

DOCKETED

Docket Number:	79-AFC-04C
Project Title:	Compliance - Application for Certification of DWR Bottlerock Geothermal Project
TN #:	262313
Document Title:	Appendix 3
Description:	Appendix 3
Filer:	John C Casteel
Organization:	Mayacma Geothermal LLC
Submitter Role:	Applicant
Submission Date:	3/24/2025 4:17:05 PM
Docketed Date:	3/24/2025



Appendix 3

Figure 1 - Vegetation Monitoring Map

Table 1 – Vegetation & Soil Boron Analytical Results

Vegetation & Soil Boron Analytical Reports

Figure 2 – Water Monitoring Map

Table 2 – Groundwater & Surface Water Analytical Results

Groundwater & Surface Water Analytical Reports

Bottle Rock Power, LLC - Vegetation Monitoring Locations

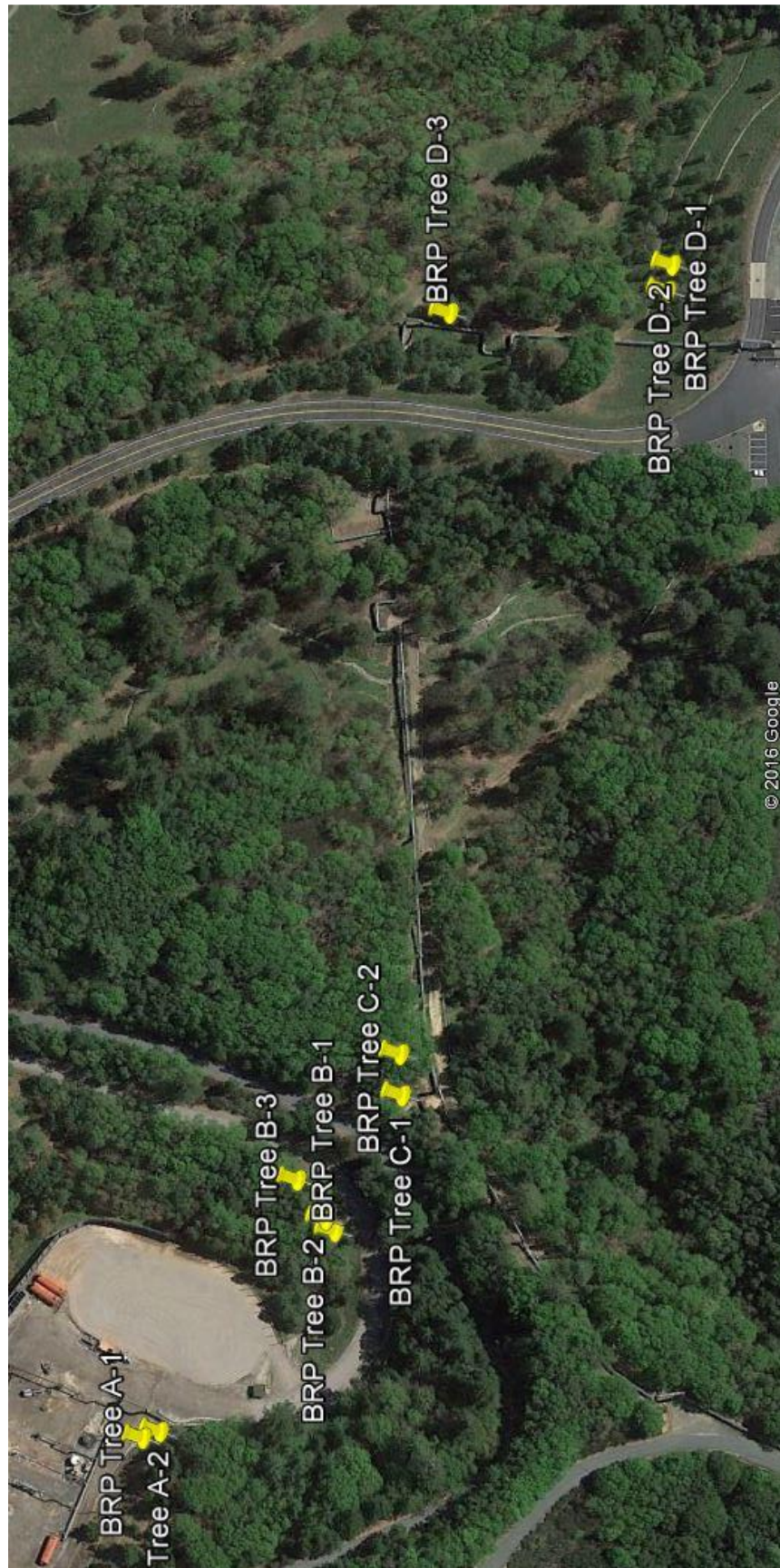


Table 1
Bottle Rock Power, LLC
2024 Vegetation Monitoring Data Needle & Soil Boron Analytical Results

Location ID	UTM Coordinates	Location Description	Sample Type	Boron (mg/kg)	Sample Type	Boron (mg/kg)
A-1	38.83734 -122.77257	Coleman Pad A3-a	Ponderosa Pine Needle	8.0	Base of Tree Soil	18
A-2	38.83729 -122.77255	Coleman Pad A3-b	Ponderosa Pine Needle	7.1	Base of Tree Soil	17
B-1	38.83675 -122.77177	West Coleman/Coleman Road BB1-a	Ponderosa Pine Needle	56	Base of Tree Soil	16
B-2	38.83678 -122.77173	West Coleman/Coleman Road (previously BB1-b) now B-2	Ponderosa Pine Needle	390	Base of Tree Soil	18
B-3	38.83687 -122.77157	West Coleman/Coleman Road previously BB1-c	Ponderosa Pine Needle	54	Base of Tree Soil	21
C-1	38.83655 -122.77121	Access Road C-1	Ponderosa Pine Needle	13	Base of Tree Soil	18
C-2	38.83655 -122.77105	Access Road C-2	Ponderosa Pine Needle	13	Base of Tree Soil	19
D-1	38.83574 -122.76807	North of Plant Fence Line D-1	Ponderosa Pine Needle	ND	Base of Tree Soil	14
D-2	38.83572 -122.76796	North of Plant Fence Line D-2 (previously D-6)	Ponderosa Pine Needle	5.6	Base of Tree Soil	ND
D-3	38.8364 -122.76813	North of Plant Fence Line DD-2 (previously DD-2a & b)	Ponderosa Pine Needle	7.9	Base of Tree Soil	18

ND - Not Detected

NA - Not Analyzed



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

12 December 2024

Mayacma Geothermal LLC

Attn: John Casteel

245 E Liberty St Suite 520

Reno, NV 89501

RE: Annual Needles

Work Order: 24L1034

Enclosed are the results of analyses for samples received by the laboratory on 12/04/24 13:17. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Stephen F. McWeeney

Project Manager



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John Casteel
Project: Annual Needles
Project Number: Pine Needles

Reported:
12/12/24 14:40

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | 925-828-6226 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | 916-686-5190 | ELAP# 2922
North Bay: 737 Southpoint Blvd Unit D | Petaluma, CA 94954 | 707-769-3128 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | 760-930-2555 | ELAP# 3055
Los Angeles: 1230 E. 223rd Street Suite 205 | Carson, CA 90745 | 424-267-5032 | ELAP# 3091

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
A-1 Needles	24L1034-01	Other (W)	12/03/24 16:18	12/04/24 13:17
A-2 Needles	24L1034-02	Other (W)	12/03/24 16:23	12/04/24 13:17
B-1 Needles	24L1034-03	Other (W)	12/03/24 16:02	12/04/24 13:17
B-2 Needles	24L1034-04	Other (W)	12/03/24 16:09	12/04/24 13:17
B-3 Needles	24L1034-05	Other (W)	12/03/24 15:51	12/04/24 13:17
C-1 Needles	24L1034-06	Other (W)	12/04/24 10:14	12/04/24 13:17
C-2 Needles	24L1034-07	Other (W)	12/04/24 10:12	12/04/24 13:17
D-1 Needles	24L1034-08	Other (W)	12/03/24 15:10	12/04/24 13:17
D-2 Needles	24L1034-09	Other (W)	12/03/24 15:08	12/04/24 13:17
D-3 Needles	24L1034-10	Other (W)	12/03/24 15:35	12/04/24 13:17



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John Casteel
Project: Annual Needles
Project Number: Pine Needles

Reported:
12/12/24 14:40

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
A-1 Needles (24L1034-01)			Sample Type: Other (W)			Sampled: 12/03/24 16:18				
Metals by EPA 6000/7000 Series Methods										
Boron	8.0	mg/kg	5.0	1	AL43633	12/06/24 05:33	12/09/24 10:39	2303	EPA 6010B	
A-2 Needles (24L1034-02)			Sample Type: Other (W)			Sampled: 12/03/24 16:23				
Metals by EPA 6000/7000 Series Methods										
Boron	7.1	mg/kg	5.0	1	AL43633	12/06/24 05:33	12/09/24 10:42	2303	EPA 6010B	
B-1 Needles (24L1034-03)			Sample Type: Other (W)			Sampled: 12/03/24 16:02				
Metals by EPA 6000/7000 Series Methods										
Boron	56	mg/kg	5.0	1	AL43633	12/06/24 05:33	12/09/24 10:45	2303	EPA 6010B	
B-2 Needles (24L1034-04)			Sample Type: Other (W)			Sampled: 12/03/24 16:09				
Metals by EPA 6000/7000 Series Methods										
Boron	390	mg/kg	5.0	1	AL43633	12/06/24 05:33	12/09/24 10:49	2303	EPA 6010B	
B-3 Needles (24L1034-05)			Sample Type: Other (W)			Sampled: 12/03/24 15:51				
Metals by EPA 6000/7000 Series Methods										
Boron	54	mg/kg	5.0	1	AL43633	12/06/24 05:33	12/09/24 10:52	2303	EPA 6010B	
C-1 Needles (24L1034-06)			Sample Type: Other (W)			Sampled: 12/04/24 10:14				
Metals by EPA 6000/7000 Series Methods										
Boron	13	mg/kg	5.0	1	AL43633	12/06/24 05:33	12/09/24 10:55	2303	EPA 6010B	
C-2 Needles (24L1034-07)			Sample Type: Other (W)			Sampled: 12/04/24 10:12				
Metals by EPA 6000/7000 Series Methods										
Boron	13	mg/kg	5.0	1	AL43633	12/06/24 05:33	12/09/24 11:04	2303	EPA 6010B	
D-1 Needles (24L1034-08)			Sample Type: Other (W)			Sampled: 12/03/24 15:10				
Metals by EPA 6000/7000 Series Methods										
Boron	ND	mg/kg	5.0	1	AL43633	12/06/24 05:33	12/09/24 11:07	2303	EPA 6010B	
D-2 Needles (24L1034-09)			Sample Type: Other (W)			Sampled: 12/03/24 15:08				
Metals by EPA 6000/7000 Series Methods										
Boron	5.6	mg/kg	5.0	1	AL43633	12/06/24 05:33	12/09/24 11:10	2303	EPA 6010B	
D-3 Needles (24L1034-10)			Sample Type: Other (W)			Sampled: 12/03/24 15:35				
Metals by EPA 6000/7000 Series Methods										
Boron	7.9	mg/kg	4.0	1	AL43633	12/06/24 05:33	12/09/24 11:13	2303	EPA 6010B	



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John Casteel
Project: Annual Needles
Project Number: Pine Needles

Reported:
12/12/24 14:40

Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Flag
Batch AL43633 - NB EPA 3050B									
Blank (AL43633-BLK1)				Prepared: 12/06/24 Analyzed: 12/09/24					
Boron	ND	5.0	mg/kg						
LCS (AL43633-BS1)				Prepared: 12/06/24 Analyzed: 12/09/24					
Boron	45.7	5.0	mg/kg	50.0		91.4	80-120		
LCS Dup (AL43633-BSD1)				Prepared: 12/06/24 Analyzed: 12/09/24					
Boron	47.6	5.0	mg/kg	50.0		95.3	80-120	4.16	20
Duplicate (AL43633-DUP1)				Source: 24L1034-01		Prepared: 12/06/24 Analyzed: 12/09/24			
Boron	8.24	5.0	mg/kg		7.99			3.01	20
MRL Check (AL43633-MRL1)				Prepared: 12/06/24 Analyzed: 12/09/24					
Boron	4.68	5.0	mg/kg	5.00		93.5	0-200		
Matrix Spike (AL43633-MS1)				Source: 24L1034-02		Prepared: 12/06/24 Analyzed: 12/09/24			
Boron	49.5	5.0	mg/kg	48.1	7.07	88.2	75-125		
Matrix Spike Dup (AL43633-MSD1)				Source: 24L1034-02		Prepared: 12/06/24 Analyzed: 12/09/24			
Boron	48.3	5.0	mg/kg	43.9	7.07	93.9	75-125	2.45	20



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John Casteel
Project: Annual Needles
Project Number: Pine Needles

Reported:
12/12/24 14:40

Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- dry Sample results reported on a dry weight basis
- REC Recovery
- RPD Relative Percent Difference

* ELAP does not offer accreditation in this matrix for the requested analyte/method combination.



Alpha Analytical Laboratories Inc.

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

208 Mason Street, Ukiah, California 95482

Work Order Chain of Custody Record

Lab No. 24L1034

Page 1 of 1

Company Name: Mayacma Geothermal LLC		Project Name: Pine Needles		Project Number:																							
Mailing Address: 245 E Liberty St Suite 520 Reno, NV 89501		Project Address:																									
Project Contact (Hardcopy or PDF to): John Casteel John@openmountainenergy.com		P.O. #		Quote #																							
Phone/Fax: 775-260-8351		Bill to: Mayacma Geothermal LLC 245 E Liberty St Suite 520 Reno, NV 89501 accounting@openmountainenergy.com																									
Samplers Signature: <i>John P. Casteel</i>		Signature below authorizes work under terms stated on reverse side.																									
Sample Designation		Sampling		Container		Preservative		Matrix		Analysis Request		TAT		For Lab Use Only													
				40ml VOA		Poly		Amber		Sleeve		HCL			HNO3		H2SO4		None		Water		Soil		24 hr ☐		Lab Approval Required
																									48 hr ☐		
																									1 wk ☐		
																									2 wk (standard) ☐		
Relinquished by: <i>John P. Casteel</i>		Received by: <i>JB</i>				Date 12/4/24		Time 13:17		California EDF Report? ☐ Yes ☐ No																	
Relinquished by:		Received by:				Date		Time		Sampling Company Log Code:																	
Relinquished by:		Received for Laboratory by:				Date		Time		Global ID:																	
										EDF to (Email Address):																	
Sample Condition on Receipt:		Travel and Site Time:		Mileage:		Misc. Supplies:		Drinking Water State System/Source Number:																			



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

12 December 2024

Mayacma Geothermal LLC

Attn: John Casteel

245 E Liberty St Suite 520

Reno, NV 89501

RE: Annual Soil

Work Order: 24L1047

Enclosed are the results of analyses for samples received by the laboratory on 12/04/24 13:17. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Stephen F. McWeeney

Project Manager



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John Casteel
Project: Annual Soil
Project Number: [none]

Reported:
12/12/24 14:43

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | 925-828-6226 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | 916-686-5190 | ELAP# 2922
North Bay: 737 Southpoint Blvd Unit D | Petaluma, CA 94954 | 707-769-3128 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | 760-930-2555 | ELAP# 3055
Los Angeles: 1230 E. 223rd Street Suite 205 | Carson, CA 90745 | 424-267-5032 | ELAP# 3091

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
A-1 Soil	24L1047-01	Soil	12/03/24 16:18	12/04/24 13:17
A-2 Soil	24L1047-02	Soil	12/03/24 16:23	12/04/24 13:17
B-1 Soil	24L1047-03	Soil	12/03/24 16:02	12/04/24 13:17
B-2 Soil	24L1047-04	Soil	12/03/24 16:09	12/04/24 13:17
B-3 Soil	24L1047-05	Soil	12/03/24 15:51	12/04/24 13:17
C-1 Soil	24L1047-06	Soil	12/04/24 10:14	12/04/24 13:17
C-2 Soil	24L1047-07	Soil	12/04/24 10:12	12/04/24 13:17
D-1 Soil	24L1047-08	Soil	12/03/24 15:10	12/04/24 13:17
D-2 Soil	24L1047-09	Soil	12/03/24 15:08	12/04/24 13:17
D-3 Soil	24L1047-10	Soil	12/03/24 15:35	12/04/24 13:17



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John Casteel
Project: Annual Soil
Project Number: [none]

Reported:
12/12/24 14:43

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
A-1 Soil (24L1047-01)			Sample Type: Soil		Sampled: 12/03/24 16:18					
Metals by EPA 6000/7000 Series Methods										
Boron	18	mg/kg	5.0	1	AL43634	12/06/24 05:37	12/09/24 11:44	2303	EPA 6010B	
A-2 Soil (24L1047-02)			Sample Type: Soil		Sampled: 12/03/24 16:23					
Metals by EPA 6000/7000 Series Methods										
Boron	17	mg/kg	5.0	1	AL43634	12/06/24 05:37	12/09/24 11:47	2303	EPA 6010B	
B-1 Soil (24L1047-03)			Sample Type: Soil		Sampled: 12/03/24 16:02					
Metals by EPA 6000/7000 Series Methods										
Boron	16	mg/kg	5.0	1	AL43634	12/06/24 05:37	12/09/24 11:50	2303	EPA 6010B	
B-2 Soil (24L1047-04)			Sample Type: Soil		Sampled: 12/03/24 16:09					
Metals by EPA 6000/7000 Series Methods										
Boron	18	mg/kg	5.0	1	AL43634	12/06/24 05:37	12/09/24 11:53	2303	EPA 6010B	
B-3 Soil (24L1047-05)			Sample Type: Soil		Sampled: 12/03/24 15:51					
Metals by EPA 6000/7000 Series Methods										
Boron	21	mg/kg	5.0	1	AL43634	12/06/24 05:37	12/09/24 11:56	2303	EPA 6010B	
C-1 Soil (24L1047-06)			Sample Type: Soil		Sampled: 12/04/24 10:14					
Metals by EPA 6000/7000 Series Methods										
Boron	18	mg/kg	5.0	1	AL43634	12/06/24 05:37	12/09/24 12:00	2303	EPA 6010B	
C-2 Soil (24L1047-07)			Sample Type: Soil		Sampled: 12/04/24 10:12					
Metals by EPA 6000/7000 Series Methods										
Boron	19	mg/kg	5.0	1	AL43634	12/06/24 05:37	12/09/24 12:09	2303	EPA 6010B	
D-1 Soil (24L1047-08)			Sample Type: Soil		Sampled: 12/03/24 15:10					
Metals by EPA 6000/7000 Series Methods										
Boron	14	mg/kg	5.0	1	AL43634	12/06/24 05:37	12/09/24 12:12	2303	EPA 6010B	
D-2 Soil (24L1047-09)			Sample Type: Soil		Sampled: 12/03/24 15:08					
Metals by EPA 6000/7000 Series Methods										
Boron	ND	mg/kg	5.0	1	AL43634	12/06/24 05:37	12/09/24 12:15	2303	EPA 6010B	
D-3 Soil (24L1047-10)			Sample Type: Soil		Sampled: 12/03/24 15:35					
Metals by EPA 6000/7000 Series Methods										
Boron	18	mg/kg	5.0	1	AL43634	12/06/24 05:37	12/09/24 12:18	2303	EPA 6010B	



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John Casteel
Project: Annual Soil
Project Number: [none]

Reported:
12/12/24 14:43

Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Flag
Batch AL43634 - NB EPA 3050B									
Blank (AL43634-BLK1)				Prepared: 12/06/24 Analyzed: 12/09/24					
Boron	ND	5.0	mg/kg						
LCS (AL43634-BS1)				Prepared: 12/06/24 Analyzed: 12/09/24					
Boron	46.8	5.0	mg/kg	50.0		93.6	80-120		
LCS Dup (AL43634-BSD1)				Prepared: 12/06/24 Analyzed: 12/09/24					
Boron	47.3	5.0	mg/kg	50.0		94.6	80-120	1.06	20
Duplicate (AL43634-DUP1)				Source: 24L1047-01		Prepared: 12/06/24 Analyzed: 12/09/24			
Boron	17.9	5.0	mg/kg		18.3			2.40	20
MRL Check (AL43634-MRL1)				Prepared: 12/06/24 Analyzed: 12/09/24					
Boron	4.35	5.0	mg/kg	5.00		87.0	0-200		
Matrix Spike (AL43634-MS1)				Source: 24L1047-02		Prepared: 12/06/24 Analyzed: 12/09/24			
Boron	54.3	5.0	mg/kg	48.1	17.1	77.3	75-125		
Matrix Spike Dup (AL43634-MSD1)				Source: 24L1047-02		Prepared: 12/06/24 Analyzed: 12/09/24			
Boron	55.1	5.0	mg/kg	48.5	17.1	78.2	75-125	1.50	20



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John Casteel
Project: Annual Soil
Project Number: [none]

Reported:
12/12/24 14:43

Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- dry Sample results reported on a dry weight basis
- REC Recovery
- RPD Relative Percent Difference

* ELAP does not offer accreditation in this matrix for the requested analyte/method combination.



