Not Applicable

#### Chain of Custody Related Remarks

#### Client Contact Remarks

#### Shipping Containers

Cooler Id	Temp (°C)	Temp Criteria (°C)	Rad (µR/Hr)	Custody Seal Intact?
NA42145	10.3	NA	15	N/A

Was ice present in the shipment container(s)?

No - Wet or gel ice was not present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

Agapito and Associates Inc.

ACZ Project ID: L88471

Date Received: 06/19/2024 11:11

Received By:

Date Printed: 6/20/2024

<sup>1</sup> The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).



Accredited  
Environmental  
Testing

2773 Downhill Drive  
Steamboat Springs, CO 80487  
(970) 879-6590

L88471

# CHAIN of CUSTODY

## Report to:

Name: Tristan Bates

Company: Agapito Associates, Inc.

E-mail: tristan.bates@agapito.com

Address: 715 Horizon Dr STE 340

Grand Junction, CO, 81506

Telephone: 9704331840

## Copy of Report to:

Name:

Company:

E-mail:

Telephone:

## Invoice to:

Name: Linda Patterson

Company: Agapito Associates, Inc.

E-mail: lpatterson@agapito.com

Address: 715 Horizon Dr STE 340

Grand Junction, CO, 81506

Telephone: 9702424220

## Copy of Invoice to:

Name: Tristan Bates

Company: Agapito Associates, Inc.

E-mail: tristan.bates@agapito.com

Address: 715 Horizon Dr STE 340

Grand Junction, CO, 81506

Telephone: 9704331840

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses?

YES

NO



If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

Are samples for SDWA Compliance Monitoring?

Yes

No

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Tristan Bates

Sampler's Site Information

State CA

Zip code 93560

Time Zone UTC-7

\*Sampler's Signature:

I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

## PROJECT INFORMATION

ANALYSES REQUESTED (Print in box or check number)

Quote #: ROSAMOND-CORES

PO#: 951-20

Reporting state for compliance testing: California

Check box if samples include NRC licensed material?

SAMPLE IDENTIFICATION

DATE:TIME

Matrix

# of Containers

IC\_UNALT\_01

6/17/2024 11:54

SO

1

IC\_UNALT\_02

6/17/2024 11:54

SO

1

IC\_ALT\_03

6/17/2024 11:54

SO

1

IC\_ALT\_04

6/17/2024 11:54

SO

1

Matrix

SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

## REMARKS

Rock samples crushed to < 1" pieces

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:

DATE:TIME

RECEIVED BY:

DATE:TIME

Tristan Bates

6/17/2024

Qualtrix ID: 1984

Revision #: 2

White - Return with sample.

Yellow - Retain for your records.

L88471 Chain of Custody



Hole	Sample	Top (ft)	Bottom (ft)
ZEV-CH-05-24	IC_UNALT_01	1009.1	1009.8
ZEV-CH-05-24	IC_UNALT_02	1015.0	1015.6
ZEV-CH-05-24	IC_ALT_03	1564.2	1564.8
ZEV-CH-05-24	IC_ALT_04	1572.9	1573.4

Thanks!



# Analytical Report

## Oilfield Environmental & Compliance, Inc.

Judd King  
Yeh & Associates  
391 Front St., Suite D  
Grover Beach, CA 93433

OEC Work Order: **2407834**

Report Date: **October 10, 2024 10:03**

Project: **Zevsar Energy Storage**

Number: Rosamond, CA

Enclosed is an analytical report for the above referenced project. The samples included in this report were received on August 22, 2024 08:47 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Manual, applicable standard operating procedures, and other related documentation. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Authorized for release by:

Meredith Sprister, Business Director

[msprister@oecusa.com](mailto:msprister@oecusa.com)

*This laboratory is accredited in accordance with the recognised International Standard ISO/IEC 17025. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO/ILAC-IAF Communiqué dated April 2017)*

307 Roemer Way, Suite 300  
Santa Maria, CA 93454

Main: (805) 922-4772

Fax: (805) 925-3376



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TNI 2016 & ISO/IEC 17025:2017  
CA-ELAP 2438, TNI 02666



# Oilfield Environmental & Compliance, Inc.

Yeh & Associates  
391 Front St., Suite D  
Grover Beach CA, 93433

Project: Zevsar Energy Storage  
Project Number: Rosamond, CA  
Project Manager: Judd King

WO & Reported:  
**2407834**  
10/10/2024 10:03

## Sample Summary

Sample ID	Laboratory ID	Client Matrix	Lab Matrix	Date Sampled	Date Received
23E-05A	2407834-01	Water	Water	08/21/2024 12:50	08/22/2024 08:47
23E-05B	2407834-02	Water	Water	08/21/2024 12:55	08/22/2024 08:47
23E-11A	2407834-03	Water	Water	08/21/2024 15:30	08/22/2024 08:47
23E-11B	2407834-04	Water	Water	08/21/2024 15:30	08/22/2024 08:47

## Sample Batch Preparation Summary

Analysis	Batch ID	Preparation Date/Time
*** DEFAULT GENERAL METHOD ***		
XRD/XRF (sub)		
<b>Anions by IC</b>		
EPA 300.0	B4H0852	08/22/2024 12:32
<b>General Chemistry Parameters by EPA or APHA Standard Methods</b>		
9040B pH	B4H0937	08/24/2024 11:08
Alkalinity, Speciated SM2320B	B4H1204	08/30/2024 15:40
Ammonia as N	B4I0017	09/03/2024 08:06
COD, Chemical Oxygen Demand	B4H1192	08/30/2024 13:35
Conductivity, SM2510B	B4H1009	08/27/2024 13:57
Ferrous Iron	B4H0862	08/22/2024 11:25
pH Sample Temperature	B4H0937	08/24/2024 11:08
Phosphate, Ortho as P by SM4500-P E/EPA 365.3	B4H0907	08/23/2024 10:20
Phosphorus, Total as P by SM4500-P B,E/EPA 365.3	B4H1078	08/28/2024 12:14
Solids, Total Dissolved (TDS), SM2540C	B4H1010	08/27/2024 10:28
Solids, Total Suspended (TSS), SM2540D	B4H0920	08/23/2024 12:31
TOC, Total Organic Carbon SM5310B	B4I0156	09/05/2024 09:24
Turbidity, SM2130B	B4H0886	08/22/2024 15:35
<b>Total Metals by CVAA</b>		
Mercury Total EPA 7470A	B4H0953	08/26/2024 08:36
<b>Total Metals by EPA 6000/7000 Series Methods</b>		
Hardness SM2340B/6010B	[CALC]	08/23/2024 09:18
<b>Total Metals by ICP</b>		
6010B Total	B4H0901	08/23/2024 09:18

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CA-ELAP 2438, TNI02666  
307 Roemer Way, Santa Maria, CA 93454

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# Oilfield Environmental & Compliance, Inc.

Yeh & Associates  
391 Front St., Suite D  
Grover Beach CA, 93433

Project: Zevsar Energy Storage  
Project Number: Rosamond, CA  
Project Manager: Judd King

WO & Reported:  
**2407834**  
10/10/2024 10:03

## Analytical Report for Samples

Sample ID : **23E-05A**

Matrix : Water

Lab ID : 2407834-01

Sampled : 08/21/24 12:50

Sampled by : Luke Salemmme

Field Data : NA

Analyte	Result	RL	Units	Dilution	Batch	Analyzed	Method	Notes
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### Anions by IC

Bromide	1.8	0.40	mg/L	1	B4H0852	08/22/24 20:20	EPA 300.0	
Chloride	550	20	"	50	"	08/25/24 02:46	"	
Fluoride	0.45	0.40	"	1	"	08/22/24 20:20	"	
Nitrate as N	6.2	0.40	"	"	"	"	"	
Nitrite as N	ND	0.40	"	"	"	"	"	
Sulfate	310	20	"	50	"	08/25/24 02:46	"	

### Total Metals by CVAA

Mercury	ND	0.00020	mg/L	1	B4H0953	08/26/24 15:02	EPA 7470A	
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### Total Metals by ICP

Aluminum	3.5	0.20	mg/L	1	B4H0901	08/26/24 15:23	EPA 6010B	
Antimony	ND	0.050	"	"	"	"	"	
Arsenic	ND	0.040	"	"	"	"	"	
Barium	0.11	0.080	"	"	"	"	"	
Beryllium	ND	0.010	"	"	"	"	"	
Boron	0.17	0.16	"	"	"	"	"	
Cadmium	ND	0.0050	"	"	"	"	"	
Calcium	270	0.40	"	"	"	"	"	
Chromium	ND	0.010	"	"	"	"	"	
Cobalt	ND	0.010	"	"	"	"	"	
Copper	ND	0.020	"	"	"	"	"	
Iron	3.7	0.40	"	"	"	"	"	
Lead	0.014	0.010	"	"	"	"	"	
Magnesium	54	0.050	"	"	"	"	"	
Manganese	0.18	0.010	"	"	"	"	"	
Molybdenum	ND	0.010	"	"	"	"	"	
Nickel	ND	0.010	"	"	"	"	"	
Potassium	9.3	0.50	"	"	"	"	"	
Selenium	ND	0.050	"	"	"	"	"	
Silica (SiO2)	40	0.80	"	"	"	"	"	
Silver	ND	0.010	"	"	"	"	"	
Sodium	93	1.2	"	"	"	"	"	
Strontium	2.2	0.010	"	"	"	"	"	

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Project: Zevsar Energy Storage  
Project Number: Rosamond, CA  
Project Manager: Judd King

WO & Reported:  
**2407834**  
10/10/2024 10:03

## Analytical Report for Samples

Sample ID : **23E-05A**

Matrix : Water

Lab ID : 2407834-01

Sampled : 08/21/24 12:50

Sampled by : Luke Salemmme

Field Data : NA

Analyte	Result	RL	Units	Dilution	Batch	Analyzed	Method	Notes
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### Total Metals by ICP (Continued)

Thallium	ND	0.020	mg/L	1	B4H0901	08/26/24 15:23	EPA 6010B	
Vanadium	ND	0.050	"	"	"	"	"	
Zinc	ND	0.050	"	"	"	"	"	

### Total Metals by EPA 6000/7000 Series Methods

Hardness as CaCO <sub>3</sub>	<b>900</b>	0.21	mg/L	1	[CALC]	08/26/24 15:23	SM 2340B	
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### General Chemistry Parameters by EPA or APHA Standard Methods

pH @ 25 C	<b>7.74</b>	0.10	pH Units	1	B4H0937	08/24/24 11:30	EPA 9040B/SM4500H+ B	HT-pH
pH Sample Temperature During Analysis	<b>21</b>	1.0	°C	"	"	"	EPA 170.1/SM 2550B	
Specific Conductance (EC) @ 25 C	<b>2300</b>	2.0	umhos/cm	"	B4H1009	08/27/24 14:57	SM 2510B	
Total Alkalinity, CaCO <sub>3</sub>	<b>75</b>	20	mg/L	"	B4H1204	09/03/24 11:51	SM 2320B	
Bicarbonate, CaCO <sub>3</sub>	<b>75</b>	20	"	"	"	"	"	
Carbonate, CaCO <sub>3</sub>	ND	20	"	"	"	"	"	
Hydroxide, CaCO <sub>3</sub>	ND	20	"	"	"	"	"	
Ammonia as N	ND	0.14	"	"	B4I0017	09/03/24 08:20	SM 4500 NH3D	
Chemical Oxygen Demand	<b>140</b>	40	"	2	B4H1192	09/02/24 12:00	SM 5220D	
Ferrous Iron	<b>149</b>	50.0	ug/L	1	B4H0862	08/22/24 14:00	SM 3500 Fe-B	HT-08
Total Organic Carbon	ND	2.5	mg/L	5	B4I0156	09/06/24 17:00	SM 5310B	R-IC
Orthophosphate as P	<b>0.84</b>	0.50	"	20	B4H0907	08/23/24 12:30	SM 4500-P E / EPA 365.3	
Phosphorus-Total as P	ND	0.50	"	"	B4H1078	08/28/24 13:30	SM 4500-P B,E / EPA 365.3	R-01
Turbidity	<b>450</b>	0.10	NTU	1	B4H0886	08/22/24 16:46	SM 2130B	
Total Dissolved Solids	<b>1800</b>	10	mg/L	"	B4H1010	08/27/24 16:00	SM 2540C	
Total Suspended Solids	<b>1000</b>	10	"	"	B4H0920	08/23/24 13:00	SM 2540D	

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Project: Zevsar Energy Storage  
Project Number: Rosamond, CA  
Project Manager: Judd King

WO & Reported:  
**2407834**  
10/10/2024 10:03

## Analytical Report for Samples

Sample ID : **23E-05B**

Matrix : Water

Lab ID : 2407834-02

Sampled : 08/21/24 12:55

Sampled by : Luke Salemm

Field Data : NA

Analyte	Result	RL	Units	Dilution	Batch	Analyzed	Method	Notes
<b>Anions by IC</b>								
Bromide	1.8	0.40	mg/L	1	B4H0852	08/22/24 20:36	EPA 300.0	
Chloride	550	20	"	50	"	08/25/24 03:49	"	
Fluoride	0.49	0.40	"	1	"	08/22/24 20:36	"	
Nitrate as N	8.2	0.40	"	"	"	"	"	
Nitrite as N	ND	0.40	"	"	"	"	"	
Sulfate	330	20	"	50	"	08/25/24 03:49	"	

## Total Metals by CVAA

Mercury	ND	0.00020	mg/L	1	B4H0953	08/26/24 15:04	EPA 7470A
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Project: Zevsar Energy Storage  
Project Number: Rosamond, CA  
Project Manager: Judd King

WO & Reported:  
**2407834**  
10/10/2024 10:03

## Analytical Report for Samples

Sample ID : **23E-05B**

Matrix : Water

Lab ID : 2407834-02

Sampled : 08/21/24 12:55

Sampled by : Luke Salemmme

Field Data : NA

Analyte	Result	RL	Units	Dilution	Batch	Analyzed	Method	Notes
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### Total Metals by ICP

<b>Aluminum</b>	<b>2.8</b>	0.20	mg/L	1	B4H0901	08/26/24 15:26	EPA 6010B	
Antimony	ND	0.050	"	"	"	"	"	
Arsenic	ND	0.040	"	"	"	"	"	
<b>Barium</b>	<b>0.11</b>	0.080	"	"	"	"	"	
Beryllium	ND	0.010	"	"	"	"	"	
<b>Boron</b>	<b>0.17</b>	0.16	"	"	"	"	"	
Cadmium	ND	0.0050	"	"	"	"	"	
<b>Calcium</b>	<b>270</b>	0.40	"	"	"	"	"	
Chromium	ND	0.010	"	"	"	"	"	
Cobalt	ND	0.010	"	"	"	"	"	
Copper	ND	0.020	"	"	"	"	"	
<b>Iron</b>	<b>3.7</b>	0.40	"	"	"	"	"	
<b>Lead</b>	<b>0.015</b>	0.010	"	"	"	"	"	
<b>Magnesium</b>	<b>53</b>	0.050	"	"	"	"	"	
<b>Manganese</b>	<b>0.25</b>	0.010	"	"	"	"	"	
Molybdenum	ND	0.010	"	"	"	"	"	
Nickel	ND	0.010	"	"	"	"	"	
<b>Potassium</b>	<b>9.4</b>	0.50	"	"	"	"	"	
Selenium	ND	0.050	"	"	"	"	"	
<b>Silica (SiO2)</b>	<b>36</b>	0.80	"	"	"	"	"	
Silver	ND	0.010	"	"	"	"	"	
<b>Sodium</b>	<b>93</b>	1.2	"	"	"	"	"	
<b>Strontium</b>	<b>2.2</b>	0.010	"	"	"	"	"	
Thallium	ND	0.020	"	"	"	"	"	
Vanadium	ND	0.050	"	"	"	"	"	
Zinc	ND	0.050	"	"	"	"	"	

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Project: Zevsar Energy Storage  
Project Number: Rosamond, CA  
Project Manager: Judd King

WO & Reported:  
**2407834**  
10/10/2024 10:03

## Analytical Report for Samples

Sample ID : **23E-05B**

Matrix : Water

Lab ID : 2407834-02

Sampled : 08/21/24 12:55

Sampled by : Luke Salemm

Field Data : NA

Analyte	Result	RL	Units	Dilution	Batch	Analyzed	Method	Notes
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### Total Metals by EPA 6000/7000 Series Methods

Hardness as CaCO <sub>3</sub>	900	0.21	mg/L	1	[CALC]	08/26/24 15:26	SM 2340B
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### General Chemistry Parameters by EPA or APHA Standard Methods

pH @ 25 C	7.64	0.10	pH Units	1	B4H0937	08/24/24 11:30	EPA 9040B/SM4500H+ B	HT-pH
pH Sample Temperature During Analysis	21	1.0	°C	"	"	"	EPA 170.1/SM 2550B	
Specific Conductance (EC) @ 25 C	2300	2.0	umhos/cm	"	B4H1009	08/27/24 14:57	SM 2510B	
Total Alkalinity, CaCO <sub>3</sub>	73	20	mg/L	"	B4H1204	09/03/24 11:51	SM 2320B	
Bicarbonate, CaCO <sub>3</sub>	73	20	"	"	"	"	"	
Carbonate, CaCO <sub>3</sub>	ND	20	"	"	"	"	"	
Hydroxide, CaCO <sub>3</sub>	ND	20	"	"	"	"	"	
Ammonia as N	ND	0.14	"	"	B4I0017	09/03/24 08:20	SM 4500 NH3D	
Chemical Oxygen Demand	150	40	"	2	B4H1192	09/02/24 12:00	SM 5220D	
Ferrous Iron	ND	50.0	ug/L	1	B4H0862	08/22/24 14:00	SM 3500 Fe-B	HT-08
Total Organic Carbon	ND	2.5	mg/L	5	B4I0156	09/06/24 17:00	SM 5310B	R-IC
Orthophosphate as P	0.92	0.50	"	20	B4H0907	08/23/24 12:30	SM 4500-P E / EPA 365.3	
Phosphorus-Total as P	ND	0.50	"	"	B4H1078	08/28/24 13:30	SM 4500-P B,E / EPA 365.3	R-01
Turbidity	550	0.10	NTU	1	B4H0886	08/22/24 16:46	SM 2130B	
Total Dissolved Solids	1800	10	mg/L	"	B4H1010	08/27/24 16:00	SM 2540C	
Total Suspended Solids	380	10	"	"	B4H0920	08/23/24 13:00	SM 2540D	

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Project: Zevsar Energy Storage  
Project Number: Rosamond, CA  
Project Manager: Judd King

WO & Reported:  
**2407834**  
10/10/2024 10:03

## Analytical Report for Samples

Sample ID : **23E-11A**  
Matrix : Water  
Lab ID : 2407834-03

Sampled : 08/21/24 15:30  
Sampled by : Luke Salemm  
Field Data : NA

Analyte	Result	RL	Units	Dilution	Batch	Analyzed	Method	Notes
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### Anions by IC

Bromide	0.83	0.40	mg/L	1	B4H0852	08/22/24 21:07	EPA 300.0	
Chloride	260	20	"	50	"	08/25/24 04:05	"	
Fluoride	1.0	0.40	"	1	"	08/22/24 21:07	"	
Nitrate as N	9.8	0.40	"	"	"	"	"	
Nitrite as N	ND	0.40	"	"	"	"	"	
Sulfate	150	20	"	50	"	08/25/24 04:05	"	

### Total Metals by CVAA

Mercury	ND	0.00020	mg/L	1	B4H0953	08/26/24 15:07	EPA 7470A	
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Project Manager: Judd King

WO & Reported:  
**2407834**  
10/10/2024 10:03

## Analytical Report for Samples

Sample ID : **23E-11A**

Matrix : Water

Lab ID : 2407834-03

Sampled : 08/21/24 15:30

Sampled by : Luke Salemmme

Field Data : NA

Analyte	Result	RL	Units	Dilution	Batch	Analyzed	Method	Notes
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### Total Metals by ICP

<b>Aluminum</b>	<b>0.58</b>	0.20	mg/L	1	B4H0901	08/26/24 15:28	EPA 6010B	
Antimony	ND	0.050	"	"	"	"	"	
Arsenic	ND	0.040	"	"	"	"	"	
<b>Barium</b>	<b>0.11</b>	0.080	"	"	"	"	"	
Beryllium	ND	0.010	"	"	"	"	"	
<b>Boron</b>	<b>0.59</b>	0.16	"	"	"	"	"	
Cadmium	ND	0.0050	"	"	"	"	"	
<b>Calcium</b>	<b>110</b>	0.40	"	"	"	"	"	
Chromium	ND	0.010	"	"	"	"	"	
Cobalt	ND	0.010	"	"	"	"	"	
Copper	ND	0.020	"	"	"	"	"	
<b>Iron</b>	<b>0.59</b>	0.40	"	"	"	"	"	
<b>Lead</b>	<b>0.012</b>	0.010	"	"	"	"	"	
<b>Magnesium</b>	<b>28</b>	0.050	"	"	"	"	"	
<b>Manganese</b>	<b>0.11</b>	0.010	"	"	"	"	"	
Molybdenum	ND	0.010	"	"	"	"	"	
Nickel	ND	0.010	"	"	"	"	"	
<b>Potassium</b>	<b>3.4</b>	0.50	"	"	"	"	"	
Selenium	ND	0.050	"	"	"	"	"	
<b>Silica (SiO2)</b>	<b>46</b>	0.80	"	"	"	"	"	
Silver	ND	0.010	"	"	"	"	"	
<b>Sodium</b>	<b>100</b>	1.2	"	"	"	"	"	
<b>Strontium</b>	<b>0.83</b>	0.010	"	"	"	"	"	
Thallium	ND	0.020	"	"	"	"	"	
Vanadium	ND	0.050	"	"	"	"	"	
Zinc	ND	0.050	"	"	"	"	"	

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Project: Zevsar Energy Storage  
Project Number: Rosamond, CA  
Project Manager: Judd King

WO & Reported:  
**2407834**  
10/10/2024 10:03

## Analytical Report for Samples

Sample ID : **23E-11A**

Matrix : Water

Lab ID : 2407834-03

Sampled : 08/21/24 15:30

Sampled by : Luke Salemm

Field Data : NA

Analyte	Result	RL	Units	Dilution	Batch	Analyzed	Method	Notes
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### Total Metals by EPA 6000/7000 Series Methods

Hardness as CaCO <sub>3</sub>	390	0.21	mg/L	1	[CALC]	08/26/24 15:28	SM 2340B
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### General Chemistry Parameters by EPA or APHA Standard Methods

pH @ 25 C	7.91	0.10	pH Units	1	B4H0937	08/24/24 11:30	EPA 9040B/SM4500H+ B	HT-pH
pH Sample Temperature During Analysis	21	1.0	°C	"	"	"	EPA 170.1/SM 2550B	
Specific Conductance (EC) @ 25 C	1300	2.0	umhos/cm	"	B4H1009	08/27/24 14:57	SM 2510B	
Total Alkalinity, CaCO <sub>3</sub>	83	20	mg/L	"	B4H1204	09/03/24 11:51	SM 2320B	
Bicarbonate, CaCO <sub>3</sub>	83	20	"	"	"	"	"	
Carbonate, CaCO <sub>3</sub>	ND	20	"	"	"	"	"	
Hydroxide, CaCO <sub>3</sub>	ND	20	"	"	"	"	"	
Ammonia as N	ND	0.14	"	"	B4I0017	09/03/24 08:20	SM 4500 NH3D	
Chemical Oxygen Demand	29	20	"	"	B4H1192	09/02/24 12:00	SM 5220D	
Ferrous Iron	ND	50.0	ug/L	"	B4H0862	08/22/24 14:00	SM 3500 Fe-B	
Total Organic Carbon	ND	2.5	mg/L	5	B4I0156	09/06/24 17:00	SM 5310B	R-IC
Orthophosphate as P	0.24	0.12	"	"	B4H0907	08/23/24 12:30	SM 4500-P E / EPA 365.3	
Phosphorus-Total as P	0.29	0.025	"	1	B4H1078	08/28/24 13:30	SM 4500-P B,E / EPA 365.3	
Turbidity	75	0.10	NTU	"	B4H0886	08/22/24 16:46	SM 2130B	
Total Dissolved Solids	900	10	mg/L	"	B4H1010	08/27/24 16:00	SM 2540C	
Total Suspended Solids	120	10	"	"	B4H0920	08/23/24 13:00	SM 2540D	

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Grover Beach CA, 93433

Project: Zevsar Energy Storage  
Project Number: Rosamond, CA  
Project Manager: Judd King

WO & Reported:  
**2407834**  
10/10/2024 10:03

## Analytical Report for Samples

Sample ID : **23E-11B**  
Matrix : Water  
Lab ID : 2407834-04

Sampled : 08/21/24 15:30  
Sampled by : Luke Salemm  
Field Data : NA

Analyte	Result	RL	Units	Dilution	Batch	Analyzed	Method	Notes
---------	--------	----	-------	----------	-------	----------	--------	-------

### Anions by IC

Bromide	0.84	0.40	mg/L	1	B4H0852	08/22/24 21:23	EPA 300.0	
Chloride	270	20	"	50	"	08/25/24 04:20	"	
Fluoride	1.1	0.40	"	1	"	08/22/24 21:23	"	
Nitrate as N	7.6	0.40	"	"	"	"	"	
Nitrite as N	ND	0.40	"	"	"	"	"	
Sulfate	170	20	"	50	"	08/25/24 04:20	"	

### Total Metals by CVAA

Mercury	ND	0.00020	mg/L	1	B4H0953	08/26/24 15:14	EPA 7470A	
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# Oilfield Environmental & Compliance, Inc.

