

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

March 18, 2024

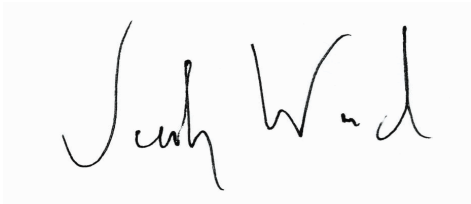
Paul Henchan
Fremont Environmental
PO Box 1289
Wellington, CO 80549

RE: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Work Order #2402423

Enclosed are the results of analyses for samples received by Summit Scientific on 02/23/24 15:37. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in blue ink that reads "Jacob Wood". The signature is written in a cursive style with a small flourish at the end of the word "Wood".

Jacob Wood For Paul Shrewsbury
President



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Project Number: UWRWR-A3002-ABN
Project Manager: Paul Henchan

Reported:
03/18/24 15:27

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BKG01@5.0'	2402423-01	Soil	02/23/24 00:00	02/23/24 15:37
BKG01@7.0'	2402423-02	Soil	02/23/24 00:00	02/23/24 15:37
BKG02@5.0'	2402423-03	Soil	02/23/24 00:00	02/23/24 15:37
BKG02@7.0'	2402423-04	Soil	02/23/24 00:00	02/23/24 15:37
BKG03@5.0'	2402423-05	Soil	02/23/24 00:00	02/23/24 15:37
BKG03@7.0'	2402423-06	Soil	02/23/24 00:00	02/23/24 15:37
BKG04@5.0'	2402423-07	Soil	02/23/24 00:00	02/23/24 15:37
BKG04@7.0'	2402423-08	Soil	02/23/24 00:00	02/23/24 15:37
BKG05@5.0'	2402423-09	Soil	02/23/24 00:00	02/23/24 15:37
BKG05@7.0'	2402423-10	Soil	02/23/24 00:00	02/23/24 15:37

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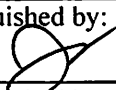
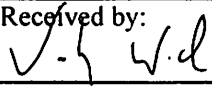
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4653 Table Mountain Drive
Golden, CO 80403
303-277-9310

Lab ID	Page 1 of 1
2402423	

Client: Fremont Env	Project Manager: Paul Henahan	Company: Noble
Address:	E-Mail: Paulh@fremontenv.com	Project Name/Location:
City/State/Zip:	jeff@fremontenv.com Ethanh@fremontenv.com	AFE#:
Phone:	Project Name: Wells Ranch USX AE 21-63-2HN (Back)	RO Billing Codes: UWRWR-A3002-ABN
Sampler Name: JG	Project Number:	Contact:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested				Special Instructions
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	EC, pH, SAR, Boron	Metals (915)		
1	BK601@5.0'	2/23/24		1			X			X			X	X		
2	BK601@7.0'															
3	BK602@5.0'															
4	BK602@7.0'															
5	BK603@5.0'															
6	BK603@7.0'															
7	BK604@5.0'															
8	BK604@7.0'															
9	BK605@5.0'															
10	BK605@7.0'															
11																
12																
13																
14																
15																

Relinquished by: 	Date/Time: 2/23/24 15:37	Received by: 	Date/Time: 2/23/24 15:37	TAT Business Days	Field DO	Notes:
Relinquished by:	Date/Time:	Received by:	Date/Time:	Same Day	Field EC	
Relinquished by:	Date/Time:	Received by:	Date/Time:	1 Day	Field ORP	
Relinquished by:	Date/Time:	Received by:	Date/Time:	2 Days	Field pH	
Relinquished by:	Date/Time:	Received by:	Date/Time:	3 Days	Field Temp.	
Temperature Upon Receipt: 15.7	Corrected Temperature	IR gun #: 2	HNO3 lot #:	Standard	<input checked="" type="checkbox"/> Field Turb.	