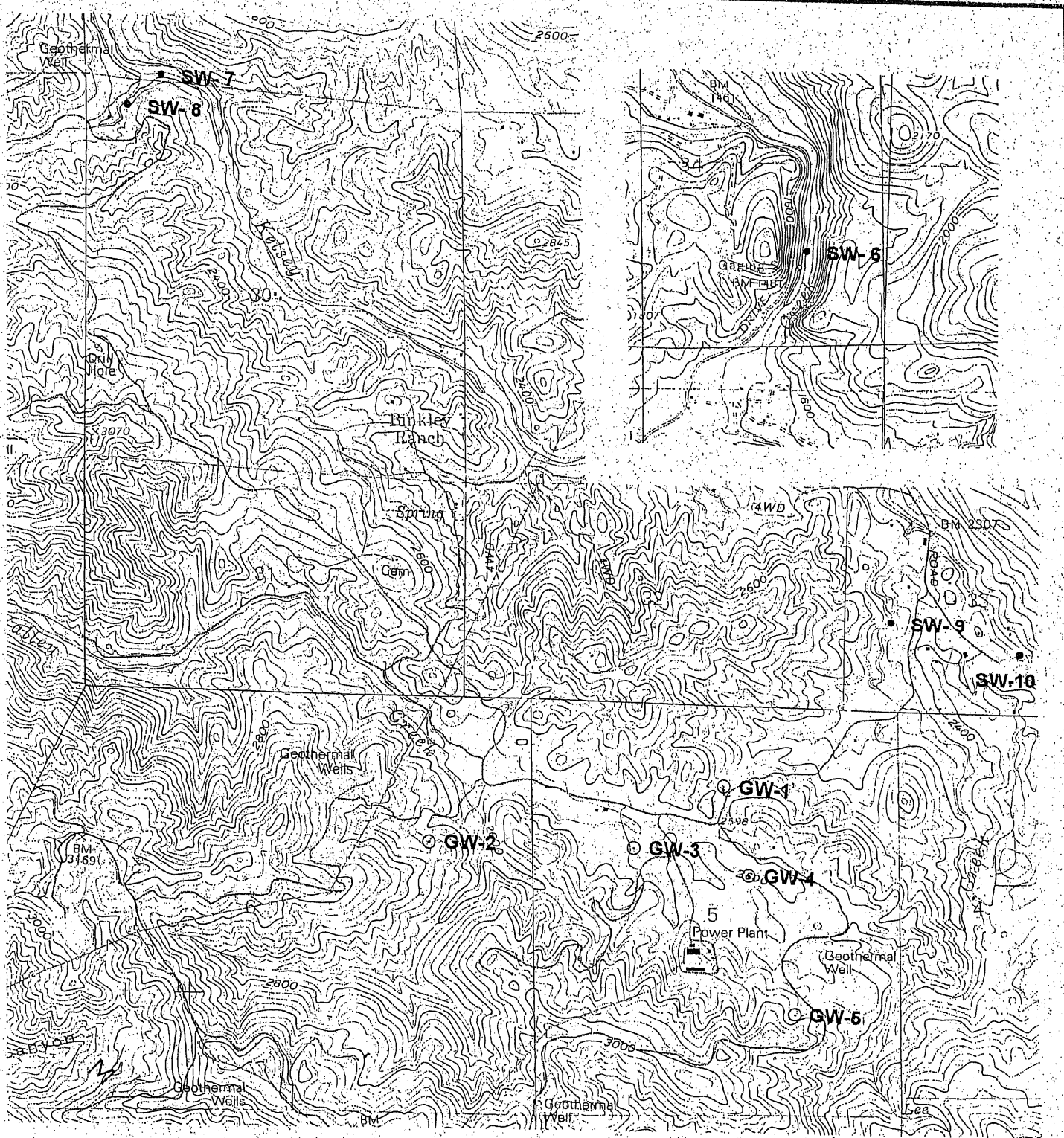
208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

Lab No. 24L1047

Page 1 of 1

Company Name: Mayacma Geothermal LLC		Project Name: Soils		Project Number:		Signature below authorizes work under terms stated on reverse side.																				
Mailing Address: 245 E Liberty St Suite 520 Reno, NV 89501		Project Address:				Analysis Request												TAT								
Project Contact (Hardcopy or PDF to): John Casteel John@openmountainenergy.com		P.O. #		Quote #		All Samples: Total boron EPA 6010B Please provide report as PDF and excel.												24 hr ☐								
Phone/Fax: 775-260-8351		Bill to: Mayacma Geothermal LLC 245 E Liberty St Suite 520 Reno, NV 89501 accounting@openmountainenergy.com																48 hr ☐								
Samplers Signature: JUCAN P. [Signature]		Sampling	Container			Preservative			Matrix															Lab Approval Required		
Sample Designation		Date Time		40ml VOA	Poly	Amber	Sleeve	HCL	HNO3	H2SO4	None	Water	Soil													1 wk ☐
A-1 Soil		12/3/24 16:18																								2 wk (standard) ☐
A-2 Soil		16:23																								
B-1 Soil		16:02																								
B-2 Soil		16:09																								
B-3 Soil		15:51																								
C-1 Soil		12/4/24 10:14																								
C-2 Soil		10:12																								
D-1 Soil 12/3/24 15:10		12/3/24 15:08		15:40																						
D-2 Soil		12/3/24 15:08																								
D-3 Soil		15:35																								
Relinquished by: JUCAN P. [Signature]		Received by: [Signature]				Date 12/4/24		Time 1317		California EDF Report? ☐ Yes ☐ No																
Relinquished by:		Received by:				Date		Time		Sampling Company Log Code:																
Relinquished by:		Received for Laboratory by:				Date		Time		Global ID:																
										EDF to (Email Address):																
										Drinking Water State System/Source Number:																
Sample Condition on Receipt:		Travel and Site Time:		Mileage:		Misc. Supplies:																				



EGS
INC

**Bottle Rock Monitoring Program
Water Quality Sample
Locations**

Scale: 1 inch = 2000 feet

Project No: 0068-026-02

Date: June 2003

FIG.1.1

Table 2
Bottle Rock Power, LLC
2024 Ground Water and Surface Water Monitoring
1st Quarter Analytical Results

Location ID	GPS Coordinates	Location & Description	Arsenic µg/l	Calcium mg/l	Magnesium mg/l	Hardness mg/l	Boron mg/l	Copper mg/l	Iron mg/l	Lead mg/l	Manganese mg/l	Sodium mg/l	Zinc mg/l	pH	Electrical Conductivity umhos/cm	Dissolved Oxygen mg/l	Turbidity NTU	Total Alkalinity mg/l	Nitrate mg/l	Sulfate mg/l	Total Suspended Solids mg/l	Total Coliform MPN
GW-1	38 50' 27.84" N 122 45' 59.07" W	Barret Spring; Running seep at sharp turn, downslope on High Valley Road	ND	57	18	218	0.12	ND	ND	ND	0.13	11	ND	8.09	380	NA	ND	170	ND	21	ND	NA
GW-3	38 50' 21.57" N 122 46' 17.46 W	BRP WW1; Northern most water supply well	ND	38	11	142	0.46	ND	0.33	ND	0.053	29	ND	8.03	350	NA	2	170	ND	6.1	ND	NA
SW-6	38 55' 33.58" N 122 50' 39.91" W	Kelsey Creek - Downstream; ~ 3 miles west of HWY 29 on Kelsey	ND	11	19	105	ND	ND	0.12	ND	ND	ND	ND	7.97	220	11	2.7	110	NA	3.7	ND	260
SW-7	38 52' 04.62" N 122 47' 43.13" W	High Valley Creek; behind Binkley Ranch House	ND	12	11	73	ND	ND	ND	ND	ND	ND	ND	7.63	170	11	1.2	69	NA	5.6	ND	150
SW-8	38 52' 08.29" N 122 47' 40.01" W	Kelsey Creek - Middle; Northwest of Binkley Ranch House, upstream of confluence with High Valley Creek	ND	6.9	8.9	54	ND	ND	0.1	ND	ND	ND	ND	7.73	130	11	3	58	NA	2.9	1.6	390
SW-9	38 50' 40.18" N 122 45' 29.61" W	Alder Creek; Adjacent to High Valley Road bridge crossing Alder Creek	ND	6.7	3.9	33	ND	ND	ND	ND	ND	ND	ND	7.91	98	11	1.4	43	NA	2.3	1.3	180
SW-10	38 50' 36.22" N 122 44' 57.25" W	Kelsey Creek - Upstream; ~ 0.5 miles west of High Valley Road gate on Bottle Rock Road	ND	5	4.4	31	ND	ND	0.13	ND	ND	ND	ND	7.98	97	11	4.5	36	NA	0.87	2.1	360

ND = Not Detected

NA = Not Analyzed

Table 2
Bottle Rock Power, LLC
2024 Ground Water and Surface Water Monitoring
2nd Quarter Analytical Results

Location ID	GPS Coordinates	Location & Description	Arsenic µg/l	Calcium mg/l	Magnesium mg/l	Hardness mg/l	Boron mg/l	Copper mg/l	Iron mg/l	Lead mg/l	Manganese mg/l	Sodium mg/l	Zinc mg/l	pH	Electrical Conductivity umhos/cm	Dissolved Oxygen mg/l	Turbidity NTU	Total Alkalinity mg/l	Nitrate mg/l	Sulfate mg/l	Total Suspended Solids mg/l	Total Coliform MPN
GW-1	38 50' 27.84" N 122 45' 59.07" W	Barret Spring; Running seep at sharp turn, downslope on High Valley Road	ND	48	15	182	ND	ND	ND	ND	0.11	8.7	ND	7.56	400	NA	ND	180	ND	21	ND	NA
GW-3	38 50' 21.57" N 122 46' 17.46 W	BRP WW1; Northern most water supply well	ND	34	10	127	0.41	ND	0.15	ND	0.046	26	ND	7.74	360	NA	ND	170	ND	6.3	ND	NA
SW-6	38 55' 33.58" N 122 50' 39.91" W	Kelsey Creek - Downstream; ~ 3 miles west of HWY 29 on Kelsey Creek	ND	14	24	134	ND	ND	ND	ND	ND	ND	ND	8.1	290	11.0	ND	130	NA	3.5	ND	>2419.6
SW-7	38 52' 04.62" N 122 47' 43.13" W	High Valley Creek; behind Binkley Ranch House	ND	17	16	107	0.13	ND	ND	ND	ND	ND	ND	7.6	290	9.3	ND	110	NA	9.1	2.3	1700
SW-8	38 52' 08.29" N 122 47' 40.01" W	Kelsey Creek - Middle; Northwest of Binkley Ranch House, upstream of confluence with High Valley Creek	ND	30	47	269	0.100	ND	ND	ND	0.021	6.7	ND	7.9	540	9.8	1.2	260	NA	14	3.2	>2419.6
SW-9	38 50' 40.18" N 122 45' 29.61" W	Alder Creek; Adjacent to High Valley Road bridge crossing Alder Creek	ND	7.6	3.9	35	ND	ND	ND	ND	ND	ND	ND	7.53	95	10	ND	42	NA	2.2	1.2	>2416.6
SW-10	38 50' 36.22" N 122 44' 57.25" W	Kelsey Creek - Upstream; ~ 0.5 miles west of High Valley Road gate on Bottle Rock Road	ND	7.4	5.7	42	ND	ND	0.13	ND	ND	ND	ND	7.54	ND	10	2.2	52	NA	2	3.3	>2419.6

ND = Not Detected
NA = Not Analyzed

Table 2
Bottle Rock Power, LLC
2024 Ground Water and Surface Water Monitoring
3rd Quarter Analytical Results

Location ID	GPS Coordinates	Location & Description	Arsenic µg/l	Calcium mg/l	Magnesium mg/l	Hardness mg/l	Boron mg/l	Copper mg/l	Iron mg/l	Lead mg/l	Manganese mg/l	Sodium mg/l	Zinc mg/l	pH	Electrical Conductivity umhos/cm	Dissolved Oxygen mg/l	Turbidity NTU	Total Alkalinity mg/l	Nitrate mg/l	Sulfate mg/l	Total Suspended Solids mg/l	Total Coliform MPN
GW-1	38 50' 27.84" N 122 45' 59.07" W	Barret Spring; Running seep at sharp turn, downslope on High Valley Road	ND	42	14	164	ND	ND	ND	ND	0.1	8.1	ND	7.83	380	NA	ND	180	ND	20	ND	NA
GW-3	38 50' 21.57" N 122 46' 17.46 W	BRP WW1; Northern most water supply well	ND	31	9.7	118	0.43	ND	0.54	ND	0.5	24	ND	7.96	350	NA	2.1	180	ND	5.5	4.9	NA
SW-6	38 55' 33.58" N 122 50' 39.91" W	Kelsey Creek - Downstream; ~ 3 miles west of HWY 29 on Kelsey Creek	ND	ND	21	116	ND	ND	ND	ND	ND	6.3	ND	8.17	250	10.0	ND	130	NA	1.1	ND	1700
SW-7	38 52' 04.62" N 122 47' 43.13" W	High Valley Creek; behind Binkley Ranch House	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SW-8	38 52' 08.29" N 122 47' 40.01" W	Kelsey Creek - Middle; Northwest of Binkley Ranch House, upstream of confluence with High Valley Creek	ND	7.2	5.2	39	ND	ND	ND	ND	ND	ND	ND	7.91	110	10	1.2	56	NA	ND	1.5	1100
SW-9	38 50' 40.18" N 122 45' 29.61" W	Alder Creek; Adjacent to High Valley Road bridge crossing Alder Creek	ND	ND	2.4	20	ND	ND	ND	ND	ND	ND	ND	7.54	66	10	ND	33	NA	0.66	ND	870
SW-10	38 50' 36.22" N 122 44' 57.25" W	Kelsey Creek - Upstream; ~ 0.5 miles west of High Valley Road gate on Bottle Rock Road	ND	8.5	6.2	47	ND	ND	0.12	ND	ND	6.2	ND	7.94	120	11	1.4	62	ND	ND	1.4	980

ND = Not Detected

NA = Not Analyzed

Table 2
Bottle Rock Power, LLC
2024 Ground Water and Surface Water Monitoring
4th Quarter Analytical Results

Location ID	GPS Coordinates	Location & Description	Arsenic µg/l	Calcium mg/l	Magnesium mg/l	Hardness mg/l	Boron mg/l	Copper mg/l	Iron mg/l	Lead mg/l	Manganese mg/l	Sodium mg/l	Zinc mg/l	pH	Electrical Conductivity µmhos/cm	Dissolved Oxygen mg/l	Turbidity NTU	Total Alkalinity mg/l	Nitrate mg/l	Sulfate mg/l	Total Suspended Solids mg/l	Total Coliform MPN
GW-1	38 50' 27.84" N 122 45' 59.07" W	Barret Spring; Running seep at sharp turn, downslope on High Valley Road	ND	48	15	183	ND	ND	ND	ND	0.11	8.8	ND	8.18	390	NA	ND	190	ND	20	ND	NA
GW-3	38 50' 21.57" N 122 46' 17.46 W	BRP WW1; Northern most water supply well	ND	33	10	123	0.41	ND	2	ND	0.09	26	ND	8.08	340	NA	14.0	170	ND	4.3	5.3	NA
SW-6	38 55' 33.58" N 122 50' 39.91" W	Kelsey Creek - Downstream; ~ 3 miles west of HWY 29 on Kelsey Creek	ND	12	18	103	ND	ND	ND	ND	ND	ND	ND	8.26	220	11.0	0.91	110	NA	4.1	ND	730
SW-7	38 52' 04.62" N 122 47' 43.13" W	High Valley Creek; behind Binkley Ranch House	ND	16	15	102	0.15	ND	ND	ND	15	ND	ND	7.9	210	8.9	ND	100	NA	8.4	ND	410
SW-8	38 52' 08.29" N 122 47' 40.01" W	Kelsey Creek - Middle; Northwest of Binkley Ranch House, upstream of confluence with High Valley Creek	ND	7.1	5.2	39	ND	ND	ND	ND	5.2	ND	ND	7.96	100	11	2.1	49	NA	1.5	1.2	730
SW-9	38 50' 40.18" N 122 45' 29.61" W	Alder Creek; Adjacent to High Valley Road bridge crossing Alder Creek	ND	6.7	3.7	32	ND	ND	ND	ND	ND	ND	ND	7.85	87	11	0.53	41	NA	2	ND	330
SW-10	38 50' 36.22" N 122 44' 57.25" W	Kelsey Creek - Upstream; ~ 0.5 miles west of High Valley Road gate on Bottle Rock Road	ND	7	5.9	42	ND	ND	0.11	ND	ND	ND	ND	7.95	100	11	3.0	49	NA	1.1	1.4	730

ND = Not Detected

NA = Not Analyzed



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

28 March 2024

Bottle Rock Power

Attn: M. Moore

4010 Stone Way North, Suite 400

Seattle, WA 98103

RE: Groundwater

Work Order: 24C2269

Enclosed are the results of analyses for samples received by the laboratory on 03/14/24 13:21. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Stephen F. McWeeney

Project Manager



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power 4010 Stone Way North, Suite 400 Seattle, WA 98103	Project Manager: M. Moore Project: Groundwater Project Number: Bottle Rock Monitoring - GW	Reported: 03/28/24 10:13
---	--	-----------------------------

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | 925-828-6226 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | 916-686-5190 | ELAP# 2922
North Bay: 737 Southpoint Blvd Unit D | Petaluma, CA 94954 | 707-769-3128 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | 760-930-2555 | ELAP# 3055
Los Angeles: 1230 E. 223rd Street Suite 205 | Carson, CA 90745 | 424-267-5032 | ELAP# 3091

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GW-3	24C2269-01	Water	03/14/24 08:16	03/14/24 13:21
GW-1	24C2269-02	Water	03/14/24 08:58	03/14/24 13:21



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power
4010 Stone Way North, Suite 400
Seattle, WA 98103

Project Manager: M. Moore
Project: Groundwater
Project Number: Bottle Rock Monitoring - GW

Reported:
03/28/24 10:13

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
GW-3 (24C2269-01)			Sample Type: Water		Sampled: 03/14/24 08:16					
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AC44421	03/18/24 07:14	03/18/24 08:39	2303	EPA 200.7	
Boron	0.46	mg/L	0.10	1	AC44421	03/18/24 07:14	03/18/24 08:39	2303	EPA 200.7	
Calcium	38	mg/L	5.0	1	AC44421	03/18/24 07:14	03/18/24 08:39	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AC44421	03/18/24 07:14	03/18/24 08:39	2303	EPA 200.7	
Iron	0.33	mg/L	0.10	1	AC44421	03/18/24 07:14	03/18/24 08:39	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AC44421	03/18/24 07:14	03/18/24 08:39	2303	EPA 200.7	
Magnesium	11	mg/L	0.60	1	AC44421	03/18/24 07:14	03/18/24 08:39	2303	EPA 200.7	
Manganese	0.052	mg/L	0.020	1	AC44421	03/18/24 07:14	03/18/24 08:39	2303	EPA 200.7	
Sodium	29	mg/L	6.0	1	AC44421	03/18/24 07:14	03/18/24 08:39	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AC44421	03/18/24 07:14	03/18/24 08:39	2303	EPA 200.7	
Conventional Chemistry Parameters by APHA/EPA Methods										
pH	8.03	pH Units	1.68	1	AC45089	03/27/24 11:54	03/27/24 12:48	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	350	umhos/cm@25°	10	1	AC45090	03/27/24 11:53	03/27/24 17:14	2303	SM2510B	
Total Alkalinity as CaCO3	170	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AC44465	03/18/24 14:30	03/19/24 09:00	1551	SM2540D	
Turbidity	2.0	NTU	1.0	1	AC44304	03/15/24 10:09	03/18/24 09:53	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	170	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Hardness, Total	142	mg/L	15	1	AC44421	03/18/24 07:14	03/18/24 08:39	2303	SM2340B	
Anions by EPA Method 300.0										
Nitrate as N	ND	mg/L	0.40	1	AC44161	03/14/24 10:30	03/14/24 19:12	2303	EPA 300.0	
Sulfate as SO4	6.1	mg/L	0.50	1	AC44161	03/14/24 10:30	03/14/24 19:12	2303	EPA 300.0	
GW-1 (24C2269-02)			Sample Type: Water		Sampled: 03/14/24 08:58					
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AC44421	03/18/24 07:14	03/18/24 08:42	2303	EPA 200.7	
Boron	0.12	mg/L	0.10	1	AC44421	03/18/24 07:14	03/18/24 08:42	2303	EPA 200.7	
Calcium	57	mg/L	5.0	1	AC44421	03/18/24 07:14	03/18/24 08:42	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AC44421	03/18/24 07:14	03/18/24 08:42	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AC44421	03/18/24 07:14	03/18/24 08:42	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AC44421	03/18/24 07:14	03/18/24 08:42	2303	EPA 200.7	
Magnesium	18	mg/L	0.60	1	AC44421	03/18/24 07:14	03/18/24 08:42	2303	EPA 200.7	
Manganese	0.13	mg/L	0.020	1	AC44421	03/18/24 07:14	03/18/24 08:42	2303	EPA 200.7	
Sodium	11	mg/L	6.0	1	AC44421	03/18/24 07:14	03/18/24 08:42	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AC44421	03/18/24 07:14	03/18/24 08:42	2303	EPA 200.7	

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.