Yeh & Associates  
391 Front St., Suite D  
Grover Beach CA, 93433

Project: Zevsar Energy Storage  
Project Number: Rosamond, CA  
Project Manager: Judd King

WO & Reported:  
**2407834**  
10/10/2024 10:03

## Analytical Report for Samples

Sample ID : **23E-11B**

Matrix : Water

Lab ID : 2407834-04

Sampled : 08/21/24 15:30

Sampled by : Luke Salemm

Field Data : NA

Analyte	Result	RL	Units	Dilution	Batch	Analyzed	Method	Notes
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### Total Metals by ICP

<b>Aluminum</b>	<b>0.66</b>	0.20	mg/L	1	B4H0901	08/26/24 15:31	EPA 6010B	
Antimony	ND	0.050	"	"	"	"	"	
Arsenic	ND	0.040	"	"	"	"	"	
<b>Barium</b>	<b>0.11</b>	0.080	"	"	"	"	"	
Beryllium	ND	0.010	"	"	"	"	"	
<b>Boron</b>	<b>0.57</b>	0.16	"	"	"	"	"	
Cadmium	ND	0.0050	"	"	"	"	"	
<b>Calcium</b>	<b>100</b>	0.40	"	"	"	"	"	
Chromium	ND	0.010	"	"	"	"	"	
Cobalt	ND	0.010	"	"	"	"	"	
Copper	ND	0.020	"	"	"	"	"	
<b>Iron</b>	<b>0.64</b>	0.40	"	"	"	"	"	
<b>Lead</b>	<b>0.015</b>	0.010	"	"	"	"	"	
<b>Magnesium</b>	<b>27</b>	0.050	"	"	"	"	"	
<b>Manganese</b>	<b>0.12</b>	0.010	"	"	"	"	"	
Molybdenum	ND	0.010	"	"	"	"	"	
Nickel	ND	0.010	"	"	"	"	"	
<b>Potassium</b>	<b>3.2</b>	0.50	"	"	"	"	"	
Selenium	ND	0.050	"	"	"	"	"	
<b>Silica (SiO2)</b>	<b>44</b>	0.80	"	"	"	"	"	
Silver	ND	0.010	"	"	"	"	"	
<b>Sodium</b>	<b>99</b>	1.2	"	"	"	"	"	
<b>Strontium</b>	<b>0.80</b>	0.010	"	"	"	"	"	
Thallium	ND	0.020	"	"	"	"	"	
Vanadium	ND	0.050	"	"	"	"	"	
Zinc	ND	0.050	"	"	"	"	"	

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Project: Zevsar Energy Storage  
Project Number: Rosamond, CA  
Project Manager: Judd King

WO & Reported:  
**2407834**  
10/10/2024 10:03

## Analytical Report for Samples

Sample ID : **23E-11B**

Matrix : Water

Lab ID : 2407834-04

Sampled : 08/21/24 15:30

Sampled by : Luke Salemm

Field Data : NA

Analyte	Result	RL	Units	Dilution	Batch	Analyzed	Method	Notes
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### Total Metals by EPA 6000/7000 Series Methods

Hardness as CaCO <sub>3</sub>	370	0.21	mg/L	1	[CALC]	08/26/24 15:31	SM 2340B
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### General Chemistry Parameters by EPA or APHA Standard Methods

pH @ 25 C	7.64	0.10	pH Units	1	B4H0937	08/24/24 11:30	EPA 9040B/SM4500H+ B	HT-pH
pH Sample Temperature During Analysis	21	1.0	°C	"	"	"	EPA 170.1/SM 2550B	
Specific Conductance (EC) @ 25 C	1300	2.0	umhos/cm	"	B4H1009	08/27/24 14:57	SM 2510B	
Total Alkalinity, CaCO <sub>3</sub>	80	20	mg/L	"	B4H1204	09/03/24 11:51	SM 2320B	
Bicarbonate, CaCO <sub>3</sub>	80	20	"	"	"	"	"	
Carbonate, CaCO <sub>3</sub>	ND	20	"	"	"	"	"	
Hydroxide, CaCO <sub>3</sub>	ND	20	"	"	"	"	"	
Ammonia as N	ND	0.14	"	"	B4I0017	09/03/24 08:20	SM 4500 NH3D	
Chemical Oxygen Demand	31	20	"	"	B4H1192	09/02/24 12:00	SM 5220D	
Ferrous Iron	117	50.0	ug/L	"	B4H0862	08/22/24 14:00	SM 3500 Fe-B	
Total Organic Carbon	ND	2.5	mg/L	5	B4I0156	09/06/24 17:00	SM 5310B	R-IC
Orthophosphate as P	0.30	0.12	"	"	B4H0907	08/23/24 12:30	SM 4500-P E / EPA 365.3	
Phosphorus-Total as P	0.34	0.025	"	1	B4H1078	08/28/24 13:30	SM 4500-P B,E / EPA 365.3	
Turbidity	60	0.10	NTU	"	B4H0886	08/22/24 16:46	SM 2130B	
Total Dissolved Solids	800	10	mg/L	"	B4H1010	08/27/24 16:00	SM 2540C	
Total Suspended Solids	87	10	"	"	B4H0920	08/23/24 13:00	SM 2540D	

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Project Number: Rosamond, CA  
Project Manager: Judd King

WO & Reported:  
**2407834**  
10/10/2024 10:03

## Anions by IC - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B4H0852 - EPA 300.0** Preparation: EPA 300.0/300.1 Anions Prep 08/22/24 09:15

### Blank (B4H0852-BLK1)

Analyzed: 08/22/24 12:40

Bromide	ND	0.40	mg/L
Chloride	ND	0.40	"
Fluoride	ND	0.40	"
Nitrate as N	ND	0.40	"
Nitrite as N	ND	0.40	"
Sulfate	ND	0.40	"

### LCS (B4H0852-BS1)

Analyzed: 08/22/24 11:38

Bromide	4.85	0.40	mg/L	5.00	97	90-110
Chloride	4.98	0.40	"	5.00	100	90-110
Fluoride	5.09	0.40	"	5.00	102	90-110
Nitrate as N	4.96	0.40	"	5.00	99	90-110
Nitrite as N	5.00	0.40	"	5.00	100	90-110
Sulfate	4.95	0.40	"	5.00	99	90-110

### LCS Dup (B4H0852-BSD1)

Analyzed: 08/22/24 11:53

Bromide	4.89	0.40	mg/L	5.00	98	90-110	0.8	20
Chloride	4.99	0.40	"	5.00	100	90-110	0.07	20
Fluoride	5.09	0.40	"	5.00	102	90-110	0.04	20
Nitrate as N	4.98	0.40	"	5.00	100	90-110	0.4	20
Nitrite as N	5.03	0.40	"	5.00	101	90-110	0.6	20
Sulfate	4.94	0.40	"	5.00	99	90-110	0.3	20

### Duplicate (B4H0852-DUP1)

Source: 2407829-01

Analyzed: 08/22/24 18:46

Bromide	85.4	20	mg/L	82.4			4	20
Chloride	10,300	20	"	10,300			0.4	20
Fluoride	ND	20	"	ND				20
Nitrate as N	ND	20	"	ND				20
Nitrite as N	ND	20	"	ND				20
Sulfate	ND	20	"	ND				20

### Matrix Spike (B4H0852-MS1)

Source: 2407829-01

Analyzed: 08/22/24 19:01

Bromide	351	21	mg/L	263	82.4	102	90-110
Chloride	10,800	21	"	263	10,300	188	90-110
Fluoride	257	21	"	263	ND	97	90-110
Nitrate as N	259	21	"	263	ND	99	90-110
Nitrite as N	247	21	"	263	ND	94	90-110
Sulfate	260	21	"	263	ND	99	90-110

QM-07

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Project Number: Rosamond, CA  
Project Manager: Judd King

WO & Reported:  
**2407834**  
10/10/2024 10:03

## Anions by IC - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B4H0852 - EPA 300.0** Preparation: EPA 300.0/300.1 Anions Prep 08/22/24 13:15

### Matrix Spike (B4H0852-MS2)

Source: 2407863-01

Analyzed: 08/23/24 02:53

Bromide	142	8.4	mg/L	105	31.0	106	90-110			
Chloride	4280	8.4	"	105	4250	34	90-110			
Fluoride	113	8.4	"	105	ND	107	90-110			
Nitrate as N	111	8.4	"	105	ND	106	90-110			
Nitrite as N	107	8.4	"	105	ND	102	90-110			
Sulfate	187	8.4	"	105	73.7	107	90-110			

QM-07

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Project Number: Rosamond, CA  
Project Manager: Judd King

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**2407834**  
10/10/2024 10:03

## Total Metals by CVAA - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B4H0953 - EPA 7470A</b> Preparation: EPA 7470A Prep 08/26/24 08:36										
<b>Blank (B4H0953-BLK1)</b> Analyzed: 08/26/24 14:12										
Mercury	ND	0.00020	mg/L							
<b>LCS (B4H0953-BS1)</b> Analyzed: 08/26/24 14:14										
Mercury	0.00960	0.00020	mg/L	0.0100		96	85-115			
<b>LCS Dup (B4H0953-BSD1)</b> Analyzed: 08/26/24 14:17										
Mercury	0.00954	0.00020	mg/L	0.0100		95	85-115	0.6	20	
<b>Duplicate (B4H0953-DUP1)</b> <b>Source: 2407866-01</b> Analyzed: 08/26/24 14:39										
Mercury	ND	0.00020	mg/L		ND				20	
<b>Matrix Spike (B4H0953-MS1)</b> <b>Source: 2407866-01</b> Analyzed: 08/26/24 14:20										
Mercury	0.00802	0.00020	mg/L	0.0100	ND	80	75-125			
<b>Matrix Spike Dup (B4H0953-MSD1)</b> <b>Source: 2407866-01</b> Analyzed: 08/26/24 14:25										
Mercury	0.00802	0.00020	mg/L	0.0100	ND	80	75-125	0	20	
<b>Post Spike (B4H0953-PS1)</b> <b>Source: 2407866-01</b> Analyzed: 08/26/24 14:31										
Mercury	3.87		ug/L	5.00	0.00696	77	85-115			QL-02

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Project Manager: Judd King

WO & Reported:  
**2407834**  
10/10/2024 10:03

## Total Metals by ICP - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B4H0901 - EPA 6010B** Preparation: EPA 3010A 08/23/24 09:18

### Blank (B4H0901-BLK1)

Analyzed: 08/26/24 14:40

Aluminum	ND	0.20	mg/L
Antimony	ND	0.050	"
Arsenic	ND	0.040	"
Barium	ND	0.080	"
Beryllium	ND	0.010	"
Boron	ND	0.16	"
Cadmium	ND	0.0050	"
Calcium	ND	0.40	"
Chromium	ND	0.010	"
Cobalt	ND	0.010	"
Copper	ND	0.020	"
Iron	ND	0.40	"
Lead	ND	0.010	"
Magnesium	ND	0.050	"
Manganese	ND	0.010	"
Molybdenum	ND	0.010	"
Nickel	ND	0.010	"
Potassium	ND	0.50	"
Selenium	ND	0.050	"
Silica (SiO <sub>2</sub> )	ND	0.80	"
Silver	ND	0.010	"
Sodium	ND	1.2	"
Strontium	ND	0.010	"
Thallium	ND	0.020	"
Vanadium	ND	0.050	"
Zinc	ND	0.050	"

### LCS (B4H0901-BS1)

Analyzed: 08/26/24 14:46

Aluminum	1.95	0.20	mg/L	2.00	98	80-120
Antimony	1.93	0.050	"	2.00	96	80-120
Arsenic	1.96	0.040	"	2.00	98	80-120
Barium	1.94	0.080	"	2.00	97	80-120
Beryllium	1.97	0.010	"	2.00	98	80-120
Boron	1.91	0.16	"	2.00	95	80-120
Cadmium	2.00	0.0050	"	2.00	100	80-120
Calcium	9.62	0.40	"	10.0	96	80-120
Chromium	1.95	0.010	"	2.00	98	80-120
Cobalt	1.98	0.010	"	2.00	99	80-120
Copper	1.98	0.020	"	2.00	99	80-120
Iron	9.69	0.40	"	10.0	97	80-120
Lead	2.06	0.010	"	2.00	103	80-120
Magnesium	9.99	0.050	"	10.0	100	80-120

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**2407834**  
10/10/2024 10:03

## Total Metals by ICP - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B4H0901 - EPA 6010B Preparation: EPA 3010A 08/23/24 09:18

### LCS (B4H0901-BS1)

Analyzed: 08/26/24 14:46

Manganese	9.36	0.010	mg/L	10.0		94	80-120			
Molybdenum	1.97	0.010	"	2.00		99	80-120			
Nickel	1.99	0.010	"	2.00		99	80-120			
Potassium	9.57	0.50	"	10.0		96	80-120			
Selenium	1.95	0.050	"	2.00		98	80-120			
Silica (SiO <sub>2</sub> )	3.93	0.80	"	4.28		92	80-120			
Silver	0.0942	0.010	"	0.100		94	80-120			
Sodium	9.68	1.2	"	10.0		97	80-120			
Strontium	1.95	0.010	"	2.00		98	80-120			
Thallium	2.02	0.020	"	2.00		101	80-120			
Vanadium	1.94	0.050	"	2.00		97	80-120			
Zinc	1.99	0.050	"	2.00		100	80-120			

### LCS Dup (B4H0901-BSD1)

Analyzed: 08/26/24 14:48

Aluminum	1.98	0.20	mg/L	2.00		99	80-120	1	20	
Antimony	1.95	0.050	"	2.00		98	80-120	1	20	
Arsenic	1.99	0.040	"	2.00		100	80-120	2	20	
Barium	1.97	0.080	"	2.00		98	80-120	1	20	
Beryllium	2.00	0.010	"	2.00		100	80-120	1	20	
Boron	2.00	0.16	"	2.00		100	80-120	4	20	
Cadmium	2.03	0.0050	"	2.00		101	80-120	1	20	
Calcium	9.79	0.40	"	10.0		98	80-120	2	20	
Chromium	2.03	0.010	"	2.00		102	80-120	4	20	
Cobalt	2.01	0.010	"	2.00		100	80-120	1	20	
Copper	2.06	0.020	"	2.00		103	80-120	4	20	
Iron	9.84	0.40	"	10.0		98	80-120	2	20	
Lead	2.09	0.010	"	2.00		104	80-120	1	20	
Magnesium	10.1	0.050	"	10.0		101	80-120	1	20	
Manganese	9.52	0.010	"	10.0		95	80-120	2	20	
Molybdenum	2.02	0.010	"	2.00		101	80-120	2	20	
Nickel	2.01	0.010	"	2.00		101	80-120	1	20	
Potassium	9.75	0.50	"	10.0		98	80-120	2	20	
Selenium	1.98	0.050	"	2.00		99	80-120	1	20	
Silica (SiO <sub>2</sub> )	3.96	0.80	"	4.28		92	80-120	0.7	20	
Silver	0.0992	0.010	"	0.100		99	80-120	5	20	
Sodium	9.82	1.2	"	10.0		98	80-120	1	20	
Strontium	1.98	0.010	"	2.00		99	80-120	1	20	
Thallium	2.05	0.020	"	2.00		102	80-120	1	20	
Vanadium	2.02	0.050	"	2.00		101	80-120	4	20	
Zinc	2.02	0.050	"	2.00		101	80-120	1	20	

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Project Manager: Judd King

WO & Reported:  
**2407834**  
10/10/2024 10:03

## Total Metals by ICP - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B4H0901 - EPA 6010B Preparation: EPA 3010A 08/23/24 09:18

<b>Duplicate (B4H0901-DUP1)</b>		<b>Source: 2407834-01</b>		Analyzed: 08/26/24 17:08						
Aluminum	4.32	0.20	mg/L		3.52			20	20	<b>QR-04</b>
Antimony	ND	0.050	"		ND				20	
Arsenic	ND	0.040	"		ND				20	
Barium	0.112	0.080	"		0.112			0.3	20	
Beryllium	ND	0.010	"		ND				20	
Boron	0.209	0.16	"		0.168			22	20	
Cadmium	ND	0.0050	"		ND				20	
Calcium	270	0.40	"		270			0	20	
Chromium	0.00620	0.010	"		0.00600			3	20	
Cobalt	ND	0.010	"		ND				20	
Copper	ND	0.020	"		0.0120				20	
Iron	4.33	0.40	"		3.69			16	20	
Lead	0.0138	0.010	"		0.0138			0	20	
Magnesium	53.7	0.050	"		54.2			0.9	20	
Manganese	0.187	0.010	"		0.179			4	20	
Molybdenum	0.00710	0.010	"		ND				20	
Nickel	0.00600	0.010	"		0.00700			15	20	
Potassium	10.1	0.50	"		9.33			8	20	
Selenium	0.0359	0.050	"		ND				20	
Silica (SiO2)	42.6	0.80	"		40.3			6	20	
Silver	ND	0.010	"		ND				20	
Sodium	93.8	1.2	"		93.0			0.8	20	
Strontium	2.18	0.010	"		2.16			0.9	20	
Thallium	ND	0.020	"		ND				20	
Vanadium	0.0196	0.050	"		0.0176			11	20	
Zinc	0.0307	0.050	"		0.0306			0.3	20	

<b>Matrix Spike (B4H0901-MS1)</b>		<b>Source: 2407834-01</b>		Analyzed: 08/26/24 17:03						
Aluminum	10.8	0.20	mg/L	2.00	3.52	366	75-131	<b>QM-4X</b>		
Antimony	1.90	0.050	"	2.00	ND	95	90-114			
Arsenic	2.02	0.040	"	2.00	ND	101	94-116			
Barium	2.08	0.080	"	2.00	0.112	98	81-123			
Beryllium	1.93	0.010	"	2.00	ND	97	89-112			
Boron	2.21	0.16	"	2.00	0.168	102	58-150			
Cadmium	1.92	0.0050	"	2.00	ND	96	92-110			
Calcium	279	0.40	"	10.0	270	96	10-196			
Chromium	1.95	0.010	"	2.00	0.00600	97	92-110			
Cobalt	1.88	0.010	"	2.00	ND	94	92-110			
Copper	2.01	0.020	"	2.00	0.0120	100	84-118			
Iron	15.3	0.40	"	10.0	3.69	116	65-138			
Lead	2.02	0.010	"	2.00	0.0138	100	88-111			
Magnesium	63.0	0.050	"	10.0	54.2	88	32-161			

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# Oilfield Environmental & Compliance, Inc.