S₂

Sample Receipt Checklist

S2 Work Order# 2402423

Client: Fremont Client Project ID: Wells Ranch USX AE 29-63-2HN (Backgrounds)

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other Airbill #: _____

Matrix (Check all that apply) Air Soil/Solid Water Other

Temp (°C) 15.7 Thermometer # 2

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? ⁽¹⁾ NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	on file
If custody seals are present, are they intact? ⁽¹⁾	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples due within 48 hours present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe ²⁺), Hexavalent Chromium (Cr ⁶⁺ , Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out completely? ⁽¹⁾	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No Sample forms
Is the COC properly relinquished by the client w/ date and time recorded? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling)? ⁽¹⁾ Note the type of preservative in the comments column – HCl, H ₂ SO ₄ , NaOH, HNO ₃ , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2? ⁽¹⁾ Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Comments (if any):				
⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.				

John Wood
Custodian Printed Name

2/23/24 15:37
Date/Time



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Project Number: UWRWR-A3002-ABN
Project Manager: Paul Henchan

Reported:
03/18/24 15:27

BKG01@5.0'
2402423-01 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Boron	ND	2.00		mg/L	1	BHC0319	03/12/24	03/13/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Arsenic	6.63	0.200		mg/kg dry	1	BHC0179	03/07/24	03/09/24	EPA 6020B	
Barium	38.3	0.400		"	"	"	"	"	"	
Cadmium	0.322	0.200		"	"	"	"	"	"	
Copper	4.86	0.400		"	"	"	"	"	"	
Lead	6.97	0.200		"	"	"	"	"	"	
Nickel	8.37	0.400		"	"	"	"	"	"	
Silver	0.0292	0.0200		"	"	"	"	"	"	
Zinc	19.4	0.400		"	"	"	"	"	"	
Selenium	ND	0.260		"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BHC0462	03/15/24	03/15/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Calcium	16.0	0.0500		mg/L dry	1	BHC0114	03/05/24	03/15/24	EPA 6020B	
Magnesium	5.78	0.0500		"	"	"	"	"	"	
Sodium	35.9	0.0500		"	"	"	"	"	"	

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Project: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Project Number: UWRWR-A3002-ABN
Project Manager: Paul Henchan

Reported:
03/18/24 15:27

BKG01@5.0'
2402423-01 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.96	0.00100	units	1	BHC0535	03/15/24	03/15/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	93.2		%	1	BHC0170	03/07/24	03/08/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.294	0.0100	mmhos/cm	1	BHC0120	03/05/24	03/09/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.29		pH Units	1	BHC0115	03/05/24	03/09/24	EPA 9045D	

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PO Box 1289
Wellington CO, 80549

Project: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Project Number: UWRWR-A3002-ABN
Project Manager: Paul Henchan

Reported:
03/18/24 15:27

BKG01@7.0'
2402423-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHC0319	03/12/24	03/13/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	37.7	0.200	mg/kg dry	1	BHC0179	03/07/24	03/09/24	EPA 6020B	
Barium	45.8	0.400	"	"	"	"	"	"	
Cadmium	1.37	0.200	"	"	"	"	"	"	
Copper	12.2	0.400	"	"	"	"	"	"	
Lead	21.1	0.200	"	"	"	"	"	"	
Nickel	13.9	0.400	"	"	"	"	"	"	
Silver	0.222	0.0200	"	"	"	"	"	"	
Zinc	23.5	0.400	"	"	"	"	"	"	
Selenium	1.34	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHC0462	03/15/24	03/15/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	104	0.0500	mg/L dry	1	BHC0114	03/05/24	03/15/24	EPA 6020B	
Magnesium	42.7	0.0500	"	"	"	"	"	"	
Sodium	169	0.0500	"	"	"	"	"	"	

Calculated Analysis

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Project Number: UWRWR-A3002-ABN
Project Manager: Paul Henchan

