



Division of Environmental Testing

2115 N Scranton St Suite 3040A

Aurora, CO 80045

800-440-5184

October 31, 2024

143 Diamond Ave
Parachute, CO 81635
970-285-2925

Project Manager : Jake J/Brett M/Blair R/Andy V/Derek H

Project Name : ELU A18 495 Cuttings

Project Number : N/A

Attached are the analytical results for ELU A18 495 Cuttings N/A received by Elevation Diagnostics, Division of Environmental Testing on October 25, 2024. This is associated with Elevation's number AA13492 .

The results were analyzed under the guidelines of various methods. These methods are identified in the report as follows: "SW" is referring to the EPA's SW-846 Compendium; "EPA" is referring to 40 CFR part 136; "HACH" is referring to a method which was validated by HACH®; "SM" is referring to a revision of the Standard Methods For the Examination of Water and Wastewater; and "ASTM" is referring to the standard test method set forth by ASTM International.

The analytical results in this report apply specifically to the samples listed in the attached Chain of Custody. This report may only be duplicated in full.

Any deviations to sample integrity, method specifications, or Elevation Diagnostics's standard operating procedures are documented in the report below.

Please contact us for any questions or comments concerning the content of this report.

Thank you,

Elevation Diagnostics, Division of Environmental Testing

Chain of Custody Form


Elevation Diagnostics

2115 North Scranton Street Suite 3040A Aurora, CO 80045
800.440.5184

Client: QB ENERGY / CAERUS OIL + GAS
 Address: 143 DIAMOND AVE
 City/State/ZIP: PARACHUTE, CO 81635
 Phone: 970-825-2653
 Project Contact: Jake J/Brett M/Blair R/Andy V/Derek H

Project Name/Number: ELU A18 495 CUTTING,3
 Project Location: 39.709112, -108.105039
 Collector Name: Mercedith Roberts

Sample ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested				Interim report requested	
					HCl	HNO ₃	None	Other	Water	Soil	Other	915-1 Metals	PH, SAR, EC, Boron	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
1	20241024-NPRBG-(A18 495-W)@ 1	10/24/24	0940	3			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
2	20241024-NPRBG-(A18 495-W)@ 0.5	10/24/24	1010	3			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
3																	AWZ
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Relinquished By: <u>Mearz</u>	Relinquished By:	Relinquished By:	Scan to Deliver Samples 
Date/Time: <u>10/24/24 1210</u>	Date/Time:	Date/Time:	
Lab Use Only	Observed Temperature Upon Receipt: <u>12.0°C</u>	Samples Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No	2024-10-25-005 Lot/EQM Number:
	Corrected Temperature Upon Receipt: <u>13.3°C</u>	pH Checked: <input type="radio"/> Yes <input checked="" type="radio"/> No	
	Thermometer #: <u>EDXEQ238</u>	pH Adjusted: <input type="radio"/> Yes <input checked="" type="radio"/> No	
	Correction Factor: <u>+1.3°C</u>	PFAS rec'd on ice: <input type="radio"/> Yes <input checked="" type="radio"/> No <u>N/A</u>	
		Name/Lot Number of Adjustment: _____	



Division of Environmental Testing

2115 N Scranton St Suite 3040A

Aurora, CO 80045

800-440-5184

Report Date : 10/31/2024

Report Time : 11:07

FINAL RESULTS REPORT

Project Manager: Jake J/Brett M/Blair R/Andy V/Derek

Project Name: ELU A18 495 Cuttings

Project Number: N/A

Sample ID	Customer ID	Collected	Dilution	Result	Units	MDL	Method Ref.
Analyte Name		Analysis Start					Recovery
AA13492-1	20241024-NPRBG-(A18 495-W)@1	Collected : 10/24/2024	09:40				
SAR - Calcium		10/29/2024	09:58	10.00	7.97	mEq/L	EPA 6020B
SAR - Magnesium		10/29/2024	09:58	10.00	2.06	mEq/L	EPA 6020B
SAR - Sodium		10/29/2024	09:58	10.00	0.20	mEq/L	EPA 6020B
SAR - Sodium Adsorption Ratio		10/29/2024	09:58	10.00	0.09	No Unit	EPA 6020B
Soil Conductivity		10/28/2024	16:59		0.95	mmhos/cm	0.0005 USDA 60
AA13492-2	20241024-NPRBG-(A18 495-W)@1	Collected : 10/24/2024	09:40				
Hot Water Soluble Boron		10/30/2024	16:27		0.33	mg/kg	0.050 Boron Hot Water Extraction
pH, Soils Temperature		10/29/2024	14:56		20.5	°C	
pH, Soils		10/29/2024	14:56		7.12	SU	0.01 EPA 9045D
AA13492-3	20241024-NPRBG-(A18 495-W)@1	Collected : 10/24/2024	09:40				
Chromium VI, Soil		10/29/2024	09:07		Not Detected	mg/kg	0.080 EPA 7199
Total Metals, Soils - Arsenic		10/28/2024	09:28	10.00	2.89	mg/kg	0.025 EPA 6020B
Total Metals, Soils - Barium		10/28/2024	09:28	10.00	210.27	mg/kg	0.025 EPA 6020B
Total Metals, Soils - Cadmium		10/28/2024	09:28	10.00	0.27	mg/kg	0.001 EPA 6020B
Total Metals, Soils - Copper		10/28/2024	09:28	10.00	11.86	mg/kg	0.025 EPA 6020B
Total Metals, Soils - Lead		10/28/2024	09:28	10.00	11.00	mg/kg	0.025 EPA 6020B
Total Metals, Soils - Nickel		10/28/2024	09:28	10.00	16.31	mg/kg	0.025 EPA 6020B
Total Metals, Soils - Selenium		10/28/2024	09:28	10.00	1.70	mg/kg	0.025 EPA 6020B
Total Metals, Soils - Silver		10/28/2024	09:28	10.00	<0.03	mg/kg	0.025 EPA 6020B
Total Metals, Soils - Zinc		10/28/2024	09:28	10.00	38.21	mg/kg	0.025 EPA 6020B
AA13493-1	20241024-NPRBG-(A18 495-W)@0.5	Collected : 10/24/2024	10:10				
SAR - Calcium		10/29/2024	09:58	10.00	13.08	mEq/L	EPA 6020B
SAR - Magnesium		10/29/2024	09:58	10.00	4.14	mEq/L	EPA 6020B
SAR - Sodium		10/29/2024	09:58	10.00	0.47	mEq/L	EPA 6020B
SAR - Sodium Adsorption Ratio		10/29/2024	09:58	10.00	0.16	No Unit	EPA 6020B
Soil Conductivity		10/28/2024	16:59		1.51	mmhos/cm	0.0005 USDA 60
AA13493-2	20241024-NPRBG-(A18 495-W)@0.5	Collected : 10/24/2024	10:10				
Hot Water Soluble Boron		10/30/2024	16:27		0.40	mg/kg	0.050 Boron Hot Water Extraction
pH, Soils Temperature		10/29/2024	14:56		20.4	°C	
pH, Soils		10/29/2024	14:56		7.24	SU	0.01 EPA 9045D
AA13493-3	20241024-NPRBG-(A18 495-W)@0.5	Collected : 10/24/2024	10:10				
Chromium VI, Soil		10/29/2024	09:07		Not Detected	mg/kg	0.080 EPA 7199
Total Metals, Soils - Arsenic		10/28/2024	09:28	10.00	3.03	mg/kg	0.025 EPA 6020B
Total Metals, Soils - Barium		10/28/2024	09:28	10.00	219.51	mg/kg	0.025 EPA 6020B
Total Metals, Soils - Cadmium		10/28/2024	09:28	10.00	0.28	mg/kg	0.001 EPA 6020B
Total Metals, Soils - Copper		10/28/2024	09:28	10.00	11.77	mg/kg	0.025 EPA 6020B
Total Metals, Soils - Lead		10/28/2024	09:28	10.00	11.18	mg/kg	0.025 EPA 6020B
Total Metals, Soils - Nickel		10/28/2024	09:28	10.00	15.55	mg/kg	0.025 EPA 6020B
Total Metals, Soils - Selenium		10/28/2024	09:28	10.00	1.99	mg/kg	0.025 EPA 6020B
Total Metals, Soils - Silver		10/28/2024	09:28	10.00	<0.03	mg/kg	0.025 EPA 6020B
Total Metals, Soils - Zinc		10/28/2024	09:28	10.00	36.64	mg/kg	0.025 EPA 6020B



Division of Environmental Testing

2115 N Scranton St Suite 3040A

Aurora, CO 80045

800-440-5184

FINAL RESULTS REPORT

Report Date : 10/31/2024

Report Time : 11:07

Project Manager: Jake J/Brett M/Blair R/Andy V/Derek **Project Name:** ELU A18 495 Cuttings

Project Number: N/A

Sample ID	Customer ID	Collected	Dilution	Result	Units	MDL	Method Ref.
Analyte Name	Analysis Start						Recovery



Division of Environmental Testing

2115 N Scranton St Suite 3040A

Aurora, CO 80045

800-440-5184

FINAL RESULTS REPORT

Report Date : 10/31/2024

Report Time : 11:07

Project Manager: Jake J/Brett M/Blair R/Andy V/Derek **Project Name:** ELU A18 495 Cuttings