Yeh & Associates  
391 Front St., Suite D  
Grover Beach CA, 93433

Project: Zevsar Energy Storage  
Project Number: Rosamond, CA  
Project Manager: Judd King

WO & Reported:  
**2407834**  
10/10/2024 10:03

## Total Metals by ICP - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B4H0901 - EPA 6010B Preparation: EPA 3010A 08/23/24 09:18

### Matrix Spike (B4H0901-MS1)

Source: 2407834-01

Analyzed: 08/26/24 17:03

Manganese	9.16	0.010	mg/L	10.0	0.179	90	90-114
Molybdenum	1.97	0.010	"	2.00	ND	98	90-114
Nickel	1.88	0.010	"	2.00	0.00700	94	90-111
Potassium	20.6	0.50	"	10.0	9.33	113	76-130
Selenium	1.97	0.050	"	2.00	ND	99	77-128
Silica (SiO2)	67.3	0.80	"	4.28	40.3	629	10-192
Silver	0.0952	0.010	"	0.100	ND	95	92-110
Sodium	104	1.2	"	10.0	93.0	114	10-193
Strontium	4.16	0.010	"	2.00	2.16	100	86-116
Thallium	1.96	0.020	"	2.00	ND	98	89-112
Vanadium	1.99	0.050	"	2.00	0.0176	99	94-110
Zinc	1.96	0.050	"	2.00	0.0306	96	86-119

QM-4X

### Matrix Spike Dup (B4H0901-MSD1)

Source: 2407834-01

Analyzed: 08/26/24 17:06

Aluminum	18.1	0.20	mg/L	2.00	3.52	729	75-131	50	20
Antimony	1.84	0.050	"	2.00	ND	92	90-114	3	20
Arsenic	2.00	0.040	"	2.00	ND	100	94-116	1	20
Barium	2.10	0.080	"	2.00	0.112	99	81-123	1	20
Beryllium	1.92	0.010	"	2.00	ND	96	89-112	0.7	20
Boron	2.13	0.16	"	2.00	0.168	98	58-150	3	20
Cadmium	1.90	0.0050	"	2.00	ND	95	92-110	1	20
Calcium	284	0.40	"	10.0	270	138	10-196	1	20
Chromium	1.90	0.010	"	2.00	0.00600	94	92-110	3	20
Cobalt	1.86	0.010	"	2.00	ND	93	92-110	1	20
Copper	1.96	0.020	"	2.00	0.0120	97	84-118	2	20
Iron	19.2	0.40	"	10.0	3.69	155	65-138	23	20
Lead	2.00	0.010	"	2.00	0.0138	99	88-111	1	20
Magnesium	65.7	0.050	"	10.0	54.2	115	32-161	4	20
Manganese	9.16	0.010	"	10.0	0.179	90	90-114	0	20
Molybdenum	1.96	0.010	"	2.00	ND	98	90-114	0.5	20
Nickel	1.86	0.010	"	2.00	0.00700	93	90-111	1	20
Potassium	22.2	0.50	"	10.0	9.33	129	76-130	8	20
Selenium	1.97	0.050	"	2.00	ND	99	77-128	0.05	20
Silica (SiO2)	90.1	0.80	"	4.28	40.3	NR	10-192	29	20
Silver	0.0934	0.010	"	0.100	ND	93	92-110	2	20
Sodium	106	1.2	"	10.0	93.0	135	10-193	2	20
Strontium	4.19	0.010	"	2.00	2.16	102	86-116	0.9	20
Thallium	1.93	0.020	"	2.00	ND	97	89-112	1	20
Vanadium	1.94	0.050	"	2.00	0.0176	96	94-110	3	20
Zinc	1.94	0.050	"	2.00	0.0306	96	86-119	0.5	20

QM-07,  
QR-04

QM-4X,  
QR-04

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Grover Beach CA, 93433

Project: Zevsar Energy Storage  
Project Number: Rosamond, CA  
Project Manager: Judd King

WO & Reported:  
**2407834**  
10/10/2024 10:03

## Total Metals by ICP - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B4H0901 - EPA 6010B** Preparation: EPA 3010A 08/23/24 09:18

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WO & Reported:  
**2407834**  
10/10/2024 10:03

## General Chemistry Parameters by EPA or APHA Standard Methods - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B4H0862 - SM 3500 Fe-B** Preparation: Wetchem default method 08/22/24 11:25

<b>Blank (B4H0862-BLK1)</b>		Analyzed: 08/22/24 14:00								
Ferrous Iron	ND	50.0	ug/L							
<b>LCS (B4H0862-BS1)</b>		Analyzed: 08/22/24 14:00								
Ferrous Iron	1100	50.0	ug/L	1000		110	80-120			
<b>LCS Dup (B4H0862-BSD1)</b>		Analyzed: 08/22/24 14:00								
Ferrous Iron	1070	50.0	ug/L	1000		107	80-120	3	20	
<b>Duplicate (B4H0862-DUP1)</b>		<b>Source: 2407834-01</b>		Analyzed: 08/22/24 14:00						
Ferrous Iron	95.9	50.0	ug/L		149			44	20	QR-03

**Batch B4H0886 - SM 2130B** Preparation: SM 2130B Turbidity Prep 08/22/24 15:35

<b>LCS (B4H0886-BS1)</b>		Analyzed: 08/22/24 16:46								
Turbidity	9.90	0.10	NTU	10.0		99	90-110			
<b>LCS (B4H0886-BS2)</b>		Analyzed: 08/22/24 16:46								
Turbidity	1000	0.10	NTU	1000		100	90-110			

**Batch B4H0907 - SM 4500-P E / EPA 365.3** Preparation: Wetchem default method 08/23/24 10:20

<b>Blank (B4H0907-BLK1)</b>		Analyzed: 08/23/24 12:30								
Orthophosphate as P	ND	0.025	mg/L							
<b>LCS (B4H0907-BS1)</b>		Analyzed: 08/23/24 12:30								
Orthophosphate as P	0.46	0.025	mg/L	0.500		91	85-115			
<b>LCS Dup (B4H0907-BSD1)</b>		Analyzed: 08/23/24 12:30								
Orthophosphate as P	0.46	0.025	mg/L	0.500		91	85-115	0.3	20	
<b>Duplicate (B4H0907-DUP1)</b>		<b>Source: 2407834-01</b>		Analyzed: 08/23/24 12:30						
Orthophosphate as P	0.78	0.50	mg/L		0.84			7	20	

**Batch B4H0920 - SM 2540D** Preparation: 2540 D TSS Prep 08/23/24 12:31

<b>Blank (B4H0920-BLK1)</b>		Analyzed: 08/23/24 13:00								
Total Suspended Solids	ND	10	mg/L							

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Project Number: Rosamond, CA  
Project Manager: Judd King

WO & Reported:  
**2407834**  
10/10/2024 10:03

## General Chemistry Parameters by EPA or APHA Standard Methods - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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### Batch B4H0920 - SM 2540D Preparation: 2540 D TSS Prep 08/23/24 12:31

<b>LCS (B4H0920-BS1)</b>		Analyzed: 08/23/24 13:00								
Total Suspended Solids	99.4	10	mg/L	100		99	80-120			
<b>LCS Dup (B4H0920-BSD1)</b>		Analyzed: 08/23/24 13:00								
Total Suspended Solids	99.6	10	mg/L	100		100	80-120	0.2	200	
<b>Duplicate (B4H0920-DUP1)</b>		Source: 2407838-02 Analyzed: 08/23/24 13:00								
Total Suspended Solids	104	10	mg/L		107			3	20	

### Batch B4H0937 - EPA 9040B/SM4500H+ B Preparation: EPA 9040B pH Prep 08/24/24 11:08

<b>LCS (B4H0937-BS1)</b>		Analyzed: 08/24/24 11:30								
pH @ 25 C	4.00	0.10	pH Units	4.01		100	90-110			
<b>LCS (B4H0937-BS2)</b>		Analyzed: 08/24/24 11:30								
pH @ 25 C	7.02	0.10	pH Units	7.00		100	90-110			
<b>LCS (B4H0937-BS3)</b>		Analyzed: 08/24/24 11:30								
pH @ 25 C	10.02	0.10	pH Units	10.0		100	90-110			
<b>Duplicate (B4H0937-DUP1)</b>		Source: 2407012-01 Analyzed: 08/24/24 11:30								
pH @ 25 C	8.02	0.10	pH Units		8.01			0.1	10	
pH Sample Temperature During Analysis	22.0	1.0	°C		22.3			1	10	

### Batch B4H1009 - SM 2510B Preparation: SM 2510B Prep 08/27/24 13:57

<b>LCS (B4H1009-BS1)</b>		Analyzed: 08/27/24 14:57								
Specific Conductance (EC) @ 25 C	91.4	2.0	umhos/cm	84.0		109	75-125			
<b>LCS (B4H1009-BS2)</b>		Analyzed: 08/27/24 14:57								
Specific Conductance (EC) @ 25 C	9780	2.0	umhos/cm	9990		98	75-125			
<b>LCS (B4H1009-BS3)</b>		Analyzed: 08/27/24 14:57								
Specific Conductance (EC) @ 25 C	98,300	2.0	umhos/cm	99,800		98	75-125			
<b>Duplicate (B4H1009-DUP1)</b>		Source: 2407825-01 Analyzed: 08/27/24 14:57								
Specific Conductance (EC) @ 25 C	5240	2.0	umhos/cm		5220			0.4	20	

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Project Number: Rosamond, CA  
Project Manager: Judd King

WO & Reported:  
**2407834**  
10/10/2024 10:03

## General Chemistry Parameters by EPA or APHA Standard Methods - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B4H1010 - SM 2540C** Preparation: 2540 C TDS Prep 08/27/24 10:28

**Blank (B4H1010-BLK1)**

Analyzed: 08/27/24 16:00

Total Dissolved Solids ND 10 mg/L

**LCS (B4H1010-BS1)**

Analyzed: 08/27/24 16:00

Total Dissolved Solids 1100 10 mg/L 1000 106 75-125

**LCS Dup (B4H1010-BSD1)**

Analyzed: 08/27/24 16:00

Total Dissolved Solids 980 10 mg/L 1000 98 75-125 7 10

**Duplicate (B4H1010-DUP1)**

Source: 2407825-01

Analyzed: 08/27/24 16:00

Total Dissolved Solids 3400 10 mg/L 3400 0.6 10

**Batch B4H1078 - SM 4500-P B,E / EPA 365.3** Preparation: NONE 08/28/24 12:14

**Blank (B4H1078-BLK1)**

Analyzed: 08/28/24 13:30

Phosphorus-Total as P ND 0.025 mg/L

**LCS (B4H1078-BS1)**

Analyzed: 08/28/24 13:30

Phosphorus-Total as P 0.27 0.025 mg/L 0.300 91 85-115

**LCS Dup (B4H1078-BSD1)**

Analyzed: 08/28/24 13:30

Phosphorus-Total as P 0.27 0.025 mg/L 0.300 91 85-115 0 20

**Duplicate (B4H1078-DUP1)**

Source: 2407792-01

Analyzed: 08/28/24 13:30

Phosphorus-Total as P 5.3 0.12 mg/L 5.3 0.3 20

**Matrix Spike (B4H1078-MS1)**

Source: 2407792-01

Analyzed: 08/28/24 13:30

Phosphorus-Total as P 5.5 0.12 mg/L 0.300 5.3 88 80-120

**Matrix Spike Dup (B4H1078-MSD1)**

Source: 2407792-01

Analyzed: 08/28/24 13:30

Phosphorus-Total as P 5.5 0.12 mg/L 0.300 5.3 97 80-120 0.5 20

**Batch B4H1192 - SM 5220D** Preparation: Wetchem default method 08/30/24 13:35

**Blank (B4H1192-BLK1)**

Analyzed: 09/02/24 12:00

Chemical Oxygen Demand ND 20 mg/L

**LCS (B4H1192-BS1)**

Analyzed: 09/02/24 12:00

Chemical Oxygen Demand 260 20 mg/L 250 103 85-115

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Project: Zevsar Energy Storage  
Project Number: Rosamond, CA  
Project Manager: Judd King

WO & Reported:  
**2407834**  
10/10/2024 10:03

## General Chemistry Parameters by EPA or APHA Standard Methods - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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### Batch B4H1192 - SM 5220D Preparation: Wetchem default method 08/30/24 13:35

#### LCS Dup (B4H1192-BSD1)

Analyzed: 09/02/24 12:00

Chemical Oxygen Demand	260	20	mg/L	250		102	85-115	0.9	10	
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#### Duplicate (B4H1192-DUP1)

Source: 2407838-01

Analyzed: 09/02/24 12:00

Chemical Oxygen Demand	360	80	mg/L		340			5	10	
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### Batch B4H1204 - SM 2320B Preparation: EPA 2320B Alkalinity Prep 08/30/24 15:40

#### Blank (B4H1204-BLK1)

Analyzed: 09/03/24 11:51

Total Alkalinity, CaCO <sub>3</sub>	ND	20	mg/L							
Bicarbonate, CaCO <sub>3</sub>	ND	20	"							
Carbonate, CaCO <sub>3</sub>	ND	20	"							
Hydroxide, CaCO <sub>3</sub>	ND	20	"							

#### LCS (B4H1204-BS1)

Analyzed: 09/03/24 11:51

Total Alkalinity, CaCO <sub>3</sub>	2410	20	mg/L	2500		97	80-120			
Carbonate, CaCO <sub>3</sub>	2170	20	"	2500		87	80-120			

#### LCS Dup (B4H1204-BSD1)

Analyzed: 09/03/24 11:51

Total Alkalinity, CaCO <sub>3</sub>	2470	20	mg/L	2500		99	80-120	2	20	
Carbonate, CaCO <sub>3</sub>	2170	20	"	2500		87	80-120	0.3	20	

#### Duplicate (B4H1204-DUP1)

Source: 2407825-01

Analyzed: 09/03/24 11:51

Total Alkalinity, CaCO <sub>3</sub>	2590	20	mg/L		2560			1	20	
Bicarbonate, CaCO <sub>3</sub>	2110	20	"		2160			2	20	
Carbonate, CaCO <sub>3</sub>	484	20	"		409			17	20	
Hydroxide, CaCO <sub>3</sub>	ND	20	"		ND				20	

### Batch B4I0017 - SM 4500 NH3D Preparation: Wetchem default method 09/03/24 08:06

#### Blank (B4I0017-BLK1)

Analyzed: 09/03/24 08:20

Ammonia as N	ND	0.14	mg/L							
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#### LCS (B4I0017-BS1)

Analyzed: 09/03/24 08:20

Ammonia as N	22.3	0.14	mg/L	20.0		111	80-120			
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10/10/2024 10:03

## General Chemistry Parameters by EPA or APHA Standard Methods - Quality Control

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B4I0017 - SM 4500 NH3D** Preparation: Wetchem default method 09/03/24 08:06

**LCS Dup (B4I0017-BSD1)**

Analyzed: 09/03/24 08:20

Ammonia as N	21.9	0.14	mg/L	20.0		109	80-120	2	20	
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**Duplicate (B4I0017-DUP1)**

Source: 2407707-01

Analyzed: 09/03/24 08:20

Ammonia as N	0.0896	0.14	mg/L		ND				20	
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**Batch B4I0156 - SM 5310B** Preparation: NONE 09/05/24 09:24

**Blank (B4I0156-BLK1)**

Analyzed: 09/06/24 17:00

Total Organic Carbon	ND	0.50	mg/L							
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**LCS (B4I0156-BS1)**

Analyzed: 09/06/24 17:00

Total Organic Carbon	5.05	0.50	mg/L	5.00		101	80-120			
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**LCS Dup (B4I0156-BSD1)**

Analyzed: 09/06/24 17:00

Total Organic Carbon	5.05	0.50	mg/L	5.00		101	80-120	0.04	20	
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**Duplicate (B4I0156-DUP1)**

Source: 2407833-02

Analyzed: 09/06/24 17:00

Total Organic Carbon	271	100	mg/L		275			1	20	
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**Matrix Spike (B4I0156-MS1)**

Source: 2407833-02

Analyzed: 09/06/24 17:00

Total Organic Carbon	2620	220	mg/L	2220	275	105	75-125			
----------------------	------	-----	------	------	-----	-----	--------	--	--	--

**Matrix Spike Dup (B4I0156-MSD1)**

Source: 2407833-02

Analyzed: 09/06/24 17:00

Total Organic Carbon	2570	220	mg/L	2220	275	103	75-125	2	20	
----------------------	------	-----	------	------	-----	-----	--------	---	----	--

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CA-ELAP 2438, TNI02666  
307 Roemer Way, Santa Maria, CA 93454

Client Connect: [client.oec.com/reports](http://client.oec.com/reports)  
[www.oecusa.com](http://www.oecusa.com)

TEL: (805) 922-4772  
FAX: (805) 925-3376



# Oilfield Environmental & Compliance, Inc.

Yeh & Associates  
391 Front St., Suite D  
Grover Beach CA, 93433

Project: Zevsar Energy Storage  
Project Number: Rosamond, CA  
Project Manager: Judd King

WO & Reported:  
**2407834**  
10/10/2024 10:03

## Sample Method Summary

Analysis	Method	Matrix	Laboratory & Certification
<b>Anions by IC</b>			
Bromide by EPA 300.0	EPA 300.0	Water	OEC, CA-ELAP,NELAP
Chloride by EPA 300.0	EPA 300.0	Water	OEC, CA-ELAP,NELAP
Fluoride by EPA 300.0	EPA 300.0	Water	OEC, CA-ELAP,NELAP
Nitrate as N by EPA 300.0	EPA 300.0	Water	OEC, CA-ELAP,NELAP
Nitrite as N by EPA 300.0	EPA 300.0	Water	OEC, CA-ELAP,NELAP
Sulfate by EPA 300.0	EPA 300.0	Water	OEC, CA-ELAP,NELAP
<b>General Chemistry Parameters by EPA or APHA Standard Methods</b>			
pH Sample Temperature	EPA 170.1/SM 2550B	Water	OEC, Internal
9040B pH	EPA 9040B/SM4500H+ B	Water	OEC, Internal
Turbidity, SM2130B	SM 2130B	Water	OEC, CA-ELAP,NELAP
Alkalinity, Speciated SM2320B	SM 2320B	Water	OEC, CA-ELAP,NELAP
Alkalinity, Speciated SM2320B	SM 2320B	Water	OEC, Internal
Alkalinity, Speciated SM2320B	SM 2320B	Water	OEC, CA-ELAP,NELAP
Conductivity, SM2510B	SM 2510B	Water	OEC, Internal
Conductivity, SM2510B	SM 2510B	Water	OEC, CA-ELAP,NELAP
Conductivity, SM2510B	SM 2510B	Water	OEC, Internal
Conductivity, SM2510B	SM 2510B	Water	OEC, CA-ELAP,NELAP
Solids, Total Dissolved (TDS), SM2540C	SM 2540C	Water	OEC, CA-ELAP,NELAP
Solids, Total Suspended (TSS), SM2540D	SM 2540D	Water	OEC, CA-ELAP,NELAP
Ferrous Iron	SM 3500 Fe-B	Water	OEC, Internal
Ammonia as N	SM 4500 NH3D	Water	OEC, CA-ELAP,NELAP
Phosphorus, Total as P by SM4500-P B,E/EPA 365.3	SM 4500-P B,E / EPA 365.3	Water	OEC, Internal
Phosphate, Ortho as P by SM4500-P E/EPA 365.3	SM 4500-P E / EPA 365.3	Water	OEC, Internal
COD, Chemical Oxygen Demand	SM 5220D	Water	OEC, CA-ELAP,NELAP
TOC, Total Organic Carbon SM5310B	SM 5310B	Water	OEC, CA-ELAP,NELAP
<b>Total Metals by CVAA</b>			
Mercury Total EPA 7470A	EPA 7470A	Water	OEC, Internal

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TEL: (805) 922-4772  
FAX: (805) 925-3376



# Oilfield Environmental & Compliance, Inc.

Yeh & Associates  
391 Front St., Suite D  
Grover Beach CA, 93433

Project: Zevsar Energy Storage  
Project Number: Rosamond, CA  
Project Manager: Judd King

WO & Reported:  
**2407834**  
10/10/2024 10:03

## Sample Method Summary (Continued)

Analysis	Method	Matrix	Laboratory & Certification
<b>Total Metals by ICP</b>			
6010B Total Aluminum	EPA 6010B	Water	OEC, NELAP
6010B Total Antimony	EPA 6010B	Water	OEC, CA-ELAP,NELAP
6010B Total Arsenic	EPA 6010B	Water	OEC, CA-ELAP,NELAP
6010B Total Barium	EPA 6010B	Water	OEC, CA-ELAP,NELAP
6010B Total Beryllium	EPA 6010B	Water	OEC, CA-ELAP,NELAP
6010B Total Boron	EPA 6010B	Water	OEC, NELAP
6010B Total Cadmium	EPA 6010B	Water	OEC, CA-ELAP,NELAP
6010B Total Calcium	EPA 6010B	Water	OEC, NELAP
6010B Total Chromium	EPA 6010B	Water	OEC, CA-ELAP,NELAP
6010B Total Cobalt	EPA 6010B	Water	OEC, CA-ELAP,NELAP
6010B Total Copper	EPA 6010B	Water	OEC, CA-ELAP,NELAP
6010B Total Iron	EPA 6010B	Water	OEC, NELAP
6010B Total Lead	EPA 6010B	Water	OEC, CA-ELAP,NELAP
6010B Total Magnesium	EPA 6010B	Water	OEC, NELAP
6010B Total Manganese	EPA 6010B	Water	OEC, NELAP
6010B Total Molybdenum	EPA 6010B	Water	OEC, CA-ELAP,NELAP
6010B Total Nickel	EPA 6010B	Water	OEC, CA-ELAP,NELAP
6010B Total Potassium	EPA 6010B	Water	OEC, NELAP
6010B Total Selenium	EPA 6010B	Water	OEC, CA-ELAP,NELAP
6010B Total Silica (SiO <sub>2</sub> ) Water	EPA 6010B	Water	OEC, NELAP
6010B Total Silver	EPA 6010B	Water	OEC, CA-ELAP,NELAP
6010B Total Sodium	EPA 6010B	Water	OEC, NELAP
6010B Total Strontium	EPA 6010B	Water	OEC, NELAP
6010B Total Thallium	EPA 6010B	Water	OEC, CA-ELAP,NELAP
6010B Total Vanadium	EPA 6010B	Water	OEC, CA-ELAP,NELAP
6010B Total Zinc	EPA 6010B	Water	OEC, CA-ELAP,NELAP

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# Oilfield Environmental & Compliance, Inc.

Yeh & Associates  
391 Front St., Suite D  
Grover Beach CA, 93433

Project: Zevsar Energy Storage  
Project Number: Rosamond, CA  
Project Manager: Judd King

WO & Reported:  
**2407834**  
10/10/2024 10:03

## Notes and Definitions

Qualifier	Definition
MDL	Method Detection Limit
RL	Reporting Limit (Quantitation Limit)
ND	Analyte NOT DETECTED at or above the method limit (MDL)
RPD	Relative Percent Difference
HT-08	Insufficient time remaining from sample receipt to run sample within holding time.
HT-pH	Water pH should be analyzed within 15 minutes of sampling. Soil pH should be analyzed as soon as possible.
QL-02	The spike recovery is outside the control limits.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS and/or LCSD recovery and/or RPD values.
QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QR-04	The RPD exceeded the QC control limits.
R-01	The Reporting Limit has been raised to account for matrix interference.
R-IC	Reporting limits elevated due to high levels of inorganic carbon in the sample.