Reported:
03/18/24 15:27

BKG01@7.0'
2402423-02 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.52	0.00100	units	1	BHC0535	03/15/24	03/15/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	86.2		%	1	BHC0170	03/07/24	03/08/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.36	0.0100	mmhos/cm	1	BHC0120	03/05/24	03/09/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.97		pH Units	1	BHC0115	03/05/24	03/09/24	EPA 9045D	

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Project: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Project Number: UWRWR-A3002-ABN
Project Manager: Paul Henchan

Reported:
03/18/24 15:27

BKG02@5.0'
2402423-03 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHC0319	03/12/24	03/13/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	2.61	0.200	mg/kg dry	1	BHC0179	03/07/24	03/09/24	EPA 6020B	
Barium	63.4	0.400	"	"	"	"	"	"	
Cadmium	0.256	0.200	"	"	"	"	"	"	
Copper	3.87	0.400	"	"	"	"	"	"	
Lead	6.73	0.200	"	"	"	"	"	"	
Nickel	4.60	0.400	"	"	"	"	"	"	
Silver	0.0240	0.0200	"	"	"	"	"	"	
Zinc	19.3	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHC0462	03/15/24	03/15/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	23.6	0.0500	mg/L dry	1	BHC0114	03/05/24	03/15/24	EPA 6020B	
Magnesium	14.6	0.0500	"	"	"	"	"	"	
Sodium	10.6	0.0500	"	"	"	"	"	"	

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PO Box 1289
Wellington CO, 80549

Project: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Project Number: UWRWR-A3002-ABN
Project Manager: Paul Henchan

Reported:
03/18/24 15:27

BKG02@5.0'
2402423-03 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.423	0.00100	units	1	BHC0535	03/15/24	03/15/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	95.0		%	1	BHC0170	03/07/24	03/08/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.338	0.0100	mmhos/cm	1	BHC0120	03/05/24	03/09/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.28		pH Units	1	BHC0115	03/05/24	03/09/24	EPA 9045D	

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Wells Ranch USX AE 29-63-IHN (Backgrounds)

Project Number: UWRWR-A3002-ABN
Project Manager: Paul Henchan

Reported:
03/18/24 15:27

BKG02@7.0'
2402423-04 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHC0319	03/12/24	03/13/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	3.56	0.200	mg/kg dry	1	BHC0179	03/07/24	03/09/24	EPA 6020B	
Barium	51.2	0.400	"	"	"	"	"	"	
Cadmium	0.253	0.200	"	"	"	"	"	"	
Copper	6.44	0.400	"	"	"	"	"	"	
Lead	10.9	0.200	"	"	"	"	"	"	
Nickel	7.21	0.400	"	"	"	"	"	"	
Silver	0.0444	0.0200	"	"	"	"	"	"	
Zinc	31.6	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHC0462	03/15/24	03/15/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	47.7	0.0500	mg/L dry	1	BHC0114	03/05/24	03/15/24	EPA 6020B	
Magnesium	17.1	0.0500	"	"	"	"	"	"	
Sodium	42.4	0.0500	"	"	"	"	"	"	

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Project: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Project Number: UWRWR-A3002-ABN
Project Manager: Paul Henchan

Reported:
03/18/24 15:27

BKG02@7.0'
2402423-04 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.34	0.00100	units	1	BHC0535	03/15/24	03/15/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.2		%	1	BHC0170	03/07/24	03/08/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.517	0.0100	mmhos/cm	1	BHC0120	03/05/24	03/09/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.99		pH Units	1	BHC0115	03/05/24	03/09/24	EPA 9045D	

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Fremont Environmental
PO Box 1289
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Project: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Project Number: UWRWR-A3002-ABN
Project Manager: Paul Henchan