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power
4010 Stone Way North, Suite 400
Seattle, WA 98103

Project Manager: M. Moore
Project: Groundwater
Project Number: Bottle Rock Monitoring - GW

Reported:
03/28/24 10:13

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
GW-1 (24C2269-02)	Sample Type: Water				Sampled: 03/14/24 08:58					
Conventional Chemistry Parameters by APHA/EPA Methods										
pH	8.09	pH Units	1.68	1	AC45089	03/27/24 11:54	03/27/24 12:48	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	380	umhos/cm@25°	10	1	AC45090	03/27/24 11:53	03/27/24 17:14	2303	SM2510B	
Total Alkalinity as CaCO3	170	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AC44465	03/18/24 14:30	03/19/24 09:00	1551	SM2540D	
Turbidity	ND	NTU	1.0	1	AC44304	03/15/24 10:09	03/18/24 09:53	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	170	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Hardness, Total	218	mg/L	15	1	AC44421	03/18/24 07:14	03/18/24 08:42	2303	SM2340B	
Anions by EPA Method 300.0										
Nitrate as N	ND	mg/L	0.40	1	AC44161	03/14/24 10:30	03/14/24 19:25	2303	EPA 300.0	
Sulfate as SO4	21	mg/L	0.50	1	AC44161	03/14/24 10:30	03/14/24 19:25	2303	EPA 300.0	



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power
4010 Stone Way North, Suite 400
Seattle, WA 98103

Project Manager: M. Moore
Project: Groundwater
Project Number: Bottle Rock Monitoring - GW

Reported:
03/28/24 10:13

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AC44421 - NB EPA 200 series DA										
Blank (AC44421-BLK1)				Prepared & Analyzed: 03/18/24						
Arsenic	ND	0.020	mg/L							
Boron	ND	0.10	mg/L							
Calcium	ND	5.0	mg/L							
Copper	ND	0.050	mg/L							
Iron	ND	0.10	mg/L							
Lead	ND	0.020	mg/L							
Magnesium	ND	0.60	mg/L							
Manganese	ND	0.020	mg/L							
Sodium	ND	6.0	mg/L							
Zinc	ND	0.30	mg/L							
LCS (AC44421-BS1)				Prepared & Analyzed: 03/18/24						
Arsenic	0.506	0.020	mg/L	0.500		101	85-115			
Boron	0.485	0.10	mg/L	0.500		97.0	85-115			
Calcium	23.7	5.0	mg/L	25.5		93.0	85-115			
Copper	0.468	0.050	mg/L	0.500		93.5	85-115			
Iron	0.506	0.10	mg/L	0.500		101	85-115			
Lead	0.470	0.020	mg/L	0.500		94.1	85-115			
Magnesium	24.3	0.60	mg/L	25.5		95.3	85-115			
Manganese	0.484	0.020	mg/L	0.500		96.8	85-115			
Sodium	25.2	6.0	mg/L	25.5		98.8	85-115			
Zinc	0.491	0.30	mg/L	0.500		98.2	85-115			
LCS Dup (AC44421-BSD1)				Prepared & Analyzed: 03/18/24						
Arsenic	0.511	0.020	mg/L	0.500		102	85-115	1.02	20	
Boron	0.487	0.10	mg/L	0.500		97.3	85-115	0.350	20	
Calcium	23.8	5.0	mg/L	25.5		93.4	85-115	0.462	20	
Copper	0.470	0.050	mg/L	0.500		94.0	85-115	0.469	20	
Iron	0.508	0.10	mg/L	0.500		102	85-115	0.474	20	
Lead	0.474	0.020	mg/L	0.500		94.9	85-115	0.868	20	
Magnesium	24.4	0.60	mg/L	25.5		95.6	85-115	0.305	20	
Manganese	0.486	0.020	mg/L	0.500		97.2	85-115	0.371	20	
Sodium	25.3	6.0	mg/L	25.5		99.2	85-115	0.328	20	
Zinc	0.494	0.30	mg/L	0.500		98.9	85-115	0.629	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.



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power
4010 Stone Way North, Suite 400
Seattle, WA 98103

Project Manager: M. Moore
Project: Groundwater
Project Number: Bottle Rock Monitoring - GW

Reported:
03/28/24 10:13

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AC44421 - NB EPA 200 series DA										
Duplicate (AC44421-DUP1)		Source: 24C2269-01			Prepared & Analyzed: 03/18/24					
Arsenic	ND	0.020	mg/L		ND				20	
Boron	0.437	0.10	mg/L		0.459			4.89	20	
Calcium	36.0	5.0	mg/L		38.0			5.24	20	
Copper	ND	0.050	mg/L		ND				20	
Iron	0.312	0.10	mg/L		0.328			5.09	20	
Lead	ND	0.020	mg/L		ND				20	
Magnesium	10.8	0.60	mg/L		11.3			5.13	20	
Manganese	0.0489	0.020	mg/L		0.0516			5.37	20	
Sodium	27.4	6.0	mg/L		29.0			5.56	20	
Zinc	ND	0.30	mg/L		ND				20	
MRL Check (AC44421-MRL1)										
Prepared & Analyzed: 03/18/24										
Arsenic	0.0231	0.020	mg/L	0.0200		116	0-200			
Boron	0.101	0.10	mg/L	0.100		101	0-200			
Calcium	5.35	5.0	mg/L	5.00		107	0-200			
Copper	0.0975	0.050	mg/L	0.100		97.5	0-200			
Iron	0.104	0.10	mg/L	0.100		104	0-200			
Lead	0.0218	0.020	mg/L	0.0200		109	0-200			
Magnesium	0.523	0.60	mg/L	0.500		105	0-200			
Manganese	0.0210	0.020	mg/L	0.0200		105	0-200			
Sodium	5.55	6.0	mg/L	5.00		111	0-200			
Zinc	0.386	0.30	mg/L	0.350		110	0-200			
Matrix Spike (AC44421-MS1)										
		Source: 24C2269-02			Prepared & Analyzed: 03/18/24					
Arsenic	0.604	0.020	mg/L	0.500	ND	121	70-130			
Boron	0.682	0.10	mg/L	0.500	0.115	113	70-130			
Calcium	80.3	5.0	mg/L	25.5	57.1	90.9	70-130			
Copper	0.565	0.050	mg/L	0.500	ND	113	70-130			
Iron	0.648	0.10	mg/L	0.500	ND	118	70-130			
Lead	0.554	0.020	mg/L	0.500	ND	111	70-130			
Magnesium	44.7	0.60	mg/L	25.5	18.3	104	70-130			
Manganese	0.676	0.020	mg/L	0.500	0.127	110	70-130			
Sodium	39.0	6.0	mg/L	25.5	10.7	111	70-130			
Zinc	0.579	0.30	mg/L	0.500	ND	116	70-130			

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.



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power
4010 Stone Way North, Suite 400
Seattle, WA 98103

Project Manager: M. Moore
Project: Groundwater
Project Number: Bottle Rock Monitoring - GW

Reported:
03/28/24 10:13

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AC44304 - NB General Prep										
Blank (AC44304-BLK1)				Prepared: 03/15/24 Analyzed: 03/18/24						
Turbidity	ND	1.0	NTU							
Duplicate (AC44304-DUP1)				Source: 24C2266-01 Prepared: 03/15/24 Analyzed: 03/18/24						
Turbidity	1.13	1.0	NTU		1.23			8.47	20	
MRL Check (AC44304-MRL1)				Prepared: 03/15/24 Analyzed: 03/18/24						
Turbidity	1.23	1.0	NTU	1.00		123	0-200			
Batch AC44421 - NB EPA 200 series DA										
Blank (AC44421-BLK1)				Prepared & Analyzed: 03/18/24						
Hardness, Total	ND	15	mg/L							
Duplicate (AC44421-DUP1)				Source: 24C2269-01 Prepared & Analyzed: 03/18/24						
Hardness, Total	134	15	mg/L		142			5.20	20	
Batch AC44465 - General Preparation										
Blank (AC44465-BLK1)				Prepared: 03/18/24 Analyzed: 03/19/24						
Total Suspended Solids	ND	1.0	mg/L							
LCS (AC44465-BS1)				Prepared: 03/18/24 Analyzed: 03/19/24						
Total Suspended Solids	98.0	1.0	mg/L	100		98.0	90-110			
Duplicate (AC44465-DUP1)				Source: 24C2350-01 Prepared: 03/18/24 Analyzed: 03/19/24						
Total Suspended Solids	36.7	1.0	mg/L		35.3			3.72	30	



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power
4010 Stone Way North, Suite 400
Seattle, WA 98103

Project Manager: M. Moore
Project: Groundwater
Project Number: Bottle Rock Monitoring - GW

Reported:
03/28/24 10:13

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AC44755 - NB General Prep										
LCS (AC44755-BS1)				Prepared: 03/21/24 Analyzed: 03/22/24						
Total Alkalinity as CaCO ₃	1020	30	mg/L	1000		102	80-120			
Duplicate (AC44755-DUP1)				Source: 24C2266-01 Prepared: 03/21/24 Analyzed: 03/22/24						
Total Alkalinity as CaCO ₃	70.6	30	mg/L		69.3			1.86	20	
Bicarbonate Alkalinity as CaCO ₃	70.6	30	mg/L		69.3			1.86	20	
Carbonate Alkalinity as CaCO ₃	ND	30	mg/L		ND				20	
Hydroxide Alkalinity as CaCO ₃	ND	30	mg/L		ND				20	
Batch AC45089 - NB General Prep										
Calibration Check (AC45089-CCV1)				Prepared & Analyzed: 03/27/24						
pH	7.49	1.68	pH Units				0-200			
Duplicate (AC45089-DUP1)				Source: 24C3088-01 Prepared & Analyzed: 03/27/24						
pH	7.29	1.68	pH Units		7.26			0.412	20	
Batch AC45090 - NB General Prep										
Duplicate (AC45090-DUP1)				Source: 24C3088-01 Prepared & Analyzed: 03/27/24						
Specific Conductance (EC)	842		10mhos/cm@25°C		849			0.828	5	



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power
4010 Stone Way North, Suite 400
Seattle, WA 98103

Project Manager: M. Moore
Project: Groundwater
Project Number: Bottle Rock Monitoring - GW

Reported:
03/28/24 10:13

Anions by EPA Method 300.0 - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AC44161 - NB General Prep										
Blank (AC44161-BLK1)				Prepared & Analyzed: 03/14/24						
Nitrate as N	ND	0.40	mg/L							
Sulfate as SO4	ND	0.50	mg/L							
LCS (AC44161-BS1)				Prepared & Analyzed: 03/14/24						
Nitrate as N	1.82	0.40	mg/L	1.80		101	90-110			
Sulfate as SO4	8.24	0.50	mg/L	8.00		103	90-110			
Duplicate (AC44161-DUP1)				Source: 24C2096-02		Prepared & Analyzed: 03/14/24				
Nitrate as N	1.46	0.40	mg/L		ND				20	
Sulfate as SO4	53.9	0.50	mg/L		ND				20	
MRL Check (AC44161-MRL1)				Prepared & Analyzed: 03/14/24						
Nitrate as N	0.363	0.40	mg/L	0.361		101	60-140			
Sulfate as SO4	1.68	0.50	mg/L	1.60		105	60-140			
Matrix Spike (AC44161-MS1)				Source: 24C2096-01		Prepared & Analyzed: 03/14/24				
Nitrate as N	3.27	0.40	mg/L	1.80	1.56	94.4	80-120			
Sulfate as SO4	57.2	0.50	mg/L	8.00	53.9	41.8	80-120			QM-02
Matrix Spike Dup (AC44161-MSD1)				Source: 24C2096-01		Prepared & Analyzed: 03/14/24				
Nitrate as N	3.30	0.40	mg/L	1.80	1.56	96.3	80-120	1.06	20	
Sulfate as SO4	56.9	0.50	mg/L	8.00	53.9	37.7	80-120	0.577	20	QM-02



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power
4010 Stone Way North, Suite 400
Seattle, WA 98103

Project Manager: M. Moore
Project: Groundwater
Project Number: Bottle Rock Monitoring - GW

Reported:
03/28/24 10:13

Notes and Definitions

- QM-02 The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
- T-14 Residual chlorine, dissolved oxygen, sulfite, and pH must be analyzed in the field to meet the EPA specified 15 minute hold time.
- ND Analyte NOT DETECTED at or above the reporting limit
- dry Sample results reported on a dry weight basis
- REC Recovery
- RPD Relative Percent Difference

* ELAP does not offer accreditation in this matrix for the requested analyte/method combination.

[illegible]

WORK ORDER

24C2269

1.0°C

Printed: 3/14/2024 3:11:22PM

Alpha Analytical Laboratories North Bay to Ukiah Chain of Custody

Client: Bottle Rock Power

Project: Groundwater

Client Code: NB_BOTTLEROCK

Bid: Master Bid

Project Number: Bottle Rock Monitoring - GW PO #:

Date Due: 03/28/24 15:00 (10 day TAT)

Received By: Luke Andrew Smith

Date Received: 03/14/24 13:21

Logged In By: Luke Andrew Smith

Date Logged: 03/14/24 13:42

Samples Received at: _____ deg C

Analysis	Department	Expires	Comments
----------	------------	---------	----------

24C2269-01 GW-3 [Water] Sampled 03/14/24 08:16

Solids, TSS-SM2540D

Wet Chem

03/21/24 23:59

24C2269-02 GW-1 [Water] Sampled 03/14/24 08:58

Solids, TSS-SM2540D

Wet Chem

03/21/24 23:59

Containers Supplied:

1L Poly - Unpres (C)

1L Poly - Unpres (C)

Relinquished By

Date

Received By

Date

Time

Relinquished By

Date

Received By

Date

Time



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

28 March 2024

Bottle Rock Power

Attn: Richard

4010 Stone Way North, Suite 400

Seattle, WA 98103

RE: Surface Water

Work Order: 24C2266

Enclosed are the results of analyses for samples received by the laboratory on 03/14/24 13:21. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Stephen F. McWeeney

Project Manager



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power
4010 Stone Way North, Suite 400
Seattle, WA 98103

Project Manager: Richard
Project: Surface Water
Project Number: Bottle Rock Monitoring - SW

Reported:
03/28/24 10:16

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | 925-828-6226 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | 916-686-5190 | ELAP# 2922
North Bay: 737 Southpoint Blvd Unit D | Petaluma, CA 94954 | 707-769-3128 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | 760-930-2555 | ELAP# 3055
Los Angeles: 1230 E. 223rd Street Suite 205 | Carson, CA 90745 | 424-267-5032 | ELAP# 3091

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SW-7	24C2266-01	Water	03/14/24 08:37	03/14/24 13:21
SW-9	24C2266-02	Water	03/14/24 09:25	03/14/24 13:21
SW-10	24C2266-03	Water	03/14/24 09:11	03/14/24 13:21
SW-6	24C2266-04	Water	03/14/24 10:31	03/14/24 13:21
SW-8	24C2266-05	Water	03/14/24 09:48	03/14/24 13:21



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power
4010 Stone Way North, Suite 400
Seattle, WA 98103

Project Manager: Richard
Project: Surface Water
Project Number: Bottle Rock Monitoring - SW

Reported:
03/28/24 10:16

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-7 (24C2266-01)			Sample Type: Water			Sampled: 03/14/24 08:37				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AC44274	03/15/24 07:12	03/18/24 07:42	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AC44274	03/15/24 07:12	03/18/24 07:42	2303	EPA 200.7	
Calcium	12	mg/L	5.0	1	AC44274	03/15/24 07:12	03/18/24 07:42	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AC44274	03/15/24 07:12	03/18/24 07:42	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AC44274	03/15/24 07:12	03/18/24 07:42	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AC44274	03/15/24 07:12	03/18/24 07:42	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AC44274	03/15/24 07:12	03/18/24 07:42	2303	EPA 200.7	
Magnesium	11	mg/L	0.60	1	AC44274	03/15/24 07:12	03/18/24 07:42	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AC44274	03/15/24 07:12	03/18/24 07:42	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AC44700	03/21/24 05:52	03/21/24 13:39	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AC44274	03/15/24 07:12	03/18/24 07:42	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AC44274	03/15/24 07:12	03/18/24 07:42	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AC44274	03/15/24 07:12	03/18/24 07:42	2303	EPA 200.7	
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	11	mg/L	0.10	1	AC44334	03/15/24 16:00	03/15/24 17:00	1551	SM4500-O G	T-14
pH	7.63	pH Units	1.68	1	AC45089	03/27/24 11:54	03/27/24 12:48	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	170	umhos/cm@25°	10	1	AC45090	03/27/24 11:53	03/27/24 17:14	2303	SM2510B	
Total Alkalinity as CaCO3	69	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AC44465	03/18/24 14:30	03/19/24 09:00	1551	SM2540D	
Turbidity	1.2	NTU	1.0	1	AC44304	03/15/24 10:09	03/18/24 09:53	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	69	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Hardness, Total	73	mg/L	15	1	AC44274	03/15/24 07:12	03/18/24 07:42	2303	SM2340B	



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power
4010 Stone Way North, Suite 400
Seattle, WA 98103

Project Manager: Richard
Project: Surface Water
Project Number: Bottle Rock Monitoring - SW

Reported:
03/28/24 10:16

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-7 (24C2266-01)										
Sample Type: Water					Sampled: 03/14/24 08:37					
Anions by EPA Method 300.0										
Sulfate as SO4	5.6	mg/L	0.50	1	AC44161	03/14/24 10:30	03/14/24 17:42	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	150	MPN/100mL	1.0	1	AC44250	03/14/24 16:30	03/15/24 16:40	2303	SM9223B	
E. Coli	11	MPN/100mL	1.0	1	AC44250	03/14/24 16:30	03/15/24 16:40	2303	SM9223B	
SW-9 (24C2266-02)										
Sample Type: Water					Sampled: 03/14/24 09:25					
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AC44274	03/15/24 07:12	03/18/24 07:45	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AC44274	03/15/24 07:12	03/18/24 07:45	2303	EPA 200.7	
Calcium	6.7	mg/L	5.0	1	AC44274	03/15/24 07:12	03/18/24 07:45	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AC44274	03/15/24 07:12	03/18/24 07:45	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AC44274	03/15/24 07:12	03/18/24 07:45	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AC44274	03/15/24 07:12	03/18/24 07:45	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AC44274	03/15/24 07:12	03/18/24 07:45	2303	EPA 200.7	
Magnesium	3.9	mg/L	0.60	1	AC44274	03/15/24 07:12	03/18/24 07:45	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AC44274	03/15/24 07:12	03/18/24 07:45	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AC44700	03/21/24 05:52	03/21/24 13:41	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AC44274	03/15/24 07:12	03/18/24 07:45	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AC44274	03/15/24 07:12	03/18/24 07:45	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AC44274	03/15/24 07:12	03/18/24 07:45	2303	EPA 200.7	



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power
4010 Stone Way North, Suite 400
Seattle, WA 98103

Project Manager: Richard
Project: Surface Water
Project Number: Bottle Rock Monitoring - SW

Reported:
03/28/24 10:16

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-9 (24C2266-02)			Sample Type: Water			Sampled: 03/14/24 09:25				
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	11	mg/L	0.10	1	AC44334	03/15/24 16:00	03/15/24 17:00	1551	SM4500-O G	T-14
pH	7.91	pH Units	1.68	1	AC45089	03/27/24 11:54	03/27/24 12:48	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	98	umhos/cm@25°	10	1	AC45090	03/27/24 11:53	03/27/24 17:14	2303	SM2510B	
Total Alkalinity as CaCO3	43	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Total Suspended Solids	1.3	mg/L	1.0	1	AC44465	03/18/24 14:30	03/19/24 09:00	1551	SM2540D	
Turbidity	1.4	NTU	1.0	1	AC44304	03/15/24 10:09	03/18/24 09:53	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	43	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Hardness, Total	33	mg/L	15	1	AC44274	03/15/24 07:12	03/18/24 07:45	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	2.3	mg/L	0.50	1	AC44161	03/14/24 10:30	03/14/24 17:54	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	180	MPN/100mL	1.0	1	AC44250	03/14/24 16:30	03/15/24 16:40	2303	SM9223B	
E. Coli	1.0	MPN/100mL	1.0	1	AC44250	03/14/24 16:30	03/15/24 16:40	2303	SM9223B	
SW-10 (24C2266-03)			Sample Type: Water			Sampled: 03/14/24 09:11				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AC44274	03/15/24 07:12	03/18/24 07:48	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AC44274	03/15/24 07:12	03/18/24 07:48	2303	EPA 200.7	
Calcium	5.0	mg/L	5.0	1	AC44274	03/15/24 07:12	03/18/24 07:48	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AC44274	03/15/24 07:12	03/18/24 07:48	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AC44274	03/15/24 07:12	03/18/24 07:48	2303	EPA 200.7	
Iron	0.13	mg/L	0.10	1	AC44274	03/15/24 07:12	03/18/24 07:48	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AC44274	03/15/24 07:12	03/18/24 07:48	2303	EPA 200.7	
Magnesium	4.4	mg/L	0.60	1	AC44274	03/15/24 07:12	03/18/24 07:48	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AC44274	03/15/24 07:12	03/18/24 07:48	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AC44700	03/21/24 05:52	03/21/24 13:44	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AC44274	03/15/24 07:12	03/18/24 07:48	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AC44274	03/15/24 07:12	03/18/24 07:48	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AC44274	03/15/24 07:12	03/18/24 07:48	2303	EPA 200.7	

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.



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power
4010 Stone Way North, Suite 400
Seattle, WA 98103

Project Manager: Richard
Project: Surface Water
Project Number: Bottle Rock Monitoring - SW

Reported:
03/28/24 10:16

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-10 (24C2266-03)										
Sample Type: Water					Sampled: 03/14/24 09:11					
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	11	mg/L	0.10	1	AC44334	03/15/24 16:00	03/15/24 17:00	1551	SM4500-O G	T-14
pH	7.98	pH Units	1.68	1	AC45089	03/27/24 11:54	03/27/24 12:48	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	97	umhos/cm@25°	10	1	AC45090	03/27/24 11:53	03/27/24 17:14	2303	SM2510B	
Total Alkalinity as CaCO3	36	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Total Suspended Solids	2.1	mg/L	1.0	1	AC44465	03/18/24 14:30	03/19/24 09:00	1551	SM2540D	
Turbidity	4.5	NTU	1.0	1	AC44304	03/15/24 10:09	03/18/24 09:53	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	36	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Hardness, Total	31	mg/L	15	1	AC44274	03/15/24 07:12	03/18/24 07:48	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	0.87	mg/L	0.50	1	AC44161	03/14/24 10:30	03/14/24 18:33	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	360	MPN/100mL	1.0	1	AC44250	03/14/24 16:30	03/15/24 16:40	2303	SM9223B	
E. Coli	11	MPN/100mL	1.0	1	AC44250	03/14/24 16:30	03/15/24 16:40	2303	SM9223B	
SW-6 (24C2266-04)										
Sample Type: Water					Sampled: 03/14/24 10:31					
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AC44274	03/15/24 07:12	03/18/24 07:51	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AC44274	03/15/24 07:12	03/18/24 07:51	2303	EPA 200.7	
Calcium	11	mg/L	5.0	1	AC44274	03/15/24 07:12	03/18/24 07:51	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AC44274	03/15/24 07:12	03/18/24 07:51	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AC44274	03/15/24 07:12	03/18/24 07:51	2303	EPA 200.7	
Iron	0.12	mg/L	0.10	1	AC44274	03/15/24 07:12	03/18/24 07:51	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AC44274	03/15/24 07:12	03/18/24 07:51	2303	EPA 200.7	
Magnesium	19	mg/L	0.60	1	AC44274	03/15/24 07:12	03/18/24 07:51	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AC44274	03/15/24 07:12	03/18/24 07:51	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AC44700	03/21/24 05:52	03/21/24 13:47	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AC44274	03/15/24 07:12	03/18/24 07:51	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AC44274	03/15/24 07:12	03/18/24 07:51	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AC44274	03/15/24 07:12	03/18/24 07:51	2303	EPA 200.7	

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.