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TEL: (805) 922-4772  
FAX: (805) 925-3376



## TECHNOLOGY OF MATERIALS

---

330 E. Concord Way  
Placentia, CA 92870

Sam Iyengar Ph.D.  
Technical Director

September 13, 2024

OilField Environmental and Compliance  
307 Roemer Way, Ste. 300  
Santa Maria, CA 93454

Enclosed please find a report on the analysis of samples. Please call me if you have any questions or concerns. **The subcontract number is 2407834**

Sincerely,

Sam Iyengar

Phone: (714) 446-9227

[www.xraydiffrac.com](http://www.xraydiffrac.com)

Cell: (951) 852-4463

## Characterization of Powder Samples

### Introduction:

Four samples were received at the laboratory for analysis. It was requested that the samples be analyzed by XRD and EDXRF. They were analyzed by XRD & EDS to determine the chemical constituents. This report summarizes the findings

### Materials and Method:

The following samples were analyzed:

- |                |         |
|----------------|---------|
| 1) 2407834 -01 | 23E-05A |
| 2) 2407834 -02 | 23E-05B |
| 3) 2407834 -03 | 23E-11A |
| 4) 2407834 -04 | 23E-11B |

Samples were analyzed by EDXRF and XRD

### X-ray Diffraction Analysis (XRD)

*X-ray diffraction (XRD) is a crystal structure analysis method using the atomic arrays within the crystals as a three-dimensional diffraction grating to diffract a monochromatic beam of x-rays. The angles at which the beam is diffracted are used to calculate the interplanar atomic spacings (d-spacings) giving information about how the atoms are arranged within the crystalline compounds. Even if materials are chemically similar, they can be differentiated by their crystallographic structures. These patterns (and their d-spacings) are compared to over 65000 data entries in the International Powder Diffraction File (PDF) data base. This technique determines the compounds (like **SiO<sub>2</sub>**, **CaCO<sub>3</sub>**, **Fe<sub>2</sub>O<sub>3</sub>** etc) present in the sample*

### Energy Dispersive X-ray Analysis (EDXRF)

*In this technique, an electron microscope with an energy dispersive X-ray spectrometer is used for analysis. The electron beam in the microscope causes specimens to emit x-rays including those from the k, l and m atomic shells. Spectrometer counts of these x-rays, which are said to be “characteristic” of the elements present in the specimen, can be used to calculate composition for a full qualitative analysis. The analysis is non-destructive and is accurate to ~ 1 %.*

*This technique determines the elements (like **Si**, **O**, **Ca**, **Fe**, etc) present in the powder sample*



### Results:

- Elemental analysis is shown in Table 1
- XRD patterns are shown in Figures 1 & 2

**Table 1: Elemental Composition (wt. %)**

Elements	23E-05A	23E-05B	23E-11A	23E-11B
Oxygen	48.7	47.6	50.7	49.7
Sodium	5.6	5.1	9.1	9.9
Magnesium	4.1	4.2	3.5	3.0
Aluminum	3.0	2.8	1.6	2.1
Silicon	5.5	9.0	6.1	7.2
Sulfur	3.2	3.8	3.3	3.6
Chlorine	17.5	14.4	15.2	14.9
Potassium	0.8	1.8	0.7	0.9
Calcium	10.8	10.1	8.9	7.8
Iron	0.7	1.2	0.7	0.9

### Conclusions:

Following Conclusions can be drawn from attached figures and Tables:

- All Four samples contain mostly **NaCl**, followed by significant amounts of anhydrite (CaSO<sub>4</sub>).
- They also contain **quartz (SiO<sub>2</sub>)** and **Feldspars**

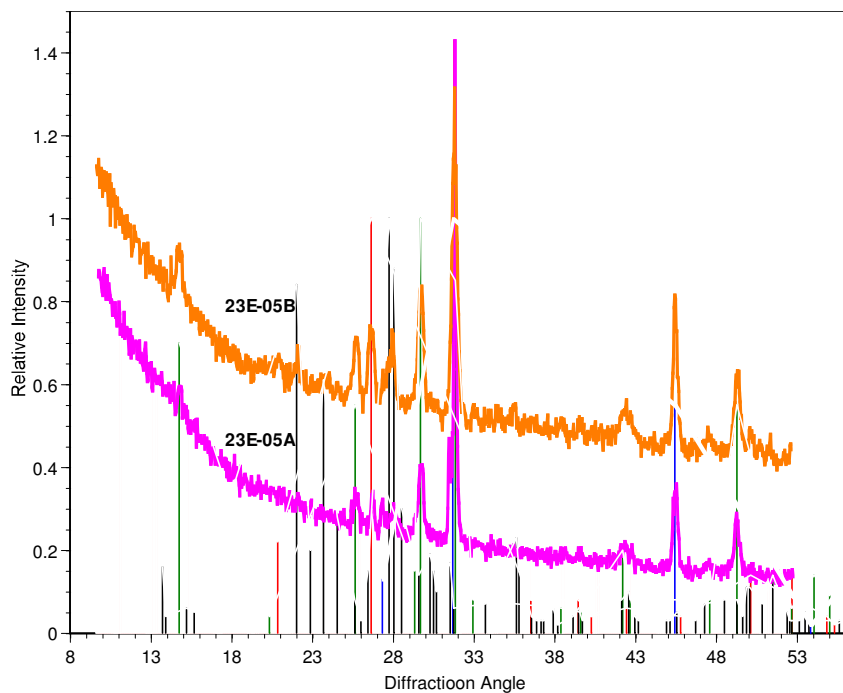
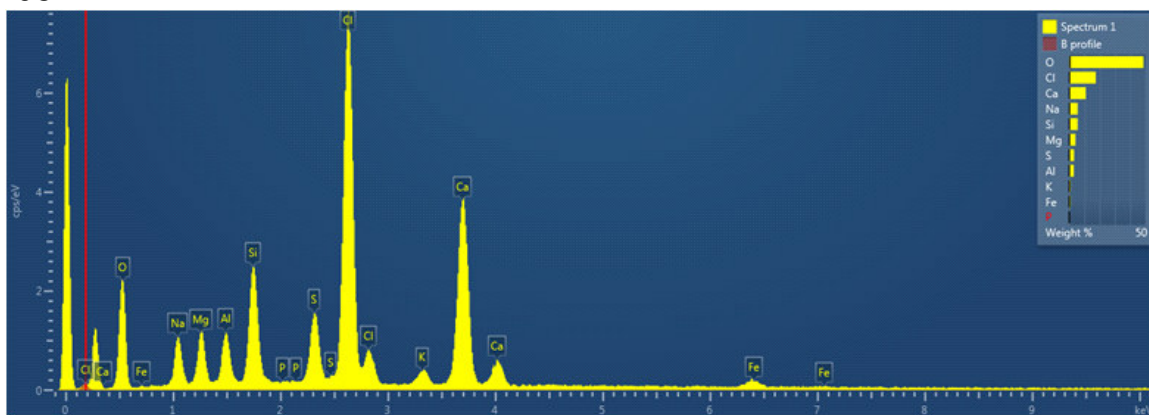
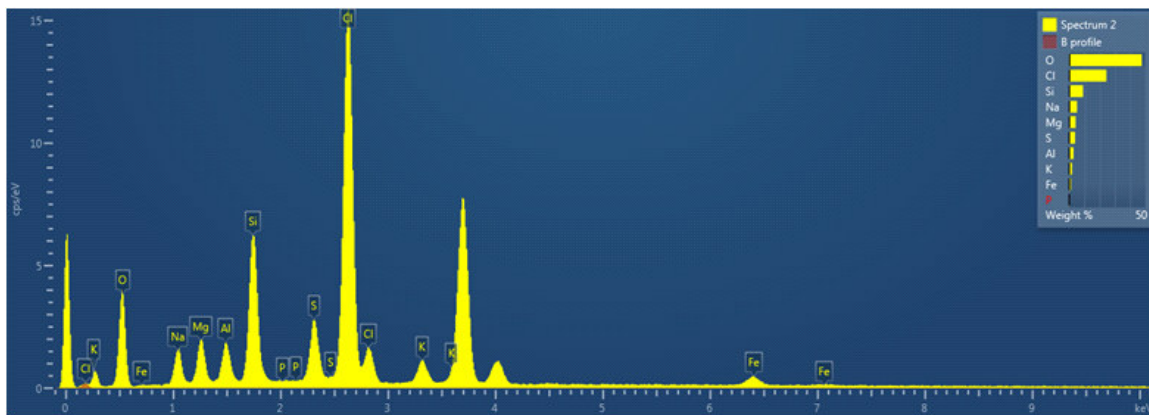


Figure 1: XRD patterns for samples with stick patterns for reference: NaCl (red), quartz (blue),  $\text{CaSO}_4 \cdot 0.5 \text{H}_2\text{O}$  (green) & Feldspars (black)

-05A



-05B



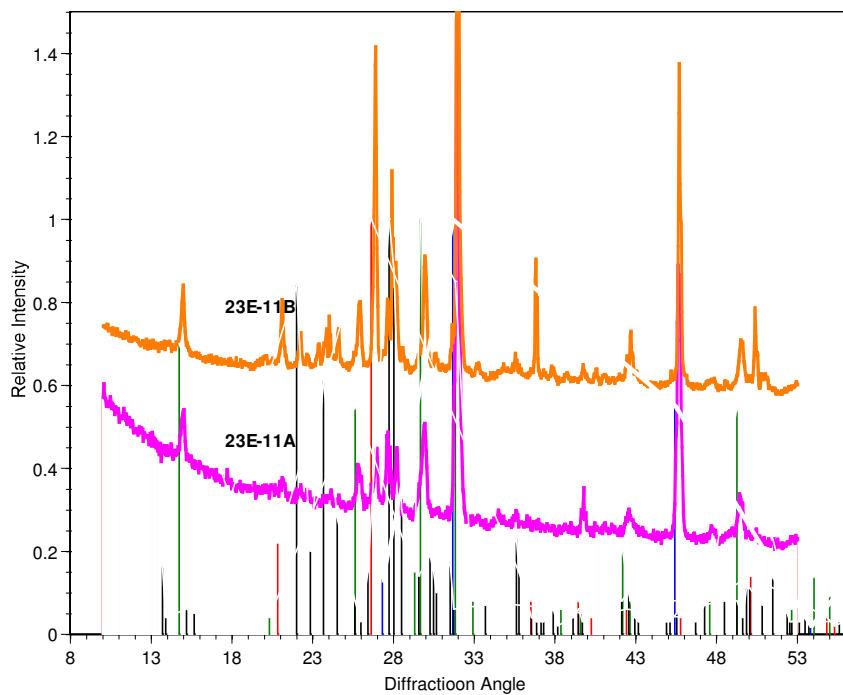
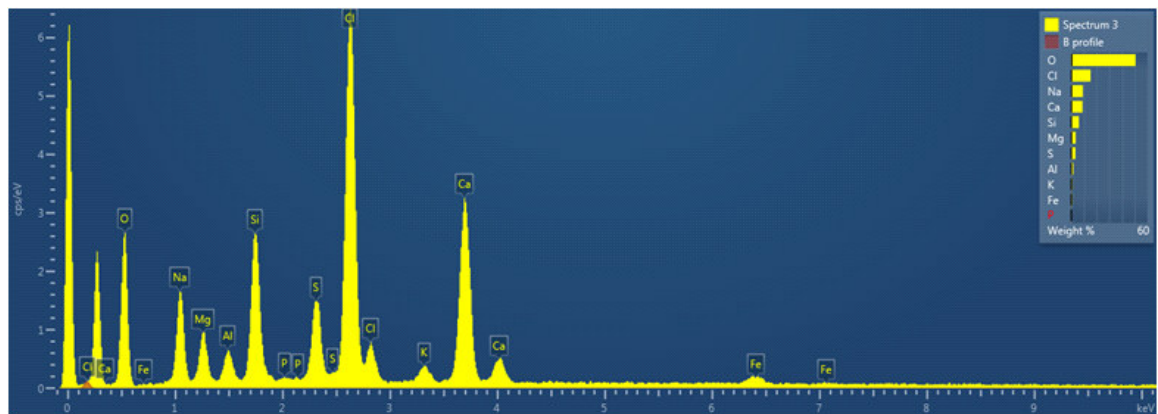
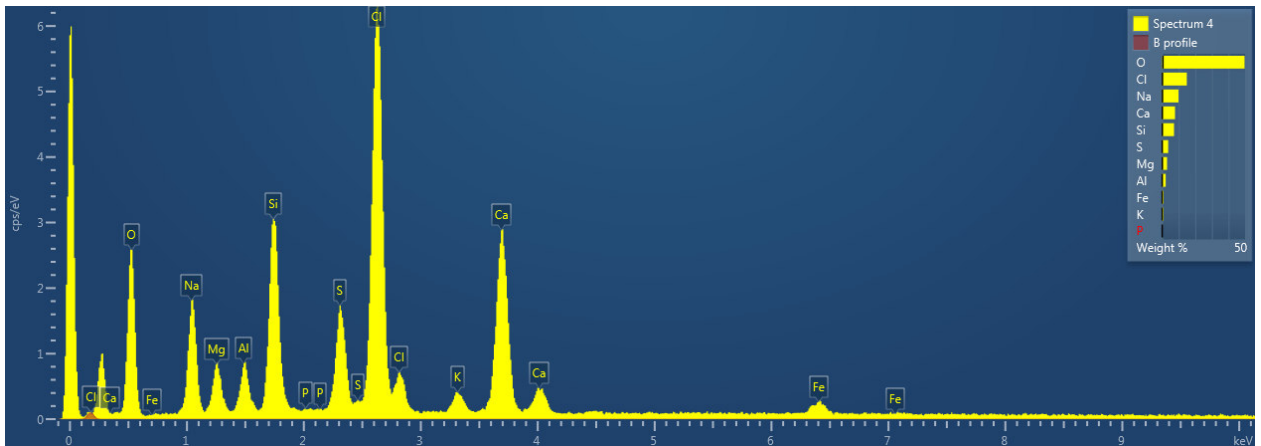


Figure 2: XRD patterns for samples with stick patterns for reference: **NaCl (red)**, **quartz (blue)**, **CaSO<sub>4</sub>·0.5 H<sub>2</sub>O (green)** & **Feldspars (black)**

-11A



-11B





## Sample Receipt

Work Order Review is Complete

Work Order

2407834

**Refresh**

Client Name	Temp °C	Thermometer ID	Refrigerator(s)	COC Received	Login
Yeh & Associates	5	2	8, ToM	08/22/2024 08:47	08/22/2024 10:36

Recorded Corrected, Acceptable Range 0°C to 6°C (See Exception Notes Below)

### Sample Transport

☐ OEC Courier/Sampler
 ☐ After Hours Drop Off
 ☐ Shipment Carrier
 ☐ Delivery (Other than OEC)
 ☐ Tracking#

Custody Seals ☒ None Present

Cooler(s) ☐ Present, Intact ☐ Present, Not Intact ☐ None

Sample(s) ☐ Present Intact ☐ Present, Not Intact ☐ None

### Condition/Preservation

Yes No N/A

<input checked="" type="checkbox"/> Received On Ice Within Range (Acceptable)	Completed COCs Received with Sample(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Received Outside Range(Acceptable)	Correct Container(s) Preserve for Analysis	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Direct from Field on Ice	Container(s) Intact and Good Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Ambient: Air or Filter Matrix	Container Label(s) Consistent with COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Received Ambient, Placed on Ice	OEC Preservation Added**	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Sample Temperature Accetable for Analysis	Sample Quantity Sufficient	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Received Outside Range [Exception]*			
<input type="checkbox"/> Insufficient Ice or Unknown			
<input type="checkbox"/> Excessive Free Liquid			

**Containers, COC Changes, And/Or Corrections**

Cotaniner ID (COC)	Container Description	Home	Matrix	Preservative	pH/Chlorine /Sulfur	Comments
01A	1000mL Poly	Fridge 8 - Walk-In	Water			
01B	1000mL Poly	Fridge 8 - Walk-In	Water			
01C	500mL Poly H2SO4	Fridge 8 - Walk-In	Water			
01D	250mL Poly	Fridge 8 - Walk-In	Water			
01E	250mL Poly HNO3	Fridge 8 - Walk-In	Water			
01F	250mL Glass (Amber)	Fridge 8 - Walk-In	Water			
01G	250mL Glass (Amber) HCl	Fridge 8 - Walk-In	Water			
01H	125mL Poly	Technology of Materials	Water			
02A	1000mL Poly	Fridge 8 - Walk-In	Water			
02B	1000mL Poly	Fridge 8 - Walk-In	Water			
02C	500mL Poly H2SO4	Fridge 8 - Walk-In	Water			
02D	250mL Poly	Fridge 8 - Walk-In	Water			
02E	250mL Poly HNO3	Fridge 8 - Walk-In	Water			
02F	250mL Glass (Amber)	Fridge 8 - Walk-In	Water			
02G	250mL Glass (Amber) HCl	Fridge 8 - Walk-In	Water			
02H	125mL Poly	Technology of Materials	Water			
03A	1000mL Poly	Fridge 8 - Walk-In	Water			
03B	1000mL Poly	Fridge 8 - Walk-In	Water			
03C	500mL Poly H2SO4	Fridge 8 - Walk-In	Water			
03D	250mL Poly	Fridge 8 - Walk-In	Water			
03E	250mL Poly HNO3	Fridge 8 - Walk-In	Water			
03F	250mL Glass (Amber)	Fridge 8 - Walk-In	Water			
03G	250mL Glass (Amber) HCl	Fridge 8 - Walk-In	Water			
03H	125mL Poly	Technology of Materials	Water			
04A	1000mL Poly	Fridge 8 - Walk-In	Water			
04B	1000mL Poly	Fridge 8 - Walk-In	Water			
04C	500mL Poly H2SO4	Fridge 8 - Walk-In	Water			
04D	250mL Poly	Fridge 8 - Walk-In	Water			
04E	250mL Poly HNO3	Fridge 8 - Walk-In	Water			
04F	250mL Glass (Amber)	Fridge 8 - Walk-In	Water			
04G	250mL Glass (Amber) HCl	Fridge 8 - Walk-In	Water			
04H	125mL Poly	Technology of Materials	Water			

Receipt Login By:

ALB-08/22/24 02:03

Receipt Reviewed By:

DA-08/22/24 02:46





# SUBCONTRACT ORDER

## 2407834

7781 3302  
9857

### SENDING LABORATORY:

Oilfield Environmental & Compliance, Inc.  
307 Roemer Way  
Santa Maria, CA 93454  
Phone: 805.922.4772 Fax: 805.925.3376  
Project Manager: Meredith Sprister ( msprister@oecusa.com & projectmgmt@oecusa.com )

### RECEIVING LABORATORY:

Technology of Materials  
330 E Concorde Way  
Placentia, CA 92870  
Phone: (714) 446-9227 Fax: -

Sample ID	Sampled	Matrix	Sample Name	Sample Comments
2407834-01	21-Aug-24 12:50	Water	23E-05A	
Analysis: Due: Analysis Comments:				
XRD/XRF 09-Sep-24 16:00				
Containers Supplied:				
(H) 125mL Poly				
2407834-02	21-Aug-24 12:55	Water	23E-05B	
Analysis: Due: Analysis Comments:				
XRD/XRF 09-Sep-24 16:00				
Containers Supplied:				
(H) 125mL Poly				
2407834-03	21-Aug-24 15:30	Water	23E-11A	
Analysis: Due: Analysis Comments:				
XRD/XRF 09-Sep-24 16:00				
Containers Supplied:				
(H) 125mL Poly				
2407834-04	21-Aug-24 15:30	Water	23E-11B	
Analysis: Due: Analysis Comments:				
XRD/XRF 09-Sep-24 16:00				
Containers Supplied:				
(H) 125mL Poly				

**Gregory S. Reed**

8/22/2024

Fed Ex

8/22/2024

Relinquished By

Date

Received By

Date

Fed Ex

Relinquished By

Date

Received By

Date



Date of Report: 11/08/2023

Lucas Thexton

Hydrostor

365 Bay Street

Toronto, CANADA M5H 2V1

Client Project: [none]

Pace Project: ZEV-CH-03-23

Pace Work Order: 2319605

Invoice ID: B486688

Enclosed are the results of analyses for samples received by the laboratory on 10/12/2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Ragen Schallock", written over a horizontal line.

Contact Person: Ragen Schallock  
Client Service Rep

A handwritten signature in black ink, appearing to read "Stuart Buttram", written over a horizontal line.

Stuart Buttram  
Operations Manager

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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ANALYTICAL SERVICES

4100 Atlas Ct. - Bakersfield, CA 93308 - 661.327.4911 - Fax: 661.327.1918 - www.pacelabs.com



2319605

Page

Report To:	Client:	Project #:
Attn:	Street Address:	Project Name:
City, State, Zip:	Phone:	BID#
Email:	Work Order #:	Sampler(s) Name Printed:

## Analysis Requested

Comments:

Sample #	Description	Date Sampled	Time Sampled
1-1	Depth: 2380ft	10/9/23	7:15 PM
1-2	Depth: 2380ft	10/9/23	10:55 PM
1-3	Depth: 2380ft	10/9/23	7:15 PM
1-4	Depth: 2380ft	10/10/23	2:10 AM
1-5	Depth: 2380ft	10/9/23	10:55 PM
1-6	Depth: 2380ft	10/9/23	10:55 PM
2-7 <sup>2</sup>	Depth: 2380ft (2:10 AM)	10/10/23	2:10 AM
2-2	Depth: 1600ft	10/10/23	8:50 AM
2-7	Depth: 1600ft	10/10/23	6:15 AM
2-3	Depth: 1600ft	10/10/23	6:15 AM
2-4	Depth: 1600ft	10/10/23	11:25 AM
2-5	Depth: 1600ft	10/10/23	11:25 AM
2-6	Depth: 1600ft	10/10/23	11:25 AM
2-7	Depth: 1600ft	10/10/23	8:50 AM

Number of Containers	TEST-1	TEST-2	TEST-3	TEST-4	TEST-5	TEST-6	TEST-7	TEST-8
VISCO	1	1	1	1	1	1	1	1
TDS	1	1	1	1	1	1	1	1
DENSITY	1	1	1	1	1	1	1	1
Hexavalent Ch	1	1	1	1	1	1	1	1
Chloride	1	1	1	1	1	1	1	1
Metals	1	1	1	1	1	1	1	1
Fluoride	1	1	1	1	1	1	1	1
Ammonia	1	1	1	1	1	1	1	1
Ammonium	1	1	1	1	1	1	1	1

## Sample Matrix

Soil	Sludge	Drinking Water	Ground Water	Waste Water	Other

## Result Request \*\*Surcharge

☒ STD ☐ 5 Day\*\* ☐ 4 Day\*\*  
☐ 3 Day\*\* ☐ 2 Day\*\* ☐ 1 Day\*\*  
 Rush requests must be approved

Notes

SHORT HOLDING TIME  
 CR<sup>6</sup> NO<sub>2</sub> NO<sub>3</sub> OP SS  
 DO Cl<sub>2</sub> BOD MBAS COT

CHK BY  
 DISTRIBUTION  
 PAK MT LPS RMT SUT  
 SUB OUT

Billing ☒ Same as above

Client: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Attn: \_\_\_\_\_  
 P.O. #: \_\_\_\_\_

System #  
(Needed for CLP)GIS/Key ☐ Well Star ☐

EDF Required Geotracker

☐ Yes ☐ No

Global ID

1230

1230

1. Relinquished By

Date

Time

Anthony Cruz

10/12/23

4:00 PM

1. Received By

Date

Time

Anthony Cruz

10/12/23

4:00 PM

2. Relinquished By

Date

Time

3. Relinquished By

Date

Time

2. Received By

Date

Time

3. Received By

Date

Time

Pace Analytical Bakersfield does not accept samples containing radioactive material above background levels. Samples containing radioactive material must be disclosed prior to receipt. Any samples suspected of containing radioactive material above background levels will not be accepted and will be returned to client.

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ANALYTICAL SERVICES

4100 Atlas Ct. - Bakersfield, CA 93308 - 661.327.4911 - Fax: 661.327.1918 - www.pacelabs.com

## Chain of Custody Form

Page 2 of 3

Report To: Client: <b>Hydr Stor</b>	Project #: <b>ZEY-CW-03-23</b>
Attn: <b>Lucas Thexten</b>	Project Name: <b>ZEY-CW-03-23</b>
Street Address: <b>365 Bay Street LVS LINDAS</b>	BID#
City, State, Zip: <b>Toronto, ON, M5H</b>	Sampler(s) Name Printed: <b>Anthony Cruz</b>
Phone: <b>647-281-5081</b>	<b>Efrain Garcia</b>
Email: <b>Lucas.Thexten@HydStor.com</b>	
Work Order #: <b>23-19605</b>	

## Analysis Requested

Number of Containers

TEST-1  
TEST-2  
TEST-3  
TEST-4  
TEST-5  
TEST-6  
TEST-7

Comments:

Sample #	Description	Date Sampled	Time Sampled
2-8	Depth: 1600 ft - 2	10/10/23	11:25 AM
3-1	Depth: 1180 ft	10/10/23	4:15 PM
3-2	Depth: 1180 ft	10/10/23	4:15 PM
3-3	Depth: 1180 ft	10/10/23	6:35 PM
3-4	Depth: 1180 ft	10/10/23	6:35 PM
3-5	Depth: 1180 ft	10/10/23	6:35 PM
3-6	Depth: 1180 ft	10/10/23	6:35 PM
3-7	Depth: 1180 ft	10/10/23	8:40 PM
3-8	Depth: 1180 ft	10/10/23	10:30 PM
4-1	Depth: 970 ft	10/11/23	12:35 AM
4-2	Depth: 970 ft	10/11/23	12:35 AM
4-3	Depth: 970 ft	10/11/23	2:20 AM
4-4	Depth: 970 ft	10/11/23	2:20 AM
4-5	Depth: 970 ft	10/11/23	2:20 AM

## Sample Matrix

Soil  
Sludge  
Drinking Water  
Ground Water  
Waste Water  
Other

## Result Request \*\*Surcharge

☒ STD ☐ 5 Day\*\* ☐ 4 Day\*\*  
☐ 3 Day\*\* ☐ 2 Day\*\* ☐ 1 Day\*\*  
 Rush requests must be approved

Notes

## Billing

☒ Same as above

Client: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Attn: \_\_\_\_\_

P.O. #: \_\_\_\_\_

System #  
(Needed for CLIP)GIS/Key ☐ Well Star ☐

## EDF Required Geotracker

☐ Yes ☐ No

Global ID

1230 Salt 10-12-23

1230

1. Relinquished By

Date

Time

1. Received By

Date

Time

Anthony Cruz

10/12/23

4:00 AM

Anthony Cruz

10/12/23

4:00 PM

2. Relinquished By

Date

Time

2. Received By

Date

Time

3. Relinquished By

Date

Time

3. Received By

Date

Time

Pace Analytical Bakersfield does not accept samples containing radioactive material above background levels. Samples containing radioactive material must be disclosed prior to receipt. Any samples suspected of containing radioactive material above background levels will not be accepted and will be returned to client.