Reported:
03/18/24 15:27

BKG03@5.0'
2402423-05 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHC0319	03/12/24	03/13/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	2.66	0.200	mg/kg dry	1	BHC0179	03/07/24	03/09/24	EPA 6020B	
Barium	46.4	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	4.07	0.400	"	"	"	"	"	"	
Lead	7.15	0.200	"	"	"	"	"	"	
Nickel	3.62	0.400	"	"	"	"	"	"	
Silver	0.0202	0.0200	"	"	"	"	"	"	
Zinc	16.5	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHC0462	03/15/24	03/15/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	152	0.0500	mg/L dry	1	BHC0114	03/05/24	03/15/24	EPA 6020B	
Magnesium	32.2	0.0500	"	"	"	"	"	"	
Sodium	30.1	0.0500	"	"	"	"	"	"	

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Project Number: UWRWR-A3002-ABN
Project Manager: Paul Henchan

Reported:
03/18/24 15:27

BKG03@5.0'
2402423-05 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.579	0.00100	units	1	BHC0535	03/15/24	03/15/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.0		%	1	BHC0170	03/07/24	03/08/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.06	0.0100	mmhos/cm	1	BHC0120	03/05/24	03/09/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.61		pH Units	1	BHC0115	03/05/24	03/09/24	EPA 9045D	

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Project Number: UWRWR-A3002-ABN
Project Manager: Paul Henchan

Reported:
03/18/24 15:27

BKG03@7.0'
2402423-06 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHC0319	03/12/24	03/13/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	5.62	0.200	mg/kg dry	1	BHC0179	03/07/24	03/09/24	EPA 6020B	
Barium	26.5	0.400	"	"	"	"	"	"	
Cadmium	0.286	0.200	"	"	"	"	"	"	
Copper	7.95	0.400	"	"	"	"	"	"	
Lead	13.3	0.200	"	"	"	"	"	"	
Nickel	7.38	0.400	"	"	"	"	"	"	
Silver	0.0530	0.0200	"	"	"	"	"	"	
Zinc	33.9	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHC0462	03/15/24	03/15/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	78.5	0.0500	mg/L dry	1	BHC0114	03/05/24	03/15/24	EPA 6020B	
Magnesium	27.4	0.0500	"	"	"	"	"	"	
Sodium	52.0	0.0500	"	"	"	"	"	"	

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Project Number: UWRWR-A3002-ABN
Project Manager: Paul Henchan

Reported:
03/18/24 15:27

BKG03@7.0'
2402423-06 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.29	0.00100	units	1	BHC0535	03/15/24	03/15/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.1		%	1	BHC0170	03/07/24	03/08/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.782	0.0100	mmhos/cm	1	BHC0120	03/05/24	03/09/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.17		pH Units	1	BHC0115	03/05/24	03/09/24	EPA 9045D	

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Project Number: UWRWR-A3002-ABN
Project Manager: Paul Henchan

Reported:
03/18/24 15:27

BKG04@5.0'
2402423-07 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHC0319	03/12/24	03/13/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	2.62	0.200	mg/kg dry	1	BHC0179	03/07/24	03/09/24	EPA 6020B	
Barium	48.7	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	2.79	0.400	"	"	"	"	"	"	
Lead	5.84	0.200	"	"	"	"	"	"	
Nickel	3.46	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	13.4	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHC0462	03/15/24	03/15/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	22.8	0.0500	mg/L dry	1	BHC0114	03/05/24	03/15/24	EPA 6020B	
Magnesium	8.14	0.0500	"	"	"	"	"	"	
Sodium	20.8	0.0500	"	"	"	"	"	"	

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Project Number: UWRWR-A3002-ABN
Project Manager: Paul Henchan

Reported:
03/18/24 15:27

BKG04@5.0'
2402423-07 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.952	0.00100	units	1	BHC0535	03/15/24	03/15/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	94.9		%	1	BHC0170	03/07/24	03/08/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.230	0.0100	mmhos/cm	1	BHC0120	03/05/24	03/09/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.46		pH Units	1	BHC0115	03/05/24	03/09/24	EPA 9045D	

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Wells Ranch USX AE 29-63-IHN (Backgrounds)