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power
4010 Stone Way North, Suite 400
Seattle, WA 98103

Project Manager: Richard
Project: Surface Water
Project Number: Bottle Rock Monitoring - SW

Reported:
03/28/24 10:16

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-6 (24C2266-04)			Sample Type: Water			Sampled: 03/14/24 10:31				
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	11	mg/L	0.10	1	AC44334	03/15/24 16:00	03/15/24 17:00	1551	SM4500-O G	T-14
pH	7.97	pH Units	1.68	1	AC45089	03/27/24 11:54	03/27/24 12:48	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	220	umhos/cm@25°	10	1	AC45090	03/27/24 11:53	03/27/24 17:14	2303	SM2510B	
Total Alkalinity as CaCO3	110	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AC44465	03/18/24 14:30	03/19/24 09:00	1551	SM2540D	
Turbidity	2.7	NTU	1.0	1	AC44304	03/15/24 10:09	03/18/24 09:53	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	110	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Hardness, Total	105	mg/L	15	1	AC44274	03/15/24 07:12	03/18/24 07:51	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	3.7	mg/L	0.50	1	AC44161	03/14/24 10:40	03/14/24 18:46	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	260	MPN/100mL	1.0	1	AC44250	03/14/24 16:30	03/15/24 16:40	2303	SM9223B	
E. Coli	25	MPN/100mL	1.0	1	AC44250	03/14/24 16:30	03/15/24 16:40	2303	SM9223B	
SW-8 (24C2266-05)			Sample Type: Water			Sampled: 03/14/24 09:48				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AC44274	03/15/24 07:12	03/18/24 07:54	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AC44274	03/15/24 07:12	03/18/24 07:54	2303	EPA 200.7	
Calcium	6.9	mg/L	5.0	1	AC44274	03/15/24 07:12	03/18/24 07:54	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AC44274	03/15/24 07:12	03/18/24 07:54	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AC44274	03/15/24 07:12	03/18/24 07:54	2303	EPA 200.7	
Iron	0.10	mg/L	0.10	1	AC44274	03/15/24 07:12	03/18/24 07:54	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AC44274	03/15/24 07:12	03/18/24 07:54	2303	EPA 200.7	
Magnesium	8.9	mg/L	0.60	1	AC44274	03/15/24 07:12	03/18/24 07:54	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AC44274	03/15/24 07:12	03/18/24 07:54	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AC44700	03/21/24 05:52	03/21/24 13:49	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AC44274	03/15/24 07:12	03/18/24 07:54	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AC44274	03/15/24 07:12	03/18/24 07:54	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AC44274	03/15/24 07:12	03/18/24 07:54	2303	EPA 200.7	

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.



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power
4010 Stone Way North, Suite 400
Seattle, WA 98103

Project Manager: Richard
Project: Surface Water
Project Number: Bottle Rock Monitoring - SW

Reported:
03/28/24 10:16

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-8 (24C2266-05)			Sample Type: Water			Sampled: 03/14/24 09:48				
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	11	mg/L	0.10	1	AC44334	03/15/24 16:00	03/15/24 17:00	1551	SM4500-O G	T-14
pH	7.73	pH Units	1.68	1	AC45089	03/27/24 11:54	03/27/24 12:48	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	130	umhos/cm@25°	10	1	AC45090	03/27/24 11:53	03/27/24 17:14	2303	SM2510B	
Total Alkalinity as CaCO3	58	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Total Suspended Solids	1.6	mg/L	1.0	1	AC44465	03/18/24 14:30	03/19/24 09:00	1551	SM2540D	
Turbidity	3.0	NTU	1.0	1	AC44304	03/15/24 10:09	03/18/24 09:53	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	58	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	30	1	AC44755	03/21/24 13:56	03/22/24 16:53	2303	SM2320B	
Hardness, Total	54	mg/L	15	1	AC44274	03/15/24 07:12	03/18/24 07:54	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	2.9	mg/L	0.50	1	AC44161	03/14/24 10:30	03/14/24 18:59	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	390	MPN/100mL	1.0	1	AC44250	03/14/24 16:30	03/15/24 16:40	2303	SM9223B	
E. Coli	73	MPN/100mL	1.0	1	AC44250	03/14/24 16:30	03/15/24 16:40	2303	SM9223B	



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power
4010 Stone Way North, Suite 400
Seattle, WA 98103

Project Manager: Richard
Project: Surface Water
Project Number: Bottle Rock Monitoring - SW

Reported:
03/28/24 10:16

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AC44274 - NB EPA 200 series										
Blank (AC44274-BLK1)				Prepared: 03/15/24 Analyzed: 03/18/24						
Arsenic	ND	0.020	mg/L							
Boron	ND	0.10	mg/L							
Calcium	ND	5.0	mg/L							
Chromium	ND	0.010	mg/L							
Copper	ND	0.050	mg/L							
Iron	ND	0.10	mg/L							
Lead	ND	0.020	mg/L							
Magnesium	ND	0.60	mg/L							
Manganese	ND	0.020	mg/L							
Sodium	ND	6.0	mg/L							
Vanadium	ND	0.020	mg/L							
Zinc	ND	0.30	mg/L							
LCS (AC44274-BS1)				Prepared: 03/15/24 Analyzed: 03/18/24						
Arsenic	0.486	0.020	mg/L	0.500		97.3	85-115			
Boron	0.467	0.10	mg/L	0.500		93.4	85-115			
Calcium	22.5	5.0	mg/L	25.5		88.1	85-115			
Chromium	0.462	0.010	mg/L	0.500		92.4	85-115			
Copper	0.453	0.050	mg/L	0.500		90.6	85-115			
Iron	0.497	0.10	mg/L	0.500		99.3	85-115			
Lead	0.454	0.020	mg/L	0.500		90.9	85-115			
Magnesium	23.1	0.60	mg/L	25.5		90.6	85-115			
Manganese	0.464	0.020	mg/L	0.500		92.7	85-115			
Sodium	23.6	6.0	mg/L	25.5		92.4	85-115			
Vanadium	0.471	0.020	mg/L	0.500		94.2	85-115			
Zinc	0.484	0.30	mg/L	0.500		96.7	85-115			
LCS Dup (AC44274-BSD1)				Prepared: 03/15/24 Analyzed: 03/18/24						
Arsenic	0.509	0.020	mg/L	0.500		102	85-115	4.44	20	
Boron	0.484	0.10	mg/L	0.500		96.8	85-115	3.62	20	
Calcium	23.2	5.0	mg/L	25.5		91.0	85-115	3.24	20	
Chromium	0.482	0.010	mg/L	0.500		96.4	85-115	4.24	20	
Copper	0.471	0.050	mg/L	0.500		94.2	85-115	3.94	20	
Iron	0.520	0.10	mg/L	0.500		104	85-115	4.60	20	
Lead	0.475	0.020	mg/L	0.500		95.0	85-115	4.39	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.



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power
4010 Stone Way North, Suite 400
Seattle, WA 98103

Project Manager: Richard
Project: Surface Water
Project Number: Bottle Rock Monitoring - SW

Reported:
03/28/24 10:16

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AC44274 - NB EPA 200 series										
LCS Dup (AC44274-BSD1)		Prepared: 03/15/24 Analyzed: 03/18/24								
Magnesium	24.0	0.60	mg/L	25.5		94.3	85-115	3.97	20	
Manganese	0.484	0.020	mg/L	0.500		96.8	85-115	4.26	20	
Sodium	24.4	6.0	mg/L	25.5		95.6	85-115	3.40	20	
Vanadium	0.491	0.020	mg/L	0.500		98.2	85-115	4.20	20	
Zinc	0.488	0.30	mg/L	0.500		97.5	85-115	0.824	20	
Duplicate (AC44274-DUP1)		Source: 24C2266-01 Prepared: 03/15/24 Analyzed: 03/18/24								
Arsenic	ND	0.020	mg/L		ND				20	
Boron	ND	0.10	mg/L		ND			11.5	20	
Calcium	11.7	5.0	mg/L		11.7			0.223	20	
Chromium	ND	0.010	mg/L		ND				20	
Copper	ND	0.050	mg/L		ND				20	
Iron	ND	0.10	mg/L		ND				20	
Lead	ND	0.020	mg/L		ND				20	
Magnesium	10.5	0.60	mg/L		10.5			0.230	20	
Manganese	ND	0.020	mg/L		ND				20	
Sodium	6.22	6.0	mg/L		ND			41.2	20	
Vanadium	ND	0.020	mg/L		ND				20	
Zinc	ND	0.30	mg/L		ND				20	
MRL Check (AC44274-MRL1)		Prepared: 03/15/24 Analyzed: 03/18/24								
Arsenic	0.0201	0.020	mg/L	0.0200		100	0-200			
Boron	0.0929	0.10	mg/L	0.100		92.9	0-200			
Calcium	4.78	5.0	mg/L	5.00		95.6	0-200			
Chromium	0.00990	0.010	mg/L	0.0100		99.0	0-200			
Copper	0.0903	0.050	mg/L	0.100		90.3	0-200			
Iron	0.0998	0.10	mg/L	0.100		99.8	0-200			
Lead	0.0193	0.020	mg/L	0.0200		96.5	0-200			
Magnesium	0.490	0.60	mg/L	0.500		98.0	0-200			
Manganese	0.0195	0.020	mg/L	0.0200		97.5	0-200			
Sodium	4.82	6.0	mg/L	5.00		96.3	0-200			
Vanadium	0.0194	0.020	mg/L	0.0200		97.0	0-200			
Zinc	0.355	0.30	mg/L	0.350		101	0-200			

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.



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power
4010 Stone Way North, Suite 400
Seattle, WA 98103

Project Manager: Richard
Project: Surface Water
Project Number: Bottle Rock Monitoring - SW

Reported:
03/28/24 10:16

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AC44274 - NB EPA 200 series										
Matrix Spike (AC44274-MS1)		Source: 24C2266-02		Prepared: 03/15/24 Analyzed: 03/18/24						
Arsenic	0.496	0.020	mg/L	0.500	ND	99.1	70-130			
Boron	0.528	0.10	mg/L	0.500	ND	95.6	70-130			
Calcium	29.4	5.0	mg/L	25.5	6.68	89.0	70-130			
Chromium	0.470	0.010	mg/L	0.500	ND	94.0	70-130			
Copper	0.457	0.050	mg/L	0.500	ND	91.5	70-130			
Iron	0.569	0.10	mg/L	0.500	ND	99.9	70-130			
Lead	0.456	0.020	mg/L	0.500	ND	91.2	70-130			
Magnesium	27.2	0.60	mg/L	25.5	3.90	91.5	70-130			
Manganese	0.472	0.020	mg/L	0.500	ND	94.4	70-130			
Sodium	28.7	6.0	mg/L	25.5	ND	97.7	70-130			
Vanadium	0.475	0.020	mg/L	0.500	ND	95.0	70-130			
Zinc	0.475	0.30	mg/L	0.500	ND	95.0	70-130			

Batch AC44700 - Hg Digest

Blank (AC44700-BLK1)		Prepared & Analyzed: 03/21/24								
Mercury	ND	0.20	ug/L							
LCS (AC44700-BS1)		Prepared & Analyzed: 03/21/24								
Mercury	2.74	0.20	ug/L	2.50		110	85-115			
Duplicate (AC44700-DUP1)		Source: 24C2793-01		Prepared & Analyzed: 03/21/24						
Mercury	ND	0.20	ug/L		ND				20	
Matrix Spike (AC44700-MS1)		Source: 24C2793-01		Prepared & Analyzed: 03/21/24						
Mercury	2.70	0.20	ug/L	2.50	ND	108	70-130			



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power
4010 Stone Way North, Suite 400
Seattle, WA 98103

Project Manager: Richard
Project: Surface Water
Project Number: Bottle Rock Monitoring - SW

Reported:
03/28/24 10:16

Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AC44700 - Hg Digest										
Matrix Spike (AC44700-MS2)		Source: 24C2806-01		Prepared & Analyzed: 03/21/24						
Mercury	2.90	0.20	ug/L	2.50	ND	116	70-130			
Matrix Spike Dup (AC44700-MSD1)		Source: 24C2793-01		Prepared & Analyzed: 03/21/24						
Mercury	2.89	0.20	ug/L	2.50	ND	115	70-130	6.55	20	



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power
4010 Stone Way North, Suite 400
Seattle, WA 98103

Project Manager: Richard
Project: Surface Water
Project Number: Bottle Rock Monitoring - SW

Reported:
03/28/24 10:16

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AC44274 - NB EPA 200 series										
Blank (AC44274-BLK1)				Prepared: 03/15/24 Analyzed: 03/18/24						
Hardness, Total	ND	15	mg/L							
Duplicate (AC44274-DUP1)				Source: 24C2266-01 Prepared: 03/15/24 Analyzed: 03/18/24						
Hardness, Total	73	15	mg/L		73			0.0514	20	
Batch AC44304 - NB General Prep										
Blank (AC44304-BLK1)				Prepared: 03/15/24 Analyzed: 03/18/24						
Turbidity	ND	1.0	NTU							
Duplicate (AC44304-DUP1)				Source: 24C2266-01 Prepared: 03/15/24 Analyzed: 03/18/24						
Turbidity	1.13	1.0	NTU		1.23			8.47	20	
MRL Check (AC44304-MRL1)				Prepared: 03/15/24 Analyzed: 03/18/24						
Turbidity	1.23	1.0	NTU	1.00		123	0-200			
Batch AC44334 - General Preparation										
Duplicate (AC44334-DUP1)				Source: 24C2266-02 Prepared & Analyzed: 03/15/24						
Dissolved Oxygen	11.1	0.10	mg/L		11.2			0.0897	20	
Batch AC44465 - General Preparation										
Blank (AC44465-BLK1)				Prepared: 03/18/24 Analyzed: 03/19/24						
Total Suspended Solids	ND	1.0	mg/L							



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power
4010 Stone Way North, Suite 400
Seattle, WA 98103

Project Manager: Richard
Project: Surface Water
Project Number: Bottle Rock Monitoring - SW

Reported:
03/28/24 10:16

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AC44465 - General Preparation										
LCS (AC44465-BS1)				Prepared: 03/18/24 Analyzed: 03/19/24						
Total Suspended Solids	98.0	1.0	mg/L	100		98.0	90-110			
Duplicate (AC44465-DUP1)				Source: 24C2350-01		Prepared: 03/18/24 Analyzed: 03/19/24				
Total Suspended Solids	36.7	1.0	mg/L		35.3			3.72	30	
Batch AC44755 - NB General Prep										
LCS (AC44755-BS1)				Prepared: 03/21/24 Analyzed: 03/22/24						
Total Alkalinity as CaCO ₃	1020	30	mg/L	1000		102	80-120			
Duplicate (AC44755-DUP1)				Source: 24C2266-01		Prepared: 03/21/24 Analyzed: 03/22/24				
Total Alkalinity as CaCO ₃	70.6	30	mg/L		69.3			1.86	20	
Bicarbonate Alkalinity as CaCO ₃	70.6	30	mg/L		69.3			1.86	20	
Carbonate Alkalinity as CaCO ₃	ND	30	mg/L		ND				20	
Hydroxide Alkalinity as CaCO ₃	ND	30	mg/L		ND				20	
Batch AC45089 - NB General Prep										
Calibration Check (AC45089-CCV1)				Prepared & Analyzed: 03/27/24						
pH	7.49	1.68	pH Units				0-200			
Duplicate (AC45089-DUP1)				Source: 24C3088-01		Prepared & Analyzed: 03/27/24				
pH	7.29	1.68	pH Units		7.26			0.412	20	
Batch AC45090 - NB General Prep										
Duplicate (AC45090-DUP1)				Source: 24C3088-01		Prepared & Analyzed: 03/27/24				
Specific Conductance (EC)	842		10mhos/cm@25°C		849			0.828	5	

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.



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power
4010 Stone Way North, Suite 400
Seattle, WA 98103

Project Manager: Richard
Project: Surface Water
Project Number: Bottle Rock Monitoring - SW

Reported:
03/28/24 10:16

Anions by EPA Method 300.0 - Quality Control

Analyte(s)	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch AC44161 - NB General Prep										
Blank (AC44161-BLK1)				Prepared & Analyzed: 03/14/24						
Sulfate as SO ₄	ND	0.50	mg/L							
LCS (AC44161-BS1)				Prepared & Analyzed: 03/14/24						
Sulfate as SO ₄	8.24	0.50	mg/L	8.00		103	90-110			
Duplicate (AC44161-DUP1)				Source: 24C2096-02		Prepared & Analyzed: 03/14/24				
Sulfate as SO ₄	53.9	0.50	mg/L		ND				20	
MRL Check (AC44161-MRL1)				Prepared & Analyzed: 03/14/24						
Sulfate as SO ₄	1.68	0.50	mg/L	1.60		105	60-140			
Matrix Spike (AC44161-MS1)				Source: 24C2096-01		Prepared & Analyzed: 03/14/24				
Sulfate as SO ₄	57.2	0.50	mg/L	8.00	53.9	41.8	80-120			QM-02
Matrix Spike Dup (AC44161-MSD1)				Source: 24C2096-01		Prepared & Analyzed: 03/14/24				
Sulfate as SO ₄	56.9	0.50	mg/L	8.00	53.9	37.7	80-120	0.577	20	QM-02



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Bottle Rock Power
4010 Stone Way North, Suite 400
Seattle, WA 98103

Project Manager: Richard
Project: Surface Water
Project Number: Bottle Rock Monitoring - SW

Reported:
03/28/24 10:16

Notes and Definitions

QM-02 The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

T-14 Residual chlorine, dissolved oxygen, sulfite, and pH must be analyzed in the field to meet the EPA specified 15 minute hold time.

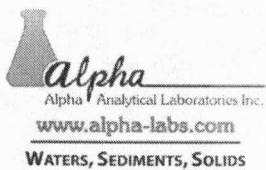
ND Analyte NOT DETECTED at or above the reporting limit

dry Sample results reported on a dry weight basis

REC Recovery

RPD Relative Percent Difference

* ELAP does not offer accreditation in this matrix for the requested analyte/method combination.



Alpha Analytical Laboratories Inc.
205 Mason Street, Ukiah CA 95482
707.468.0401 (phone)
707.468.5267 (fax)
clientservices@alpha-labs.com

North Bay Laboratory (2303)
737 Southpoint Blvd, Ste D, Petaluma 94954

Bay Area Laboratory (2728)
262 Rickenbacker Circle, Livermore CA 94551

Central Valley Laboratory (2922)
9090 Union Park Way #113, Elk Grove CA 95624

San Diego Service Center
2722 Loker Ave West, Ste A, Carlsbad CA 92010

Chain of Custody - Work Order

Reports and Invoices delivered by email in PDF format

Lab No 24C2268 Pg ____ of ____

Report to		Invoice to (if different)		Project Information		Signature below authorizes work under terms stated on reverse side.																									
Company:		Contact:		Project ID:		Analysis Request																									
Bottle Rock Power				Bottle Rock Monitoring-SW																											
Attn:		Email address:		Project No:																											
Address:		Address:		PO Number:																											
PO Box 326																															
Cobb, CA 95426																															
Phone/Fax:		Phone/Fax:																													
707-529-3799																															
Email Address:																															
Field Sampler - Printed Name & Signature:				Container		Preservative		Matrix		Total Number of Containers per Sample ID		ALK, Ph, ec Turbidity & TSS Hardness, SO4 B, Cu, Fe & Pb Mn, Na & Zn Diss. Oxygen Bac-T As, Cr, V, Hg																			
Richard Lacey																															
Sample Identification		Sampling		40ml VOA Vial		Plastic		Glass		Sleeve		Other		HCl		HNO3		H2SO4		Other		None		Drinking Water		Wastewater		Soil		Other	
Date		Time																													
SW-7		3/14/24 8:37		XX																											
SW-9		3/14/24 9:25		XX																											
SW-10		3/14/24 9:16		XX																											
SW-6		3/14/24 10:31		XX																											
SW-8		3/14/24 9:48		XX																											
Relinquished by				Received by				Date		Time		DDW Write On EDT Transmission? ☐ Yes ☐ No																			
Richard Lacey				[Signature]				3/14/24		1327		State System Number: _____																			
												If "Y" please enter the Source Number(s) in the column above																			
												CA Geotracker EDF Report? ☐ Yes ☐ No																			
												Global ID: _____ Sampling Company Log Code: _____																			
												EDF to (Email Address): _____																			
												Travel and Site Time: _____ Mileage: _____ Misc. Supplies: _____																			

Report to		Invoice to (if different)		Project Information		Signature below authorizes work under terms stated on reverse side.													
Company:		Contact:		Project ID:		Analysis Request TAT TEMP °C													
Bottle Rock Power				Bottle Rock Monitoring-SW															
Attn:		Email address:		Project No:															
Address:		Address:		PO Number:															
PO Box 326						Standard 10 days RUSH: 5 days 48 hours Other: days Preapproval required													
Cobb, CA 95426																			
Phone/Fax:		Phone/Fax:																	
707-529-3799																			
Email Address:						Notes / DDW Source Codes													
Field Sampler - Printed Name & Signature:						Total Number of Containers per Sample ID													
Richard Lacy																			
Sample Identification		Sampling				ALK, Ph, ec Turbidity & TSS Hardness, SO4 B, Cu, Fe & Pb Mn, Na & Zn Diss. Oxygen Bac-T As, Cr, V, Hg													
SW-7		3/14/24 8:37		XX		6 6 6 6 6													
SW-9		3/14/24 9:25		XX															
SW-10		3/14/24 9:16		XX															
SW-6		3/14/24 10:31		XX															
SW-8		3/14/24 9:48		XX		6 6 6 6 6													
Relinquished by		Received by		Date		Time		DDW Write On EDT Transmission? State System Number: If "Y" please enter the Source Number(s) in the column above CA Geotracker EDF Report? Global ID: EDF to (Email Address): Travel and Site Time: Mileage: Misc. Supplies:											
Richard Lacy		AS		3/14/24		1327													