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ANALYTICAL SERVICES

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## Chain of Custody Form

Page 3 of 3

Report To: Client: <b>Hydrostar</b>	Project #: <b>TEV-CH-03-23</b>
Attn: <b>Lucas Thexten</b>	Project Name: <b>TEV-CH-03-23</b>
Street Address: <b>365 Bay St. 2<sup>nd</sup> Floor</b>	BID#
City, State, Zip: <b>Toronto, ON M5H</b>	Sampler(s) Name Printed: <b>Anthony Cruz</b>
Phone: <b>647-281-5888</b> Fax:	<b>Erwin Garcia</b>
Email: <b>Lucas.Thexten@hydrostar.com</b>	
Work Order #: <b>23-19605</b>	

# of Containers	Analysis Requested							
	Viscosity Test 1	TDS, pH Test 2	Density Test 3	Hexavalent Test 4	Cyanide Test 5	Nitrate Test 6	Plastic Test 7	Container Test 8
1					X			
1						X	X	
1						X	X	
1	X							
1		X						
1			X					
1				X				
1					X			
1						X	X	
1						X	X	

Comments:				
Sample Matrix		Result Request **Surcharge		
Soil	Drinking Water	<input checked="" type="checkbox"/> STD	<input type="checkbox"/> 5 Day**	<input type="checkbox"/> 4 Day**
Sludge	Ground Water	(18 Days)		
Waste Water	Waste Water	<input type="checkbox"/> 3 Day**	<input type="checkbox"/> 2 Day**	<input type="checkbox"/> 1 Day**
Other		Rush requests must be approved		
Notes				

Sample #	Description	Date Sampled	Time Sampled
4-6	Depth: 970 ft	10/11/23	2:20 am
4-7	Depth: 970 ft	10/11/23	4:00 am
4-8	Depth: 970 ft	10/11/23	4:00 am
5-1	Depth: 380 ft	10/11/23	8:20 am
5-2	Depth: 380 ft	10/11/23	8:20 am
5-3	Depth: 380 ft	10/11/23	10:30 am
5-4	Depth: 380 ft	10/11/23	10:30 am
5-5	Depth: 380 ft	10/11/23	10:30 am
5-6	Depth: 380 ft	10/11/23	10:30 am
5-7	Depth: 380 ft	10/11/23	7:05 am
5-8	Depth: 380 ft	10/11/23	7:05 am

Billing <input type="checkbox"/> Same as above		EDF Required Geotracker <input type="checkbox"/> Yes <input type="checkbox"/> No		Global ID <b>1230</b>	
Client:		1. Relinquished By <b>Anthony Cruz</b>	Date <b>10/12/23</b>	Time <b>9:00 am</b>	1. Received By <b>[Signature]</b>
Address:		2. Relinquished By	Date	Time	2. Received By
City: _____ State _____ Zip _____		3. Relinquished By	Date	Time	3. Received By
Attn: _____					
P.O. #: _____					

Pace Analytical Bakersfield does not accept samples containing radioactive material above background levels. Samples containing radioactive material must be disclosed prior to receipt. Any samples suspected of containing radioactive material above background levels will not be accepted and will be returned to client.

REV 12/2021



Chain of Custody and Cooler Receipt Form for 2319605 Page 4 of 5

PACE ANALYTICAL		COOLER RECEIPT FORM		Page <u>1</u> Of <u>2</u>	
Submission #: <u>23-19605</u>					
SHIPPING INFORMATION Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> GSO / GLS <input type="checkbox"/> Hand Delivery <input checked="" type="checkbox"/> Pace Lab Field Service <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			SHIPPING CONTAINER Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		FREE LIQUID YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> W / S
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: _____					
Custody Seals Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: _____					
Intact? Yes <input type="checkbox"/> No <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>					
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: <u>0.97</u> Container: <u>NA</u> Thermometer ID: <u>337</u>		Date/Time: <u>10-12-23</u>	
		Temperature: (A) <u>0.8</u> °C / (C) <u>1.0</u> °C		Analyst Init <u>SMH</u>	

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES	B.C	B.C	B.C	B.C	B.C					
4oz / 8oz / 16oz PE UNPRES										
2oz Cr <sup>4</sup>	D	D	D	D	D					
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 6oz	E	E	E	E	E					
PT CYANIDE	F	F	F	F	F					
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664B										
PT OBOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- SM										
QT EPA 503/618.3/8081A										
QT EPA 515.1/8151A										
QT EPA 525.2										
QT EPA 525.2 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548.1										
QT EPA 549.2										
QT EPA 8015M										
QT EPA 8270C										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments:

Sample Numbering Completed By: RPZ

A = Actual / C = Corrected

Date/Time: 10/12/23 15:10

Rev 23 05/20/22

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Chain of Custody and Cooler Receipt Form for 2319605 Page 5 of 5

PACE ANALYTICAL		COOLER RECEIPT FORM		Page <u>2</u> Of <u>2</u>	
Submission #: <u>23-19605</u>					
<b>SHIPPING INFORMATION</b> Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> GSO / GLS <input type="checkbox"/> Hand Delivery <input checked="" type="checkbox"/> Pace Lab Field Service <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			<b>SHIPPING CONTAINER</b> Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		<b>FREE LIQUID</b> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> W / S
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments:					
Custody Seals Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments:					
Intact? Yes <input type="checkbox"/> No <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>					
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: <u>0.97</u> Container: <u>NA</u> Thermometer ID: <u>337</u>		Date/Time <u>10-12-23</u>	
		Temperature: (A) <u>1.8</u> °C / (C) <u>2.0</u> °C		Analyst Init <u>SMH</u>	

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES	A	A	A	A	A					
4oz / 8oz / 16oz PE UNPRES										
2oz Cr <sup>4</sup>										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PTa PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664B										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 5M										
QT EPA 505/509.3/5081A										
QT EPA 515.1/5151A										
QT EPA 525.2										
QT EPA 525.2 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548.1										
QT EPA 549.2										
QT EPA 8015M										
QT EPA 8276C										
8oz / 16oz / 32oz AMBER	G,H	G,H	G,H	G,H	G,H					
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments:

Sample Numbering Completed By: RPA

Date/Time: 10/12/23 15:10

Rev 23 06/20/22

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Hydrostor  
365 Bay Street  
Toronto, CANADA M5H 2V1

**Reported:** 11/08/2023 16:29  
**Project:** ZEV-CH-03-23  
**Project Number:** [none]  
**Project Manager:** Lucas Thexton

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
2319605-01	<b>COC Number:</b>	---	<b>Receive Date:</b>	10/12/2023 12:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	10/09/2023 07:15
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	1 Depth 2380ft	<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	Anthony Cruz/Efrain Garcia	<b>Sample Type:</b>	Groundwater
2319605-02	<b>COC Number:</b>	---	<b>Receive Date:</b>	10/12/2023 12:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	10/10/2023 06:15
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	2 Depth 1600ft	<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	Anthony Cruz/Efrain Garcia	<b>Sample Type:</b>	Groundwater
2319605-03	<b>COC Number:</b>	---	<b>Receive Date:</b>	10/12/2023 12:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	10/10/2023 06:35
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	3 Depth 1180ft	<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	Anthony Cruz/Efrain Garcia	<b>Sample Type:</b>	Groundwater
2319605-04	<b>COC Number:</b>	---	<b>Receive Date:</b>	10/12/2023 12:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	10/11/2023 02:20
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	4 Depth 970ft	<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	Anthony Cruz/Efrain Garcia	<b>Sample Type:</b>	Groundwater
2319605-05	<b>COC Number:</b>	---	<b>Receive Date:</b>	10/12/2023 12:30
	<b>Project Number:</b>	---	<b>Sampling Date:</b>	10/11/2023 07:05
	<b>Sampling Location:</b>	---	<b>Sample Depth:</b>	---
	<b>Sampling Point:</b>	5 Depth 380ft	<b>Lab Matrix:</b>	Water
	<b>Sampled By:</b>	Anthony Cruz/Efrain Garcia	<b>Sample Type:</b>	Groundwater

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Hydrostor  
365 Bay Street  
Toronto, CANADA M5H 2V1

Reported: 11/08/2023 16:29  
Project: ZEV-CH-03-23  
Project Number: [none]  
Project Manager: Lucas Thexton

## Water Analysis (General Chemistry)

Pace Sample ID:	2319605-01	Client Sample Name:	1 Depth 2380ft, 10/9/2023 7:15:00AM, Anthony Cruz/Efrain Garcia					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Total Recoverable Calcium	26	mg/L	0.10	0.014	EPA-200.7	0.071		1
Total Recoverable Magnesium	3600	ug/L	50	19	EPA-200.7	42		1
Total Recoverable Sodium	87	mg/L	0.50	0.051	EPA-200.7	ND		1
Bicarbonate Alkalinity as CaCO <sub>3</sub>	170	mg/L	4.1	4.1	SM-2320B	ND		2
Carbonate Alkalinity as CaCO <sub>3</sub>	21	mg/L	4.1	4.1	SM-2320B	ND		2
Chloride	55	mg/L	0.50	0.13	EPA-300.0	ND		3
Fluoride	0.51	mg/L	0.050	0.025	EPA-300.0	ND		3
Nitrate as N	ND	mg/L	0.10	0.024	EPA-300.0	ND	A26,S05	3
Sulfate	65	mg/L	1.0	0.14	EPA-300.0	ND		3
pH	8.90	pH Units	0.05	0.05	EPA-150.1		S05	4
Total Dissolved Solids @ 180 C	410	mg/L	20	10	EPA-160.1	ND	A10	5
MBAS	0.16	mg/L	0.20	0.048	SM-5540C	ND	J,A01,A26,S05	6
Total Cyanide	0.0017	mg/L	0.0050	0.0017	EPA-335.4	ND	J	7
Nitrite as N	0.0079	mg/L	0.050	0.0050	EPA-300.0	ND	J,A26,S05	3
Perchlorate	ND	ug/L	2.0	0.81	EPA-314.0	ND		8

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-200.7	10/13/23 16:55	10/20/23 18:12	SDA	PE-OP4	1	B176139	EPA 200.2
2	SM-2320B	10/13/23 07:30	10/13/23 15:54	RML	MET-1	1	B175322	No Prep
3	EPA-300.0	10/13/23 20:00	10/14/23 08:12	RC1	IC9	1	B176133	No Prep
4	EPA-150.1	10/13/23 07:30	10/13/23 15:54	RML	MET-1	1	B175322	No Prep
5	EPA-160.1	10/14/23 10:00	10/14/23 10:00	CAD	MANUAL	2	B176147	No Prep
6	SM-5540C	10/13/23 12:45	10/13/23 12:45	JMN	SPEC06	2	B176128	No Prep
7	EPA-335.4	10/18/23 09:25	10/20/23 16:40	JMH	KONE-1	1	B176346	EPA 335.4 Total
8	EPA-314.0	10/16/23 20:00	10/17/23 02:18	SM2	IC10	1	B176221	No Prep

DCN = Data Continuation Number





Hydrostor  
365 Bay Street  
Toronto, CANADA M5H 2V1

Reported: 11/08/2023 16:29  
Project: ZEV-CH-03-23  
Project Number: [none]  
Project Manager: Lucas Thexton

## Metals Analysis

Pace Sample ID:	2319605-01	Client Sample Name:	1 Depth 2380ft, 10/9/2023 7:15:00AM, Anthony Cruz/Efrain Garcia					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Hexavalent Chromium	0.00026	mg/L	0.00020	0.000020	EPA-218.6	ND		1
Total Recoverable Aluminum	130	ug/L	50	26	EPA-200.7	41		2
Total Recoverable Antimony	ND	ug/L	100	5.0	EPA-200.7	ND		3
Total Recoverable Arsenic	ND	ug/L	50	7.8	EPA-200.7	ND		2
Total Recoverable Beryllium	ND	ug/L	10	0.77	EPA-200.7	ND		2
Total Recoverable Boron	150	ug/L	20	1.7	EPA-200.8	3.2		4
Total Recoverable Cadmium	ND	ug/L	10	1.1	EPA-200.7	ND		2
Total Recoverable Chromium	17	ug/L	10	1.2	EPA-200.7	ND		2
Total Recoverable Copper	6.0	ug/L	10	1.2	EPA-200.7	ND	J	3
Total Recoverable Iron	3800	ug/L	50	30	EPA-200.7	92	S11	3
Total Recoverable Manganese	190	ug/L	10	4.0	EPA-200.7	ND		2
Total Recoverable Mercury	ND	ug/L	0.20	0.022	EPA-245.1	ND		5
Total Recoverable Nickel	5.9	ug/L	10	2.3	EPA-200.7	ND	J	2
Total Recoverable Selenium	ND	ug/L	100	27	EPA-200.7	ND		2
Total Recoverable Silver	ND	ug/L	1.0	0.10	EPA-200.8	ND		4
Total Recoverable Thallium	ND	ug/L	100	11	EPA-200.7	ND		2
Total Recoverable Zinc	1400	ug/L	50	9.5	EPA-200.7	ND		2

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-218.6	10/17/23 09:00	10/17/23 15:28	RC1	IC11	1	B176252	No Prep
2	EPA-200.7	10/13/23 16:55	10/20/23 18:12	SDA	PE-OP4	1	B176139	EPA 200.2
3	EPA-200.7	10/13/23 16:55	10/26/23 19:16	JRG	PE-OP4	1	B176139	EPA 200.2
4	EPA-200.8	10/13/23 16:55	10/16/23 16:11	ARD	PE-EL4	1	B176140	EPA 200.2
5	EPA-245.1	10/19/23 15:05	10/20/23 15:30	TMT	CETAC4	1	B176460	EPA 245.1

DCN = Data Continuation Number



Hydrostor  
365 Bay Street  
Toronto, CANADA M5H 2V1

Reported: 11/08/2023 16:29  
Project: ZEV-CH-03-23  
Project Number: [none]  
Project Manager: Lucas Thexton

## Water Analysis (General Chemistry)

Pace Sample ID:	2319605-02	Client Sample Name:	2 Depth 1600ft, 10/10/2023 6:15:00AM, Anthony Cruz/Efrain Garcia					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Total Recoverable Calcium	20	mg/L	0.10	0.014	EPA-200.7	0.071		1
Total Recoverable Magnesium	3800	ug/L	50	19	EPA-200.7	42		1
Total Recoverable Sodium	73	mg/L	0.50	0.051	EPA-200.7	ND		1
Bicarbonate Alkalinity as CaCO <sub>3</sub>	73	mg/L	4.1	4.1	SM-2320B	ND		2
Carbonate Alkalinity as CaCO <sub>3</sub>	ND	mg/L	4.1	4.1	SM-2320B	ND		2
Chloride	31	mg/L	0.50	0.13	EPA-300.0	ND		3
Fluoride	0.57	mg/L	0.050	0.025	EPA-300.0	ND		3
Nitrate as N	ND	mg/L	0.10	0.024	EPA-300.0	ND	S05	3
Sulfate	52	mg/L	1.0	0.14	EPA-300.0	ND		3
pH	7.87	pH Units	0.05	0.05	EPA-150.1		S05	4
Total Dissolved Solids @ 180 C	260	mg/L	20	10	EPA-160.1	ND	A10	5
MBAS	0.17	mg/L	0.10	0.024	SM-5540C	ND	A26,S05	6
Total Cyanide	ND	mg/L	0.0050	0.0017	EPA-335.4	ND		7
Nitrite as N	0.049	mg/L	0.050	0.0050	EPA-300.0	ND	J,S05	3
Perchlorate	ND	ug/L	2.0	0.81	EPA-314.0	ND		8

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-200.7	10/13/23 16:55	10/20/23 18:15	SDA	PE-OP4	1	B176139	EPA 200.2
2	SM-2320B	10/13/23 07:30	10/13/23 16:02	RML	MET-1	1	B175322	No Prep
3	EPA-300.0	10/13/23 20:00	10/14/23 11:54	RC1	IC9	1	B176133	No Prep
4	EPA-150.1	10/13/23 07:30	10/13/23 16:02	RML	MET-1	1	B175322	No Prep
5	EPA-160.1	10/14/23 10:00	10/14/23 10:00	CAD	MANUAL	2	B176147	No Prep
6	SM-5540C	10/13/23 12:45	10/13/23 12:45	JMN	SPEC06	1	B176128	No Prep
7	EPA-335.4	10/18/23 09:25	10/20/23 16:40	JMH	KONE-1	1	B176346	EPA 335.4 Total
8	EPA-314.0	10/16/23 20:00	10/17/23 02:34	SM2	IC10	1	B176221	No Prep

DCN = Data Continuation Number



Hydrostor  
365 Bay Street  
Toronto, CANADA M5H 2V1

Reported: 11/08/2023 16:29  
Project: ZEV-CH-03-23  
Project Number: [none]  
Project Manager: Lucas Thexton

## Metals Analysis

Pace Sample ID: 2319605-02		Client Sample Name: 2 Depth 1600ft, 10/10/2023 6:15:00AM, Anthony Cruz/Efrain Garcia						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Hexavalent Chromium	0.00020	mg/L	0.00020	0.000020	EPA-218.6	ND		1
Total Recoverable Aluminum	210	ug/L	50	26	EPA-200.7	41		2
Total Recoverable Antimony	ND	ug/L	100	5.0	EPA-200.7	ND		3
Total Recoverable Arsenic	ND	ug/L	50	7.8	EPA-200.7	ND		2
Total Recoverable Beryllium	ND	ug/L	10	0.77	EPA-200.7	ND		2
Total Recoverable Boron	140	ug/L	20	1.7	EPA-200.8	3.2		4
Total Recoverable Cadmium	ND	ug/L	10	1.1	EPA-200.7	ND		2
Total Recoverable Chromium	11	ug/L	10	1.2	EPA-200.7	ND		2
Total Recoverable Copper	2.8	ug/L	10	1.2	EPA-200.7	ND	J	3
Total Recoverable Iron	4300	ug/L	50	30	EPA-200.7	92	S11	3
Total Recoverable Manganese	340	ug/L	10	4.0	EPA-200.7	ND		2
Total Recoverable Mercury	ND	ug/L	0.20	0.022	EPA-245.1	0.10		5
Total Recoverable Nickel	6.1	ug/L	10	2.3	EPA-200.7	ND	J	2
Total Recoverable Selenium	ND	ug/L	100	27	EPA-200.7	ND		2
Total Recoverable Silver	ND	ug/L	1.0	0.10	EPA-200.8	ND		4
Total Recoverable Thallium	ND	ug/L	100	11	EPA-200.7	ND		2
Total Recoverable Zinc	1200	ug/L	50	9.5	EPA-200.7	ND		2

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-218.6	10/17/23 09:00	10/17/23 14:29	RC1	IC11	1	B176252	No Prep
2	EPA-200.7	10/13/23 16:55	10/20/23 18:15	SDA	PE-OP4	1	B176139	EPA 200.2
3	EPA-200.7	10/13/23 16:55	10/26/23 19:18	JRG	PE-OP4	1	B176139	EPA 200.2
4	EPA-200.8	10/13/23 16:55	10/16/23 16:13	ARD	PE-EL4	1	B176140	EPA 200.2
5	EPA-245.1	10/24/23 08:35	10/24/23 16:05	TMT	CETAC4	1	B176679	EPA 245.1

DCN = Data Continuation Number



Hydrostor  
365 Bay Street  
Toronto, CANADA M5H 2V1

Reported: 11/08/2023 16:29  
Project: ZEV-CH-03-23  
Project Number: [none]  
Project Manager: Lucas Thexton

## Water Analysis (General Chemistry)

Pace Sample ID:	2319605-03	Client Sample Name:	3 Depth 1180ft, 10/10/2023 6:35:00AM, Anthony Cruz/Efrain Garcia					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Total Recoverable Calcium	22	mg/L	0.10	0.014	EPA-200.7	0.071		1
Total Recoverable Magnesium	2600	ug/L	50	19	EPA-200.7	42		1
Total Recoverable Sodium	79	mg/L	0.50	0.051	EPA-200.7	ND		1
Bicarbonate Alkalinity as CaCO3	61	mg/L	4.1	4.1	SM-2320B	ND		2
Carbonate Alkalinity as CaCO3	7.0	mg/L	4.1	4.1	SM-2320B	ND		2
Chloride	33	mg/L	0.50	0.13	EPA-300.0	ND		3
Fluoride	0.93	mg/L	0.050	0.025	EPA-300.0	ND		3
Nitrate as N	ND	mg/L	0.10	0.024	EPA-300.0	ND	A26,S05	3
Sulfate	53	mg/L	1.0	0.14	EPA-300.0	ND		3
pH	8.78	pH Units	0.05	0.05	EPA-150.1		S05	4
Total Dissolved Solids @ 180 C	240	mg/L	20	10	EPA-160.1	ND	A10	5
MBAS	ND	mg/L	0.10	0.024	SM-5540C	ND	A26,S05	6
Total Cyanide	ND	mg/L	0.0050	0.0017	EPA-335.4	ND		7
Nitrite as N	0.0087	mg/L	0.050	0.0050	EPA-300.0	ND	J,A26,S05	3

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-200.7	10/13/23 16:55	10/20/23 18:17	SDA	PE-OP4	1	B176139	EPA 200.2
2	SM-2320B	10/13/23 07:30	10/13/23 16:28	RML	MET-1	1	B175323	No Prep
3	EPA-300.0	10/13/23 20:00	10/14/23 12:08	RC1	IC9	1	B176133	No Prep
4	EPA-150.1	10/13/23 07:30	10/13/23 16:28	RML	MET-1	1	B175323	No Prep
5	EPA-160.1	10/14/23 10:00	10/14/23 10:00	CAD	MANUAL	2	B176147	No Prep
6	SM-5540C	10/13/23 12:45	10/13/23 12:45	JMN	SPEC06	1	B176128	No Prep
7	EPA-335.4	10/18/23 09:25	10/20/23 16:40	JMH	KONE-1	1	B176346	EPA 335.4 Total

DCN = Data Continuation Number



Hydrostor  
365 Bay Street  
Toronto, CANADA M5H 2V1

Reported: 11/08/2023 16:29  
Project: ZEV-CH-03-23  
Project Number: [none]  
Project Manager: Lucas Thexton

## Metals Analysis

Pace Sample ID: 2319605-03		Client Sample Name: 3 Depth 1180ft, 10/10/2023 6:35:00AM, Anthony Cruz/Efrain Garcia						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Hexavalent Chromium	0.00012	mg/L	0.00020	0.000020	EPA-218.6	ND	J	1
Total Recoverable Aluminum	260	ug/L	50	26	EPA-200.7	41		2
Total Recoverable Antimony	ND	ug/L	100	5.0	EPA-200.7	ND		3
Total Recoverable Arsenic	ND	ug/L	50	7.8	EPA-200.7	ND		2
Total Recoverable Beryllium	ND	ug/L	10	0.77	EPA-200.7	ND		2
Total Recoverable Boron	130	ug/L	20	1.7	EPA-200.8	3.2		4
Total Recoverable Cadmium	ND	ug/L	10	1.1	EPA-200.7	ND		2
Total Recoverable Chromium	7.4	ug/L	10	1.2	EPA-200.7	ND	J	2
Total Recoverable Copper	ND	ug/L	10	1.2	EPA-200.7	ND		3
Total Recoverable Iron	3000	ug/L	50	30	EPA-200.7	92	S11	3
Total Recoverable Manganese	150	ug/L	10	4.0	EPA-200.7	ND		2
Total Recoverable Mercury	0.037	ug/L	0.20	0.022	EPA-245.1	0.10	J	5
Total Recoverable Nickel	ND	ug/L	10	2.3	EPA-200.7	ND		2
Total Recoverable Selenium	ND	ug/L	100	27	EPA-200.7	ND		2
Total Recoverable Silver	ND	ug/L	1.0	0.10	EPA-200.8	ND		4
Total Recoverable Thallium	ND	ug/L	100	11	EPA-200.7	ND		2
Total Recoverable Zinc	380	ug/L	50	9.5	EPA-200.7	ND		2