Project Number: UWRWR-A3002-ABN
Project Manager: Paul Henchan

Reported:
03/18/24 15:27

BKG04@7.0'
2402423-08 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHC0319	03/12/24	03/13/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	3.10	0.200	mg/kg dry	1	BHC0179	03/07/24	03/09/24	EPA 6020B	
Barium	107	0.400	"	"	"	"	"	"	
Cadmium	0.377	0.200	"	"	"	"	"	"	
Copper	7.70	0.400	"	"	"	"	"	"	
Lead	12.1	0.200	"	"	"	"	"	"	
Nickel	5.96	0.400	"	"	"	"	"	"	
Silver	0.0403	0.0200	"	"	"	"	"	"	
Zinc	35.6	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHC0462	03/15/24	03/15/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	15.5	0.0500	mg/L dry	1	BHC0114	03/05/24	03/15/24	EPA 6020B	
Magnesium	8.72	0.0500	"	"	"	"	"	"	
Sodium	56.0	0.0500	"	"	"	"	"	"	

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Project Number: UWRWR-A3002-ABN
Project Manager: Paul Henchan

Reported:
03/18/24 15:27

BKG04@7.0'
2402423-08 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.82	0.00100	units	1	BHC0535	03/15/24	03/15/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	88.3		%	1	BHC0170	03/07/24	03/08/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.379	0.0100	mmhos/cm	1	BHC0120	03/05/24	03/09/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.48		pH Units	1	BHC0115	03/05/24	03/09/24	EPA 9045D	

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Project Number: UWRWR-A3002-ABN
Project Manager: Paul Henchan

Reported:
03/18/24 15:27

BKG05@5.0'
2402423-09 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHC0319	03/12/24	03/13/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	5.45	0.200	mg/kg dry	1	BHC0179	03/07/24	03/09/24	EPA 6020B	
Barium	397	0.400	"	"	"	"	"	"	
Cadmium	0.345	0.200	"	"	"	"	"	"	
Copper	8.88	0.400	"	"	"	"	"	"	
Lead	20.5	0.200	"	"	"	"	"	"	
Nickel	6.22	0.400	"	"	"	"	"	"	
Silver	0.0843	0.0200	"	"	"	"	"	"	
Zinc	26.2	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHC0462	03/15/24	03/15/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	39.6	0.0500	mg/L dry	1	BHC0114	03/05/24	03/15/24	EPA 6020B	
Magnesium	19.2	0.0500	"	"	"	"	"	"	
Sodium	98.7	0.0500	"	"	"	"	"	"	

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Project Number: UWRWR-A3002-ABN
Project Manager: Paul Henchan

Reported:
03/18/24 15:27

BKG05@5.0'
2402423-09 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.22	0.00100	units	1	BHC0535	03/15/24	03/15/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	85.4		%	1	BHC0170	03/07/24	03/08/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.730	0.0100	mmhos/cm	1	BHC0120	03/05/24	03/09/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.31		pH Units	1	BHC0115	03/05/24	03/09/24	EPA 9045D	

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Project Number: UWRWR-A3002-ABN
Project Manager: Paul Henchan

Reported:
03/18/24 15:27

BKG05@7.0'
2402423-10 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHC0319	03/12/24	03/13/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	10.0	0.200	mg/kg dry	1	BHC0179	03/07/24	03/09/24	EPA 6020B	
Barium	80.6	0.400	"	"	"	"	"	"	
Cadmium	0.467	0.200	"	"	"	"	"	"	
Copper	9.30	0.400	"	"	"	"	"	"	
Lead	17.7	0.200	"	"	"	"	"	"	
Nickel	8.38	0.400	"	"	"	"	"	"	
Silver	0.0987	0.0200	"	"	"	"	"	"	
Zinc	40.9	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHC0462	03/15/24	03/15/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	28.0	0.0500	mg/L dry	1	BHC0114	03/05/24	03/15/24	EPA 6020B	
Magnesium	16.2	0.0500	"	"	"	"	"	"	
Sodium	111	0.0500	"	"	"	"	"	"	