WORK ORDER

Printed: 3/14/2024 3:11:00PM

24C2266

Alpha Analytical Laboratories North Bay to Ukiah Chain of Custody

Client: Bottle Rock Power

Client Code: NB_BOTTLEROCK

Bid: Master Bid

Project: Surface Water

Project Number: Bottle Rock Monitoring - SW PO #:

Date Due: 03/28/24 15:00 (10 day TAT)

Received By: Luke Andrew Smith

Date Received: 03/14/24 13:21

Logged In By: Luke Andrew Smith

Date Logged: 03/14/24 13:28

Samples Received at: _____ deg C

Analysis	Department	Expires	Comments
----------	------------	---------	----------

24C2266-01 SW-7 [Water] Sampled 03/14/24 08:37

Diss Oxygen SM4500	Wet Chem	03/14/24 08:51	
Hg CVAA Total 245.1	Metals	04/11/24 23:59	
Solids, TSS-SM2540D	Wet Chem	03/21/24 23:59	

24C2266-02 SW-9 [Water] Sampled 03/14/24 09:25

Diss Oxygen SM4500	Wet Chem	03/14/24 09:39	
Hg CVAA Total 245.1	Metals	04/11/24 23:59	
Solids, TSS-SM2540D	Wet Chem	03/21/24 23:59	

24C2266-03 SW-10 [Water] Sampled 03/14/24 09:11

Diss Oxygen SM4500	Wet Chem	03/14/24 09:25	
Hg CVAA Total 245.1	Metals	04/11/24 23:59	
Solids, TSS-SM2540D	Wet Chem	03/21/24 23:59	

24C2266-04 SW-6 [Water] Sampled 03/14/24 10:31

Diss Oxygen SM4500	Wet Chem	03/14/24 10:45	
Hg CVAA Total 245.1	Metals	04/11/24 23:59	
Solids, TSS-SM2540D	Wet Chem	03/21/24 23:59	

24C2266-05 SW-8 [Water] Sampled 03/14/24 09:48

Diss Oxygen SM4500	Wet Chem	03/14/24 10:02	
Hg CVAA Total 245.1	Metals	04/11/24 23:59	
Solids, TSS-SM2540D	Wet Chem	03/21/24 23:59	

Relinquished By

Date

Received By

Date

Time

Relinquished By

Date

Received By

Date

Time

24C2266

Alpha Analytical Laboratories North Bay to Ukiah Chain of Custody

Client: Bottle Rock Power
Project: Surface Water

Client Code: NB_BOTTLEROCK Bid: Master Bid
Project Number: Bottle Rock Monitoring - SW PO #:

Containers Supplied:

- 1L Poly - Unpres (F)
- 1L Poly - Unpres (F)
- 1L Poly - Unpres (F)
- 1L Poly - Unpres (F)
- 1L Poly - Unpres (F)
- 250mL Poly HNO3 (E)
- 250mL Poly HNO3 (E)
- 250mL Poly HNO3 (E)
- 250mL Poly HNO3 (E)
- 250mL Poly HNO3 (E)
- VOA Vial - Unpres (D)
- VOA Vial - Unpres (D)
- VOA Vial - Unpres (D)
- VOA Vial - Unpres (D)
- VOA Vial - Unpres (D)



alpha

Alpha Analytical Laboratories, Inc.

email: clientservices@alpha-labs.com

Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

18 June 2024

Mayacma Geothermal LLC

Attn: Mayacma Geothermal LLC

245 E Liberty St Suite 520

Reno, NV 89501

RE: Ground Water

Work Order: 24E4445

Enclosed are the results of analyses for samples received by the laboratory on 05/30/24 13:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Stephen F. McWeeney

Project Manager



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: Mayacma Geothermal LLC
Project: Ground Water
Project Number: [none]

Reported:
06/18/24 09:02

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | 925-828-6226 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | 916-686-5190 | ELAP# 2922
North Bay: 737 Southpoint Blvd Unit D | Petaluma, CA 94954 | 707-769-3128 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | 760-930-2555 | ELAP# 3055
Los Angeles: 1230 E. 223rd Street Suite 205 | Carson, CA 90745 | 424-267-5032 | ELAP# 3091

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GW-1	24E4445-01	Water	05/30/24 10:20	05/30/24 13:20
GW-3	24E4445-02	Water	05/30/24 10:45	05/30/24 13:20



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: Mayacma Geothermal LLC
Project: Ground Water
Project Number: [none]

Reported:
06/18/24 09:02

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
GW-1 (24E4445-01)										
	Sample Type: Water					Sampled: 05/30/24 10:20				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AE45025	05/31/24 07:06	05/31/24 11:54	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AE45025	05/31/24 07:06	05/31/24 11:54	2303	EPA 200.7	
Calcium	48	mg/L	5.0	1	AE45025	05/31/24 07:06	05/31/24 11:54	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AE45025	05/31/24 07:06	05/31/24 11:54	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AE45025	05/31/24 07:06	05/31/24 11:54	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AE45025	05/31/24 07:06	05/31/24 11:54	2303	EPA 200.7	
Magnesium	15	mg/L	0.60	1	AE45025	05/31/24 07:06	05/31/24 11:54	2303	EPA 200.7	
Manganese	0.11	mg/L	0.020	1	AE45025	05/31/24 07:06	05/31/24 11:54	2303	EPA 200.7	
Sodium	8.7	mg/L	6.0	1	AE45025	05/31/24 07:06	05/31/24 11:54	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AE45025	05/31/24 07:06	05/31/24 11:54	2303	EPA 200.7	
Conventional Chemistry Parameters by APHA/EPA Methods										
pH	7.56	pH Units	1.68	1	AE45060	05/31/24 13:44	05/31/24 14:07	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	400	umhos/cm@25°t	10	1	AE45060	05/31/24 13:44	05/31/24 14:07	2303	SM2510B	
Total Alkalinity as CaCO3	180	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AF43105	06/03/24 09:21	06/04/24 11:30	1551	SM2540D	
Turbidity	ND	NTU	1.0	1	AE45016	05/30/24 17:24	05/30/24 17:29	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	180	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Hardness, Total	182	mg/L	15	1	AE45025	05/31/24 07:06	05/31/24 11:54	2303	SM2340B	
Anions by EPA Method 300.0										
Nitrate as N	ND	mg/L	0.40	1	AE45000	05/30/24 14:51	05/30/24 17:09	2303	EPA 300.0	
Sulfate as SO4	21	mg/L	1.0	2	AE45000	05/30/24 14:51	05/31/24 19:25	2303	EPA 300.0	
GW-3 (24E4445-02)										
	Sample Type: Water					Sampled: 05/30/24 10:45				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AE45025	05/31/24 07:06	05/31/24 11:57	2303	EPA 200.7	
Boron	0.41	mg/L	0.10	1	AE45025	05/31/24 07:06	05/31/24 11:57	2303	EPA 200.7	
Calcium	34	mg/L	5.0	1	AE45025	05/31/24 07:06	05/31/24 11:57	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AE45025	05/31/24 07:06	05/31/24 11:57	2303	EPA 200.7	
Iron	0.20	mg/L	0.10	1	AE45025	05/31/24 07:06	05/31/24 11:57	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AE45025	05/31/24 07:06	05/31/24 11:57	2303	EPA 200.7	
Magnesium	10	mg/L	0.60	1	AE45025	05/31/24 07:06	05/31/24 11:57	2303	EPA 200.7	
Manganese	0.046	mg/L	0.020	1	AE45025	05/31/24 07:06	05/31/24 11:57	2303	EPA 200.7	
Sodium	26	mg/L	6.0	1	AE45025	05/31/24 07:06	05/31/24 11:57	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AE45025	05/31/24 07:06	05/31/24 11:57	2303	EPA 200.7	

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.



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: Mayacma Geothermal LLC
Project: Ground Water
Project Number: [none]

Reported:
06/18/24 09:02

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
GW-3 (24E4445-02)			Sample Type: Water			Sampled: 05/30/24 10:45				
Conventional Chemistry Parameters by APHA/EPA Methods										
pH	7.74	pH Units	1.68	1	AE45060	05/31/24 13:44	05/31/24 14:07	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	360	umhos/cm@25°C	10	1	AE45060	05/31/24 13:44	05/31/24 14:07	2303	SM2510B	
Total Alkalinity as CaCO3	170	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AF43105	06/03/24 09:21	06/04/24 11:30	1551	SM2540D	
Turbidity	ND	NTU	1.0	1	AE45016	05/30/24 17:24	05/30/24 17:29	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	170	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Hardness, Total	127	mg/L	15	1	AE45025	05/31/24 07:06	05/31/24 11:57	2303	SM2340B	
Anions by EPA Method 300.0										
Nitrate as N	ND	mg/L	0.40	1	AE45000	05/30/24 14:51	05/30/24 17:22	2303	EPA 300.0	
Sulfate as SO4	6.3	mg/L	0.50	1	AE45000	05/30/24 14:51	05/30/24 17:22	2303	EPA 300.0	



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: Mayacma Geothermal LLC
Project: Ground Water
Project Number: [none]

Reported:
06/18/24 09:02

Notes and Definitions

- QM-02 The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
- T-14 Residual chlorine, dissolved oxygen, sulfite, and pH must be analyzed in the field to meet the EPA specified 15 minute hold time.
- ND Analyte NOT DETECTED at or above the reporting limit
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

* ELAP does not offer accreditation in this matrix for the requested analyte/method combination.

WORK ORDER

Printed: 5/30/2024 2:05:59PM

24E4445

Alpha Analytical Laboratories North Bay to Ukiah Chain of Custody

Client: Mayacma Geothermal LLC

Client Code: NBSM_MGLLC

Bid:

Project: Ground Water

Project Number: [none]

PO #:

Date Due: 06/13/24 15:00 (10 day TAT)

Received By: Stephen F. McWeeney

Date Received: 05/30/24 13:20

Logged In By: Cade J Burkhammer

Date Logged: 05/30/24 13:26

Samples Received at: _____ deg C

Analysis	Department	Expires	Comments
----------	------------	---------	----------

24E4445-01 GW-3 [Water] Sampled 05/30/24 10:20

Solids, TSS-SM2540D

Wet Chem

06/06/24 23:59

24E4445-02 GW-1 [Water] Sampled 05/30/24 10:45

Solids, TSS-SM2540D

Wet Chem

06/06/24 23:59

Containers Supplied:

1L Poly - Unpres (C)

1L Poly - Unpres (C)

Relinquished By

Date

Received By

Date

Time

Relinquished By

Date

Received By

Date

Time



alpha

Alpha Analytical Laboratories, Inc.

email: clientservices@alpha-labs.com

Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

14 June 2024

Mayacma Geothermal LLC

Attn: Mayacma Geothermal LLC

245 E Liberty St Suite 520

Reno, NV 89501

RE: Surface Water

Work Order: 24E4450

Enclosed are the results of analyses for samples received by the laboratory on 05/30/24 13:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Stephen F. McWeeney

Project Manager



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: Mayacma Geothermal LLC
Project: Surface Water
Project Number: [none]

Reported:
06/14/24 16:18

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | 925-828-6226 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | 916-686-5190 | ELAP# 2922
North Bay: 737 Southpoint Blvd Unit D | Petaluma, CA 94954 | 707-769-3128 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | 760-930-2555 | ELAP# 3055
Los Angeles: 1230 E. 223rd Street Suite 205 | Carson, CA 90745 | 424-267-5032 | ELAP# 3091

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SW-6	24E4450-01	Water	05/30/24 08:50	05/30/24 13:20
SW-7	24E4450-02	Water	05/30/24 10:30	05/30/24 13:20
SW-8	24E4450-03	Water	05/30/24 09:30	05/30/24 13:20
SW-9	24E4450-04	Water	05/30/24 10:10	05/30/24 13:20
SW-10	24E4450-05	Water	05/30/24 09:50	05/30/24 13:20



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: Mayacma Geothermal LLC
Project: Surface Water
Project Number: [none]

Reported:
06/14/24 16:18

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-6 (24E4450-01)			Sample Type: Water			Sampled: 05/30/24 08:50				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AE45023	05/31/24 06:22	05/31/24 12:34	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AE45023	05/31/24 06:22	05/31/24 12:34	2303	EPA 200.7	
Calcium	14	mg/L	5.0	1	AE45023	05/31/24 06:22	05/31/24 12:34	2303	EPA 200.7	
Chromium	0.011	mg/L	0.010	1	AE45023	05/31/24 06:22	05/31/24 12:34	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AE45023	05/31/24 06:22	05/31/24 12:34	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AE45023	05/31/24 06:22	05/31/24 12:34	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AE45023	05/31/24 06:22	05/31/24 12:34	2303	EPA 200.7	
Magnesium	24	mg/L	0.60	1	AE45023	05/31/24 06:22	05/31/24 12:34	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AE45023	05/31/24 06:22	05/31/24 12:34	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AF43269	06/05/24 06:05	06/05/24 13:02	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AE45023	05/31/24 06:22	05/31/24 12:34	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AE45023	05/31/24 06:22	05/31/24 12:34	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AE45023	05/31/24 06:22	05/31/24 12:34	2303	EPA 200.7	
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	11	mg/L	0.10	1	AE45076	05/31/24 16:00	05/31/24 17:00	1551	SM4500-O G	T-14
pH	8.10	pH Units	1.68	1	AE45060	05/31/24 13:44	05/31/24 14:07	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	290	umhos/cm@25°c	10	1	AE45060	05/31/24 13:44	05/31/24 14:07	2303	SM2510B	
Total Alkalinity as CaCO3	130	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Total Suspended Solids	5.9	mg/L	1.0	1	AF43105	06/03/24 09:21	06/04/24 11:30	1551	SM2540D	
Turbidity	ND	NTU	1.0	1	AE45016	05/30/24 17:24	05/30/24 17:29	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	130	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Hardness, Total	134	mg/L	15	1	AE45023	05/31/24 06:22	05/31/24 12:34	2303	SM2340B	

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.



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: Mayacma Geothermal LLC
Project: Surface Water
Project Number: [none]

Reported:
06/14/24 16:18

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-6 (24E4450-01)										
			Sample Type: Water			Sampled: 05/30/24 08:50				
Anions by EPA Method 300.0										
Sulfate as SO4	3.5	mg/L	0.50	1	AE45000	05/30/24 14:51	05/30/24 18:01	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	>2419.6	MPN/100mL	1.0	1	AE45010	05/30/24 15:58	05/31/24 16:34	2303	SM9223B	
E. Coli	93	MPN/100mL	1.0	1	AE45010	05/30/24 15:58	05/31/24 16:34	2303	SM9223B	
SW-7 (24E4450-02)										
			Sample Type: Water			Sampled: 05/30/24 10:30				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AE45025	05/31/24 07:06	05/31/24 12:00	2303	EPA 200.7	
Boron	0.13	mg/L	0.10	1	AE45025	05/31/24 07:06	05/31/24 12:00	2303	EPA 200.7	
Calcium	17	mg/L	5.0	1	AE45025	05/31/24 07:06	05/31/24 12:00	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AE45025	05/31/24 07:06	05/31/24 12:00	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AE45025	05/31/24 07:06	05/31/24 12:00	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AE45025	05/31/24 07:06	05/31/24 12:00	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AE45025	05/31/24 07:06	05/31/24 12:00	2303	EPA 200.7	
Magnesium	16	mg/L	0.60	1	AE45025	05/31/24 07:06	05/31/24 12:00	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AE45025	05/31/24 07:06	05/31/24 12:00	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AF43269	06/05/24 06:05	06/05/24 13:13	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AE45025	05/31/24 07:06	05/31/24 12:00	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AE45025	05/31/24 07:06	05/31/24 12:00	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AE45025	05/31/24 07:06	05/31/24 12:00	2303	EPA 200.7	



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: Mayacma Geothermal LLC
Project: Surface Water
Project Number: [none]

Reported:
06/14/24 16:18

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-7 (24E4450-02)										
Sample Type: Water					Sampled: 05/30/24 10:30					
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	9.3	mg/L	0.10	1	AE45076	05/31/24 16:00	05/31/24 17:00	1551	SM4500-O G	T-14
pH	7.60	pH Units	1.68	1	AE45060	05/31/24 13:44	05/31/24 14:07	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	290	umhos/cm@25°C	10	1	AE45060	05/31/24 13:44	05/31/24 14:07	2303	SM2510B	
Total Alkalinity as CaCO3	110	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Total Suspended Solids	2.3	mg/L	1.0	1	AF43105	06/03/24 09:21	06/04/24 11:30	1551	SM2540D	
Turbidity	ND	NTU	1.0	1	AE45016	05/30/24 17:24	05/30/24 17:29	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	110	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Hardness, Total	107	mg/L	15	1	AE45025	05/31/24 07:06	05/31/24 12:00	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	9.1	mg/L	0.50	1	AE45000	05/30/24 14:51	05/30/24 18:14	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	1700	MPN/100mL	1.0	1	AE45010	05/30/24 15:58	05/31/24 16:34	2303	SM9223B	
E. Coli	9.7	MPN/100mL	1.0	1	AE45010	05/30/24 15:58	05/31/24 16:34	2303	SM9223B	
SW-8 (24E4450-03)										
Sample Type: Water					Sampled: 05/30/24 09:30					
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AE45023	05/31/24 06:22	05/31/24 12:37	2303	EPA 200.7	
Boron	0.10	mg/L	0.10	1	AE45023	05/31/24 06:22	05/31/24 12:37	2303	EPA 200.7	
Calcium	30	mg/L	5.0	1	AE45023	05/31/24 06:22	05/31/24 12:37	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AE45023	05/31/24 06:22	05/31/24 12:37	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AE45023	05/31/24 06:22	05/31/24 12:37	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AE45023	05/31/24 06:22	05/31/24 12:37	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AE45023	05/31/24 06:22	05/31/24 12:37	2303	EPA 200.7	
Magnesium	47	mg/L	0.60	1	AE45023	05/31/24 06:22	05/31/24 12:37	2303	EPA 200.7	
Manganese	0.021	mg/L	0.020	1	AE45023	05/31/24 06:22	05/31/24 12:37	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AF43269	06/05/24 06:05	06/05/24 13:34	1551	EPA 245.1	
Sodium	6.7	mg/L	6.0	1	AE45023	05/31/24 06:22	05/31/24 12:37	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AE45023	05/31/24 06:22	05/31/24 12:37	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AE45023	05/31/24 06:22	05/31/24 12:37	2303	EPA 200.7	

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.



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: Mayacma Geothermal LLC
Project: Surface Water
Project Number: [none]

Reported:
06/14/24 16:18

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-8 (24E4450-03)										
Sample Type: Water					Sampled: 05/30/24 09:30					
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	9.8	mg/L	0.10	1	AE45076	05/31/24 16:00	05/31/24 17:00	1551	SM4500-O G	T-14
pH	7.90	pH Units	1.68	1	AE45060	05/31/24 13:44	05/31/24 14:07	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	540	umhos/cm@25°	10	1	AE45060	05/31/24 13:44	05/31/24 14:07	2303	SM2510B	
Total Alkalinity as CaCO3	260	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Total Suspended Solids	3.2	mg/L	1.0	1	AF43105	06/03/24 09:21	06/04/24 11:30	1551	SM2540D	
Turbidity	1.2	NTU	1.0	1	AE45016	05/30/24 17:24	05/30/24 17:29	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	260	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Hardness, Total	269	mg/L	15	1	AE45023	05/31/24 06:22	05/31/24 12:37	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	14	mg/L	0.50	1	AE45000	05/30/24 14:51	05/30/24 18:27	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	>2419.6	MPN/100mL	1.0	1	AE45010	05/30/24 15:58	05/31/24 16:34	2303	SM9223B	
E. Coli	46	MPN/100mL	1.0	1	AE45010	05/30/24 15:58	05/31/24 16:34	2303	SM9223B	
SW-9 (24E4450-04)										
Sample Type: Water					Sampled: 05/30/24 10:10					
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AE45025	05/31/24 07:06	05/31/24 12:03	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AE45025	05/31/24 07:06	05/31/24 12:03	2303	EPA 200.7	
Calcium	7.6	mg/L	5.0	1	AE45025	05/31/24 07:06	05/31/24 12:03	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AE45025	05/31/24 07:06	05/31/24 12:03	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AE45025	05/31/24 07:06	05/31/24 12:03	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AE45025	05/31/24 07:06	05/31/24 12:03	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AE45025	05/31/24 07:06	05/31/24 12:03	2303	EPA 200.7	
Magnesium	3.9	mg/L	0.60	1	AE45025	05/31/24 07:06	05/31/24 12:03	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AE45025	05/31/24 07:06	05/31/24 12:03	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AF43269	06/05/24 06:05	06/05/24 13:36	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AE45025	05/31/24 07:06	05/31/24 12:03	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AE45025	05/31/24 07:06	05/31/24 12:03	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AE45025	05/31/24 07:06	05/31/24 12:03	2303	EPA 200.7	

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.



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: Mayacma Geothermal LLC
Project: Surface Water
Project Number: [none]

Reported:
06/14/24 16:18

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-9 (24E4450-04)										
Sample Type: Water					Sampled: 05/30/24 10:10					
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	10	mg/L	0.10	1	AE45076	05/31/24 16:00	05/31/24 17:00	1551	SM4500-O G	T-14
pH	7.53	pH Units	1.68	1	AE45060	05/31/24 13:44	05/31/24 14:07	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	95	umhos/cm@25°	10	1	AE45060	05/31/24 13:44	05/31/24 14:07	2303	SM2510B	
Total Alkalinity as CaCO3	42	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Total Suspended Solids	1.2	mg/L	1.0	1	AF43105	06/03/24 09:21	06/04/24 11:30	1551	SM2540D	
Turbidity	ND	NTU	1.0	1	AE45016	05/30/24 17:24	05/30/24 17:29	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	42	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Hardness, Total	35	mg/L	15	1	AE45025	05/31/24 07:06	05/31/24 12:03	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	2.2	mg/L	0.50	1	AE45000	05/30/24 14:51	05/30/24 18:40	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	>2419.6	MPN/100mL	1.0	1	AE45010	05/30/24 15:58	05/31/24 16:34	2303	SM9223B	
E. Coli	63	MPN/100mL	1.0	1	AE45010	05/30/24 15:58	05/31/24 16:34	2303	SM9223B	
SW-10 (24E4450-05)										
Sample Type: Water					Sampled: 05/30/24 09:50					
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AE45023	05/31/24 06:22	05/31/24 12:40	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AE45023	05/31/24 06:22	05/31/24 12:40	2303	EPA 200.7	
Calcium	7.4	mg/L	5.0	1	AE45023	05/31/24 06:22	05/31/24 12:40	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AE45023	05/31/24 06:22	05/31/24 12:40	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AE45023	05/31/24 06:22	05/31/24 12:40	2303	EPA 200.7	
Iron	0.13	mg/L	0.10	1	AE45023	05/31/24 06:22	05/31/24 12:40	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AE45023	05/31/24 06:22	05/31/24 12:40	2303	EPA 200.7	
Magnesium	5.7	mg/L	0.60	1	AE45023	05/31/24 06:22	05/31/24 12:40	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AE45023	05/31/24 06:22	05/31/24 12:40	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AF43269	06/05/24 06:05	06/05/24 13:39	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AE45023	05/31/24 06:22	05/31/24 12:40	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AE45023	05/31/24 06:22	05/31/24 12:40	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AE45023	05/31/24 06:22	05/31/24 12:40	2303	EPA 200.7	

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.