Project Number: N/A

QC Report

QC	Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%Rec	% REC Limits	RPD	RPD Limit
BORON-5460										
DUP	AA13492	0.30	0.050	mg/kg					9.5238	-15 - 15
MB	AA13596	0.01		mg/kg						
LCS	AA13597	1.05		mg/kg	1.00		105	80 - 120		
LCS	AA13598	9.84		mg/kg	9.00		109	80 - 120		
CHROM_VI_SOIL-5412										
DUP	AA13450	0.09	0.080	mg/kg					<%MDL%	
MB	AA13472	Not Detected		mg/kg						
LCS	AA13474	0.04		mg/kg	0.04		100			
LCS	AA13475	0.04		mg/kg	0.04		100			
ECISOIL_MMHOS-5440										
DUP	AA13491	1.56		mmhos/cm					1.9048	
LCS	AA13553	9.55		mmhos/cm	10.00		95.5			
LCS	AA13554	9.66		mmhos/cm	10.00		96.6			
PH_S-5449										
DUP	AA13491	7.30	0.01	S.U.					0.6825938566	-5 - 5
LCS	AA13568	6.91	0.01	S.U.	6.86		101	95 - 105		
LCS	AA13569	6.86	0.01	S.U.	6.86		100	95 - 105		



Division of Environmental Testing

2115 N Scranton St Suite 3040A

Aurora, CO 80045

800-440-5184

Report Date : 10/31/2024

Report Time : 11:07

FINAL RESULTS REPORT

Project Manager: Jake J/Brett M/Blair R/Andy V/Derek **Project Name:** ELU A18 495 Cuttings

Project Number: N/A

QC Report

QC	Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%Rec	% REC Limits	RPD	RPD Limit
----	---------	--------	-----------------	-------	-------------	---------------	------	--------------	-----	-----------

METALS S-5423

AA13389

Dup	Selenium	1.72	0.025	mg/kg		1.81			5.10	0 - 15
Matrix Spike	Selenium	18.04		mg/kg	20	1.81	81.2			

AA13494

MB	Arsenic	0.00		mg/kg						
MB	Barium	0.00		mg/kg						
MB	Cadmium	0.00		mg/kg						
MB	Copper	0.00		mg/kg						
MB	Lead	0.00		mg/kg						
MB	Nickel	0.00		mg/kg						
MB	Selenium	0.00		mg/kg						
MB	Silver	0.00		mg/kg						
MB	Zinc	0.00		mg/kg						

AA13496

LCS	Arsenic	0.09		mg/kg			100	80 - 120		
LCS	Barium	0.10		mg/kg			100	80 - 120		
LCS	Cadmium	0.09		mg/kg			100	80 - 120		
LCS	Copper	0.09		mg/kg			100	80 - 120		
LCS	Lead	0.10		mg/kg			100	80 - 120		
LCS	Nickel	0.09		mg/kg			100	80 - 120		
LCS	Selenium	0.10		mg/kg			100	80 - 120		
LCS	Silver	0.09		mg/kg			100	80 - 120		
LCS	Zinc	0.10		mg/kg			100	80 - 120		

AA13497

LCS	Arsenic	0.09		mg/kg			100	80 - 120		
LCS	Barium	0.10		mg/kg			100	80 - 120		
LCS	Cadmium	0.09		mg/kg			100	80 - 120		
LCS	Copper	0.09		mg/kg			100	80 - 120		
LCS	Lead	0.10		mg/kg			100	80 - 120		
LCS	Nickel	0.09		mg/kg			100	80 - 120		
LCS	Selenium	0.10		mg/kg			100	80 - 120		
LCS	Silver	0.09		mg/kg			100	80 - 120		
LCS	Zinc	0.10		mg/kg			100	80 - 120		

SAR-5458

AA13491

Dup	Calcium	13.40		mEq/L	13.40	13.60			1.48	
Dup	Magnesium	4.64		mEq/L	4.64	4.74			2.13	
Dup	Sodium	0.50		mEq/L	0.50	0.50			<%MDL%	
Dup	Sodium Adsorption Ratio	0.16		mEq/L	0.16	0.17			6.06	

AA13589

MB	Calcium	0.00		mEq/L						
MB	Magnesium	0.00		mEq/L						
MB	Sodium	0.01		mEq/L						
MB	Sodium Adsorption Ratio	Not Detected								

AA13590



Division of Environmental Testing

2115 N Scranton St Suite 3040A

Aurora, CO 80045

800-440-5184

Report Date : 10/31/2024

Report Time : 11:07

FINAL RESULTS REPORT

Project Manager: Jake J/Brett M/Blair R/Andy V/Derek **Project Name:** ELU A18 495 Cuttings

Project Number: N/A

QC Report

QC	Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%Rec	% REC Limits	RPD	RPD Limit
LCS	Calcium	8.99		ppm			89.9			
LCS	Magnesium	9.28		ppm			92.8			
LCS	Sodium	8.92		ppm			89.2			
LCS	Sodium Adsorption Ratio	0.50		ppm			92.6			

AA13591

LCS	Calcium	418.43		ppm			83.7			
LCS	Magnesium	428.11		ppm			85.6			
LCS	Sodium	430.72		ppm			86.1			
LCS	Sodium Adsorption Ratio	3.54		ppm			93.7			