Summit Scientific

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Project Number: UWRWR-A3002-ABN
 Project Manager: Paul Henchan

Reported:
 03/18/24 15:27

BKG05@7.0'
2402423-10 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	4.13	0.00100	units	1	BHC0535	03/15/24	03/15/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	87.2		%	1	BHC0170	03/07/24	03/08/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.697	0.0100	mmhos/cm	1	BHC0120	03/05/24	03/09/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **02/23/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.09		pH Units	1	BHC0115	03/05/24	03/09/24	EPA 9045D	

Summit Scientific

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Project Number: UWRWR-A3002-ABN
 Project Manager: Paul Henchan

Reported:
 03/18/24 15:27

Total Metals by EPA 6020B Hot Water Soluble Extraction - Quality Control


Summit Scientific

Analyte	Result	Reporting		Spike Level	Source Result	%REC		RPD		Notes
		Limit	Units			%REC	Limits	RPD	Limit	

Batch BHC0319 - EPA 3050B

Blank (BHC0319-BLK1)				Prepared: 03/12/24 Analyzed: 03/13/24							
Boron	ND	2.00	mg/L								
LCS (BHC0319-BS1)				Prepared: 03/12/24 Analyzed: 03/13/24							
Boron	5.47	2.00	mg/L	5.00	109	80-120					
Duplicate (BHC0319-DUP1)				Source: 2402423-01				Prepared: 03/12/24 Analyzed: 03/13/24			
Boron	0.199	2.00	mg/L		0.213		6.94	20			
Matrix Spike (BHC0319-MS1)				Source: 2402423-01				Prepared: 03/12/24 Analyzed: 03/13/24			
Boron	5.28	2.00	mg/L	5.00	0.213	101	75-125				
Matrix Spike Dup (BHC0319-MSD1)				Source: 2402423-01				Prepared: 03/12/24 Analyzed: 03/13/24			
Boron	5.35	2.00	mg/L	5.00	0.213	103	75-125	1.17	25		

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Project Number: UWRWR-A3002-ABN
Project Manager: Paul Henchan

Reported:
03/18/24 15:27

Total Metals by EPA 6020B - Quality Control
Summit Scientific

Analyte	Result	Reporting		Spike Level	Source Result	%REC		RPD		Notes
		Limit	Units			Limits	RPD	Limit		

Batch BHC0179 - EPA 3050B

Blank (BHC0179-BLK1)

Prepared: 03/07/24 Analyzed: 03/09/24

Arsenic	ND	0.200	mg/kg wet							
Barium	ND	0.400	"							
Cadmium	ND	0.200	"							
Copper	ND	0.400	"							
Lead	ND	0.200	"							
Nickel	ND	0.400	"							
Silver	ND	0.0200	"							
Zinc	ND	0.400	"							
Selenium	ND	0.260	"							

LCS (BHC0179-BS1)

Prepared: 03/07/24 Analyzed: 03/09/24

Arsenic	40.4	0.200	mg/kg wet	40.0		101	80-120			
Barium	41.6	0.400	"	40.0		104	80-120			
Cadmium	2.09	0.200	"	2.00		104	80-120			
Copper	45.5	0.400	"	40.0		114	80-120			
Lead	20.5	0.200	"	20.0		102	80-120			
Nickel	44.5	0.400	"	40.0		111	80-120			
Silver	2.08	0.0200	"	2.00		104	80-120			
Zinc	44.3	0.400	"	40.0		111	80-120			
Selenium	4.69	0.260	"	4.00		117	80-120			

Duplicate (BHC0179-DUP1)