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: Mayacma Geothermal LLC
Project: Surface Water
Project Number: [none]

Reported:
06/14/24 16:18

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-10 (24E4450-05)			Sample Type: Water			Sampled: 05/30/24 09:50				
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	10	mg/L	0.10	1	AE45076	05/31/24 16:00	05/31/24 17:00	1551	SM4500-O G	T-14
pH	7.54	pH Units	1.68	1	AE45060	05/31/24 13:44	05/31/24 14:07	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	ND	umhos/cm@25°C	10	1	AE45060	05/31/24 13:44	05/31/24 14:07	2303	SM2510B	
Total Alkalinity as CaCO3	52	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Total Suspended Solids	3.3	mg/L	1.0	1	AF43105	06/03/24 09:21	06/04/24 11:30	1551	SM2540D	
Turbidity	2.2	NTU	1.0	1	AE45016	05/30/24 17:24	05/30/24 17:29	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	52	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	30	1	AE45070	05/31/24 14:55	05/31/24 16:00	2303	SM2320B	
Hardness, Total	42	mg/L	15	1	AE45023	05/31/24 06:22	05/31/24 12:40	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	2.0	mg/L	0.50	1	AE45000	05/30/24 14:51	05/30/24 18:53	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	>2419.6	MPN/100mL	1.0	1	AE45010	05/30/24 15:58	05/31/24 16:34	2303	SM9223B	
E. Coli	53	MPN/100mL	1.0	1	AE45010	05/30/24 15:58	05/31/24 16:34	2303	SM9223B	



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: Mayacma Geothermal LLC
Project: Surface Water
Project Number: [none]

Reported:
06/14/24 16:18

Notes and Definitions

>2419.6 >2419.6

QM-02 The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

T-14 Residual chlorine, dissolved oxygen, sulfite, and pH must be analyzed in the field to meet the EPA specified 15 minute hold time.

ND Analyte NOT DETECTED at or above the reporting limit

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

* ELAP does not offer accreditation in this matrix for the requested analyte/method combination.

Work Order

Chain of Custody Record

Lab No. 21E1900

Page _____ of _____

Company Name: Mayacma Geothermal LLC		Project Name: Surface Water		Project Number:		Signature below authorizes work under terms stated on reverse side.																																							
Mailing Address: 245 E Liberty St Suite 520 Reno, NV 89501		Project Address:				Analysis Request												TAT																											
Project Contact (Hardcopy or PDF to): John Casteel John@openmountainenergy.com		P.O. #		Quote #		All Samples: Metals by EPA 200 Series Methods As, B, Ca, Cr, Cu, Fe, Pb, Mg, Mn, Hg, Na, V, Zn Conventional Chemistry Parameters by APHA/EPA Methods Dissolved Oxygen, pH, Specific Conductance (EC), Total Alkalinity as CaCO3, Total Suspended Solids, Turbidity, Bicarbonate Alkalinity as CaCO3, Carbonate Alkalinity as CaCO3, Hydroxide Alkalinity as CaCO3, Hardness Anions by EPA Method 300.0 Sulfate as SO4 Microbiological Parameters by APHA Standard Methods Total Coliforms, E. Coli Reference Work Order: 24C2266 for list												24 hr ☐ 48 hr ☐ Lab Approval Required 1 wk ☐ 2 wk (standard) ☐																											
Samplers Signature:		Sampling		Container			Preservative			Matrix			For Lab Use Only																																
Sample Designation		Date Time		40ml VOA			Poly			Amber															Sleeve			HCL			HNO3			H2SO4			None			Water			Soil		
SW-6		5/30/24 09:50																																											
SW-7		10:30																																											
SW-8		09:30																																											
SW-9		10:10																																											
SW-10		09:50																																											
Relinquished by: Lucas Peters <i>Lucas Peters</i>		Received by: <i>[Signature]</i>				Date 5/30/24		Time 1:20 pm		California EDF Report? ☐ Yes ☐ No Sampling Company Log Code: Global ID: EDF to (Email Address): Drinking Water State System/Source Number:																																			
Relinquished by:		Received by:				Date		Time																																					
Relinquished by:		Received for Laboratory by:				Date		Time																																					
Sample Condition on Receipt:		Travel and Site Time:		Mileage:		Misc. Supplies:																																							

WORK ORDER

Printed: 5/30/2024 2:05:00PM

24E4450

Alpha Analytical Laboratories North Bay to Ukiah Chain of Custody

Client: Mayacma Geothermal LLC
Project: Surface Water

Client Code: NBSM_MGLLC
Project Number: [none]

Bid:
PO #:

Date Due: 06/13/24 15:00 (10 day TAT)

Received By: Stephen F. McWeeney

Date Received: 05/30/24 13:20

Logged In By: Cade J Burkhammer

Date Logged: 05/30/24 13:53

Samples Received at: _____ deg C

Analysis	Department	Expires	Comments
24E4450-01 SW-6 [Water] Sampled 05/30/24 08:50			
Diss Oxygen SM4500	Wet Chem	05/30/24 09:04	
Hg CVAA Total 245.1	Metals	06/27/24 23:59	
Solids, TSS-SM2540D	Wet Chem	06/06/24 23:59	
24E4450-02 SW-7 [Water] Sampled 05/30/24 10:30			
Diss Oxygen SM4500	Wet Chem	05/30/24 10:44	
Hg CVAA Total 245.1	Metals	06/27/24 23:59	
Solids, TSS-SM2540D	Wet Chem	06/06/24 23:59	
24E4450-03 SW-8 [Water] Sampled 05/30/24 09:30			
Diss Oxygen SM4500	Wet Chem	05/30/24 09:44	
Hg CVAA Total 245.1	Metals	06/27/24 23:59	
Solids, TSS-SM2540D	Wet Chem	06/06/24 23:59	
24E4450-04 SW-9 [Water] Sampled 05/30/24 10:10			
Diss Oxygen SM4500	Wet Chem	05/30/24 10:24	
Hg CVAA Total 245.1	Metals	06/27/24 23:59	
Solids, TSS-SM2540D	Wet Chem	06/06/24 23:59	
24E4450-05 SW-10 [Water] Sampled 05/30/24 09:50			
Diss Oxygen SM4500	Wet Chem	05/30/24 10:04	
Hg CVAA Total 245.1	Metals	06/27/24 23:59	
Solids, TSS-SM2540D	Wet Chem	06/06/24 23:59	

 
Relinquished By _____ Date 5-30-24

 5-30-24 1515
Received By _____ Date _____ Time

 5-30-24
Relinquished By _____ Date

 5-30-24
Received By _____ Date _____ Time

WORK ORDER

Printed: 5/30/2024 2:05:00PM

24E4450

Alpha Analytical Laboratories North Bay to Ukiah Chain of Custody

Client: Mayacma Geothermal LLC

Project: Surface Water

Client Code: NBSM_MGLLC

Project Number: [none]

Bid:

PO #:

Containers Supplied:

1L Poly - Unpres (F)
1L Poly - Unpres (F)
1L Poly - Unpres (F)
1L Poly - Unpres (F)
1L Poly - Unpres (F)
250mL Poly HNO3 (E)
250mL Poly HNO3 (E)
250mL Poly HNO3 (E)
250mL Poly HNO3 (E)
250mL Poly HNO3 (E)
VOA Vial - Unpres (D)
VOA Vial - Unpres (D)
VOA Vial - Unpres (D)
VOA Vial - Unpres (D)
VOA Vial - Unpres (D)



alpha

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

21 October 2024

Mayacma Geothermal LLC

Attn: John

245 E Liberty St Suite 520

Reno, NV 89501

RE: Ground Water

Work Order: 24J1843

Enclosed are the results of analyses for samples received by the laboratory on 10/09/24 13:35. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Stephen F. McWeeney

Project Manager



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John
Project: Ground Water
Project Number: [none]

Reported:
10/21/24 12:14

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | 925-828-6226 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | 916-686-5190 | ELAP# 2922
North Bay: 737 Southpoint Blvd Unit D | Petaluma, CA 94954 | 707-769-3128 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | 760-930-2555 | ELAP# 3055
Los Angeles: 1230 E. 223rd Street Suite 205 | Carson, CA 90745 | 424-267-5032 | ELAP# 3091

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GW-1	24J1843-01	Water	10/09/24 10:18	10/09/24 13:35
GW-3	24J1843-02	Water	10/09/24 10:40	10/09/24 13:35



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John
Project: Ground Water
Project Number: [none]

Reported:
10/21/24 12:14

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
GW-1 (24J1843-01)			Sample Type: Water			Sampled: 10/09/24 10:18				
Metals by EPA 200 Series Methods										
Boron	ND	mg/L	0.10	1	AJ43839	10/10/24 07:52	10/10/24 11:08	2303	EPA 200.7	
Calcium	42	mg/L	5.0	1	AJ43839	10/10/24 07:52	10/10/24 11:08	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AJ43839	10/10/24 07:52	10/10/24 11:08	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AJ43839	10/10/24 07:52	10/10/24 11:08	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AJ43839	10/10/24 07:52	10/10/24 11:08	2303	EPA 200.7	
Magnesium	14	mg/L	0.60	1	AJ43839	10/10/24 07:52	10/10/24 11:08	2303	EPA 200.7	
Manganese	0.10	mg/L	0.020	1	AJ43839	10/10/24 07:52	10/10/24 11:08	2303	EPA 200.7	
Sodium	8.1	mg/L	6.0	1	AJ43839	10/10/24 07:52	10/10/24 11:08	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AJ43839	10/10/24 07:52	10/10/24 11:08	2303	EPA 200.7	
Metals by EPA Method 200.8 ICP/MS										
Arsenic	ND	ug/L	2.0	1	AJ44385	10/17/24 08:54	10/17/24 15:21	2303	EPA 200.8	
Conventional Chemistry Parameters by APHA/EPA Methods										
pH	7.83	pH Units	1.68	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	380	umhos/cm@25°i	10	1	AJ43953	10/11/24 10:48	10/11/24 17:29	2303	SM2510B	
Total Alkalinity as CaCO3	180	mg/L	30	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AJ44068	10/14/24 10:00	10/14/24 14:45	1551	SM2540D	
Turbidity	ND	NTU	1.0	1	AJ43951	10/11/24 10:33	10/11/24 10:38	2303	SM2130B	T-06
Bicarbonate Alkalinity as CaCO3	180	mg/L	30	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM2320B	
Hardness, Total	164	mg/L	15	1	AJ43839	10/10/24 07:52	10/10/24 11:08	2303	SM2340B	

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.



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John
Project: Ground Water
Project Number: [none]

Reported:
10/21/24 12:14

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
GW-1 (24J1843-01)			Sample Type: Water			Sampled: 10/09/24 10:18				
Anions by EPA Method 300.0										
Nitrate as N	ND	mg/L	0.40	1	AJ43771	10/09/24 16:36	10/09/24 19:25	2303	EPA 300.0	
Sulfate as SO ₄	20	mg/L	0.50	1	AJ43771	10/09/24 16:36	10/09/24 19:25	2303	EPA 300.0	
GW-3 (24J1843-02)			Sample Type: Water			Sampled: 10/09/24 10:40				
Metals by EPA 200 Series Methods										
Boron	0.43	mg/L	0.10	1	AJ43839	10/10/24 07:52	10/10/24 11:11	2303	EPA 200.7	
Calcium	31	mg/L	5.0	1	AJ43839	10/10/24 07:52	10/10/24 11:11	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AJ43839	10/10/24 07:52	10/10/24 11:11	2303	EPA 200.7	
Iron	0.54	mg/L	0.10	1	AJ43839	10/10/24 07:52	10/10/24 11:11	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AJ43839	10/10/24 07:52	10/10/24 11:11	2303	EPA 200.7	
Magnesium	9.7	mg/L	0.60	1	AJ43839	10/10/24 07:52	10/10/24 11:11	2303	EPA 200.7	
Manganese	0.050	mg/L	0.020	1	AJ43839	10/10/24 07:52	10/10/24 11:11	2303	EPA 200.7	
Sodium	24	mg/L	6.0	1	AJ43839	10/10/24 07:52	10/10/24 11:11	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AJ43839	10/10/24 07:52	10/10/24 11:11	2303	EPA 200.7	
Metals by EPA Method 200.8 ICP/MS										
Arsenic	ND	ug/L	2.0	1	AJ44493	10/18/24 10:44	10/18/24 12:55	2303	EPA 200.8	
Conventional Chemistry Parameters by APHA/EPA Methods										
pH	7.96	pH Units	1.68	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	350	umhos/cm@25°	10	1	AJ43953	10/11/24 10:48	10/11/24 17:29	2303	SM2510B	
Total Alkalinity as CaCO ₃	180	mg/L	30	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM2320B	
Total Suspended Solids	4.9	mg/L	1.0	1	AJ44068	10/14/24 10:00	10/14/24 14:45	1551	SM2540D	
Turbidity	2.1	NTU	1.0	1	AJ43951	10/11/24 10:33	10/11/24 10:38	2303	SM2130B	
Bicarbonate Alkalinity as CaCO ₃	180	mg/L	30	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM2320B	
Carbonate Alkalinity as CaCO ₃	ND	mg/L	5.0	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM2320B	
Hydroxide Alkalinity as CaCO ₃	ND	mg/L	5.0	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM2320B	
Hardness, Total	118	mg/L	15	1	AJ43839	10/10/24 07:52	10/10/24 11:11	2303	SM2340B	

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.



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John
Project: Ground Water
Project Number: [none]

Reported:
10/21/24 12:14

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
GW-3 (24J1843-02)			Sample Type: Water			Sampled: 10/09/24 10:40				
Anions by EPA Method 300.0										
Nitrate as N	ND	mg/L	0.40	1	AJ43771	10/09/24 16:36	10/09/24 19:38	2303	EPA 300.0	
Sulfate as SO4	5.5	mg/L	0.50	1	AJ43771	10/09/24 16:36	10/09/24 19:38	2303	EPA 300.0	



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John
Project: Ground Water
Project Number: [none]

Reported:
10/21/24 12:14

Notes and Definitions

- T-06 Sample analyzed outside of recommended holding time.
- T-14 Residual chlorine, dissolved oxygen, sulfite, and pH must be analyzed in the field to meet the EPA specified 15 minute hold time.
- ND Analyte NOT DETECTED at or above the reporting limit
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

* ELAP does not offer accreditation in this matrix for the requested analyte/method combination.



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

Work Order

Chain of Custody Record

Lab No.

2451843

Page

1 of 1

Company Name: Mayacma Geothermal LLC		Project Name: Ground Water		Project Number:		Signature below authorizes work under terms stated on reverse side.																		
Mailing Address: 245 E Liberty St Suite 520 Reno, NV 89501		Project Address:				Analysis Request												TAT						
Project Contact (Hardcopy or PDF to): John Casteel John@openmountainenergy.com		P.O. #		Quote #		All samples: Metals by EPA 200 As, B, Ca, Cu, Fe, Pb, Mg, Mn, Na, Zn												24 hr ☐	1.3 For Lab Use Only					
Phone/Fax: 775-260-8351		Bill to: Mayacma Geothermal LLC 245 E Liberty St Suite 520 Reno, NV 89501 accounting@openmountainenergy.com				Conventional Chemistry Parameters by APHA/EPA Methods: pH, Specific conductance (EC), Total Alk as CaCO ₃ , TSS, Turbidity, Bicarbonate Alkalinity as CaCO ₃ , Carbonate Alkalinity as CaCO ₃ , Hydroxide Alkalinity as CaCO ₃ , Hardness												48 hr ☐						
Samplers Signature: <i>LUCAS PETER</i>		Sampling		Container		Preservative		Matrix		Anions by EPA Method 300.0 Nitrate as N, Sulfate as SO ₄												Lab Approval Required 1 wk ☐		
Sample Designation		Date Time		40ml VOA		Poly		Amber		Sleeve		HCL		HNO ₃		H ₂ SO ₄		None		Water		Soil		2 wk (standard) ☐
GW-1		10/9/24 10:19																						
GW-3		10/9/24 10:40																						
Relinquished by: <i>LUCAS PETER</i>		Received by: <i>SK</i>				Date 10-9-24		Time 13:35		California EDF Report? ☐ Yes ☐ No														
Relinquished by:		Received by:				Date		Time		Sampling Company Log Code:														
Relinquished by:		Received for Laboratory by:				Date		Time		Global ID:														
										EDF to (Email Address):														
										Drinking Water State System/Source Number:														
Sample Condition on Receipt:		Travel and Site Time:		Mileage:		Misc. Supplies:																		



alpha

Alpha Analytical Laboratories, Inc.

email: clientservices@alpha-labs.com

Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

25 October 2024

Mayacma Geothermal LLC

Attn: John

245 E Liberty St Suite 520

Reno, NV 89501

RE: Surface Water

Work Order: 24J1848

Enclosed are the results of analyses for samples received by the laboratory on 10/09/24 13:35. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Stephen F. McWeeney

Project Manager



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John
Project: Surface Water
Project Number: [none]

Reported:
10/25/24 11:11

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | 925-828-6226 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | 916-686-5190 | ELAP# 2922
North Bay: 737 Southpoint Blvd Unit D | Petaluma, CA 94954 | 707-769-3128 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | 760-930-2555 | ELAP# 3055
Los Angeles: 1230 E. 223rd Street Suite 205 | Carson, CA 90745 | 424-267-5032 | ELAP# 3091

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SW-6	24J1848-01	Water	10/09/24 08:50	10/09/24 13:35
SW-8	24J1848-02	Water	10/09/24 09:50	10/09/24 13:35
SW-9	24J1848-03	Water	10/09/24 10:05	10/09/24 13:35
SW-10	24J1848-04	Water	10/09/24 09:26	10/09/24 13:35



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John
Project: Surface Water
Project Number: [none]

Reported:
10/25/24 11:11

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-6 (24J1848-01)			Sample Type: Water			Sampled: 10/09/24 08:50				
Metals by EPA 200 Series Methods										
Boron	ND	mg/L	0.10	1	AJ43832	10/10/24 06:09	10/10/24 11:45	2303	EPA 200.7	
Calcium	11	mg/L	5.0	1	AJ43832	10/10/24 06:09	10/10/24 11:45	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AJ43832	10/10/24 06:09	10/10/24 11:45	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AJ43832	10/10/24 06:09	10/10/24 11:45	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AJ43832	10/10/24 06:09	10/10/24 11:45	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AJ43832	10/10/24 06:09	10/10/24 11:45	2303	EPA 200.7	
Magnesium	21	mg/L	0.60	1	AJ43832	10/10/24 06:09	10/10/24 11:45	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AJ43832	10/10/24 06:09	10/10/24 11:45	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AJ44765	10/23/24 05:56	10/24/24 13:47	1551	EPA 245.1	
Sodium	6.3	mg/L	6.0	1	AJ43832	10/10/24 06:09	10/10/24 11:45	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AJ43832	10/10/24 06:09	10/10/24 11:45	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AJ43832	10/10/24 06:09	10/10/24 11:45	2303	EPA 200.7	
Metals by EPA Method 200.8 ICP/MS										
Arsenic	ND	ug/L	2.0	1	AJ44385	10/17/24 08:54	10/17/24 15:45	2303	EPA 200.8	
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	10	mg/L	0.10	1	AJ44128	10/10/24 16:00	10/10/24 17:00	1551	SM4500-O G	T-14
pH	8.17	pH Units	1.68	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	250	umhos/cm@25°t	10	1	AJ43953	10/11/24 10:48	10/11/24 17:29	2303	SM2510B	
Total Alkalinity as CaCO3	130	mg/L	30	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AJ44068	10/14/24 10:00	10/14/24 14:45	1551	SM2540D	
Turbidity	ND	NTU	1.0	1	AJ43951	10/11/24 10:33	10/11/24 10:38	2303	SM2130B	T-06
Bicarbonate Alkalinity as CaCO3	130	mg/L	30	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM2320B	
Hardness, Total	116	mg/L	15	1	AJ43832	10/10/24 06:09	10/10/24 11:45	2303	SM2340B	

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.