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-218.6	10/17/23 09:00	10/17/23 14:39	RC1	IC11	1	B176252	No Prep
2	EPA-200.7	10/13/23 16:55	10/20/23 18:17	SDA	PE-OP4	1	B176139	EPA 200.2
3	EPA-200.7	10/13/23 16:55	10/26/23 19:21	JRG	PE-OP4	1	B176139	EPA 200.2
4	EPA-200.8	10/13/23 16:55	10/16/23 16:15	ARD	PE-EL4	1	B176140	EPA 200.2
5	EPA-245.1	10/24/23 08:35	10/24/23 16:07	TMT	CETAC4	1	B176679	EPA 245.1

DCN = Data Continuation Number



Hydrostor  
365 Bay Street  
Toronto, CANADA M5H 2V1

Reported: 11/08/2023 16:29  
Project: ZEV-CH-03-23  
Project Number: [none]  
Project Manager: Lucas Thexton

## Water Analysis (General Chemistry)

Pace Sample ID:	2319605-04	Client Sample Name:	4 Depth 970ft, 10/11/2023 2:20:00AM, Anthony Cruz/Efrain Garcia					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Total Recoverable Calcium	16	mg/L	0.10	0.014	EPA-200.7	0.071		1
Total Recoverable Magnesium	3400	ug/L	50	19	EPA-200.7	42		1
Total Recoverable Sodium	57	mg/L	0.50	0.051	EPA-200.7	ND		1
Bicarbonate Alkalinity as CaCO <sub>3</sub>	56	mg/L	4.1	4.1	SM-2320B	ND		2
Carbonate Alkalinity as CaCO <sub>3</sub>	10	mg/L	4.1	4.1	SM-2320B	ND		2
Chloride	31	mg/L	0.50	0.13	EPA-300.0	ND		3
Fluoride	1.0	mg/L	0.050	0.025	EPA-300.0	ND		3
Nitrate as N	ND	mg/L	0.10	0.024	EPA-300.0	ND	A26,S05	3
Sulfate	52	mg/L	1.0	0.14	EPA-300.0	ND		3
pH	8.97	pH Units	0.05	0.05	EPA-150.1		S05	4
Total Dissolved Solids @ 180 C	240	mg/L	20	10	EPA-160.1	ND	A10	5
MBAS	0.027	mg/L	0.10	0.024	SM-5540C	ND	J,S05	6
Total Cyanide	ND	mg/L	0.0050	0.0017	EPA-335.4	ND		7
Nitrite as N	ND	mg/L	0.050	0.0050	EPA-300.0	ND	A26,S05	3
Perchlorate	ND	ug/L	2.0	0.81	EPA-314.0	ND		8

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-200.7	10/13/23 16:55	10/20/23 18:19	SDA	PE-OP4	1	B176139	EPA 200.2
2	SM-2320B	10/13/23 07:30	10/13/23 16:41	RML	MET-1	1	B175323	No Prep
3	EPA-300.0	10/13/23 20:00	10/14/23 12:21	RC1	IC9	1	B176133	No Prep
4	EPA-150.1	10/13/23 07:30	10/13/23 16:41	RML	MET-1	1	B175323	No Prep
5	EPA-160.1	10/14/23 10:00	10/14/23 10:00	CAD	MANUAL	2	B176147	No Prep
6	SM-5540C	10/13/23 12:45	10/13/23 12:45	JMN	SPEC06	1	B176128	No Prep
7	EPA-335.4	10/18/23 09:25	10/20/23 16:40	JMH	KONE-1	1	B176346	EPA 335.4 Total
8	EPA-314.0	10/16/23 20:00	10/17/23 03:40	SM2	IC10	1	B176221	No Prep

DCN = Data Continuation Number



Hydrostor  
365 Bay Street  
Toronto, CANADA M5H 2V1

Reported: 11/08/2023 16:29  
Project: ZEV-CH-03-23  
Project Number: [none]  
Project Manager: Lucas Thexton

## Metals Analysis

Pace Sample ID: 2319605-04		Client Sample Name: 4 Depth 970ft, 10/11/2023 2:20:00AM, Anthony Cruz/Efrain Garcia						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Hexavalent Chromium	0.00012	mg/L	0.00020	0.000020	EPA-218.6	ND	J	1
Total Recoverable Aluminum	200	ug/L	50	26	EPA-200.7	41		2
Total Recoverable Antimony	ND	ug/L	100	5.0	EPA-200.7	ND		3
Total Recoverable Arsenic	ND	ug/L	50	7.8	EPA-200.7	ND		2
Total Recoverable Beryllium	ND	ug/L	10	0.77	EPA-200.7	ND		2
Total Recoverable Boron	110	ug/L	20	1.7	EPA-200.8	3.2		4
Total Recoverable Cadmium	ND	ug/L	10	1.1	EPA-200.7	ND		2
Total Recoverable Chromium	9.8	ug/L	10	1.2	EPA-200.7	ND	J	2
Total Recoverable Copper	7.6	ug/L	10	1.2	EPA-200.7	ND	J	3
Total Recoverable Iron	9700	ug/L	50	30	EPA-200.7	92	S11	3
Total Recoverable Manganese	210	ug/L	10	4.0	EPA-200.7	ND		2
Total Recoverable Mercury	0.055	ug/L	0.20	0.022	EPA-245.1	0.10	J	5
Total Recoverable Nickel	3.7	ug/L	10	2.3	EPA-200.7	ND	J	2
Total Recoverable Selenium	ND	ug/L	100	27	EPA-200.7	ND		2
Total Recoverable Silver	ND	ug/L	1.0	0.10	EPA-200.8	ND		4
Total Recoverable Thallium	ND	ug/L	100	11	EPA-200.7	ND		2
Total Recoverable Zinc	1300	ug/L	50	9.5	EPA-200.7	ND		2

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-218.6	10/17/23 09:00	10/17/23 14:48	RC1	IC11	1	B176252	No Prep
2	EPA-200.7	10/13/23 16:55	10/20/23 18:19	SDA	PE-OP4	1	B176139	EPA 200.2
3	EPA-200.7	10/13/23 16:55	10/26/23 19:23	JRG	PE-OP4	1	B176139	EPA 200.2
4	EPA-200.8	10/13/23 16:55	10/16/23 16:17	ARD	PE-EL4	1	B176140	EPA 200.2
5	EPA-245.1	10/24/23 08:35	10/24/23 16:09	TMT	CETAC4	1	B176679	EPA 245.1

DCN = Data Continuation Number



Hydrostor  
365 Bay Street  
Toronto, CANADA M5H 2V1

Reported: 11/08/2023 16:29  
Project: ZEV-CH-03-23  
Project Number: [none]  
Project Manager: Lucas Thexton

## Water Analysis (General Chemistry)

Pace Sample ID:	2319605-05	Client Sample Name:	5 Depth 380ft, 10/11/2023 7:05:00AM, Anthony Cruz/Efrain Garcia					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Total Recoverable Calcium	14	mg/L	0.10	0.014	EPA-200.7	0.071		1
Total Recoverable Magnesium	4400	ug/L	50	19	EPA-200.7	42		1
Total Recoverable Sodium	50	mg/L	0.50	0.051	EPA-200.7	ND		1
Bicarbonate Alkalinity as CaCO3	51	mg/L	4.1	4.1	SM-2320B	ND		2
Carbonate Alkalinity as CaCO3	9.7	mg/L	4.1	4.1	SM-2320B	ND		2
Chloride	29	mg/L	0.50	0.13	EPA-300.0	ND		3
Fluoride	1.2	mg/L	0.050	0.025	EPA-300.0	ND		3
Nitrate as N	ND	mg/L	0.10	0.024	EPA-300.0	ND	A26,S05	3
Sulfate	47	mg/L	1.0	0.14	EPA-300.0	ND		3
pH	8.96	pH Units	0.05	0.05	EPA-150.1		S05	4
Total Dissolved Solids @ 180 C	270	mg/L	20	10	EPA-160.1	ND	A10	5
MBAS	0.14	mg/L	0.10	0.024	SM-5540C	ND	S05	6
Total Cyanide	0.0030	mg/L	0.0050	0.0017	EPA-335.4	ND	J	7
Nitrite as N	ND	mg/L	0.050	0.0050	EPA-300.0	ND	A26,S05	3

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-200.7	10/13/23 16:55	10/20/23 18:21	SDA	PE-OP4	1	B176139	EPA 200.2
2	SM-2320B	10/13/23 07:30	10/13/23 16:47	RML	MET-1	1	B175323	No Prep
3	EPA-300.0	10/13/23 20:00	10/14/23 12:35	RC1	IC9	1	B176133	No Prep
4	EPA-150.1	10/13/23 07:30	10/13/23 16:47	RML	MET-1	1	B175323	No Prep
5	EPA-160.1	10/14/23 10:00	10/14/23 10:00	CAD	MANUAL	2	B176147	No Prep
6	SM-5540C	10/13/23 12:45	10/13/23 12:45	JMN	SPEC06	1	B176128	No Prep
7	EPA-335.4	10/18/23 09:25	10/20/23 16:40	JMH	KONE-1	1	B176346	EPA 335.4 Total

DCN = Data Continuation Number





Hydrostor  
365 Bay Street  
Toronto, CANADA M5H 2V1

Reported: 11/08/2023 16:29  
Project: ZEV-CH-03-23  
Project Number: [none]  
Project Manager: Lucas Thexton

## Metals Analysis

<b>Pace Sample ID:</b>	2319605-05	<b>Client Sample Name:</b>	5 Depth 380ft, 10/11/2023 7:05:00AM, Anthony Cruz/Efrain Garcia					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Hexavalent Chromium	ND	mg/L	0.00020	0.000020	EPA-218.6	ND		1
<b>Total Recoverable Aluminum</b>	<b>110</b>	<b>ug/L</b>	<b>50</b>	<b>26</b>	<b>EPA-200.7</b>	<b>41</b>		<b>2</b>
Total Recoverable Antimony	ND	ug/L	100	5.0	EPA-200.7	ND		3
Total Recoverable Arsenic	ND	ug/L	50	7.8	EPA-200.7	ND		2
Total Recoverable Beryllium	ND	ug/L	10	0.77	EPA-200.7	ND		2
<b>Total Recoverable Boron</b>	<b>27</b>	<b>ug/L</b>	<b>20</b>	<b>1.7</b>	<b>EPA-200.8</b>	<b>3.2</b>		<b>4</b>
Total Recoverable Cadmium	ND	ug/L	10	1.1	EPA-200.7	ND		2
<b>Total Recoverable Chromium</b>	<b>5.2</b>	<b>ug/L</b>	<b>10</b>	<b>1.2</b>	<b>EPA-200.7</b>	<b>ND</b>	<b>J</b>	<b>2</b>
<b>Total Recoverable Copper</b>	<b>2.9</b>	<b>ug/L</b>	<b>10</b>	<b>1.2</b>	<b>EPA-200.7</b>	<b>ND</b>	<b>J</b>	<b>3</b>
<b>Total Recoverable Iron</b>	<b>5600</b>	<b>ug/L</b>	<b>50</b>	<b>30</b>	<b>EPA-200.7</b>	<b>92</b>	<b>S11</b>	<b>3</b>
<b>Total Recoverable Manganese</b>	<b>130</b>	<b>ug/L</b>	<b>10</b>	<b>4.0</b>	<b>EPA-200.7</b>	<b>ND</b>		<b>2</b>
<b>Total Recoverable Mercury</b>	<b>0.029</b>	<b>ug/L</b>	<b>0.20</b>	<b>0.022</b>	<b>EPA-245.1</b>	<b>0.10</b>	<b>J</b>	<b>5</b>
<b>Total Recoverable Nickel</b>	<b>2.9</b>	<b>ug/L</b>	<b>10</b>	<b>2.3</b>	<b>EPA-200.7</b>	<b>ND</b>	<b>J</b>	<b>2</b>
Total Recoverable Selenium	ND	ug/L	100	27	EPA-200.7	ND		2
Total Recoverable Silver	ND	ug/L	1.0	0.10	EPA-200.8	ND		4
Total Recoverable Thallium	ND	ug/L	100	11	EPA-200.7	ND		2
<b>Total Recoverable Zinc</b>	<b>1500</b>	<b>ug/L</b>	<b>50</b>	<b>9.5</b>	<b>EPA-200.7</b>	<b>ND</b>		<b>2</b>

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-218.6	10/17/23 09:00	10/17/23 14:58	RC1	IC11	1	B176252	No Prep
2	EPA-200.7	10/13/23 16:55	10/20/23 18:21	SDA	PE-OP4	1	B176139	EPA 200.2
3	EPA-200.7	10/13/23 16:55	10/26/23 19:25	JRG	PE-OP4	1	B176139	EPA 200.2
4	EPA-200.8	10/13/23 16:55	10/16/23 16:19	ARD	PE-EL4	1	B176140	EPA 200.2
5	EPA-245.1	10/24/23 08:35	10/24/23 16:11	TMT	CETAC4	1	B176679	EPA 245.1

DCN = Data Continuation Number



Hydrostor  
365 Bay Street  
Toronto, CANADA M5H 2V1

Reported: 11/08/2023 16:29  
Project: ZEV-CH-03-23  
Project Number: [none]  
Project Manager: Lucas Thexton

## Water Analysis (General Chemistry)

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
<b>QC Batch ID: B175322</b>							
Bicarbonate Alkalinity as CaCO <sub>3</sub>	B175322-BLK1	ND	mg/L	4.1	4.1		1
Carbonate Alkalinity as CaCO <sub>3</sub>	B175322-BLK1	ND	mg/L	4.1	4.1		1
<b>QC Batch ID: B175323</b>							
Bicarbonate Alkalinity as CaCO <sub>3</sub>	B175323-BLK1	ND	mg/L	4.1	4.1		2
Carbonate Alkalinity as CaCO <sub>3</sub>	B175323-BLK1	ND	mg/L	4.1	4.1		2
<b>QC Batch ID: B176128</b>							
MBAS	B176128-BLK1	ND	mg/L	0.10	0.024		3
<b>QC Batch ID: B176133</b>							
Chloride	B176133-BLK1	ND	mg/L	0.50	0.13		4
Fluoride	B176133-BLK1	ND	mg/L	0.050	0.025		4
Nitrate as N	B176133-BLK1	ND	mg/L	0.10	0.024		4
Sulfate	B176133-BLK1	ND	mg/L	1.0	0.14		4
Nitrite as N	B176133-BLK1	ND	mg/L	0.050	0.0050		4
<b>QC Batch ID: B176139</b>							
Total Recoverable Calcium	B176139-BLK1	0.070641	mg/L	0.10	0.014	J	5
Total Recoverable Magnesium	B176139-BLK1	42.307	ug/L	50	19	J	5
Total Recoverable Sodium	B176139-BLK1	ND	mg/L	0.50	0.051		5
<b>QC Batch ID: B176147</b>							
Total Dissolved Solids @ 180 C	B176147-BLK1	ND	mg/L	6.7	3.3		6
<b>QC Batch ID: B176221</b>							
Perchlorate	B176221-BLK1	ND	ug/L	2.0	0.81		7
<b>QC Batch ID: B176346</b>							
Total Cyanide	B176346-BLK1	ND	mg/L	0.0050	0.0017		8

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Hydrostor  
365 Bay Street  
Toronto, CANADA M5H 2V1

Reported: 11/08/2023 16:29  
Project: ZEV-CH-03-23  
Project Number: [none]  
Project Manager: Lucas Thexton

## Water Analysis (General Chemistry)

### Quality Control Report - Method Blank Analysis

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B175322-BLK1	PB	SM-2320B	10/13/23	10/13/23 14:53	RML	MET-1	1
2	B175323-BLK1	PB	SM-2320B	10/13/23	10/13/23 16:23	RML	MET-1	1
3	B176128-BLK1	PB	SM-5540C	10/13/23	10/13/23 12:45	JMN	SPEC06	1
4	B176133-BLK1	PB	EPA-300.0	10/13/23	10/13/23 23:50	RC1	IC9	1
5	B176139-BLK1	PB	EPA-200.7	10/13/23	10/20/23 17:45	SDA	PE-OP4	1
6	B176147-BLK1	PB	EPA-160.1	10/14/23	10/14/23 10:00	CAD	MANUAL	0.667
7	B176221-BLK1	PB	EPA-314.0	10/16/23	10/16/23 21:38	SM2	IC10	1
8	B176346-BLK1	PB	EPA-335.4	10/18/23	10/20/23 14:17	JMH	KONE-1	1



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Project: ZEV-CH-03-23  
Project Number: [none]  
Project Manager: Lucas Thexton

## Water Analysis (General Chemistry)

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals	Run #
								Percent Recovery	RPD		
QC Batch ID: B175322											
pH	B175322-BS2	LCS	7.1100	7.0000	pH Units	102		95 - 105			1
QC Batch ID: B175323											
pH	B175323-BS2	LCS	7.1000	7.0000	pH Units	101		95 - 105			2
QC Batch ID: B176128											
MBAS	B176128-BS1	LCS	0.19560	0.20000	mg/L	97.8		85 - 115			3
QC Batch ID: B176133											
Chloride	B176133-BS1	LCS	52.821	50.000	mg/L	106		90 - 110			4
Fluoride	B176133-BS1	LCS	1.0380	1.0000	mg/L	104		90 - 110			4
Nitrate as N	B176133-BS1	LCS	5.1835	5.0000	mg/L	104		90 - 110			4
Sulfate	B176133-BS1	LCS	110.14	100.00	mg/L	110		90 - 110			4
Nitrite as N	B176133-BS1	LCS	1.0399	1.0000	mg/L	104		90 - 110			4
QC Batch ID: B176139											
Total Recoverable Calcium	B176139-BS1	LCS	10.686	10.000	mg/L	107		85 - 115			5
Total Recoverable Magnesium	B176139-BS1	LCS	10178	10000	ug/L	102		85 - 115			5
Total Recoverable Sodium	B176139-BS1	LCS	9.9722	10.000	mg/L	99.7		85 - 115			5
QC Batch ID: B176147											
Total Dissolved Solids @ 180 C	B176147-BS1	LCS	610.00	586.00	mg/L	104		90 - 110		A10	6
QC Batch ID: B176221											
Perchlorate	B176221-BS1	LCS	11.209	10.000	ug/L	112		85 - 115			7
QC Batch ID: B176346											
Total Cyanide	B176346-BS1	LCS	0.14773	0.15000	mg/L	98.5		90 - 110			8

Run #	QC Sample ID	QC Type	Method	Prep Date	Run		Analyst	Instrument	Dilution
					Date	Time			
1	B175322-BS2	LCS	EPA-150.1	10/13/23	10/13/23	14:42	RML	MET-1	1
2	B175323-BS2	LCS	EPA-150.1	10/13/23	10/13/23	16:12	RML	MET-1	1
3	B176128-BS1	LCS	SM-5540C	10/13/23	10/13/23	12:45	JMN	SPEC06	1
4	B176133-BS1	LCS	EPA-300.0	10/13/23	10/14/23	00:04	RC1	IC9	1
5	B176139-BS1	LCS	EPA-200.7	10/13/23	10/20/23	17:47	SDA	PE-OP4	1
6	B176147-BS1	LCS	EPA-160.1	10/14/23	10/14/23	10:00	CAD	MANUAL	5
7	B176221-BS1	LCS	EPA-314.0	10/16/23	10/16/23	21:55	SM2	IC10	1
8	B176346-BS1	LCS	EPA-335.4	10/18/23	10/20/23	14:17	JMH	KONE-1	1

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Reported: 11/08/2023 16:29  
Project: ZEV-CH-03-23  
Project Number: [none]  
Project Manager: Lucas Thexton

## Water Analysis (General Chemistry)

### Quality Control Report - Precision & Accuracy

									Control Limits			
Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	RPD	Percent Recovery	Lab	
											Quals	R#
QC Batch ID: B175322		Used client sample: N										
Bicarbonate Alkalinity as CaCO3	DUP	2319602-02	514.21	521.81		mg/L	1.5		10			1
Carbonate Alkalinity as CaCO3	DUP	2319602-02	14.000	15.210		mg/L	8.3		10			1
pH	DUP	2319602-02	8.3900	8.4200		pH Units	0.4		20			2
QC Batch ID: B175323		Used client sample: Y - Description: 3 Depth 1180ft, 10/10/2023 06:35										
Bicarbonate Alkalinity as CaCO3	DUP	2319605-03	61.010	60.090		mg/L	1.5		10			3
Carbonate Alkalinity as CaCO3	DUP	2319605-03	7.0000	8.8200		mg/L	23.0		10		A02	3
pH	DUP	2319605-03	8.7800	8.8500		pH Units	0.8		20			4
QC Batch ID: B176128		Used client sample: Y - Description: 1 Depth 2380ft, 10/09/2023 07:15										
MBAS	DUP	2319605-01	0.15960	0.15060		mg/L	5.8		20		J	5
	MS	2319605-01	0.15960	0.54340	0.40000	mg/L		96.0		80 - 120		6
	MSD	2319605-01	0.15960	0.53140	0.40000	mg/L	2.2	93.0	20	80 - 120		7
QC Batch ID: B176133		Used client sample: N										
Chloride	DUP	2319678-01	55.857	55.943		mg/L	0.2		10			8
	MS	2319678-01	55.857	108.38	50.505	mg/L		104		80 - 120		9
	MSD	2319678-01	55.857	108.37	50.505	mg/L	0.0	104	10	80 - 120		10
Fluoride	DUP	2319678-01	0.11760	0.12260		mg/L	4.2		10			8
	MS	2319678-01	0.11760	1.1623	1.0101	mg/L		103		80 - 120		9
	MSD	2319678-01	0.11760	1.1673	1.0101	mg/L	0.4	104	10	80 - 120		10
Nitrate as N	DUP	2319678-01	0.37490	0.37610		mg/L	0.3		10			8
	MS	2319678-01	0.37490	5.2348	5.0505	mg/L		96.2		80 - 120		9
	MSD	2319678-01	0.37490	5.2393	5.0505	mg/L	0.1	96.3	10	80 - 120		10
Sulfate	DUP	2319678-01	129.76	130.06		mg/L	0.2		10			8
	MS	2319678-01	129.76	235.63	101.01	mg/L		105		80 - 120		9
	MSD	2319678-01	129.76	235.58	101.01	mg/L	0.0	105	10	80 - 120		10
Nitrite as N	DUP	2319678-01	ND	ND		mg/L			10			8
	MS	2319678-01	ND	1.0029	1.0101	mg/L		99.3		80 - 120		9
	MSD	2319678-01	ND	1.0027	1.0101	mg/L	0.0	99.3	10	80 - 120		10
QC Batch ID: B176139		Used client sample: N										
Total Recoverable Calcium	DUP	2319408-02	141.08	134.26		mg/L	5.0		20			11
	MS	2319408-02	141.08	133.00	10.000	mg/L		-80.8		75 - 125	A03	12
	MSD	2319408-02	141.08	133.77	10.000	mg/L	0.6	-73.1	20	75 - 125	A03	13
Total Recoverable Magnesium	DUP	2319408-02	65871	63226		ug/L	4.1		20			11
	MS	2319408-02	65871	74060	10000	ug/L		81.9		75 - 125		12
	MSD	2319408-02	65871	74125	10000	ug/L	0.1	82.5	20	75 - 125		13
Total Recoverable Sodium	DUP	2319408-02	447.35	413.33		mg/L	7.9		20			11
	MS	2319408-02	447.35	411.83	10.000	mg/L		-355		75 - 125	A03	12
	MSD	2319408-02	447.35	422.13	10.000	mg/L	2.5	-252	20	75 - 125	A03	13

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Reported: 11/08/2023 16:29  
Project: ZEV-CH-03-23  
Project Number: [none]  
Project Manager: Lucas Thexton

## Water Analysis (General Chemistry)

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits		Lab	R#
									RPD	Percent Recovery		
QC Batch ID: B176147		Used client sample: N										
Total Dissolved Solids @ 180 C	DUP	2319372-01	438.00	426.00		mg/L	2.8		10		A10	14
QC Batch ID: B176221		Used client sample: N										
Perchlorate	DUP	2318963-01	ND	ND		ug/L			15			15
	MS	2318963-01	ND	11.228	10.000	ug/L		112		80 - 120		16
	MSD	2318963-01	ND	11.242	10.000	ug/L	0.1	112	15	80 - 120		17
QC Batch ID: B176346		Used client sample: N										
Total Cyanide	DUP	2319563-01	ND	0.0018600		mg/L			10		J	18
	MS	2319563-01	ND	0.10391	0.10000	mg/L		104		85 - 115		19
	MSD	2319563-01	ND	0.098177	0.10000	mg/L	5.7	98.2	10	85 - 115		20

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B175322-DUP1	DUP	SM-2320B	10/13/23	10/13/23 15:05	RML	MET-1	2
2	B175322-DUP1	DUP	EPA-150.1	10/13/23	10/13/23 15:05	RML	MET-1	1
3	B175323-DUP1	DUP	SM-2320B	10/13/23	10/13/23 16:34	RML	MET-1	1
4	B175323-DUP1	DUP	EPA-150.1	10/13/23	10/13/23 16:34	RML	MET-1	1
5	B176128-DUP1	DUP	SM-5540C	10/13/23	10/13/23 12:45	JMN	SPEC06	2
6	B176128-MS1	MS	SM-5540C	10/13/23	10/13/23 12:45	JMN	SPEC06	2
7	B176128-MSD1	MSD	SM-5540C	10/13/23	10/13/23 12:45	JMN	SPEC06	2
8	B176133-DUP1	DUP	EPA-300.0	10/13/23	10/14/23 00:31	RC1	IC9	1
9	B176133-MS1	MS	EPA-300.0	10/13/23	10/14/23 00:44	RC1	IC9	1.010
10	B176133-MSD1	MSD	EPA-300.0	10/13/23	10/14/23 00:57	RC1	IC9	1.010
11	B176139-DUP1	DUP	EPA-200.7	10/13/23	10/20/23 17:52	SDA	PE-OP4	1
12	B176139-MS1	MS	EPA-200.7	10/13/23	10/20/23 17:57	SDA	PE-OP4	1
13	B176139-MSD1	MSD	EPA-200.7	10/13/23	10/20/23 17:59	SDA	PE-OP4	1
14	B176147-DUP1	DUP	EPA-160.1	10/14/23	10/14/23 10:00	CAD	MANUAL	2
15	B176221-DUP1	DUP	EPA-314.0	10/16/23	10/16/23 22:28	SM2	IC10	1
16	B176221-MS1	MS	EPA-314.0	10/16/23	10/16/23 22:44	SM2	IC10	1
17	B176221-MSD1	MSD	EPA-314.0	10/16/23	10/16/23 23:01	SM2	IC10	1
18	B176346-DUP1	DUP	EPA-335.4	10/18/23	10/20/23 15:11	JMH	KONE-1	1
19	B176346-MS1	MS	EPA-335.4	10/18/23	10/20/23 14:46	JMH	KONE-1	1
20	B176346-MSD1	MSD	EPA-335.4	10/18/23	10/20/23 14:46	JMH	KONE-1	1

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Reported: 11/08/2023 16:29  
Project: ZEV-CH-03-23  
Project Number: [none]  
Project Manager: Lucas Thexton

## Metals Analysis

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
<b>QC Batch ID: B176139</b>							
Total Recoverable Aluminum	B176139-BLK1	41.185	ug/L	50	26	J	1
Total Recoverable Antimony	B176139-BLK2	ND	ug/L	100	5.0		2
Total Recoverable Arsenic	B176139-BLK1	ND	ug/L	50	7.8		1
Total Recoverable Beryllium	B176139-BLK1	ND	ug/L	10	0.77		1
Total Recoverable Cadmium	B176139-BLK1	ND	ug/L	10	1.1		1
Total Recoverable Chromium	B176139-BLK1	ND	ug/L	10	1.2		1
Total Recoverable Copper	B176139-BLK2	ND	ug/L	10	1.2		2
Total Recoverable Iron	B176139-BLK2	91.926	ug/L	50	30	M01	2
Total Recoverable Manganese	B176139-BLK1	ND	ug/L	10	4.0		1
Total Recoverable Nickel	B176139-BLK1	ND	ug/L	10	2.3		1
Total Recoverable Selenium	B176139-BLK1	ND	ug/L	100	27		1
Total Recoverable Thallium	B176139-BLK1	ND	ug/L	100	11		1
Total Recoverable Zinc	B176139-BLK1	ND	ug/L	50	9.5		1
<b>QC Batch ID: B176140</b>							
Total Recoverable Boron	B176140-BLK1	3.2450	ug/L	20	1.7	J	3
Total Recoverable Silver	B176140-BLK1	ND	ug/L	1.0	0.10		3
<b>QC Batch ID: B176252</b>							
Hexavalent Chromium	B176252-BLK1	ND	mg/L	0.00020	0.000020		4
<b>QC Batch ID: B176460</b>							
Total Recoverable Mercury	B176460-BLK1	ND	ug/L	0.20	0.022		5
<b>QC Batch ID: B176679</b>							
Total Recoverable Mercury	B176679-BLK1	0.10000	ug/L	0.20	0.022	J,M02	6

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B176139-BLK1	PB	EPA-200.7	10/13/23	10/20/23 17:45	SDA	PE-OP4	1
2	B176139-BLK2	PB	EPA-200.7	10/13/23	10/26/23 18:02	JRG	PE-OP4	1
3	B176140-BLK1	PB	EPA-200.8	10/13/23	10/16/23 15:47	ARD	PE-EL4	1
4	B176252-BLK1	PB	EPA-218.6	10/17/23	10/17/23 12:40	RC1	IC11	1
5	B176460-BLK1	PB	EPA-245.1	10/19/23	10/20/23 13:37	TMT	CETAC4	1
6	B176679-BLK1	PB	EPA-245.1	10/24/23	10/24/23 14:41	TMT	CETAC4	1

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Project: ZEV-CH-03-23  
Project Number: [none]  
Project Manager: Lucas Thexton

## Metals Analysis

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals	Run #
								Percent Recovery	RPD		
QC Batch ID: B176139											
Total Recoverable Aluminum	B176139-BS1	LCS	1007.9	1000.0	ug/L	101		85 - 115			1
Total Recoverable Antimony	B176139-BS2	LCS	440.32	400.00	ug/L	110		85 - 115			2
Total Recoverable Arsenic	B176139-BS1	LCS	200.26	200.00	ug/L	100		85 - 115			1
Total Recoverable Beryllium	B176139-BS1	LCS	209.90	200.00	ug/L	105		85 - 115			1
Total Recoverable Cadmium	B176139-BS1	LCS	195.61	200.00	ug/L	97.8		85 - 115			1
Total Recoverable Chromium	B176139-BS1	LCS	210.21	200.00	ug/L	105		85 - 115			1
Total Recoverable Copper	B176139-BS2	LCS	380.16	400.00	ug/L	95.0		85 - 115			2
Total Recoverable Iron	B176139-BS2	LCS	1005.9	1000.0	ug/L	101		85 - 115			2
Total Recoverable Manganese	B176139-BS1	LCS	532.03	500.00	ug/L	106		85 - 115			1
Total Recoverable Nickel	B176139-BS1	LCS	428.08	400.00	ug/L	107		85 - 115			1
Total Recoverable Selenium	B176139-BS1	LCS	206.12	200.00	ug/L	103		85 - 115			1
Total Recoverable Thallium	B176139-BS1	LCS	432.59	400.00	ug/L	108		85 - 115			1
Total Recoverable Zinc	B176139-BS1	LCS	533.62	500.00	ug/L	107		85 - 115			1
QC Batch ID: B176140											
Total Recoverable Boron	B176140-BS1	LCS	422.80	400.00	ug/L	106		85 - 115			3
Total Recoverable Silver	B176140-BS1	LCS	42.208	40.000	ug/L	106		85 - 115			3
QC Batch ID: B176252											
Hexavalent Chromium	B176252-BS1	LCS	0.020006	0.020000	mg/L	100		90 - 110			4
QC Batch ID: B176460											
Total Recoverable Mercury	B176460-BS1	LCS	1.1025	1.0000	ug/L	110		85 - 115			5
QC Batch ID: B176679											
Total Recoverable Mercury	B176679-BS1	LCS	0.93250	1.0000	ug/L	93.2		85 - 115			6

Run #	QC Sample ID	QC Type	Method	Prep Date	Run		Analyst	Instrument	Dilution
					Date	Time			
1	B176139-BS1	LCS	EPA-200.7	10/13/23	10/20/23	17:47	SDA	PE-OP4	1
2	B176139-BS2	LCS	EPA-200.7	10/13/23	10/26/23	18:04	JRG	PE-OP4	1
3	B176140-BS1	LCS	EPA-200.8	10/13/23	10/16/23	15:55	ARD	PE-EL4	1
4	B176252-BS1	LCS	EPA-218.6	10/17/23	10/18/23	09:03	SM2	IC11	1
5	B176460-BS1	LCS	EPA-245.1	10/19/23	10/20/23	13:39	TMT	CETAC4	1
6	B176679-BS1	LCS	EPA-245.1	10/24/23	10/24/23	14:43	TMT	CETAC4	1

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Project Manager: Lucas Thexton

## Metals Analysis

### Quality Control Report - Precision & Accuracy

									Control Limits				
Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	RPD	Percent Recovery	Lab	Quals	R#
QC Batch ID: B176139		Used client sample: N											
Total Recoverable Aluminum	DUP	2319408-02	941.22	929.62		ug/L	1.2		20				1
	MS	2319408-02	941.22	1945.6	1000.0	ug/L		100		75 - 125			2
	MSD	2319408-02	941.22	1920.5	1000.0	ug/L	1.3	97.9	20	75 - 125			3
Total Recoverable Antimony	DUP	2319408-02	ND	ND		ug/L			20				4
	MS	2319408-02	ND	445.03	400.00	ug/L		111		75 - 125	J		5
	MSD	2319408-02	ND	421.12	400.00	ug/L	5.5	105	20	75 - 125	J		6
Total Recoverable Arsenic	DUP	2319408-02	ND	ND		ug/L			20				1
	MS	2319408-02	ND	215.22	200.00	ug/L		108		75 - 125			2
	MSD	2319408-02	ND	210.06	200.00	ug/L	2.4	105	20	75 - 125			3
Total Recoverable Beryllium	DUP	2319408-02	ND	ND		ug/L			20				1
	MS	2319408-02	ND	218.51	200.00	ug/L		109		75 - 125			2
	MSD	2319408-02	ND	211.45	200.00	ug/L	3.3	106	20	75 - 125			3
Total Recoverable Cadmium	DUP	2319408-02	ND	ND		ug/L			20				1
	MS	2319408-02	ND	216.31	200.00	ug/L		108		75 - 125			2
	MSD	2319408-02	ND	207.73	200.00	ug/L	4.0	104	20	75 - 125			3
Total Recoverable Chromium	DUP	2319408-02	7.3570	6.7262		ug/L	9.0		20		J		1
	MS	2319408-02	7.3570	229.23	200.00	ug/L		111		75 - 125			2
	MSD	2319408-02	7.3570	220.02	200.00	ug/L	4.1	106	20	75 - 125			3
Total Recoverable Copper	DUP	2319408-02	9854.2	9773.0		ug/L	0.8		20				4
	MS	2319408-02	9854.2	9663.8	400.00	ug/L		-47.6		75 - 125	A03		5
	MSD	2319408-02	9854.2	9768.7	400.00	ug/L	1.1	-21.4	20	75 - 125	A03		6
Total Recoverable Iron	DUP	2319408-02	57463	55006		ug/L	4.4		20				4
	MS	2319408-02	57463	55570	1000.0	ug/L		-189		75 - 125	A03		5
	MSD	2319408-02	57463	55513	1000.0	ug/L	0.1	-195	20	75 - 125	A03		6
Total Recoverable Manganese	DUP	2319408-02	392.19	398.02		ug/L	1.5		20				1
	MS	2319408-02	392.19	908.71	500.00	ug/L		103		75 - 125			2
	MSD	2319408-02	392.19	897.90	500.00	ug/L	1.2	101	20	75 - 125			3
Total Recoverable Nickel	DUP	2319408-02	33.419	31.509		ug/L	5.9		20				1
	MS	2319408-02	33.419	492.81	400.00	ug/L		115		75 - 125			2
	MSD	2319408-02	33.419	472.47	400.00	ug/L	4.2	110	20	75 - 125			3
Total Recoverable Selenium	DUP	2319408-02	ND	ND		ug/L			20				1
	MS	2319408-02	ND	188.79	200.00	ug/L		94.4		75 - 125			2
	MSD	2319408-02	ND	177.55	200.00	ug/L	6.1	88.8	20	75 - 125			3
Total Recoverable Thallium	DUP	2319408-02	ND	ND		ug/L			20				1
	MS	2319408-02	ND	401.80	400.00	ug/L		100		75 - 125			2
	MSD	2319408-02	ND	390.10	400.00	ug/L	3.0	97.5	20	75 - 125			3
Total Recoverable Zinc	DUP	2319408-02	12415	11283		ug/L	9.6		20				1
	MS	2319408-02	12415	12176	500.00	ug/L		-47.7		75 - 125	A03		2
	MSD	2319408-02	12415	11942	500.00	ug/L	1.9	-94.6	20	75 - 125	A03		3

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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Hydrostor  
365 Bay Street  
Toronto, CANADA M5H 2V1

Reported: 11/08/2023 16:29  
Project: ZEV-CH-03-23  
Project Number: [none]  
Project Manager: Lucas Thexton

## Metals Analysis

### Quality Control Report - Precision & Accuracy

										Control Limits			
Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	RPD	Percent Recovery	Lab Quals	R#	
QC Batch ID: B176140		Used client sample: N											
Total Recoverable Boron	DUP	2319408-01	189.61	173.71		ug/L	8.7		20			7	
	MS	2319408-01	189.61	599.90	400.00	ug/L		103		70 - 130		8	
	MSD	2319408-01	189.61	583.30	400.00	ug/L	2.8	98.4	20	70 - 130		9	
Total Recoverable Silver	DUP	2319408-01	ND	ND		ug/L			20			7	
	MS	2319408-01	ND	43.159	40.000	ug/L		108		70 - 130		8	
	MSD	2319408-01	ND	40.635	40.000	ug/L	6.0	102	20	70 - 130		9	
QC Batch ID: B176252		Used client sample: Y - Description: 1 Depth 2380ft, 10/09/2023 07:15											
Hexavalent Chromium	DUP	2319605-01	0.00025640	0.00025690		mg/L	0.2		10			10	
	MS	2319605-01	0.00025640	0.020878	0.020202	mg/L		102		90 - 110		11	
	MSD	2319605-01	0.00025640	0.020900	0.020202	mg/L	0.1	102	10	90 - 110		12	
QC Batch ID: B176460		Used client sample: N											
Total Recoverable Mercury	DUP	2319364-01	ND	ND		ug/L			20			13	
	MS	2319364-01	ND	1.1475	1.0000	ug/L		115		70 - 130		14	
	MSD	2319364-01	ND	1.1325	1.0000	ug/L	1.3	113	20	70 - 130		15	
QC Batch ID: B176679		Used client sample: N											
Total Recoverable Mercury	DUP	2319674-01	0.041500	0.025750		ug/L	46.8		20		J,A02	16	
	MS	2319674-01	0.041500	1.0350	1.0000	ug/L		99.4		70 - 130		17	
	MSD	2319674-01	0.041500	0.90500	1.0000	ug/L	13.4	86.4	20	70 - 130		18	

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Hydrostor  
365 Bay Street  
Toronto, CANADA M5H 2V1

Reported: 11/08/2023 16:29  
Project: ZEV-CH-03-23  
Project Number: [none]  
Project Manager: Lucas Thexton

## Metals Analysis

### Quality Control Report - Precision & Accuracy

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B176139-DUP1	DUP	EPA-200.7	10/13/23	10/20/23 17:52	SDA	PE-OP4	1
2	B176139-MS1	MS	EPA-200.7	10/13/23	10/20/23 17:57	SDA	PE-OP4	1
3	B176139-MSD1	MSD	EPA-200.7	10/13/23	10/20/23 17:59	SDA	PE-OP4	1
4	B176139-DUP2	DUP	EPA-200.7	10/13/23	10/26/23 18:09	JRG	PE-OP4	5
5	B176139-MS2	MS	EPA-200.7	10/13/23	10/26/23 18:13	JRG	PE-OP4	5
6	B176139-MSD2	MSD	EPA-200.7	10/13/23	10/26/23 18:15	JRG	PE-OP4	5
7	B176140-DUP1	DUP	EPA-200.8	10/13/23	10/16/23 15:51	ARD	PE-EL4	1
8	B176140-MS1	MS	EPA-200.8	10/13/23	10/16/23 15:57	ARD	PE-EL4	1
9	B176140-MSD1	MSD	EPA-200.8	10/13/23	10/16/23 15:59	ARD	PE-EL4	1
10	B176252-DUP1	DUP	EPA-218.6	10/17/23	10/17/23 15:37	RC1	IC11	1
11	B176252-MS1	MS	EPA-218.6	10/17/23	10/17/23 15:47	RC1	IC11	1.010
12	B176252-MSD1	MSD	EPA-218.6	10/17/23	10/17/23 14:19	RC1	IC11	1.010
13	B176460-DUP1	DUP	EPA-245.1	10/19/23	10/20/23 13:43	TMT	CETAC4	1
14	B176460-MS1	MS	EPA-245.1	10/19/23	10/20/23 13:45	TMT	CETAC4	1
15	B176460-MSD1	MSD	EPA-245.1	10/19/23	10/20/23 13:48	TMT	CETAC4	1
16	B176679-DUP1	DUP	EPA-245.1	10/24/23	10/24/23 14:47	TMT	CETAC4	1
17	B176679-MS1	MS	EPA-245.1	10/24/23	10/24/23 16:03	TMT	CETAC4	1
18	B176679-MSD1	MSD	EPA-245.1	10/24/23	10/24/23 15:22	TMT	CETAC4	1

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## LA Testing

520 Mission Street South Pasadena, CA 91030  
Phone/Fax: (323) 254-9960 / (323) 254-9982  
<http://www.LATesting.com> / [pasadenalab@latesting.com](mailto:pasadenalab@latesting.com)

LA Testing Order ID: 322325494  
Customer ID: BCLA50  
Customer PO:  
Project ID:

Attn: Ragen Schallcock  
Pace Analytical Services, LLC  
4100 Atlas Court  
Bakersfield, CA 93308

Phone: (661) 327-4911  
Fax: (661) 327-1918  
Received: 10/17/2023  
Analyzed: 10/22/2023

Proj: 2319605

### Test Report: Determination of Asbestos Structures >10µm in Drinking Water Performed by the 100.2 Method (EPA 600/R-94/134)

Sample ID Client / EMSL	Sample Filtration Date/Time	Original Sample Vol. Filtered (ml)	Effective Filter Area (mm²)	Area Analyzed (mm²)	ASBESTOS				
					Asbestos Types	Fibers Detected	Analytical Sensitivity	Concentration	Confidence Limits
MFL (million fibers per liter)									
2319605-01 322325494-0001	10/17/2023 02:30 PM	1	1288	0.2580	None Detected	ND	5.00	<5.00	0.00 - 18.00
Collection Date/Time: 10/09/2023 07:15 AM									
Due to excessive particulate the analytical sensitivity of 0.2 MFL as required by the method was not reached.									
2319605-02 322325494-0002	10/17/2023 02:30 PM	1	1288	0.2580	None Detected	ND	5.00	<5.00	0.00 - 18.00
Collection Date/Time: 10/10/2023 06:15 AM									
Due to excessive particulate the analytical sensitivity of 0.2 MFL as required by the method was not reached.									
2319605-03 322325494-0003	10/17/2023 02:30 PM	1	1288	0.2580	None Detected	ND	5.00	<5.00	0.00 - 18.00
Collection Date/Time: 10/10/2023 06:35 AM									
Due to excessive particulate the analytical sensitivity of 0.2 MFL as required by the method was not reached.									
2319605-04 322325494-0004	10/17/2023 02:30 PM	1	1288	0.2580	None Detected	ND	5.00	<5.00	0.00 - 18.00
Collection Date/Time: 10/11/2023 02:20 AM									
Due to excessive particulate the analytical sensitivity of 0.2 MFL as required by the method was not reached.									

Analyst(s)

Sherrie Ahmad (5)

  
Jerry Drapala Ph.D, Laboratory Manager  
or Other Approved Signatory

Any questions please contact Jerry Drapala.

Initial report from: 10/22/2023 10:00:22

LA Testing maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by LA Testing. LA Testing bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. Estimation of uncertainty is available on request. Sample collection and containers provided by the client, acceptable bottle blank level is defined as  $\leq 0.01 \text{ MFL} > 10 \mu\text{m}$ . ND= None Detected. No Fibers Detected: the value will be reported as less than 362% of the concentration equivalent to one fiber. 1 to 4 fibers: The result will be reported as less than the corresponding upper 95% confidence limit (Poisson). 5 to 30 fibers: Mean and 95% confidence intervals will be reported on the basis of the Poisson assumption. When more than 30 fibers are counted, both the Gaussian 95% confidence interval and the Poisson 95% confidence interval will be calculated. The large of these two intervals will be selected for data reporting. When the Gaussian 95% confidence interval is selected for data reporting, the Poisson will also be noted.

Samples analyzed by LA Testing South Pasadena, CA CA ELAP 2263

Test Report: TEM 100.2-2.2.2.2 Printed: 10/22/2023 10:00AM

Page 1 of 2



## LA Testing

520 Mission Street South Pasadena, CA 91030  
Phone/Fax: (323) 254-9960 / (323) 254-9982  
<http://www.LATesting.com> / [pasadenalab@latesting.com](mailto:pasadenalab@latesting.com)

LA Testing Order ID: 322325494  
Customer ID: BCLA50  
Customer PO:  
Project ID:

Attn: Ragen Schallock  
Pace Analytical Services, LLC  
4100 Atlas Court  
Bakersfield, CA 93308

Phone: (661) 327-4911  
Fax: (661) 327-1918  
Received: 10/17/2023  
Analyzed: 10/22/2023

Proj: 2319605

### Test Report: Determination of Asbestos Structures >10µm in Drinking Water Performed by the 100.2 Method (EPA 600/R-94/134)

Sample ID Client / EMSL	Sample Filtration Date/Time	Original Sample Vol. Filtered (ml)	Effective Filter Area (mm²)	Area Analyzed (mm²)	ASBESTOS				
					Asbestos Types	Fibers Detected	Analytical Sensitivity	Concentration	Confidence Limits
2319605-05 322325494-0005	10/17/2023 02:30 PM	1	1288	0.2580	None Detected	ND	5.00	<5.00	0.00 - 18.00

Collection Date/Time: 10/11/2023 07:05 AM

Due to excessive particulate the analytical sensitivity of 0.2 MFL as required by the method was not reached.

Sample ozonated prior to analysis due to lab receipt time exceeding 48 hour method hold time.

Analyst(s)

Sherrie Ahmad (5)



Jerry Drapala Ph.D, Laboratory Manager  
or Other Approved Signatory

Any questions please contact Jerry Drapala.

Initial report from: 10/22/2023 10:00:22

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Samples analyzed by LA Testing South Pasadena, CA CA ELAP 2263

Test Report: TEM 100.2-2.2.2.2 Printed: 10/22/2023 10:00AM

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Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

Attn: Ragen Williams  
Pace Analytical Services LLC  
4100 Atlas Court  
Bakersfield, California 93308

Generated 11/8/2023 2:34:08 PM

## JOB DESCRIPTION

2319605

## JOB NUMBER

380-69531-1

Eurofins Eaton Analytical Pomona  
941 Corporate Center Drive  
Pomona CA 91768-2642

See page two for job notes and contact information.

Page 1 of 15



## Eurofins Eaton Analytical Pomona

### Job Notes

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

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

### Compliance Statement

1. Laboratory is accredited in accordance with TNI 2016 Standards and ISO/IEC 17025:2017.
2. Laboratory certifies that the test results meet all TNI 2016 and ISO/IEC 17025:2017 requirements unless noted under the individual analysis
3. Test results relate only to the sample(s) tested.
4. This report shall not be reproduced except in full, without the written approval of the laboratory.
5. Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.  
(DW, Water matrices)

### Authorization



Generated  
11/8/2023 2:34:08 PM

Authorized for release by  
Anisha Zachariah, Project Manager  
Anisha.Zachariah@eurofinsus.com  
(626)386-1142

*Eurofins Drinking Water Testing Pomona is a laboratory within Eurofins Eaton Analytical, LLC, a company within Eurofins Environment Testing Group of Companies*



Client: Pace Analytical Services LLC  
Project/Site: 2319605

Laboratory Job ID: 380-69531-1

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## Definitions/Glossary

Client: Pace Analytical Services LLC  
Project/Site: 2319605

Job ID: 380-69531-1

### Qualifiers

#### HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

### Glossary

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

Eurofins Eaton Analytical Pomona

## Case Narrative

Client: Pace Analytical Services LLC  
Project/Site: 2319605

Job ID: 380-69531-1

**Job ID: 380-69531-1**

**Laboratory: Eurofins Eaton Analytical Pomona**

### Narrative

**Job Narrative**  
**380-69531-1**

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

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

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

### Receipt

The samples were received on 11/2/2023 10:45 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.1°C

### HPLC/IC

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

## Detection Summary

Client: Pace Analytical Services LLC  
Project/Site: 2319605

Job ID: 380-69531-1

**Client Sample ID: 2319605-03**

**Lab Sample ID: 380-69531-1**

☐ No Detections.

**Client Sample ID: 2319605-05**

**Lab Sample ID: 380-69531-2**

☐ No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Eaton Analytical Pomona

## Client Sample Results

Client: Pace Analytical Services LLC  
Project/Site: 2319605

Job ID: 380-69531-1

**Client Sample ID: 2319605-03**

**Lab Sample ID: 380-69531-1**

**Date Collected: 10/10/23 06:35**

**Matrix: Water**

**Date Received: 11/02/23 10:45**

**Method: EPA 314.0 - Perchlorate (IC)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		2.0	ug/L			11/06/23 21:25	1

**Client Sample ID: 2319605-05**

**Lab Sample ID: 380-69531-2**

**Date Collected: 10/11/23 07:05**

**Matrix: Water**

**Date Received: 11/02/23 10:45**

**Method: EPA 314.0 - Perchlorate (IC)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		2.0	ug/L			11/06/23 21:49	1

Eurofins Eaton Analytical Pomona

## QC Sample Results

Client: Pace Analytical Services LLC  
Project/Site: 2319605

Job ID: 380-69531-1

### Method: 314.0 - Perchlorate (IC)

Lab Sample ID: MB 380-62663/4  
Matrix: Water  
Analysis Batch: 62663

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		2.0	ug/L			11/06/23 17:21	1

Lab Sample ID: LCS 380-62663/6  
Matrix: Water  
Analysis Batch: 62663

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perchlorate	10.0	10.5		ug/L		105	85 - 115

Lab Sample ID: LCSD 380-62663/7  
Matrix: Water  
Analysis Batch: 62663

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perchlorate	10.0	9.95		ug/L		100	85 - 115	5	15

Lab Sample ID: MRL 380-62663/5  
Matrix: Water  
Analysis Batch: 62663

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Perchlorate	2.00	2.02		ug/L		101	75 - 125

Lab Sample ID: 380-69472-A-1 MS  
Matrix: Water  
Analysis Batch: 62663

Client Sample ID: Matrix Spike  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perchlorate	ND	F1	10.0	8.04	F1	ug/L		66	80 - 120

Lab Sample ID: 380-69472-A-1 MSD  
Matrix: Water  
Analysis Batch: 62663

Client Sample ID: Matrix Spike Duplicate  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perchlorate	ND	F1	10.0	7.71	F1	ug/L		62	80 - 120	4	15

Eurofins Eaton Analytical Pomona

## QC Association Summary

Client: Pace Analytical Services LLC  
Project/Site: 2319605

Job ID: 380-69531-1

### HPLC/IC

#### Analysis Batch: 62663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-69531-1	2319605-03	Total/NA	Water	314.0	
380-69531-2	2319605-05	Total/NA	Water	314.0	
MB 380-62663/4	Method Blank	Total/NA	Water	314.0	
LCS 380-62663/6	Lab Control Sample	Total/NA	Water	314.0	
LCSD 380-62663/7	Lab Control Sample Dup	Total/NA	Water	314.0	
MRL 380-62663/5	Lab Control Sample	Total/NA	Water	314.0	
380-69472-A-1 MS	Matrix Spike	Total/NA	Water	314.0	
380-69472-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	314.0	

Eurofins Eaton Analytical Pomona

## Lab Chronicle

Client: Pace Analytical Services LLC  
Project/Site: 2319605

Job ID: 380-69531-1

**Client Sample ID: 2319605-03**

**Lab Sample ID: 380-69531-1**

**Date Collected: 10/10/23 06:35**

**Matrix: Water**

**Date Received: 11/02/23 10:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/INA	Analysis	314.0		1	62663	YHP7	EA POM	11/06/23 21:25

**Client Sample ID: 2319605-05**

**Lab Sample ID: 380-69531-2**

**Date Collected: 10/11/23 07:05**

**Matrix: Water**

**Date Received: 11/02/23 10:45**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/INA	Analysis	314.0		1	62663	YHP7	EA POM	11/06/23 21:49

### Laboratory References:

EA POM = Eurofins Eaton Analytical Pomona, 941 Corporate Center Drive, Pomona, CA 91768-2642, TEL (626)386-1100

Eurofins Eaton Analytical Pomona

## Accreditation/Certification Summary

Client: Pace Analytical Services LLC  
Project/Site: 2319605

Job ID: 380-69531-1

### Laboratory: Eurofins Eaton Analytical Pomona

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2813	06-18-25
Utah	NELAP	CA00006	02-29-24

- 1
- 2
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- 8
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- 13
- 14

Eurofins Eaton Analytical Pomona



## Method Summary

Client: Pace Analytical Services LLC  
Project/Site: 2319605

Job ID: 380-69531-1

Method	Method Description	Protocol	Laboratory
314.0	Perchlorate (IC)	EPA	EA POM

**Protocol References:**

EPA = US Environmental Protection Agency

**Laboratory References:**

EA POM = Eurofins Eaton Analytical Pomona, 941 Corporate Center Drive, Pomona, CA 91768-2642, TEL (626)386-1100

Eurofins Eaton Analytical Pomona

## Sample Summary

Client: Pace Analytical Services LLC  
Project/Site: 2319605

Job ID: 380-69531-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
380-69531-1	2319605-03	Water	10/10/23 08:35	11/02/23 10:45
380-69531-2	2319605-05	Water	10/11/23 07:05	11/02/23 10:45

- 1
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- 4
- 5
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- 10
- 11
- 12
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- 14

**SUBCONTRACT ORDER**  
Pace Analytical Labs - Bakersfield, CA  
**2319605**

SENDING LABORATORY:

Pace Analytical Labs  
4100 Atlas Ct  
Bakersfield, CA 93308  
Phone: 661-327-4911  
Fax: 661-327-1918  
Project Manager: Ragen Schallock

RECEIVING LABORATORY:

Eurofins Eaton Analytical - Monrovia \$MWHMR  
941 Corporate Center Dr  
Pomona, CA 91768  
Phone: (626) 386-1100  
Fax: (626) 568-6324



380-68531 CCO

Analysis	Due	Expires	Laboratory ID	Comments
----------	-----	---------	---------------	----------

Sample ID: 2319605-03	Water	Sampled: 10/10/23 06:35		
-----------------------	-------	-------------------------	--	--

Perchlorate_w_E314.0_ug/L	10/24/23 23:59	11/07/23 06:35		
Containers Supplied:				

Sample ID: 2319605-05	Water	Sampled: 10/11/23 07:05		
-----------------------	-------	-------------------------	--	--

Perchlorate_w_E314.0_ug/L	10/24/23 23:59	11/08/23 07:05		
Containers Supplied:				



Released By

11.1.23

Date



Received By

11/2/23 1045

Date

Released By

Date

Received By

Date

Page 14 of 15  
43-02=4.1 (630A)  
4X: 6849 7627 2930

Page 1 of 1  
11/8/2023

### Login Sample Receipt Checklist

Client: Pace Analytical Services LLC

Job Number: 380-69531-1

Login Number: 69531

List Source: Eurofins Eaton Analytical Pomona

List Number: 1

Creator: Edrosa, Rey

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

Eurofins Eaton Analytical Pomona

Page 15 of 15

11/8/2023



**ZALCO LABORATORIES, INC.**

Analytical & Consulting Services

4309 Armour Avenue  
Bakersfield, California 93308

(661) 395-0539  
FAX (661) 395-3069

October 27, 2023

Ragen Schallock  
Pace Analytical  
4100 Atlas Court  
Bakersfield, CA 93308

TEL: (661) 327-4911  
FAX: (661) 327-1918

Project ID: 2319605  
RE: 2310389

Dear Ragen Schallock:

Zalco Laboratories, Inc. received 5 samples on 10/13/2023 for the analyses presented in the following report.

We appreciate your business and look forward to serving you in the future. Please feel free to call our office if you have any questions regarding these test results.

Sincerely,



Juan Magana  
Project Manager  
CC:

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCPL: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level \*: See Case Narrative  
The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Note: Samples analyzed for regulatory purposes should be put on ice immediately after sampling and received by the laboratory at temperatures between 0-5°C. Microbiological analysis requires samples to be at least 4-10°C when received at the laboratory. For additional information regarding the limitations of the method(s) referred to, please call us at 661-395-0539.



**ZALCO LABORATORIES, INC.**

Analytical & Consulting Services

4309 Armour Avenue  
Bakersfield, California 93308

(661) 395-0539  
FAX (661) 395-3069

Pace Analytical  
4100 Atlas Court  
Bakersfield, CA 93308

Project: Master  
Project #: 2319605  
Attention: Ragen Schallcock

Work Order No.: 2310389  
Reported: 10/27/2023  
Received: 10/13/23 13:48

Lab Sample ID: 2310389-01

Collected By: Client

Client Sample ID: 2319605-01

Date Collected: 10/9/2023 7:15:00AM

Analyte	Results	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
<b>General Chemistry</b>		<i>MCL Limits</i>						
Density @ 15 C (60 F)	0.9984		g/mL		ASTM D 4052	10/27/23	10/27/23	JAM
<b>Viscosity</b>								
1-Viscosity @ 50°F	0.920		cSt		ASTM D 445	10/27/23	10/27/23	JAM
2-Viscosity @ 70°F	0.800		cSt		ASTM D 445	10/27/23	10/27/23	JAM
3-Viscosity @ 80°F	0.700		cSt		ASTM D 445	10/27/23	10/27/23	JAM
4-Viscosity @ 100°F	0.550		cSt		ASTM D 445	10/27/23	10/27/23	JAM

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCUP: Toxicity Characteristic  
Leaching Procedure MCL: Maximum Contaminant Level \*: See Case Narrative  
The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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Microbiological analysis requires samples to be at least 4-10°C when received at the laboratory. For additional information regarding the limitations of the method(s) referred to, please call us at 661-395-0539.



**ZALCO LABORATORIES, INC.**

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4309 Armour Avenue  
Bakersfield, California 93308

(661) 395-0539  
FAX (661) 395-3069

Pace Analytical  
4100 Atlas Court  
Bakersfield, CA 93308

Project: Master  
Project #: 2319605  
Attention: Ragen Schallcock

Work Order No.: 2310389  
Reported: 10/27/2023  
Received: 10/13/23 13:48

Lab Sample ID: 2310389-02

Collected By: Client

Client Sample ID: 2319605-02

Date Collected: 10/10/2023 6:15:00AM

Analyte	Results	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
<b>General Chemistry</b>		<i>MCL Limits</i>						
Density @ 15 C (60 F)	0.9981		g/mL		ASTM D 4052	10/27/23	10/27/23	JAM
<b>Viscosity</b>								
1-Viscosity @ 60°F	0.950		cSt		ASTM D 445	10/27/23	10/27/23	JAM
2-Viscosity @ 70°F	0.810		cSt		ASTM D 445	10/27/23	10/27/23	JAM
3-Viscosity @ 80°F	0.700		cSt		ASTM D 445	10/27/23	10/27/23	JAM
4-Viscosity @ 100°F	0.540		cSt		ASTM D 445	10/27/23	10/27/23	JAM

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level \* See Case Narrative  
The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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**ZALCO LABORATORIES, INC.**

Analytical & Consulting Services

4309 Armour Avenue  
Bakersfield, California 93308

(661) 395-0539  
FAX (661) 395-3069

Pace Analytical  
4100 Atlas Court  
Bakersfield, CA 93308

Project: Master  
Project #: 2319605  
Attention: Ragen Schallcock

Work Order No.: 2310389  
Reported: 10/27/2023  
Received: 10/13/23 13:48

Lab Sample ID: 2310389-03

Collected By: Client

Client Sample ID: 2319605-03

Date Collected: 10/10/2023 6:35:00AM

Analyte	Results	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
<b>General Chemistry</b>		<i>MCL Limits</i>						
Density @ 15 C (60 F)	0.9977		g/mL		ASTM D 4052	10/27/23	10/27/23	JAM
<b>Viscosity</b>								
1-Viscosity @ 50°F	0.960		cSt		ASTM D 445	10/27/23	10/27/23	JAM
2-Viscosity @ 70°F	0.820		cSt		ASTM D 445	10/27/23	10/27/23	JAM
3-Viscosity @ 80°F	0.710		cSt		ASTM D 445	10/27/23	10/27/23	JAM
4-Viscosity @ 100°F	0.550		cSt		ASTM D 445	10/27/23	10/27/23	JAM

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level \*: See Case Narrative  
The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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Analytical & Consulting Services

4309 Armour Avenue  
Bakersfield, California 93308

(661) 395-0539  
FAX (661) 395-3069

Pace Analytical  
4100 Atlas Court  
Bakersfield, CA 93308

Project: Master  
Project #: 2319605  
Attention: Ragen Schallcock

Work Order No.: 2310389  
Reported: 10/27/2023  
Received: 10/13/23 13:48

Lab Sample ID: 2310389-04  
Client Sample ID: 2319605-04

Collected By: Client  
Date Collected: 10/11/2023 2:20:00AM

Analyte	Results	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
<b>General Chemistry</b>		<i>MCL Limits</i>						
Density @ 15 C (60 F)	0.9981		g/mL		ASTM D 4052	10/27/23	10/27/23	JAM
<b>Viscosity</b>								
1-Viscosity @ 50°F	0.950		cSt		ASTM D 445	10/27/23	10/27/23	JAM
2-Viscosity @ 70°F	0.810		cSt		ASTM D 445	10/27/23	10/27/23	JAM
3-Viscosity @ 80°F	0.700		cSt		ASTM D 445	10/27/23	10/27/23	JAM
4-Viscosity @ 100°F	0.540		cSt		ASTM D 445	10/27/23	10/27/23	JAM

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level \* See Case Narrative  
The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Note: Samples analyzed for regulatory purposes should be put on ice immediately after sampling and received by the laboratory at temperatures between 0-5°C. Microbiological analysis requires samples to be at least 4-10°C when received at the laboratory. For additional information regarding the limitations of the method(s) referred to, please call us at 661-395-0539.



**ZALCO LABORATORIES, INC.**  
Analytical & Consulting Services

4309 Armour Avenue  
Bakersfield, California 93308

(661) 395-0539  
FAX (661) 395-3069

Pace Analytical  
4100 Atlas Court  
Bakersfield, CA 93308

Project: Master  
Project #: 2319605  
Attention: Ragen Schallcock

Work Order No.: 2310389  
Reported: 10/27/2023  
Received: 10/13/23 13:48

Lab Sample ID: 2310389-05

Collected By: Client

Client Sample ID: 2319605-05

Date Collected: 10/11/2023 7:05:00AM

Analyte	Results	PQL	Units	Flag	Method	Date Prepared	Date Analyzed	Init.
<b>General Chemistry</b>		<i>MCL Limits</i>						
Density @ 15 C (60 F)	0.9980		g/mL		ASTM D 4052	10/27/23	10/27/23	JAM
<b>Viscosity</b>								
1-Viscosity @ 60°F	0.950		cSt		ASTM D 445	10/27/23	10/27/23	JAM
2-Viscosity @ 70°F	0.810		cSt		ASTM D 445	10/27/23	10/27/23	JAM
3-Viscosity @ 80°F	0.700		cSt		ASTM D 445	10/27/23	10/27/23	JAM
4-Viscosity @ 100°F	0.540		cSt		ASTM D 445	10/27/23	10/27/23	JAM

NSS: Non Sufficient Sample H: Exceeds Analysis Hold Time TTLC: Total Threshold Limit Concentration STLC: Soluble Threshold Limit Concentration TCLP: Toxicity Characteristic Leaching Procedure MCL: Maximum Contaminant Level \*: See Case Narrative  
The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Note: Samples analyzed for regulatory purposes should be put on ice immediately after sampling and received by the laboratory at temperatures between 0-6°C. Microbiological analysis requires samples to be at least 4-10°C when received at the laboratory. For additional information regarding the limitations of the method(s) referred to, please call us at 661-395-0539.

**SUBCONTRACT ORDER**  
**Pace Analytical (Bakersfield, CA)**  
**2319605**

2310389

**SENDING LABORATORY:**

Pace Analytical  
4100 Atlas Court  
Bakersfield, CA 93308  
Phone: 661-327-4911  
FAX: 661-327-1918  
Project Manager: Ragen Schallcock

**RECEIVING LABORATORY:**

Zalco Laboratories  
4309 Armour  
Bakersfield, CA 93308  
Megan Stillman  
Phone: 395-0539  
FAX: 395-3069

ZLCLB

<b>DOD:</b> No	<b>Level 4:</b> No	<b>EDDs Needed:</b>	
<b>Analysis</b>	<b>Due</b>	<b>Expires</b>	<b>Comments</b>

ASTM D4052 - Density	10/24/23 23:59	10/07/24 07:15	
ASTM D445 - Viscosity	10/24/23 23:59	10/07/24 07:15	

**CA Drinking Water PSCode**

GeoTracker -	Global ID:	Field Point:	Log Code: ---
Sample ID: 2319605-01	Water	Sampled: 10/09/23 07:15	Sample Name: 1 Depth 2380ft

Containers supplied:  
X32: Glass Amber 1000 ml (quart)

ASTM D4052 - Density	10/24/23 23:59	10/08/24 06:15	
ASTM D445 - Viscosity	10/24/23 23:59	10/08/24 06:15	

**CA Drinking Water PSCode**

GeoTracker -	Global ID:	Field Point:	Log Code: ---
Sample ID: 2319605-02	Water	Sampled: 10/10/23 06:15	Sample Name: 2 Depth 1600ft

Containers supplied:  
X32: Glass Amber 1000 ml (quart)

ASTM D4052 - Density	10/24/23 23:59	10/08/24 06:35	
ASTM D445 - Viscosity	10/24/23 23:59	10/08/24 06:35	

**CA Drinking Water PSCode**

GeoTracker -	Global ID:	Field Point:	Log Code: ---
Sample ID: 2319605-03	Water	Sampled: 10/10/23 06:35	Sample Name: 3 Depth 1180ft

Containers supplied:  
X32: Glass Amber 1000 ml (quart)

ASTM D4052 - Density	10/24/23 23:59	10/09/24 02:20	
ASTM D445 - Viscosity	10/24/23 23:59	10/09/24 02:20	

**CA Drinking Water PSCode**

GeoTracker -	Global ID:	Field Point:	Log Code: ---
Sample ID: 2319605-04	Water	Sampled: 10/11/23 02:20	Sample Name: 4 Depth 970ft


Containers supplied:  
X32: Glass Amber 1000 ml (quart)

	10-13-23	Andrea M.	10/13/23	13:48
Released By	Date	Received By	Date	

Released By	Date	Received By	Date
ZLCLB		Printed 10/13/2023 11:21:40AM	Page 1 of 2

**SUBCONTRACT ORDER**  
**Pace Analytical (Bakersfield, CA)**  
**2319605**

Analysis	Due	Expires	Comments
ASTM D4052 - Density	10/24/23 23:59	10/09/24 07:05	
ASTM D445 - Viscosity	10/24/23 23:59	10/09/24 07:05	
<b>CA Drinking Water PSCode</b>			
GeoTracker -	Global ID:	Field Point:	Log Code: ---
Sample ID: 2319605-05	Water	Sampled: 10/11/23 07:05	Sample Name: 5 Depth 380ft
Containers supplied:			
X32: Glass Amber 1000 ml (quart)			

	10-13-23		
Released By	Date	Received By	Date
Released By	Date	Received By	Date

**ZLCLB** Printed 10/13/2023 11:21:40AM Page 2 of 2



Hydrostor  
365 Bay Street  
Toronto, CANADA M5H 2V1

**Reported:** 11/08/2023 16:29  
**Project:** ZEV-CH-03-23  
**Project Number:** [none]  
**Project Manager:** Lucas Thexton

## Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
A01	Detection and quantitation limits are raised due to sample dilution.
A02	The difference between duplicate readings is less than the quantitation limit.
A03	The sample concentration was more than 4 times the spike level.
A10	Detection and quantitation limits were raised due to matrix interference.
A26	Sample received past holding time.
M01	Analyte detected in the Method Blank at or above the PQL.
M02	Analyte detected in the Method Blank at a level between the PQL and > 1/2 the PQL.
S05	The sample holding time was exceeded.
S11	The analyte in the Method Blank is greater than the laboratory PQL but the sample result is greater than 10 times the Method Blank.