Source: 2402423-01

Prepared: 03/07/24 Analyzed: 03/09/24

Arsenic	7.01	0.200	mg/kg dry		6.63		5.56	20		
Barium	50.3	0.400	"		38.3		27.0	20		QR-04
Cadmium	0.356	0.200	"		0.322		10.0	20		
Copper	5.72	0.400	"		4.86		16.2	20		
Lead	8.05	0.200	"		6.97		14.4	20		
Nickel	9.23	0.400	"		8.37		9.84	20		
Silver	0.0292	0.0200	"		0.0292		0.00	20		
Zinc	19.7	0.400	"		19.4		1.53	20		
Selenium	0.223	0.260	"		ND		200	20		QR-01

Summit Scientific

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Project: Noble - Wells Ranch USX AE 29-63-IHN (Backgrounds)

Project Number: UWRWR-A3002-ABN
 Project Manager: Paul Henchan

Reported:
 03/18/24 15:27

Total Metals by EPA 6020B - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD		Notes
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit		

Batch BHC0179 - EPA 3050B

Matrix Spike (BHC0179-MS1)

Source: 2402423-01

Prepared: 03/07/24 Analyzed: 03/09/24

Arsenic	50.6	0.200	mg/kg dry	42.9	6.63	103	75-125			
Barium	115	0.400	"	42.9	38.3	179	75-125			QM-05
Cadmium	2.58	0.200	"	2.15	0.322	105	75-125			
Copper	32.0	0.400	"	42.9	4.86	63.3	75-125			QM-05
Lead	28.9	0.200	"	21.5	6.97	102	75-125			
Nickel	34.3	0.400	"	42.9	8.37	60.4	75-125			QM-05
Silver	2.22	0.0200	"	2.15	0.0292	102	75-125			
Zinc	46.8	0.400	"	42.9	19.4	63.7	75-125			QM-05
Selenium	4.81	0.260	"	4.29	ND	112	75-125			

Matrix Spike Dup (BHC0179-MSD1)

Source: 2402423-01

Prepared: 03/07/24 Analyzed: 03/09/24

Arsenic	54.2	0.200	mg/kg dry	42.9	6.63	111	75-125	6.85	25	
Barium	122	0.400	"	42.9	38.3	195	75-125	5.62	25	QM-05
Cadmium	2.78	0.200	"	2.15	0.322	114	75-125	7.13	25	
Copper	33.0	0.400	"	42.9	4.86	65.5	75-125	2.81	25	QM-05
Lead	31.1	0.200	"	21.5	6.97	112	75-125	7.23	25	
Nickel	35.3	0.400	"	42.9	8.37	62.7	75-125	2.85	25	QM-05
Silver	2.38	0.0200	"	2.15	0.0292	109	75-125	6.80	25	
Zinc	48.2	0.400	"	42.9	19.4	67.1	75-125	3.09	25	QM-05
Selenium	5.14	0.260	"	4.29	ND	120	75-125	6.45	25	

Summit Scientific

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Project: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Project Number: UWRWR-A3002-ABN
 Project Manager: Paul Henchan

Reported:
 03/18/24 15:27

Hexavalent Chromium by EPA Method 7196 - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD		Notes
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit		

Batch BHC0462 - 3060A Mod

Blank (BHC0462-BLK1)

Prepared & Analyzed: 03/15/24

Chromium, Hexavalent ND 0.30 mg/kg wet

LCS (BHC0462-BS1)

Prepared & Analyzed: 03/15/24

Chromium, Hexavalent 24.4 0.30 mg/kg wet 25.0 97.6 80-120

Duplicate (BHC0462-DUP1)

Source: 2402423-01

Prepared & Analyzed: 03/15/24

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

Matrix Spike (BHC0462-MS1)

Source: 2402423-01

Prepared & Analyzed: 03/15/24

Chromium, Hexavalent 26.4 0.30 mg/kg dry 26.8 ND 98.4 75-125

Matrix Spike Dup (BHC0462-MSD1)