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John
Project: Surface Water
Project Number: [none]

Reported:
10/25/24 11:11

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-6 (24J1848-01)										
			Sample Type: Water			Sampled: 10/09/24 08:50				
Anions by EPA Method 300.0										
Sulfate as SO4	1.1	mg/L	0.50	1	AJ43771	10/09/24 16:36	10/09/24 19:51	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	1700	MPN/100mL	1.0	1	AJ43796	10/09/24 16:25	10/10/24 16:46	2303	SM9223B	
E. Coli	150	MPN/100mL	1.0	1	AJ43796	10/09/24 16:25	10/10/24 16:46	2303	SM9223B	
SW-8 (24J1848-02)										
			Sample Type: Water			Sampled: 10/09/24 09:50				
Metals by EPA 200 Series Methods										
Boron	ND	mg/L	0.10	1	AJ43832	10/10/24 06:09	10/10/24 11:48	2303	EPA 200.7	
Calcium	7.2	mg/L	5.0	1	AJ43832	10/10/24 06:09	10/10/24 11:48	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AJ43832	10/10/24 06:09	10/10/24 11:48	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AJ43832	10/10/24 06:09	10/10/24 11:48	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AJ43832	10/10/24 06:09	10/10/24 11:48	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AJ43832	10/10/24 06:09	10/10/24 11:48	2303	EPA 200.7	
Magnesium	5.2	mg/L	0.60	1	AJ43832	10/10/24 06:09	10/10/24 11:48	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AJ43832	10/10/24 06:09	10/10/24 11:48	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AJ44765	10/23/24 05:56	10/24/24 13:50	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AJ43832	10/10/24 06:09	10/10/24 11:48	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AJ43832	10/10/24 06:09	10/10/24 11:48	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AJ43832	10/10/24 06:09	10/10/24 11:48	2303	EPA 200.7	
Metals by EPA Method 200.8 ICP/MS										
Arsenic	ND	ug/L	2.0	1	AJ44307	10/17/24 09:00	10/18/24 15:27	2303	EPA 200.8	



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John
Project: Surface Water
Project Number: [none]

Reported:
10/25/24 11:11

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-8 (24J1848-02)										
Sample Type: Water					Sampled: 10/09/24 09:50					
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	10	mg/L	0.10	1	AJ44128	10/10/24 16:00	10/10/24 17:00	1551	SM4500-O G	T-14
pH	7.91	pH Units	1.68	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	110	umhos/cm@25°	10	1	AJ43953	10/11/24 10:48	10/11/24 17:29	2303	SM2510B	
Total Alkalinity as CaCO3	56	mg/L	30	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM2320B	
Total Suspended Solids	1.5	mg/L	1.0	1	AJ44068	10/14/24 10:00	10/14/24 14:45	1551	SM2540D	
Turbidity	1.2	NTU	1.0	1	AJ43951	10/11/24 10:33	10/11/24 10:38	2303	SM2130B	T-06
Bicarbonate Alkalinity as CaCO3	56	mg/L	30	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM2320B	
Hardness, Total	39	mg/L	15	1	AJ43832	10/10/24 06:09	10/10/24 11:48	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	ND	mg/L	0.50	1	AJ43771	10/09/24 16:36	10/09/24 20:04	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	1100	MPN/100mL	1.0	1	AJ43796	10/09/24 16:25	10/10/24 16:46	2303	SM9223B	
E. Coli	91	MPN/100mL	1.0	1	AJ43796	10/09/24 16:25	10/10/24 16:46	2303	SM9223B	
SW-9 (24J1848-03)										
Sample Type: Water					Sampled: 10/09/24 10:05					
Metals by EPA 200 Series Methods										
Boron	ND	mg/L	0.10	1	AJ43832	10/10/24 06:09	10/10/24 11:51	2303	EPA 200.7	
Calcium	ND	mg/L	5.0	1	AJ43832	10/10/24 06:09	10/10/24 11:51	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AJ43832	10/10/24 06:09	10/10/24 11:51	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AJ43832	10/10/24 06:09	10/10/24 11:51	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AJ43832	10/10/24 06:09	10/10/24 11:51	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AJ43832	10/10/24 06:09	10/10/24 11:51	2303	EPA 200.7	
Magnesium	2.4	mg/L	0.60	1	AJ43832	10/10/24 06:09	10/10/24 11:51	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AJ43832	10/10/24 06:09	10/10/24 11:51	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AJ44765	10/23/24 05:56	10/24/24 13:53	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AJ43832	10/10/24 06:09	10/10/24 11:51	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AJ43832	10/10/24 06:09	10/10/24 11:51	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AJ43832	10/10/24 06:09	10/10/24 11:51	2303	EPA 200.7	

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.



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John
Project: Surface Water
Project Number: [none]

Reported:
10/25/24 11:11

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-9 (24J1848-03)			Sample Type: Water			Sampled: 10/09/24 10:05				
Metals by EPA Method 200.8 ICP/MS										
Arsenic	ND	ug/L	2.0	1	AJ44385	10/17/24 08:54	10/17/24 15:52	2303	EPA 200.8	
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	10	mg/L	0.10	1	AJ44128	10/10/24 16:00	10/10/24 17:00	1551	SM4500-O G	T-14
pH	7.54	pH Units	1.68	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	66	umhos/cm@25°i	10	1	AJ43953	10/11/24 10:48	10/11/24 17:29	2303	SM2510B	
Total Alkalinity as CaCO3	33	mg/L	30	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AJ44068	10/14/24 10:00	10/14/24 14:45	1551	SM2540D	
Turbidity	ND	NTU	1.0	1	AJ43951	10/11/24 10:33	10/11/24 10:38	2303	SM2130B	T-06
Bicarbonate Alkalinity as CaCO3	33	mg/L	30	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM2320B	
Hardness, Total	20	mg/L	15	1	AJ43832	10/10/24 06:09	10/10/24 11:51	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	0.66	mg/L	0.50	1	AJ43771	10/09/24 16:36	10/09/24 20:17	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	870	MPN/100mL	1.0	1	AJ43796	10/09/24 16:25	10/10/24 16:46	2303	SM9223B	
E. Coli	43	MPN/100mL	1.0	1	AJ43796	10/09/24 16:25	10/10/24 16:46	2303	SM9223B	
SW-10 (24J1848-04)			Sample Type: Water			Sampled: 10/09/24 09:26				
Metals by EPA 200 Series Methods										
Boron	ND	mg/L	0.10	1	AJ43832	10/10/24 06:09	10/10/24 11:54	2303	EPA 200.7	
Calcium	8.5	mg/L	5.0	1	AJ43832	10/10/24 06:09	10/10/24 11:54	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AJ43832	10/10/24 06:09	10/10/24 11:54	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AJ43832	10/10/24 06:09	10/10/24 11:54	2303	EPA 200.7	
Iron	0.12	mg/L	0.10	1	AJ43832	10/10/24 06:09	10/10/24 11:54	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AJ43832	10/10/24 06:09	10/10/24 11:54	2303	EPA 200.7	
Magnesium	6.2	mg/L	0.60	1	AJ43832	10/10/24 06:09	10/10/24 11:54	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AJ43832	10/10/24 06:09	10/10/24 11:54	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AJ44765	10/23/24 05:56	10/24/24 13:55	1551	EPA 245.1	
Sodium	6.2	mg/L	6.0	1	AJ43832	10/10/24 06:09	10/10/24 11:54	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AJ43832	10/10/24 06:09	10/10/24 11:54	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AJ43832	10/10/24 06:09	10/10/24 11:54	2303	EPA 200.7	

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.



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John
Project: Surface Water
Project Number: [none]

Reported:
10/25/24 11:11

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-10 (24J1848-04)			Sample Type: Water			Sampled: 10/09/24 09:26				
Metals by EPA Method 200.8 ICP/MS										
Arsenic	ND	ug/L	2.0	1	AJ44307	10/17/24 09:00	10/18/24 15:46	2303	EPA 200.8	
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	11	mg/L	0.10	1	AJ44128	10/10/24 16:00	10/10/24 17:00	1551	SM4500-O G	T-14
pH	7.94	pH Units	1.68	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	120	umhos/cm@25°t	10	1	AJ43953	10/11/24 10:48	10/11/24 17:29	2303	SM2510B	
Total Alkalinity as CaCO3	62	mg/L	30	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM2320B	
Total Suspended Solids	1.4	mg/L	1.0	1	AJ44068	10/14/24 10:00	10/14/24 14:45	1551	SM2540D	
Turbidity	1.4	NTU	1.0	1	AJ43951	10/11/24 10:33	10/11/24 10:38	2303	SM2130B	T-06
Bicarbonate Alkalinity as CaCO3	62	mg/L	30	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AJ43948	10/11/24 10:10	10/11/24 14:16	2303	SM2320B	
Hardness, Total	47	mg/L	15	1	AJ43832	10/10/24 06:09	10/10/24 11:54	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	ND	mg/L	0.50	1	AJ43771	10/09/24 16:36	10/09/24 20:30	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	980	MPN/100mL	1.0	1	AJ43796	10/09/24 16:25	10/10/24 16:46	2303	SM9223B	
E. Coli	76	MPN/100mL	1.0	1	AJ43796	10/09/24 16:25	10/10/24 16:46	2303	SM9223B	



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

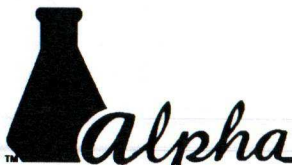
Project Manager: John
Project: Surface Water
Project Number: [none]

Reported:
10/25/24 11:11

Notes and Definitions

- T-06 Sample analyzed outside of recommended holding time.
- T-14 Residual chlorine, dissolved oxygen, sulfite, and pH must be analyzed in the field to meet the EPA specified 15 minute hold time.
- ND Analyte NOT DETECTED at or above the reporting limit
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

* ELAP does not offer accreditation in this matrix for the requested analyte/method combination.



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

Work Order

Chain of Custody Record

Lab No.

2451848

Page

1 of 1

Company Name: Mayacma Geothermal LLC		Project Name: Surface Water		Project Number:		Signature below authorizes work under terms stated on reverse side.																		
Mailing Address: 245 E Liberty St Suite 520 Reno, NV 89501		Project Address:				Analysis Request										TAT								
Project Contact (Hardcopy or PDF to): John Casteel John@openmountainenergy.com		P.O. #		Quote #		All Samples: Metals by EPA 200 Series Methods As, B, Ca, Cr, Cu, Fe, Pb, Mg, Mn, Hg, Na, V, Zn										24 hr ☐								
Phone/Fax: 775-260-8351		Bill to: Mayacma Geothermal LLC 245 E Liberty St Suite 520 Reno, NV 89501 accounting@openmountainenergy.com				Conventional Chemistry Parameters by APHA/EPA Methods Dissolved Oxygen, pH, Specific Conductance (EC), Total Alkalinity as CaCO ₃ , Total Suspended Solids, Turbidity, Bicarbonate Alkalinity as CaCO ₃ , Carbonate Alkalinity as CaCO ₃ , Hydroxide Alkalinity as CaCO ₃ , Hardness										48 hr ☐								
Samplers Signature: <i>Lucy Patten</i>		Sampling		Container		Preservative		Matrix		Anions by EPA Method 300.0 Sulfate as SO ₄ Microbiological Parameters by APHA Standard Methods Total Coliforms, E. Coli Reference Work Order: 24E4450 for list Please provide report as PDF and excel.										Lab Approval Required ☐				
Sample Designation		Date Time		40ml VOA	Poly	Amber	Sleeve	HCL	HNO ₃											H ₂ SO ₄	None	Water	Soil	1 wk ☐
SW-6		10/9/24 09:50																						2 wk (standard) ☐
SW-7 NO sample, dry creek		1																						
SW-8		09:50																						
SW-9		10:05																						
SW-10		09:26																						
Relinquished by: <i>Lucy Patten</i>		Received by: <i>AC</i>				Date 10-9-24		Time 13:35		California EDF Report? ☐ Yes ☐ No														
Relinquished by:		Received by:				Date		Time		Sampling Company Log Code:														
Relinquished by:		Received for Laboratory by:				Date		Time		Global ID:														
										EDF to (Email Address):														
Sample Condition on Receipt:		Travel and Site Time:		Mileage:		Misc. Supplies:		Drinking Water State System/Source Number:																

WORK ORDER

24J1848

Printed: 10/9/2024 4:54:29PM

Alpha Analytical Laboratories North Bay to Ukiah Chain of Custody

Client: Mayacma Geothermal LLC

Client Code: NBSM_MGLLC

Bid:

Project: Surface Water

Project Number: [none]

PO #:

Date Due: 10/23/24 15:00 (10 day TAT)

Received By: Alicia Clark

Date Received: 10/09/24 13:35

Logged In By: Cade J Burkhammer

Date Logged: 10/09/24 15:24

Samples Received at: _____ deg C

Analysis	Department	Expires	Comments
----------	------------	---------	----------

24J1848-01 SW-6 [Water] Sampled 10/09/24 08:50

Diss Oxygen SM4500	Wet Chem	10/09/24 09:04	
Hg CVAA Total 245.1	Metals	11/06/24 23:59	
Solids, TSS-SM2540D	Wet Chem	10/16/24 23:59	

24J1848-02 SW-8 [Water] Sampled 10/09/24 09:50

Diss Oxygen SM4500	Wet Chem	10/09/24 10:04	
Hg CVAA Total 245.1	Metals	11/06/24 23:59	
Solids, TSS-SM2540D	Wet Chem	10/16/24 23:59	

24J1848-03 SW-9 [Water] Sampled 10/09/24 10:05

Diss Oxygen SM4500	Wet Chem	10/09/24 10:19	
Hg CVAA Total 245.1	Metals	11/06/24 23:59	
Solids, TSS-SM2540D	Wet Chem	10/16/24 23:59	

24J1848-04 SW-10 [Water] Sampled 10/09/24 09:26

Diss Oxygen SM4500	Wet Chem	10/09/24 09:40	
Hg CVAA Total 245.1	Metals	11/06/24 23:59	
Solids, TSS-SM2540D	Wet Chem	10/16/24 23:59	

Relinquished By

Date

Received By

Date

Time

Relinquished By

Date

Received By

Date

Time

WORK ORDER

Printed: 10/9/2024 4:54:29PM

24J1848

Alpha Analytical Laboratories North Bay to Ukiah Chain of Custody

Client: Mayacma Geothermal LLC**Client Code: NBSM_MGLLC****Bid:****Project: Surface Water****Project Number: [none]****PO #:****Containers Supplied:**

1L Poly - Unpres (F)

1L Poly - Unpres (F)

1L Poly - Unpres (F)

1L Poly - Unpres (F)

250mL Poly HNO3 (E)

250mL Poly HNO3 (E)

250mL Poly HNO3 (E)

250mL Poly HNO3 (E)

VOA Vial - Unpres (D)

VOA Vial - Unpres (D)

VOA Vial - Unpres (D)

VOA Vial - Unpres (D)



alpha

Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

12 December 2024

Mayacma Geothermal LLC

Attn: John Casteel

245 E Liberty St Suite 520

Reno, NV 89501

RE: Ground Water

Work Order: 24L1000

Enclosed are the results of analyses for samples received by the laboratory on 12/04/24 13:17. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Stephen F. McWeeney

Project Manager



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John Casteel
Project: Ground Water
Project Number: [none]

Reported:
12/12/24 14:38

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | 925-828-6226 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | 916-686-5190 | ELAP# 2922
North Bay: 737 Southpoint Blvd Unit D | Petaluma, CA 94954 | 707-769-3128 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | 760-930-2555 | ELAP# 3055
Los Angeles: 1230 E. 223rd Street Suite 205 | Carson, CA 90745 | 424-267-5032 | ELAP# 3091

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GW-1	24L1000-01	Water	12/04/24 08:56	12/04/24 13:17
GW-3	24L1000-02	Water	12/04/24 09:39	12/04/24 13:17



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John Casteel
Project: Ground Water
Project Number: [none]

Reported:
12/12/24 14:38

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
GW-1 (24L1000-01)										
	Sample Type: Water					Sampled: 12/04/24 08:56				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AL43676	12/09/24 06:10	12/09/24 07:57	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AL43676	12/09/24 06:10	12/09/24 07:57	2303	EPA 200.7	
Calcium	48	mg/L	5.0	1	AL43676	12/09/24 06:10	12/09/24 07:57	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AL43676	12/09/24 06:10	12/09/24 07:57	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AL43676	12/09/24 06:10	12/09/24 07:57	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AL43676	12/09/24 06:10	12/09/24 07:57	2303	EPA 200.7	
Magnesium	15	mg/L	0.60	1	AL43676	12/09/24 06:10	12/09/24 07:57	2303	EPA 200.7	
Manganese	0.11	mg/L	0.020	1	AL43676	12/09/24 06:10	12/09/24 07:57	2303	EPA 200.7	
Sodium	8.8	mg/L	6.0	1	AL43676	12/09/24 06:10	12/09/24 07:57	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AL43676	12/09/24 06:10	12/09/24 07:57	2303	EPA 200.7	
Conventional Chemistry Parameters by APHA/EPA Methods										
pH	8.18	pH Units	1.68	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	390	umhos/cm@25°i	10	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2510B	
Total Alkalinity as CaCO3	190	mg/L	20	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AL43638	12/06/24 09:15	12/09/24 14:45	1551	SM2540D	
Turbidity	ND	NTU	0.50	1	AL43600	12/05/24 15:48	12/05/24 16:13	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	190	mg/L	20	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Hardness, Total	183	mg/L	15	1	AL43676	12/09/24 06:10	12/09/24 07:57	2303	SM2340B	
Anions by EPA Method 300.0										
Nitrate as N	ND	mg/L	0.40	1	AL43561	12/05/24 11:10	12/05/24 16:04	2303	EPA 300.0	
Sulfate as SO4	20	mg/L	0.50	1	AL43561	12/05/24 11:10	12/05/24 16:04	2303	EPA 300.0	
GW-3 (24L1000-02)										
	Sample Type: Water					Sampled: 12/04/24 09:39				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AL43676	12/09/24 06:10	12/09/24 08:08	2303	EPA 200.7	
Boron	0.41	mg/L	0.10	1	AL43676	12/09/24 06:10	12/09/24 08:08	2303	EPA 200.7	
Calcium	33	mg/L	5.0	1	AL43676	12/09/24 06:10	12/09/24 08:08	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AL43676	12/09/24 06:10	12/09/24 08:08	2303	EPA 200.7	
Iron	2.0	mg/L	0.10	1	AL43676	12/09/24 06:10	12/09/24 08:08	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AL43676	12/09/24 06:10	12/09/24 08:08	2303	EPA 200.7	
Magnesium	10	mg/L	0.60	1	AL43676	12/09/24 06:10	12/09/24 08:08	2303	EPA 200.7	
Manganese	0.087	mg/L	0.020	1	AL43676	12/09/24 06:10	12/09/24 08:08	2303	EPA 200.7	
Sodium	26	mg/L	6.0	1	AL43676	12/09/24 06:10	12/09/24 08:08	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AL43676	12/09/24 06:10	12/09/24 08:08	2303	EPA 200.7	

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.



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John Casteel
Project: Ground Water
Project Number: [none]

Reported:
12/12/24 14:38

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
GW-3 (24L1000-02)			Sample Type: Water			Sampled: 12/04/24 09:39				
Conventional Chemistry Parameters by APHA/EPA Methods										
pH	8.08	pH Units	1.68	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	340	umhos/cm@25°i	10	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2510B	
Total Alkalinity as CaCO3	170	mg/L	20	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Total Suspended Solids	5.3	mg/L	1.0	1	AL43638	12/06/24 09:15	12/09/24 14:45	1551	SM2540D	
Turbidity	14	NTU	0.50	1	AL43600	12/05/24 15:48	12/05/24 16:13	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	170	mg/L	20	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Hardness, Total	123	mg/L	15	1	AL43676	12/09/24 06:10	12/09/24 08:08	2303	SM2340B	
Anions by EPA Method 300.0										
Nitrate as N	ND	mg/L	0.40	1	AL43561	12/05/24 11:10	12/05/24 16:17	2303	EPA 300.0	
Sulfate as SO4	4.3	mg/L	0.50	1	AL43561	12/05/24 11:10	12/05/24 16:17	2303	EPA 300.0	



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John Casteel
Project: Ground Water
Project Number: [none]

Reported:
12/12/24 14:38

Notes and Definitions

- QM-01 The spike recovery for this QC sample is outside of established control limits possibly due to a sample matrix interference.
- T-14 Residual chlorine, dissolved oxygen, sulfite, and pH must be analyzed in the field to meet the EPA specified 15 minute hold time.
- ND Analyte NOT DETECTED at or above the reporting limit
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

* ELAP does not offer accreditation in this matrix for the requested analyte/method combination.



Alpha
Analytical

Page 1 of 1

Company Name: Mayacma Geothermal LLC		Project Name: Ground Water		Project Number:		Signature below authorizes work under terms stated on reverse side.																	
Mailing Address: 245 E Liberty St Suite 520 Reno, NV 89501		Project Address:		P.O. #		Quote #		Analysis Request															
Project Contact (Hardcopy or PDF to): John Casteel john@openmountainenergy.com		Bill to: Mayacma Geothermal LLC 245 E Liberty St Suite 520 Reno, NV 89501 accounting@openmountainenergy.com		Phone/Fax: 775-260-8351		Methods: Conventional Chemistry Parameters by APHA/EPA pH, Specific conductance (EC), Total Alk as CaCO ₃ , TSS, Turbidity, Bicarbonate Alkalinity as CaCO ₃ , Carbonate Alkalinity as CaCO ₃ , Hydroxide Alkalinity as CaCO ₃ , Hardness Anions by EPA Method 300.0 Nitrate as N, Sulfate as SO ₄		TAT 24 hr ☐ 48 hr ☐ 1 wk ☐ 2 wk ☐ (standard) ☐															
Samplers Signature: <i>John Casteel</i>		Sampling		Container		Preservative		Matrix		For Lab Use Only													
Sample Designation		Date		Time		40ml VOA Poly Amber Sleeve HCL HNO ₃ H ₂ SO ₄ None Water Soil		Reference Work Order: 24E4445 for complete list. Please provide report as PDF and excel.		Approved ☐ Lab Required ☐													
GW-1		12/4/24		9:56		GW-3		11		9:39		California EDF Report? ☐ Yes ☐ No											
Relinquished by:		Received by:		Date		Time		Date		Time		Drinking Water State System Source Number:											
Relinquished by:		Received by:		Date		Time		Date		Time		EDF to (Email Address):											
Relinquished by:		Received for Laboratory by:		Date		Time		Date		Time		Global ID:											
Relinquished by:		Received by:		Date		Time		Date		Time		Global ID:											
Relinquished by:		Received by:		Date		Time		Date		Time		Global ID:											
Relinquished by:		Received by:		Date		Time		Date		Time		Global ID:											
Relinquished by:		Received by:		Date		Time		Date		Time		Global ID:											
Relinquished by:		Received by:		Date		Time		Date		Time		Global ID:											
Relinquished by:		Received by:		Date		Time		Date		Time		Global ID:											
Relinquished by:		Received by:		Date		Time		Date		Time		Global ID:											
Relinquished by:		Received by:		Date		Time		Date		Time		Global ID:											
Relinquished by:		Received by:		Date		Time		Date		Time		Global ID:											
Relinquished by:		Received by:		Date		Time		Date		Time		Global ID:											
Relinquished by:		Received by:		Date		Time		Date		Time		Global ID:											
Relinquished by:		Received by:		Date		Time		Date		Time		Global ID:											
Relinquished by:		Received by:		Date		Time		Date		Time		Global ID:											
Relinquished by:		Received by:		Date		Time		Date		Time		Global ID:											
Relinquished by:		Received by:		Date		Time		Date		Time		Global ID:											
Relinquished by:		Received by:		Date		Time		Date		Time		Global ID:											
Relinquished by:		Received by:		Date		Time		Date		Time		Global ID:											
Relinquished by:		Received by:		Date		Time		Date		Time		Global ID:											
Relinquished by:		Received by:		Date		Time		Date		Time		Global ID:											
Relinquished by:		Received by:		Date		Time		Date		Time		Global ID:											
Relinquished by:		Received by:		Date		Time		Date		Time		Global ID:											
Relinquished by:		Received by:		Date		Time		Date		Time		Global ID:											
Relinquished by:		Received by:		Date		Time		Date		Time		Global ID:											
Relinquished by:		Received by: </																					

WORK ORDER

Printed: 12/5/2024 8:47:46AM

24L1000

Alpha Analytical Laboratories North Bay to Ukiah Chain of Custody

Client: Mayacma Geothermal LLC

Client Code: NBSM_MGLLC

Bid: Services List

Project: Ground Water

Project Number: [none]

PO #:

Date Due: 12/18/24 15:00 (10 day TAT)

Received By: Ziggie V Burnside

Date Received: 12/04/24 13:13

Logged In By: Stephen F. McWeeney

Date Logged: 12/05/24 08:35

Samples Received at: _____ deg C

Analysis	Department	Expires	Comments
24L1000-01 GW-1 [Water] Sampled 12/04/24 08:56			
Solids, TSS-SM2540D	Wet Chem	12/11/24 23:59	
24L1000-02 GW-3 [Water] Sampled 12/04/24 09:39			
Solids, TSS-SM2540D	Wet Chem	12/11/24 23:59	

Containers Supplied:

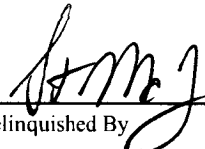
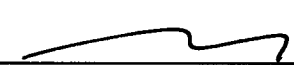
1L Poly - Unpres (A)

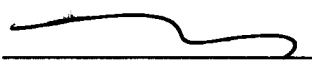
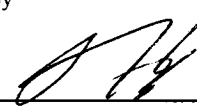
1L Poly - Unpres (A)

250mL Poly HNO3 (C)

250mL Poly HNO3 (C)

40

Relinquished By  Date 12/5/24 Received By  Date 12/5/24 Time 2

Relinquished By  Date 12/5/24 Received By  Date 12-5-24 Time 1015

1505



alpha

Alpha Analytical Laboratories, Inc.

email: clientservices@alpha-labs.com

Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

18 December 2024

Mayacma Geothermal LLC

Attn: John Casteel

245 E Liberty St Suite 520

Reno, NV 89501

RE: Surface Water

Work Order: 24L1003

Enclosed are the results of analyses for samples received by the laboratory on 12/04/24 13:17. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Stephen F. McWeeney

Project Manager



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John Casteel
Project: Surface Water
Project Number: [none]

Reported:
12/18/24 14:30

Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | 925-828-6226 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | 916-686-5190 | ELAP# 2922
North Bay: 737 Southpoint Blvd Unit D | Petaluma, CA 94954 | 707-769-3128 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | 760-930-2555 | ELAP# 3055
Los Angeles: 1230 E. 223rd Street Suite 205 | Carson, CA 90745 | 424-267-5032 | ELAP# 3091

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SW-6	24L1003-01	Water	12/04/24 07:40	12/04/24 13:17
SW-7	24L1003-02	Water	12/04/24 09:08	12/04/24 13:17
SW-8	24L1003-03	Water	12/04/24 08:23	12/04/24 13:17
SW-9	24L1003-04	Water	12/04/24 08:41	12/04/24 13:17
SW-10	24L1003-05	Water	12/04/24 08:34	12/04/24 13:17



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John Casteel
Project: Surface Water
Project Number: [none]

Reported:
12/18/24 14:30

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-6 (24L1003-01)			Sample Type: Water			Sampled: 12/04/24 07:40				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AL43676	12/09/24 06:10	12/09/24 08:11	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AL43676	12/09/24 06:10	12/09/24 08:11	2303	EPA 200.7	
Calcium	12	mg/L	5.0	1	AL43676	12/09/24 06:10	12/09/24 08:11	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AL43676	12/09/24 06:10	12/09/24 08:11	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AL43676	12/09/24 06:10	12/09/24 08:11	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AL43676	12/09/24 06:10	12/09/24 08:11	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AL43676	12/09/24 06:10	12/09/24 08:11	2303	EPA 200.7	
Magnesium	18	mg/L	0.60	1	AL43676	12/09/24 06:10	12/09/24 08:11	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AL43676	12/09/24 06:10	12/09/24 08:11	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AL44388	12/16/24 13:36	12/17/24 13:59	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AL43676	12/09/24 06:10	12/09/24 08:11	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AL43676	12/09/24 06:10	12/09/24 08:11	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AL43676	12/09/24 06:10	12/09/24 08:11	2303	EPA 200.7	
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	11	mg/L	0.10	1	AL43778	12/06/24 16:00	12/06/24 17:00	1551	SM4500-O G	T-14
pH	8.26	pH Units	1.68	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	220	umhos/cm@25°c	10	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2510B	
Total Alkalinity as CaCO3	110	mg/L	20	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AL43597	12/06/24 14:00	12/09/24 11:15	1551	SM2540D	
Turbidity	0.91	NTU	0.50	1	AL43600	12/05/24 15:48	12/05/24 16:13	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	110	mg/L	20	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Hardness, Total	103	mg/L	15	1	AL43676	12/09/24 06:10	12/09/24 08:11	2303	SM2340B	

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.



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John Casteel
Project: Surface Water
Project Number: [none]

Reported:
12/18/24 14:30

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-6 (24L1003-01)										
			Sample Type: Water			Sampled: 12/04/24 07:40				
Anions by EPA Method 300.0										
Sulfate as SO4	4.1	mg/L	0.50	1	AL43561	12/05/24 11:10	12/05/24 16:42	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	730	MPN/100mL	1.0	1	AL43551	12/05/24 09:58	12/06/24 13:20	2303	SM9223B	
E. Coli	20	MPN/100mL	1.0	1	AL43551	12/05/24 09:58	12/06/24 13:20	2303	SM9223B	
SW-7 (24L1003-02)										
			Sample Type: Water			Sampled: 12/04/24 09:08				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AL43676	12/09/24 06:10	12/09/24 08:14	2303	EPA 200.7	
Boron	0.15	mg/L	0.10	1	AL43676	12/09/24 06:10	12/09/24 08:14	2303	EPA 200.7	
Calcium	16	mg/L	5.0	1	AL43676	12/09/24 06:10	12/09/24 08:14	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AL43676	12/09/24 06:10	12/09/24 08:14	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AL43676	12/09/24 06:10	12/09/24 08:14	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AL43676	12/09/24 06:10	12/09/24 08:14	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AL43676	12/09/24 06:10	12/09/24 08:14	2303	EPA 200.7	
Magnesium	15	mg/L	0.60	1	AL43676	12/09/24 06:10	12/09/24 08:14	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AL43676	12/09/24 06:10	12/09/24 08:14	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AL44388	12/16/24 13:36	12/17/24 13:17	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AL43676	12/09/24 06:10	12/09/24 08:14	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AL43676	12/09/24 06:10	12/09/24 08:14	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AL43676	12/09/24 06:10	12/09/24 08:14	2303	EPA 200.7	

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.



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John Casteel
Project: Surface Water
Project Number: [none]

Reported:
12/18/24 14:30

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-7 (24L1003-02)										
Sample Type: Water					Sampled: 12/04/24 09:08					
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	8.9	mg/L	0.10	1	AL43778	12/06/24 16:00	12/06/24 17:00	1551	SM4500-O G	T-14
pH	7.90	pH Units	1.68	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	210	umhos/cm@25°	10	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2510B	
Total Alkalinity as CaCO3	100	mg/L	20	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AL43597	12/06/24 14:00	12/09/24 11:15	1551	SM2540D	
Turbidity	ND	NTU	0.50	1	AL43600	12/05/24 15:48	12/05/24 16:13	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	100	mg/L	20	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Hardness, Total	102	mg/L	15	1	AL43676	12/09/24 06:10	12/09/24 08:14	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	8.4	mg/L	0.50	1	AL43561	12/05/24 11:10	12/05/24 16:55	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	410	MPN/100mL	1.0	1	AL43551	12/05/24 09:58	12/06/24 13:20	2303	SM9223B	
E. Coli	23	MPN/100mL	1.0	1	AL43551	12/05/24 09:58	12/06/24 13:20	2303	SM9223B	
SW-8 (24L1003-03)										
Sample Type: Water					Sampled: 12/04/24 08:23					
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AL43635	12/06/24 05:45	12/09/24 07:17	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AL43635	12/06/24 05:45	12/09/24 07:17	2303	EPA 200.7	
Calcium	7.1	mg/L	5.0	1	AL43635	12/06/24 05:45	12/09/24 07:17	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AL43635	12/06/24 05:45	12/09/24 07:17	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AL43635	12/06/24 05:45	12/09/24 07:17	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AL43635	12/06/24 05:45	12/09/24 07:17	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AL43635	12/06/24 05:45	12/09/24 07:17	2303	EPA 200.7	
Magnesium	5.2	mg/L	0.60	1	AL43635	12/06/24 05:45	12/09/24 07:17	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AL43635	12/06/24 05:45	12/09/24 07:17	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AL44388	12/16/24 13:36	12/17/24 14:02	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AL43635	12/06/24 05:45	12/09/24 07:17	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AL43635	12/06/24 05:45	12/09/24 07:17	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AL43635	12/06/24 05:45	12/09/24 07:17	2303	EPA 200.7	

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.



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John Casteel
Project: Surface Water
Project Number: [none]

Reported:
12/18/24 14:30

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-8 (24L1003-03)			Sample Type: Water			Sampled: 12/04/24 08:23				
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	11	mg/L	0.10	1	AL43778	12/06/24 16:00	12/06/24 17:00	1551	SM4500-O G	T-14
pH	7.96	pH Units	1.68	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	100	umhos/cm@25°	10	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2510B	
Total Alkalinity as CaCO3	49	mg/L	20	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Total Suspended Solids	1.2	mg/L	1.0	1	AL43597	12/06/24 14:00	12/09/24 11:15	1551	SM2540D	
Turbidity	2.1	NTU	0.50	1	AL43600	12/05/24 15:48	12/05/24 16:13	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	49	mg/L	20	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Hardness, Total	39	mg/L	15	1	AL43635	12/06/24 05:45	12/09/24 07:17	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	1.5	mg/L	0.50	1	AL43561	12/05/24 11:10	12/05/24 17:08	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	730	MPN/100mL	1.0	1	AL43551	12/05/24 09:58	12/06/24 13:20	2303	SM9223B	
E. Coli	47	MPN/100mL	1.0	1	AL43551	12/05/24 09:58	12/06/24 13:20	2303	SM9223B	
SW-9 (24L1003-04)			Sample Type: Water			Sampled: 12/04/24 08:41				
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AL43676	12/09/24 06:10	12/09/24 08:18	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AL43676	12/09/24 06:10	12/09/24 08:18	2303	EPA 200.7	
Calcium	6.7	mg/L	5.0	1	AL43676	12/09/24 06:10	12/09/24 08:18	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AL43676	12/09/24 06:10	12/09/24 08:18	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AL43676	12/09/24 06:10	12/09/24 08:18	2303	EPA 200.7	
Iron	ND	mg/L	0.10	1	AL43676	12/09/24 06:10	12/09/24 08:18	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AL43676	12/09/24 06:10	12/09/24 08:18	2303	EPA 200.7	
Magnesium	3.7	mg/L	0.60	1	AL43676	12/09/24 06:10	12/09/24 08:18	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AL43676	12/09/24 06:10	12/09/24 08:18	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AL44388	12/16/24 13:36	12/17/24 14:05	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AL43676	12/09/24 06:10	12/09/24 08:18	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AL43676	12/09/24 06:10	12/09/24 08:18	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AL43676	12/09/24 06:10	12/09/24 08:18	2303	EPA 200.7	

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.



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John Casteel
Project: Surface Water
Project Number: [none]

Reported:
12/18/24 14:30

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-9 (24L1003-04)										
Sample Type: Water					Sampled: 12/04/24 08:41					
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	11	mg/L	0.10	1	AL43778	12/06/24 16:00	12/06/24 17:00	1551	SM4500-O G	T-14
pH	7.85	pH Units	1.68	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	87	umhos/cm@25°c	10	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2510B	
Total Alkalinity as CaCO3	41	mg/L	20	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Total Suspended Solids	ND	mg/L	1.0	1	AL43597	12/06/24 14:00	12/09/24 11:15	1551	SM2540D	
Turbidity	0.53	NTU	0.50	1	AL43600	12/05/24 15:48	12/05/24 16:13	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	41	mg/L	20	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Hardness, Total	32	mg/L	15	1	AL43676	12/09/24 06:10	12/09/24 08:18	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	2.0	mg/L	0.50	1	AL43561	12/05/24 11:10	12/05/24 17:21	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	330	MPN/100mL	1.0	1	AL43551	12/05/24 09:58	12/06/24 13:20	2303	SM9223B	
E. Coli	3.1	MPN/100mL	1.0	1	AL43551	12/05/24 09:58	12/06/24 13:20	2303	SM9223B	
SW-10 (24L1003-05)										
Sample Type: Water					Sampled: 12/04/24 08:34					
Metals by EPA 200 Series Methods										
Arsenic	ND	mg/L	0.020	1	AL43635	12/06/24 05:45	12/09/24 07:20	2303	EPA 200.7	
Boron	ND	mg/L	0.10	1	AL43635	12/06/24 05:45	12/09/24 07:20	2303	EPA 200.7	
Calcium	7.0	mg/L	5.0	1	AL43635	12/06/24 05:45	12/09/24 07:20	2303	EPA 200.7	
Chromium	ND	mg/L	0.010	1	AL43635	12/06/24 05:45	12/09/24 07:20	2303	EPA 200.7	
Copper	ND	mg/L	0.050	1	AL43635	12/06/24 05:45	12/09/24 07:20	2303	EPA 200.7	
Iron	0.11	mg/L	0.10	1	AL43635	12/06/24 05:45	12/09/24 07:20	2303	EPA 200.7	
Lead	ND	mg/L	0.020	1	AL43635	12/06/24 05:45	12/09/24 07:20	2303	EPA 200.7	
Magnesium	5.9	mg/L	0.60	1	AL43635	12/06/24 05:45	12/09/24 07:20	2303	EPA 200.7	
Manganese	ND	mg/L	0.020	1	AL43635	12/06/24 05:45	12/09/24 07:20	2303	EPA 200.7	
Mercury	ND	ug/L	0.20	1	AL44388	12/16/24 13:36	12/17/24 14:07	1551	EPA 245.1	
Sodium	ND	mg/L	6.0	1	AL43635	12/06/24 05:45	12/09/24 07:20	2303	EPA 200.7	
Vanadium	ND	mg/L	0.020	1	AL43635	12/06/24 05:45	12/09/24 07:20	2303	EPA 200.7	
Zinc	ND	mg/L	0.30	1	AL43635	12/06/24 05:45	12/09/24 07:20	2303	EPA 200.7	

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.



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John Casteel
Project: Surface Water
Project Number: [none]

Reported:
12/18/24 14:30

	Result	Units	Reporting Limit	Dilution	Batch	Prepared	Analyzed	ELAP#	Method	Note
SW-10 (24L1003-05)			Sample Type: Water			Sampled: 12/04/24 08:34				
Conventional Chemistry Parameters by APHA/EPA Methods										
Dissolved Oxygen	11	mg/L	0.10	1	AL43778	12/06/24 16:00	12/06/24 17:00	1551	SM4500-O G	T-14
pH	7.95	pH Units	1.68	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM4500-H+ B	T-14
Specific Conductance (EC)	100	umhos/cm@25°i	10	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2510B	
Total Alkalinity as CaCO3	49	mg/L	20	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Total Suspended Solids	1.4	mg/L	1.0	1	AL43597	12/06/24 14:00	12/09/24 11:15	1551	SM2540D	
Turbidity	3.0	NTU	0.50	1	AL43600	12/05/24 15:48	12/05/24 16:13	2303	SM2130B	
Bicarbonate Alkalinity as CaCO3	49	mg/L	20	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Carbonate Alkalinity as CaCO3	ND	mg/L	5.0	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Hydroxide Alkalinity as CaCO3	ND	mg/L	5.0	1	AL43698	12/06/24 14:30	12/06/24 15:17	2303	SM2320B	
Hardness, Total	42	mg/L	15	1	AL43635	12/06/24 05:45	12/09/24 07:20	2303	SM2340B	
Anions by EPA Method 300.0										
Sulfate as SO4	1.1	mg/L	0.50	1	AL43561	12/05/24 11:10	12/05/24 17:34	2303	EPA 300.0	
Microbiological Parameters by APHA Standard Methods										
Total Coliforms	730	MPN/100mL	1.0	1	AL43551	12/05/24 09:58	12/06/24 13:20	2303	SM9223B	
E. Coli	66	MPN/100mL	1.0	1	AL43551	12/05/24 09:58	12/06/24 13:20	2303	SM9223B	



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

Mayacma Geothermal LLC
245 E Liberty St Suite 520
Reno, NV 89501

Project Manager: John Casteel
Project: Surface Water
Project Number: [none]

Reported:
12/18/24 14:30

Notes and Definitions

QM-01 The spike recovery for this QC sample is outside of established control limits possibly due to a sample matrix interference.

T-14 Residual chlorine, dissolved oxygen, sulfite, and pH must be analyzed in the field to meet the EPA specified 15 minute hold time.

ND Analyte NOT DETECTED at or above the reporting limit

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

* ELAP does not offer accreditation in this matrix for the requested analyte/method combination.



Chain of Custody Record

208 Mason Street, Ukiah, California 95482
(707) 468-0401 • Fax: (707) 468-5267

Page 1 of 1[illegible]

WORK ORDER

Printed: 12/5/2024 9:06:22AM

24L1003

Alpha Analytical Laboratories North Bay to Ukiah Chain of Custody

Client: **Mayacma Geothermal LLC**Client Code: **NBSM_MGLLC**Bid: **Services List**Project: **Surface Water**Project Number: **[none]**

PO #:

Date Due: 12/18/24 15:00 (10 day TAT)

Received By: Ziggie V Burnside

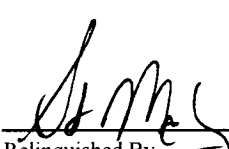
Date Received: 12/04/24 13:17

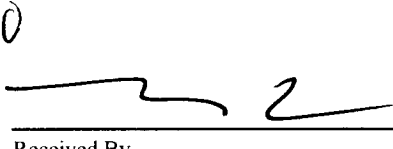
Logged In By: Stephen F. McWeeney

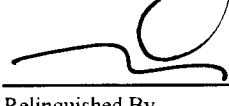
Date Logged: 12/05/24 08:50

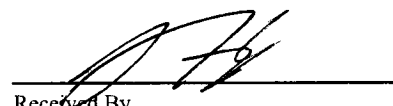
Samples Received at: _____ deg C

Analysis	Department	Expires	Comments
24L1003-01 SW-6 [Water] Sampled 12/04/24 07:40			
Diss Oxygen SM4500	Wet Chem	12/04/24 07:54	
Hg CVAA Total 245.1	Metals	01/01/25 23:59	
Solids, TSS-SM2540D	Wet Chem	12/11/24 23:59	
24L1003-02 SW-7 [Water] Sampled 12/04/24 09:08			
Diss Oxygen SM4500	Wet Chem	12/04/24 09:22	
Hg CVAA Total 245.1	Metals	01/01/25 23:59	
Solids, TSS-SM2540D	Wet Chem	12/11/24 23:59	
24L1003-03 SW-8 [Water] Sampled 12/04/24 08:23			
Diss Oxygen SM4500	Wet Chem	12/04/24 08:37	
Hg CVAA Total 245.1	Metals	01/01/25 23:59	
Solids, TSS-SM2540D	Wet Chem	12/11/24 23:59	
24L1003-04 SW-9 [Water] Sampled 12/04/24 08:41			
Diss Oxygen SM4500	Wet Chem	12/04/24 08:55	
Hg CVAA Total 245.1	Metals	01/01/25 23:59	
Solids, TSS-SM2540D	Wet Chem	12/11/24 23:59	
24L1003-05 SW-10 [Water] Sampled 12/04/24 08:34			
Diss Oxygen SM4500	Wet Chem	12/04/24 08:48	
Hg CVAA Total 245.1	Metals	01/01/25 23:59	
Solids, TSS-SM2540D	Wet Chem	12/11/24 23:59	

 12/5/24
Relinquished By _____ Date

 12/5/24
Received By _____ Date Time

 12/5/24
Relinquished By _____ Date

 12/5/24 1515
Received By _____ Date Time

24L1003

Alpha Analytical Laboratories North Bay to Ukiah Chain of Custody

Client: Mayacma Geothermal LLC	Client Code: NBSM_MGLLC	Bid: Services List
Project: Surface Water	Project Number: [none]	PO #:

Containers Supplied:

- 1L Poly - Unpres (A)
- 1L Poly - Unpres (A)
- 1L Poly - Unpres (A)
- 1L Poly - Unpres (A)
- 1L Poly - Unpres (A)
- VOA Vial - Unpres (D)
- VOA Vial - Unpres (D)
- VOA Vial - Unpres (D)
- VOA Vial - Unpres (D)
- VOA Vial - Unpres (D)