Source: 2402423-01

Prepared & Analyzed: 03/15/24

Chromium, Hexavalent 26.4 0.30 mg/kg dry 26.8 ND 98.4 75-125 0.00 20

Summit Scientific

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Project: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Project Number: UWRWR-A3002-ABN
 Project Manager: Paul Henchan

Reported:
 03/18/24 15:27

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike Level	Source Result	%REC		RPD		Notes
		Limit	Units			%REC	Limits	RPD	Limit	

Batch BHC0114 - General Preparation

Blank (BHC0114-BLK1)

Prepared: 03/05/24 Analyzed: 03/15/24

Calcium	ND	0.0500	mg/L wet							
Magnesium	ND	0.0500	"							
Sodium	ND	0.0500	"							

LCS (BHC0114-BS1)

Prepared: 03/05/24 Analyzed: 03/15/24

Calcium	4.95	0.0500	mg/L wet	5.00	99.0	70-130				
Magnesium	5.73	0.0500	"	5.00	115	70-130				
Sodium	5.69	0.0500	"	5.00	114	70-130				

Summit Scientific

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Project: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Project Number: UWRWR-A3002-ABN
 Project Manager: Paul Henchan

Reported:
 03/18/24 15:27

Physical Parameters by APHA/ASTM/EPA Methods - Quality Control

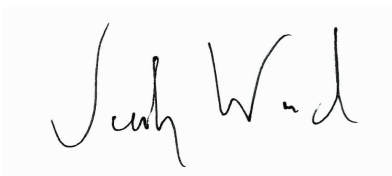
Summit Scientific

Analyte	Result	Reporting		Spike	Source	%REC		RPD		Notes
		Limit	Units	Level	Result	%REC	Limits	RPD	Limit	

Batch BHC0170 - General Preparation

Duplicate (BHC0170-DUP1)	Source: 2402423-01		Prepared: 03/07/24 Analyzed: 03/08/24	
% Solids	94.5	%	93.2	1.42 20

Summit Scientific



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Project: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Project Number: UWRWR-A3002-ABN
 Project Manager: Paul Henchan

Reported:
 03/18/24 15:27

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike Level	Source		%REC		RPD		Notes
		Limit	Units		Result	%REC	Limits	RPD	Limit		

Batch BHC0120 - General Preparation

Blank (BHC0120-BLK1)

Prepared: 03/05/24 Analyzed: 03/09/24

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BHC0120-BS1)

Prepared: 03/05/24 Analyzed: 03/09/24

Specific Conductance (EC) 0.148 0.0100 mmhos/cm 0.150 98.6 95-105

Duplicate (BHC0120-DUP1)

Source: 2402423-01

Prepared: 03/05/24 Analyzed: 03/09/24

Specific Conductance (EC) 0.289 0.0100 mmhos/cm 0.294 1.71 20

Summit Scientific

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Project: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Project Number: UWRWR-A3002-ABN
 Project Manager: Paul Henchan

Reported:
 03/18/24 15:27

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike	Source	%REC			RPD	Notes
		Limit	Units	Level	Result	%REC	Limits	RPD	Limit	

Batch BHC0115 - General Preparation

LCS (BHC0115-BS1)

Prepared: 03/05/24 Analyzed: 03/09/24

pH	9.07	pH Units	9.18	98.8	95-105
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Duplicate (BHC0115-DUP1)

Source: 2402423-01

Prepared: 03/05/24 Analyzed: 03/09/24

pH	8.24	pH Units	8.29	0.605	20
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Summit Scientific

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Project: Noble - Wells Ranch USX AE 29-63-1HN (Backgrounds)

Project Number: UWRWR-A3002-ABN
Project Manager: Paul Henchan

Reported:
03/18/24 15:27

Notes and Definitions

- QR-04 The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
- QR-01 Analyses are not controlled on RPD values from sample concentrations less than 10 times the reporting limit. QC batch accepted based on LCS and/or LCSD QC results.
- QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The associated LCS and/or LCSD were within acceptance limits, therefore the data are considered valid.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference