

# **FREMONT ENVIRONMENTAL INC.**

March 18, 2024

Mr. Daniel Peterson  
Noble Energy Inc.  
2115 117<sup>th</sup> Avenue  
Greeley, CO 80634

Subject:           **Flowline Closure Data Submittal**  
Wells Ranch AA 35-62-1AHNC  
API # 05-123-38670  
SWSW Sec. 36, T6N, R63W  
Weld County, Colorado  
Fremont Project No. C024-042  
Facility ID #435570, Remediation #30294

Dear Mr. Peterson:

As you requested, Fremont Environmental Inc. (Fremont) personnel conducted Flowline Closure activities for the Noble Energy Inc. (Noble) Wells Ranch AA 35-62-1AHNC. Impacted soil was not encountered during abandonment activities. Details of the Wells Ranch AA 35-62-1AHNC flowline closure activities are documented in the attached Closure Report. Groundwater was not encountered during flowline abandonment activities.

Please contact me at (303) 956-8714 if you require any additional information. Fremont appreciates the opportunity to provide this service.

Sincerely,

**FREMONT ENVIRONMENTAL INC.**



Paul V. Henehan, P.E.  
Senior Consultant

Attachments:

- Facility Closure Checklist
- Tables
- Figures
- Photos
- Laboratory Reports

# Flowline Closure Checklist

## COGCC Rule 911.a.(4) Environmental Site Closure Assessment Field Form

Additional Attachments:		Tank Battery Closure		Wellhead Closure		Pit Closure		Partially Buried Vault Closure
Site Name & COGCC Facility Number: WELLS RANCH AA35 ECONODE T6N-R63W-S35 L01 Facility ID: 480959		Date: 02/21/2024-02/22/2024		Remediation Project #: 30294				
Associated Wells: API: 05-123-38670 Facility ID: 435570 Wells Ranch AA 35-62-1AHNC		Age of Site: 2014		Number of Photos Attached: 11 Photos				

Starting point: (GPS coordinates and descriptions) 40.437486, -104.394080

End point: (GPS coordinates and descriptions) 40.4426494, -104.3933461

USCS Soil Type: SW Estimated Depth to Groundwater: N/A

Hydrocarbon Impacted Soils / Spills: (Note estimated size and if impact appears to be surficial or extends to an unknown depth)  
None observed

Salt Crusted Soils or Impacted Vegetation: (Note estimated size and if impact appears to be surficial or extends to an unknown depth)  
None observed

### Flowlines

Flowline type	3" Steel							
Depth	Roughly 3-4ft							
Age	2014							
Length	2,017ft							
Construction Material	GRN FBE Epoxy							
Were flowlines pulled?	Abandoned-in-Place							
Visual Integrity of lines	No Damage							
Visual impacts if trenched	N/A							
PID Readings if trenched	N/A							
Sample taken? Location/Sample ID#	FL01@6.0' FL02@6.0' GL01@7.0' GL02@7.0'							
Photo Number(s)	Photo 1A-1B, 2A-2B, & 3A-3G							

Other observations regarding on location flowlines: GL01@7.0' to GL02@7.0' is a 2" Green FBE epoxy coated steel gas line abandoned-in-place that runs from the wellhead to the on-site pad meter house. An exceedance in pH was discovered at sample locations (FL01@6.0', GL01@7.0' and GL02@7.0') and exceedances in Arsenic were discovered at all sample locations. Furthermore, local background samples collected at similar depths at both the separator and wellhead tie-in sample locations were found with exceeding pH and Arsenic levels as well. Thus, these exceedances should be contributed to native soil conditions. Refer to the inorganic soil chemistry table (Table 3) and metals in soil chemistry table (Table 4) for reference.

### Summary

Was impacted soil identified?		No	Yes - less than 10 cubic yards	Yes - more than 10 cubic yards
Total number of samples field screened: 0 Samples		Total number of samples collected: 15 Samples		
Highest PID Reading: High @ 0.0ppm (All Samples)		Total number of samples submitted to lab for analysis: 15 Samples		
If more than 10 cubic yards of impacted soil were observed:				
Vertical extent: N/A		Estimated spill volume: N/A		
Lateral extent: N/A		Volume of soil removed: N/A		
Is additional investigation required? N/A				
Was groundwater encountered during the investigation?				
No		Yes - not impacted or in contact with impacted soils		Yes - groundwater impacted and/or in contact with impacted soils
Measured depth to groundwater: N/A		Was remedial groundwater removal conducted? Yes No		
Date Groundwater was encountered: N/A		Commencement date of removal: N/A		
Sheen on groundwater? Yes No		Volume of groundwater removed prior to sampling: N/A		
Free product observed? Yes No		Volume of groundwater removed post sampling: N/A		
Total number of samples collected: N/A		Total Volume of groundwater removed: N/A		
Total number of samples submitted to lab for analysis: N/A				

**TABLE 1**  
**SUMMARY OF VOLATILE ORGANIC SOIL CHEMISTRY DATA**  
**NOBLE ENERGY INC.**  
**WELLS RANCH AA 35-62-1AHNC, WELD COUNTY, COLORADO**  
**FREMONT PROJECT NO. C024-042**

Sample ID	Sample Date	Depth (ft)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-Benzene (mg/kg)	Xylenes (mg/kg)	1,2,4-Trimethyl-Benzene (mg/kg)	1,3,5-Trimethyl-Benzene (mg/kg)	Naphthalene (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)
ECMC Table 915-1 Limits (Residential SSL)			1.2	490	5.8	58	30	27	2	500**		
ECMC Table 915-1 Limits (Protection of Groundwater SSL)			0.0026	0.69	0.78	9.9	0.0081	0.0087	0.0038	500**		
FL01@6.0'	2/21/2024	6.0 Ft	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
GL01@7.0'	2/21/2024	7.0 Ft	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
FL02@6.0'	2/22/2024	6.0 Ft	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
GL02@7.0'	2/21/2024	7.0 Ft	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50

Bold faced values exceed the ECMC Table 915-1 concentrations

Red & blue highlighted 915-1 Limits indicate the referenced soil screening level (SSL)

Green highlighted cells indicate soil removed via excavation

\* Indicates laboratory minimum detection limit in excess of SSL

\*\* Summation of GRO+DRO+ORO must be less than 500 mg/kg

NA - Not analyzed

TABLE 2  
SUMMARY OF POLYCYCLIC AROMATIC HYDROCARBON SOIL CHEMISTRY DATA  
NOBLE ENERGY INC.  
WELLS RANCH AA 35-62-1AHNC, WELD COUNTY, COLORADO  
FREMONT PROJECT NO. C024-042

Sample ID	Sample Date	Depth (ft)	Acenaphthene (mg/kg)	Anthracene (mg/kg)	Benzo (a) Anthracene (mg/kg)	Benzo (a) Pyrene (mg/kg)	Benzo (b) Fluoranthene (mg/kg)	Benzo (k) Fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenzo (a,h) Anthracene (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	Indeno (1,2,3-cd) Pyrene (mg/kg)	Pyrene (mg/kg)	1-Methyl - Naphthalene (mg/kg)	2-Methyl- Naphthalene (mg/kg)
ECMC Table 915-1 Limits (Residential SSL)			360	1800	1.1	0.11	1.1	11	110	0.11	240	240	1.1	180	18	24
ECMC Table 915-1 Limits (Protection of Groundwater SSL)			0.55	5.8	0.011	0.24	0.3	2.9	9	0.096	8.9	0.54	0.98	1.3	0.006	0.019
FL01@6.0'	2/21/2024	6.0 Ft	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
GL01@7.0'	2/21/2024	7.0 Ft	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
FL02@6.0'	2/22/2024	6.0 Ft	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
GL02@7.0'	2/21/2024	7.0 Ft	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500

Bold faced values exceed the ECMC Table 915-1 concentrations

Red & blue highlighted 915-1 Limits indicate the referenced soil screening level (SSL)

\* Indicates laboratory minimum detection limit in excess of SSL

NA - Not analyzed

Green highlighted cells indicate soil removed via excavation

**TABLE 3**  
**SUMMARY OF SOIL SUITABILITY FOR RECLAMATION**  
**NOBLE ENERGY INC.**  
**WELLS RANCH AA 35-62-1AHNC, WELD COUNTY, COLORADO**  
**FREMONT PROJECT NO. C024-042**

Sample ID	Sample Date	Depth (ft)	pH	EC (mmhos/cm)	SAR	Boron (mg/L)
ECMC Table 915-1 Soil Suitability Limits			6 - 8.3	<4	<6	2
Max. Background Concentration (or Concentration Range)			8.70	-	-	-
FL01@6.0'	2/21/2024	6.0 Ft	<b>8.35</b>	0.270	0.485	<2.00
GL01@7.0'	2/21/2024	7.0 Ft	<b>8.51</b>	0.207	0.282	<2.00
FL02@6.0'	2/22/2024	6.0 Ft	8.28	0.344	0.505	<2.00
GL02@7.0'	2/21/2024	7.0 Ft	<b>8.56</b>	0.356	1.60	<2.00
BKG01@6.0'	2/21/2024	6.0 Ft	<b>8.69</b>	0.112	0.101	<2.00
BKG01@7.0'	2/21/2024	7.0 Ft	<b>8.53</b>	0.162	0.552	<2.00
BKG02@6.0'	2/21/2024	6.0 Ft	7.96	0.420	0.501	<2.00
BKG02@7.0'	2/21/2024	7.0 Ft	8.23	0.221	0.235	<2.00
BKG03@6.0'	2/22/2024	6.0 Ft	8.17	0.0770	0.0631	<2.00
BKG03@7.0'	2/22/2024	7.0 Ft	<b>8.63</b>	0.111	0.0919	<2.00
BKG04@6.0'	2/22/2024	6.0 Ft	<b>8.70</b>	0.150	0.249	<2.00
BKG04@7.0'	2/22/2024	7.0 Ft	<b>8.62</b>	0.142	0.250	<2.00
BKG05@6.0'	2/22/2024	6.0 Ft	8.12	0.914	0.973	<2.00
BKG06@6.0'	2/22/2024	6.0 Ft	<b>8.46</b>	0.150	0.0882	<2.00
BKG07@6.0'	2/22/2024	6.0 Ft	<b>8.32</b>	0.176	0.263	<2.00

Bold faced, yellow highlighted values exceed the ECMC Table 915-1 concentrations

Green highlighted cells indicate soil removed via excavation

Yellow highlighted 915-1 Limits indicate the referenced soil screening level (SSL)

NA - Not analyzed

Local Background Samples (BKG01, BG02, BKG03, BKG04, BKG05, BKG06, BKG07)

**TABLE 4**  
**SUMMARY OF METALS IN SOIL CHEMISTRY DATA**  
**NOBLE ENERGY INC.**  
**WELLS RANCH AA 35-62-1AHNC, WELD COUNTY, COLORADO**  
**FREMONT PROJECT NO. C024-042**

Sample ID	Sample Date	Depth (ft)	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (VI) (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Zinc (mg/kg)
ECMC Table 915-1 Limits (Residential SSL)			0.68	15000	71	0.3	3100	400	1500	390	390	23000
ECMC Table 915-1 Limits (Protection of Groundwater SSL)			0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
125% Max. Background Concentration			7.47	-	-	-	-	-	-	-	-	-
FL01@6.0'	2/21/2024	6.0 Ft	<b>3.68</b>	80.6	<0.200	<0.30	3.50	6.82	3.99	<0.260	0.0535	14.0
GL01@7.0'	2/21/2024	7.0 Ft	<b>2.05</b>	78.9	<0.200	<0.30	1.67	4.42	2.04	<0.260	0.0360	9.98
FL02@6.0'	2/22/2024	6.0 Ft	<b>3.23</b>	73.1	<0.200	<0.30	2.54	5.79	3.25	<0.260	0.0465	12.8
GL02@7.0'	2/21/2024	7.0 Ft	<b>3.31</b>	35.6	<0.200	<0.30	2.99	7.27	2.31	<0.260	0.0571	14.9
BKG01@6.0'	2/21/2024	6.0 Ft	<b>4.64</b>	64.8	<0.200	<0.30	2.79	5.33	3.23	<0.260	0.0430	12.0
BKG01@7.0'	2/21/2024	7.0 Ft	<b>5.90</b>	<b>97.9</b>	0.348	<0.30	3.09	6.35	4.04	<0.260	0.0434	13.6
BKG02@6.0'	2/21/2024	6.0 Ft	<b>5.98</b>	<b>98.0</b>	<0.200	<0.30	3.20	8.11	5.07	<0.260	0.0635	15.0
BKG02@7.0'	2/21/2024	7.0 Ft	<b>4.49</b>	74.1	<0.200	<0.30	2.50	5.31	3.18	<0.260	0.0414	11.6
BKG03@6.0'	2/22/2024	6.0 Ft	<b>2.95</b>	36.0	<0.200	<0.30	1.71	3.40	1.92	<0.260	0.0294	7.96
BKG03@7.0'	2/22/2024	7.0 Ft	<b>2.65</b>	68.1	<0.200	<0.30	1.69	3.68	1.78	<0.260	0.0232	7.21
BKG04@6.0'	2/22/2024	6.0 Ft	<b>2.92</b>	<b>83.5</b>	<0.200	<0.30	1.99	8.08	2.92	<0.260	0.0350	9.01
BKG04@7.0'	2/22/2024	7.0 Ft	<b>2.22</b>	34.8	<0.200	<0.30	1.61	2.83	1.85	<0.260	0.0345	7.98
BKG05@6.0'	2/22/2024	6.0 Ft	<b>3.49</b>	44.9	0.285	<0.30	4.84	8.74	5.24	<0.260	0.0607	25.3
BKG06@6.0'	2/22/2024	6.0 Ft	<b>3.34</b>	81.4	<0.200	<0.30	2.75	4.55	3.57	<0.260	0.0433	11.5
BKG07@6.0'	2/22/2024	6.0 Ft	<b>3.72</b>	53.7	<0.200	<0.30	2.80	6.16	3.26	<0.260	0.0491	12.0

Bold faced values exceed the ECMC Table 915-1 concentrations

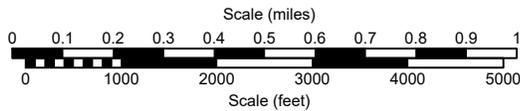
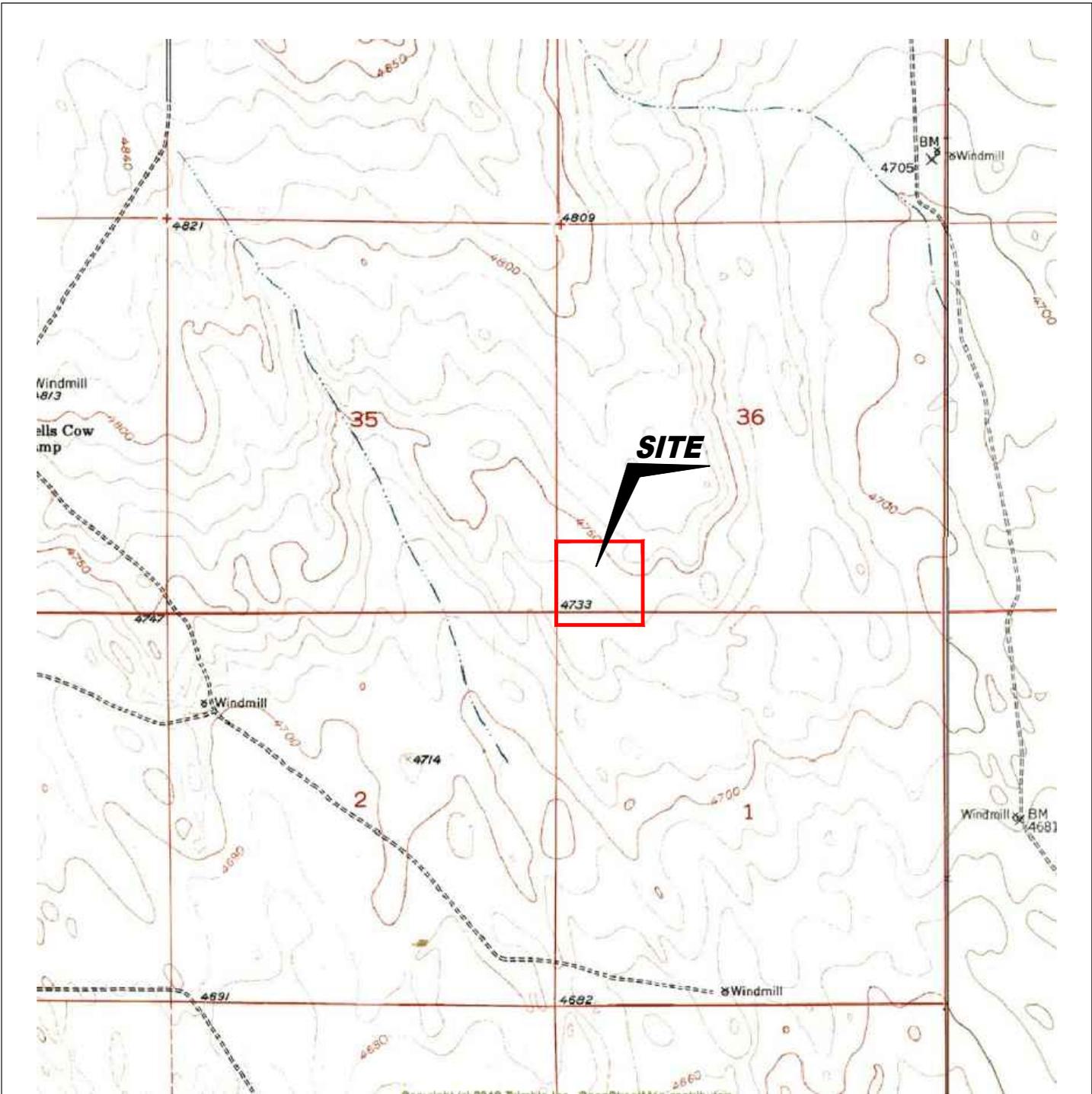
Red & blue highlighted 915-1 Limits indicate the referenced soil screening level (SSL)

\* Indicates laboratory minimum detection limit in excess of SSL

Green highlighted cells indicate soil removed via excavation

NA - Not analyzed

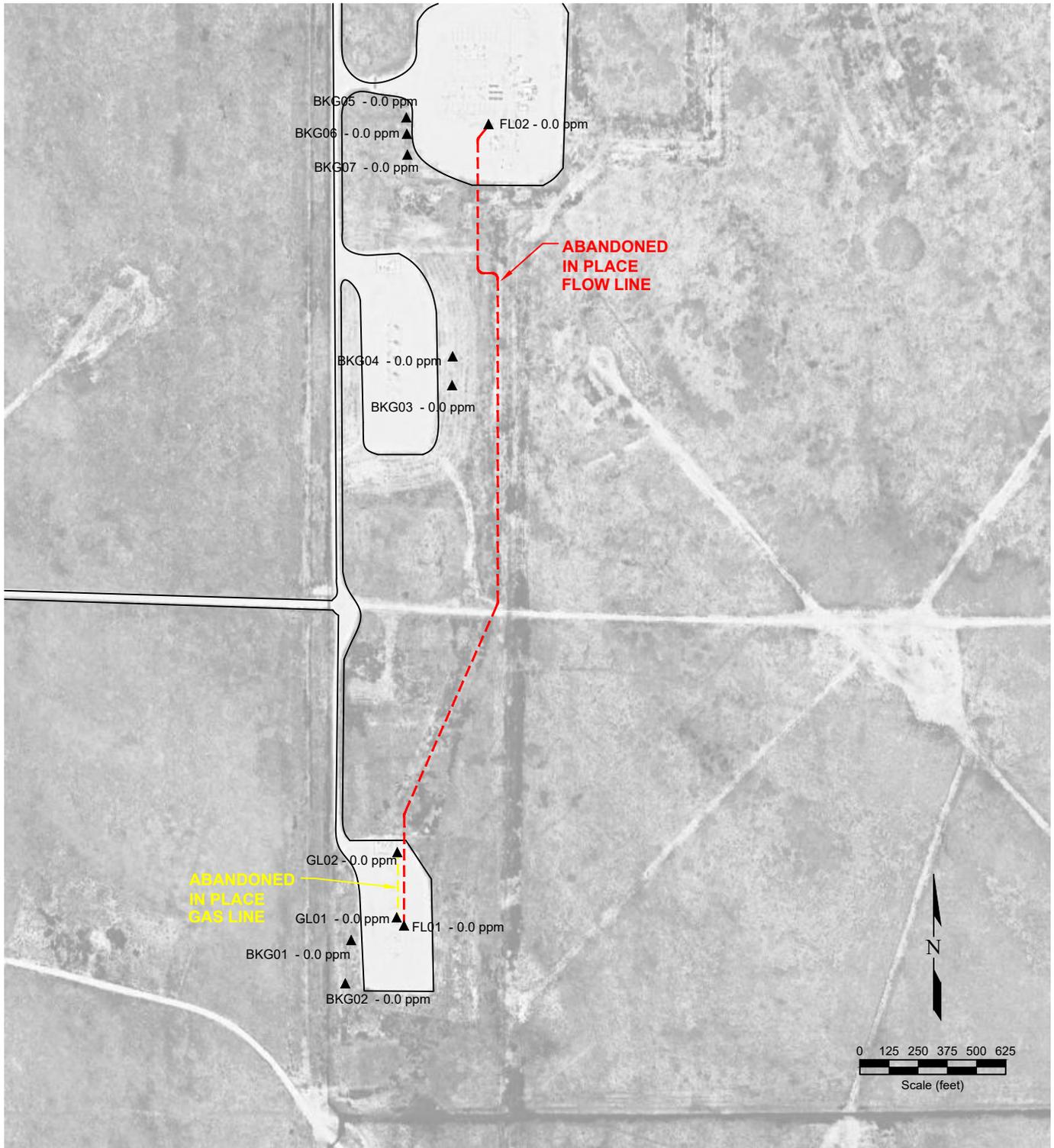
Local Background Samples (BKG01, BG02, BKG03, BKG04, BKG05, BKG06, BKG07)



USGS 7.5 MINUTE SERIES (TOPOGRAPHIC)

<p>Figure 1  <b>SITE LOCATION MAP</b>  <b>Noble Energy Inc ~ Wells Ranch AA35-62-1AHNC</b></p> <p>SWSW Sec. 36, T6N, R63W, 6th PM          Weld County, Colorado          40.437499°, -104.394114°</p>		
Project # <b>CO24-042</b>	API # <b>05-123-38670</b>	Facility #
Date <b>8/3/24</b>	Remediation # <b>30294</b>	Filename <b>24042T2</b>





**LEGEND**

- WELL HEAD LOCATION
- ▲ PID READING LOCATION
- ABOVE GROUND STORAGE TANK
- FORMER FACILITY
- ABANDONED IN PLACE FLOW LINE
- ABANDONED IN PLACE GAS LINE
- FENCE LINE
- CONTAINMENT BERM
- CONTAINMENT WALL

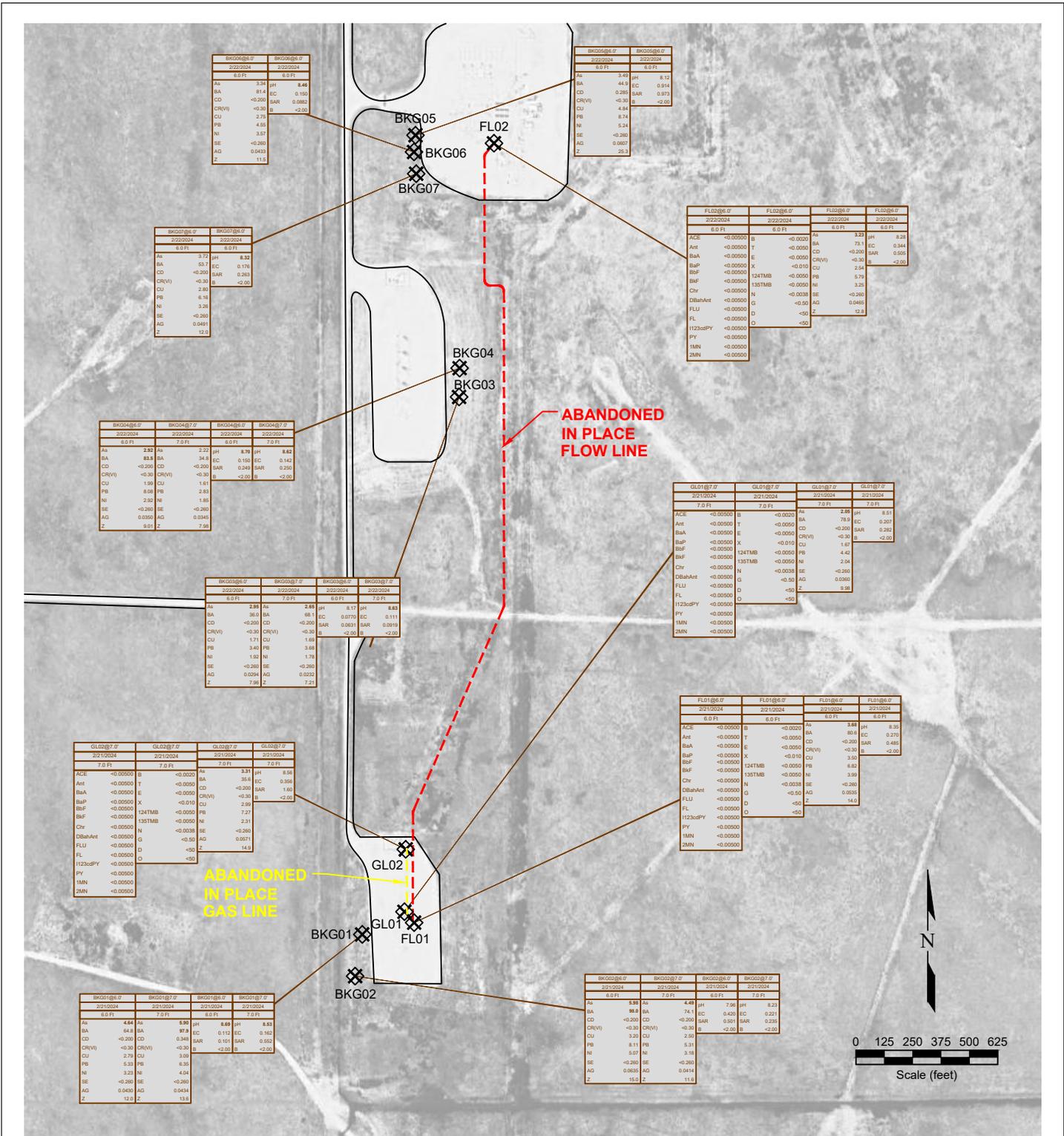
Figure 2  
**SITE MAP**

**Noble Energy Inc ~ Wells Ranch AA35-62-1AHNC**

SWSW Sec. 36, T6N, R63W, 6th PM  
Weld County, Colorado  
40.437499°, -104.394114°

Project No. <b>CO24-042</b>	API # <b>05-123-38670</b>	Facility #
Date <b>8/3/24</b>	Remediation # <b>30294</b>	Filename <b>24042Q2</b>





**Figure 3**  
**SOIL CHEMISTRY MAP**  
 Noble Energy Inc ~ Wells Ranch AA35-62-1AHNC

SWSW Sec. 36, T6N, R63W, 6th PM  
 Weld County, Colorado  
 40.437499°, -104.394114°

Project No. <b>CO24-042</b>	API # <b>05-123-38670</b>	Facility #
Date <b>8/3/24</b>	Remediation # <b>30294</b>	Filename <b>24042Q2</b>



SAMPLE ID	SAMPLE ID	SAMPLE ID	SAMPLE ID	SAMPLE ID	SAMPLE ID
DATE	DATE	DATE	DATE	DATE	DATE
DEPTH	DEPTH (ft)	DEPTH	DEPTH (ft)	DEPTH	DEPTH (ft)
ACE	<0.0050	ACENAPHTHENE (mg/kg)	BA	88.8	74.1
Ant	<0.0050	ANTHRACENE (mg/kg)	EC	0.420	EC 0.201
BaA	<0.0050	BENZO (A) ANTHRACENE (mg/kg)	CR(VI)	<0.30	0.501
BaP	<0.0050	BENZO (A) PYRENE (mg/kg)	CU	2.60	2.60
BaF	<0.0050	BENZO (B) FLUORANTHENE (mg/kg)	PB	8.11	9.31
Chr	<0.0050	CHRYSENE (mg/kg)	PI	5.07	3.18
DBahAnt	<0.0050	DIBENZO (A,H) ANTHRACENE (mg/kg)	SE	<0.260	<0.260
FLU	<0.0050	FLUORANTHENE (mg/kg)	AG	0.0635	0.0414
FL	<0.0050	FLUCRENE (mg/kg)	Z	15.0	11.9
1123cdPY	<0.0050	INDENO (1,2,3-CD) PYRENE (mg/kg)			
PY	<0.0050	PYRENE (mg/kg)			
1MN	<0.0050	1-METHYLNAPHTHALENE (mg/kg)			
2MN	<0.0050	2-METHYLNAPHTHALENE (mg/kg)			

# Photo Log



*Description:*

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# Photo Log



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# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

March 18, 2024

Paul Henchan

Fremont Environmental

PO Box 1289

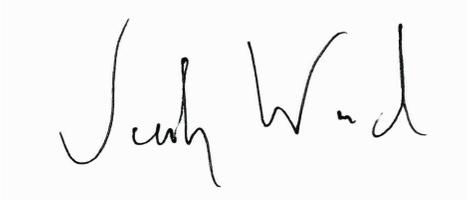
Wellington, CO 80549

RE: Noble - Wells Ranch AA 35-62-1AHNC

Work Order #2402394

Enclosed are the results of analyses for samples received by Summit Scientific on 02/22/24 17:38. 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 large initial "J" and "W".

Jacob Wood For Paul Shrewsbury  
President



Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC

Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 11:05

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FL01@6.0'	2402394-01	Soil	02/21/24 00:00	02/22/24 17:38
GL01@7.0'	2402394-02	Soil	02/21/24 00:00	02/22/24 17:38
FL02@6.0'	2402394-03	Soil	02/22/24 00:00	02/22/24 17:38
GL02@7.0'	2402394-04	Soil	02/21/24 00:00	02/22/24 17:38

Summit Scientific

*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.*

# SUMMIT SCIENTIFIC

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

Lab ID	Page <u>1</u> of <u>1</u>
2402394	

Send Data To:		Send Invoice To:	
Client: <u>Fremont Env</u>	Project Manager:	Company: <u>Noble</u>	
Address:	E-Mail: <u>Paulh@fremontenv.com</u>	Project Name/Location:	
City/State/Zip:	<u>jeff@fremontenv.com Ethan@fremontenv.com</u>	AFE#:	
Phone:	Project Name: <u>Wells Ranch AA 35-62-1AHC</u>	PO/Billing Codes: <u>UWRWR-A3006-ARJ</u>	
Sampler Name: <u>J6</u>	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	BTEX+N	TMS (915)	DR,ORO,680	PAHs (915)	EC-IPH, SAs, BOD, etc	Metals (915)		
1	FLO1C6.0'	2/21/24		2			X			X				X	X	X	X	X	X	
2	<del>FLO1C6.0'</del> GLO1C7.0'	2/21/24		↓			X			X				X	X	X	X	X	X	
3	FLO2C6.0'	2/22/24		↓			X			X				X	X	X	X	X	X	
4	GLO2C7.0'	2/21/24		↓			X			X				X	X	X	X	X	X	
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				

Relinquished by: <u>J</u> Date/Time: <u>2/22/24</u>	Received by: <u>Paul H. Smith</u> Date/Time: <u>2/22/24 11:38</u>	TAT Business Days	Field DO	Notes:
Relinquished by:	Received by:	Same Day	Field EC	
Relinquished by:	Received by:	1 Day	Field ORP	
Relinquished by:	Received by:	2 Days	Field pH	
Relinquished by:	Received by:	3 Days	Field Temp.	
Temperature Upon Receipt: <u>14.0</u>	Corrected Temperature	Standard	<input checked="" type="checkbox"/> Field Turb.	
	IR gun #:		HNO3 lot #:	

S<sub>2</sub>

Sample Receipt Checklist

S2 Work Order# 2402394

Client: Fremont Client Project ID: Noble-wells Ranch AA 35-62-1AHNC

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

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

Temp (°C) 14.0 Thermometer # 2

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? <sup>(1)</sup> <b>NOTE:</b> 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"/>	
If custody seals are present, are they intact? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 <sup>2+</sup> ), Hexavalent Chromium (Cr <sup>6+</sup> , Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out Completely? <sup>(1)</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>no sample times</u>
Is the COC properly relinquished by the client w/ date and time recorded? <sup>(1)</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>no time</u>
Were all samples received intact? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? <b>If yes, contact client and note in narrative.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling)? <sup>(1)</sup> Note the type of preservative in the comments column – HCl, H <sub>2</sub> SO <sub>4</sub> , NaOH, HNO <sub>3</sub> , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2? <sup>(1)</sup> 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"/>	
<u>Additional Comments (if any):</u>				
<sup>(1)</sup> If NO, then contact the client before proceeding with analysis and note in case narrative.				

AS  
Custodian Printed Name

2/22/24  
Date/Time



Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC  
Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 11:05

**FL01@6.0'**  
**2402394-01 (Soil)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHB0772	02/23/24	02/24/24	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
Ethylbenzene	ND	0.0050		"	"	"	"	"	"	
Xylenes (total)	ND	0.010		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
Naphthalene	ND	0.0038		"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50		"	"	"	"	"	"	

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0400	100 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0378	94.6 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0396	99.1 %		50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHB0778	02/23/24	02/23/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	12.3	98.7 %		30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC

Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 11:05

**FL01@6.0'**  
**2402394-01 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHB0791	02/26/24	02/26/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0260	78.0 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0176	52.8 %	40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHC0208	03/08/24	03/13/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC  
Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 11:05

**FL01@6.0'**  
**2402394-01 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	3.68	0.200	mg/kg dry	1	BHC0140	03/06/24	03/07/24	EPA 6020B	
Barium	80.6	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	3.50	0.400	"	"	"	"	"	"	
Lead	6.82	0.200	"	"	"	"	"	"	
Nickel	3.99	0.400	"	"	"	"	"	"	
Silver	0.0535	0.0200	"	"	"	"	"	"	
Zinc	14.0	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHC0459	03/15/24	03/15/24	EPA 7196A	

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

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	23.9	0.0500	mg/L dry	1	BHC0067	03/04/24	03/09/24	EPA 6020B	
Magnesium	5.84	0.0500	"	"	"	"	"	"	
Sodium	10.2	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.485	0.00100	units	1	BHC0274	03/11/24	03/11/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Summit Scientific

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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC  
 Project Number: UWRWR-A3006-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 03/18/24 11:05

**FL01@6.0'**  
**2402394-01 (Soil)**

**Summit Scientific**

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	86.0		%	1	BHC0090	03/05/24	03/06/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.270	0.0100	mmhos/cm	1	BHC0069	03/04/24	03/06/24	EPA 120.1	

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

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.35		pH Units	1	BHC0068	03/04/24	03/06/24	EPA 9045D	

Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC  
Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 11:05

**GL01@7.0'**  
**2402394-02 (Soil)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BHB0772	02/23/24	02/24/24	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0409	102 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0374	93.6 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0390	97.6 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BHB0778	02/23/24	02/23/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	13.7	109 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC  
Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 11:05

**GL01@7.0'**  
**2402394-02 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHB0791	02/26/24	02/26/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0231	69.2 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0151	45.2 %	40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHC0208	03/08/24	03/13/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC  
Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 11:05

**GL01@7.0'**  
**2402394-02 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	2.05	0.200	mg/kg dry	1	BHC0140	03/06/24	03/07/24	EPA 6020B	
Barium	78.9	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.67	0.400	"	"	"	"	"	"	
Lead	4.42	0.200	"	"	"	"	"	"	
Nickel	2.04	0.400	"	"	"	"	"	"	
Silver	0.0360	0.0200	"	"	"	"	"	"	
Zinc	9.98	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHC0459	03/15/24	03/15/24	EPA 7196A	

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

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	27.4	0.0500	mg/L dry	1	BHC0067	03/04/24	03/09/24	EPA 6020B	
Magnesium	4.71	0.0500	"	"	"	"	"	"	
Sodium	6.08	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.282	0.00100	units	1	BHC0274	03/11/24	03/11/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC  
Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 11:05

**GL01@7.0'**  
**2402394-02 (Soil)**

**Summit Scientific**

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	91.2		%	1	BHC0090	03/05/24	03/06/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.207	0.0100	mmhos/cm	1	BHC0069	03/04/24	03/06/24	EPA 120.1	

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

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.51		pH Units	1	BHC0068	03/04/24	03/06/24	EPA 9045D	

Summit Scientific



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PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC

Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 11:05

**FL02@6.0'**  
**2402394-03 (Soil)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BHB0772	02/23/24	02/24/24	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0401	100 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0372	92.9 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0385	96.3 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BHB0778	02/23/24	02/23/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	11.8	94.0 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

Summit Scientific

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Project: Noble - Wells Ranch AA 35-62-1AHNC

Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 11:05

**FL02@6.0'**  
**2402394-03 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHB0791	02/26/24	02/26/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0242	72.6 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0174	52.3 %	40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHC0208	03/08/24	03/13/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC

Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 11:05

**FL02@6.0'**  
**2402394-03 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	3.23	0.200	mg/kg dry	1	BHC0140	03/06/24	03/07/24	EPA 6020B	
Barium	73.1	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	2.54	0.400	"	"	"	"	"	"	
Lead	5.79	0.200	"	"	"	"	"	"	
Nickel	3.25	0.400	"	"	"	"	"	"	
Silver	0.0465	0.0200	"	"	"	"	"	"	
Zinc	12.8	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHC0459	03/15/24	03/15/24	EPA 7196A	

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

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	34.3	0.0500	mg/L dry	1	BHC0067	03/04/24	03/09/24	EPA 6020B	
Magnesium	7.88	0.0500	"	"	"	"	"	"	
Sodium	12.6	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.505	0.00100	units	1	BHC0274	03/11/24	03/11/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC  
 Project Number: UWRWR-A3006-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 03/18/24 11:05

**FL02@6.0'**  
**2402394-03 (Soil)**

**Summit Scientific**

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	84.3		%	1	BHC0090	03/05/24	03/06/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.344	0.0100	mmhos/cm	1	BHC0069	03/04/24	03/06/24	EPA 120.1	

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

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.28		pH Units	1	BHC0068	03/04/24	03/06/24	EPA 9045D	

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC

Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 11:05

**GL02@7.0'**  
**2402394-04 (Soil)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BHB0772	02/23/24	02/24/24	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0413	103 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0387	96.8 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0396	99.1 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BHB0778	02/23/24	02/23/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	14.7	118 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC

Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 11:05

**GL02@7.0'**  
**2402394-04 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHB0791	02/26/24	02/26/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0264	79.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0187	56.2 %	40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHC0208	03/08/24	03/13/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC  
Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 11:05

**GL02@7.0'**  
**2402394-04 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	3.31	0.200	mg/kg dry	1	BHC0140	03/06/24	03/07/24	EPA 6020B	
Barium	35.6	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	2.99	0.400	"	"	"	"	"	"	
Lead	7.27	0.200	"	"	"	"	"	"	
Nickel	2.31	0.400	"	"	"	"	"	"	
Silver	0.0571	0.0200	"	"	"	"	"	"	
Zinc	14.9	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHC0459	03/15/24	03/15/24	EPA 7196A	

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

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	19.2	0.0500	mg/L dry	1	BHC0067	03/04/24	03/09/24	EPA 6020B	
Magnesium	4.78	0.0500	"	"	"	"	"	"	
Sodium	30.2	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.60	0.00100	units	1	BHC0274	03/11/24	03/11/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC  
 Project Number: UWRWR-A3006-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 03/18/24 11:05

**GL02@7.0'**  
**2402394-04 (Soil)**

**Summit Scientific**

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	91.8		%	1	BHC0090	03/05/24	03/06/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **02/21/24 00:00**

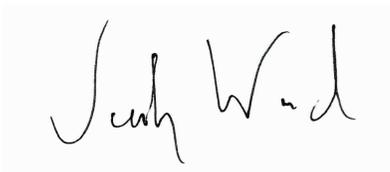
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.356	0.0100	mmhos/cm	1	BHC0069	03/04/24	03/06/24	EPA 120.1	

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

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.56		pH Units	1	BHC0068	03/04/24	03/06/24	EPA 9045D	

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC  
Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 11:05

### Volatile Organic Compounds by EPA Method 8260B - Quality Control

#### Summit Scientific

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

#### Batch BHB0772 - EPA 5030 Soil MS

##### Blank (BHB0772-BLK1)

Prepared: 02/23/24 Analyzed: 02/24/24

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0388		"	0.0400		97.1	50-150			
<i>Surrogate: Toluene-d8</i>	0.0345		"	0.0400		86.2	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0394		"	0.0400		98.4	50-150			

##### LCS (BHB0772-BS1)

Prepared: 02/23/24 Analyzed: 02/24/24

Benzene	0.0872	0.0020	mg/kg	0.100		87.2	70-130			
Toluene	0.0907	0.0050	"	0.100		90.7	70-130			
Ethylbenzene	0.0942	0.0050	"	0.100		94.2	70-130			
m,p-Xylene	0.192	0.010	"	0.200		95.9	70-130			
o-Xylene	0.0960	0.0050	"	0.100		96.0	70-130			
1,2,4-Trimethylbenzene	0.0892	0.0050	"	0.100		89.2	70-130			
1,3,5-Trimethylbenzene	0.0877	0.0050	"	0.100		87.7	70-130			
Naphthalene	0.0931	0.0038	"	0.100		93.1	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0378		"	0.0400		94.6	50-150			
<i>Surrogate: Toluene-d8</i>	0.0363		"	0.0400		90.8	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0382		"	0.0400		95.5	50-150			

##### Matrix Spike (BHB0772-MS1)

Source: 2402394-01

Prepared: 02/23/24 Analyzed: 02/24/24

Benzene	0.0947	0.0020	mg/kg	0.100	ND	94.7	70-130			
Toluene	0.103	0.0050	"	0.100	ND	103	70-130			
Ethylbenzene	0.110	0.0050	"	0.100	ND	110	70-130			
m,p-Xylene	0.218	0.010	"	0.200	ND	109	70-130			
o-Xylene	0.107	0.0050	"	0.100	ND	107	70-130			
1,2,4-Trimethylbenzene	0.0982	0.0050	"	0.100	ND	98.2	70-130			
1,3,5-Trimethylbenzene	0.0998	0.0050	"	0.100	ND	99.8	70-130			
Naphthalene	0.101	0.0038	"	0.100	ND	101	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0358		"	0.0400		89.4	50-150			
<i>Surrogate: Toluene-d8</i>	0.0370		"	0.0400		92.6	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0386		"	0.0400		96.5	50-150			

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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC  
 Project Number: UWRWR-A3006-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 03/18/24 11:05

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**Summit Scientific**

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

**Batch BHB0772 - EPA 5030 Soil MS**

<b>Matrix Spike Dup (BHB0772-MSD1)</b>	<b>Source: 2402394-01</b>			<b>Prepared: 02/23/24 Analyzed: 02/24/24</b>						
Benzene	0.0860	0.0020	mg/kg	0.100	ND	86.0	70-130	9.73	30	
Toluene	0.0933	0.0050	"	0.100	ND	93.3	70-130	10.3	30	
Ethylbenzene	0.0927	0.0050	"	0.100	ND	92.7	70-130	16.9	30	
m,p-Xylene	0.185	0.010	"	0.200	ND	92.4	70-130	16.3	30	
o-Xylene	0.0925	0.0050	"	0.100	ND	92.5	70-130	14.3	30	
1,2,4-Trimethylbenzene	0.0847	0.0050	"	0.100	ND	84.7	70-130	14.8	30	
1,3,5-Trimethylbenzene	0.0855	0.0050	"	0.100	ND	85.5	70-130	15.4	30	
Naphthalene	0.0928	0.0038	"	0.100	ND	92.8	70-130	8.89	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0390</i>		<i>"</i>	<i>0.0400</i>		<i>97.6</i>	<i>50-150</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0379</i>		<i>"</i>	<i>0.0400</i>		<i>94.6</i>	<i>50-150</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0397</i>		<i>"</i>	<i>0.0400</i>		<i>99.3</i>	<i>50-150</i>			

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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC  
 Project Number: UWRWR-A3006-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 03/18/24 11:05

**Extractable Petroleum Hydrocarbons by 8015 - Quality Control**  
**Summit Scientific**

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

**Batch BHB0778 - EPA 3550A**

**Blank (BHB0778-BLK1)**

Prepared & Analyzed: 02/23/24

C10-C28 (DRO)	ND	50	mg/kg								
Surrogate: <i>o</i> -Terphenyl	14.3		"	12.5		114		30-150			

**LCS (BHB0778-BS1)**

Prepared & Analyzed: 02/23/24

C10-C28 (DRO)	471	50	mg/kg	500		94.2		70-130			
Surrogate: <i>o</i> -Terphenyl	18.4		"	12.5		147		30-150			

**Matrix Spike (BHB0778-MS1)**

Source: 2402394-01

Prepared & Analyzed: 02/23/24

C10-C28 (DRO)	404	50	mg/kg	500	11.8	78.4		70-130			
Surrogate: <i>o</i> -Terphenyl	13.9		"	12.5		111		30-150			

**Matrix Spike Dup (BHB0778-MSD1)**

Source: 2402394-01

Prepared & Analyzed: 02/23/24

C10-C28 (DRO)	421	50	mg/kg	500	11.8	81.8		70-130	4.15	20	
Surrogate: <i>o</i> -Terphenyl	12.7		"	12.5		101		30-150			

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Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC  
Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 11:05

**PAH by EPA Method 8270D SIM - Quality Control**  
**Summit Scientific**

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

**Batch BHB0791 - EPA 5030 Soil MS**

**Blank (BHB0791-BLK1)**

Prepared & Analyzed: 02/26/24

Acenaphthene	ND	0.00500	mg/kg							
Anthracene	ND	0.00500	"							
Benzo (a) anthracene	ND	0.00500	"							
Benzo (a) pyrene	ND	0.00500	"							
Benzo (b) fluoranthene	ND	0.00500	"							
Benzo (k) fluoranthene	ND	0.00500	"							
Chrysene	ND	0.00500	"							
Dibenz (a,h) anthracene	ND	0.00500	"							
Fluoranthene	ND	0.00500	"							
Fluorene	ND	0.00500	"							
Indeno (1,2,3-cd) pyrene	ND	0.00500	"							
Pyrene	ND	0.00500	"							
1-Methylnaphthalene	ND	0.00500	"							
2-Methylnaphthalene	ND	0.00500	"							
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0441</i>		"	<i>0.0333</i>		<i>132</i>		<i>40-150</i>		
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0281</i>		"	<i>0.0333</i>		<i>84.3</i>		<i>40-150</i>		

**LCS (BHB0791-BS1)**

Prepared & Analyzed: 02/26/24

Acenaphthene	0.0377	0.00500	mg/kg	0.0333	113	31-137
Anthracene	0.0338	0.00500	"	0.0333	101	30-120
Benzo (a) anthracene	0.0326	0.00500	"	0.0333	97.9	30-120
Benzo (a) pyrene	0.0324	0.00500	"	0.0333	97.2	30-120
Benzo (b) fluoranthene	0.0381	0.00500	"	0.0333	114	30-120
Benzo (k) fluoranthene	0.0377	0.00500	"	0.0333	113	30-120
Chrysene	0.0369	0.00500	"	0.0333	111	30-120
Dibenz (a,h) anthracene	0.0273	0.00500	"	0.0333	81.8	30-120
Fluoranthene	0.0379	0.00500	"	0.0333	114	30-120
Fluorene	0.0372	0.00500	"	0.0333	112	30-120
Indeno (1,2,3-cd) pyrene	0.0394	0.00500	"	0.0333	118	30-120
Pyrene	0.0382	0.00500	"	0.0333	115	35-142
1-Methylnaphthalene	0.0378	0.00500	"	0.0333	114	35-142
2-Methylnaphthalene	0.0397	0.00500	"	0.0333	119	35-142
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0318</i>		"	<i>0.0333</i>	<i>95.3</i>	<i>40-150</i>
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0363</i>		"	<i>0.0333</i>	<i>109</i>	<i>40-150</i>

Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC  
Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 11:05

**PAH by EPA Method 8270D SIM - Quality Control**

**Summit Scientific**

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

**Batch BHB0791 - EPA 5030 Soil MS**

<b>Matrix Spike (BHB0791-MS1)</b>	<b>Source: 2402394-01</b>			<b>Prepared &amp; Analyzed: 02/26/24</b>							
Acenaphthene	0.0167	0.00500	mg/kg	0.0333	ND	50.1	31-137				
Anthracene	0.0135	0.00500	"	0.0333	ND	40.4	30-120				
Benzo (a) anthracene	0.0173	0.00500	"	0.0333	ND	51.9	30-120				
Benzo (a) pyrene	0.0135	0.00500	"	0.0333	ND	40.5	30-120				
Benzo (b) fluoranthene	0.0173	0.00500	"	0.0333	ND	51.8	30-120				
Benzo (k) fluoranthene	0.0166	0.00500	"	0.0333	ND	49.9	30-120				
Chrysene	0.0164	0.00500	"	0.0333	ND	49.3	30-120				
Dibenz (a,h) anthracene	0.0162	0.00500	"	0.0333	ND	48.7	30-120				
Fluoranthene	0.0142	0.00500	"	0.0333	ND	42.7	30-120				
Fluorene	0.0160	0.00500	"	0.0333	ND	48.1	30-120				
Indeno (1,2,3-cd) pyrene	0.0143	0.00500	"	0.0333	ND	42.8	30-120				
Pyrene	0.0161	0.00500	"	0.0333	ND	48.2	35-142				
1-Methylnaphthalene	0.0147	0.00500	"	0.0333	ND	44.2	15-130				
2-Methylnaphthalene	0.0151	0.00500	"	0.0333	ND	45.2	15-130				
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0209</i>		<i>"</i>	<i>0.0333</i>		<i>62.7</i>	<i>40-150</i>				
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0160</i>		<i>"</i>	<i>0.0333</i>		<i>48.1</i>	<i>40-150</i>				

<b>Matrix Spike Dup (BHB0791-MSD1)</b>	<b>Source: 2402394-01</b>			<b>Prepared &amp; Analyzed: 02/26/24</b>							
Acenaphthene	0.0158	0.00500	mg/kg	0.0333	ND	47.4	31-137	5.68	30		
Anthracene	0.0198	0.00500	"	0.0333	ND	59.3	30-120	38.0	30		QR-02
Benzo (a) anthracene	0.0165	0.00500	"	0.0333	ND	49.6	30-120	4.39	30		
Benzo (a) pyrene	0.0154	0.00500	"	0.0333	ND	46.1	30-120	12.9	30		
Benzo (b) fluoranthene	0.0158	0.00500	"	0.0333	ND	47.3	30-120	9.22	30		
Benzo (k) fluoranthene	0.0165	0.00500	"	0.0333	ND	49.4	30-120	0.924	30		
Chrysene	0.0161	0.00500	"	0.0333	ND	48.4	30-120	1.87	30		
Dibenz (a,h) anthracene	0.0150	0.00500	"	0.0333	ND	45.1	30-120	7.70	30		
Fluoranthene	0.0163	0.00500	"	0.0333	ND	48.8	30-120	13.2	30		
Fluorene	0.0164	0.00500	"	0.0333	ND	49.3	30-120	2.55	30		
Indeno (1,2,3-cd) pyrene	0.0139	0.00500	"	0.0333	ND	41.6	30-120	2.96	30		
Pyrene	0.0176	0.00500	"	0.0333	ND	52.9	35-142	9.28	30		
1-Methylnaphthalene	0.0184	0.00500	"	0.0333	ND	55.1	15-130	22.0	50		
2-Methylnaphthalene	0.0148	0.00500	"	0.0333	ND	44.5	15-130	1.58	50		
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0138</i>		<i>"</i>	<i>0.0333</i>		<i>41.3</i>	<i>40-150</i>				
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0161</i>		<i>"</i>	<i>0.0333</i>		<i>48.4</i>	<i>40-150</i>				

Summit Scientific

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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC  
 Project Number: UWRWR-A3006-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 03/18/24 11:05

**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 BHC0208 - EPA 3050B**

**Blank (BHC0208-BLK1)**

Prepared: 03/08/24 Analyzed: 03/13/24

Boron ND 2.00 mg/L

**LCS (BHC0208-BS1)**

Prepared: 03/08/24 Analyzed: 03/13/24

Boron 4.88 2.00 mg/L 5.00 97.6 80-120

**Duplicate (BHC0208-DUP1)**

Source: 2402027-18RE1

Prepared: 03/08/24 Analyzed: 03/13/24

Boron 0.841 2.00 mg/L 0.798 5.22 20

**Matrix Spike (BHC0208-MS1)**

Source: 2402027-18RE1

Prepared: 03/08/24 Analyzed: 03/13/24

Boron 5.65 2.00 mg/L 5.00 0.798 97.1 75-125

**Matrix Spike Dup (BHC0208-MSD1)**

Source: 2402027-18RE1

Prepared: 03/08/24 Analyzed: 03/13/24

Boron 5.58 2.00 mg/L 5.00 0.798 95.6 75-125 1.37 25

Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC

Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 11:05

**Total Metals by EPA 6020B - Quality Control**  
**Summit Scientific**

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

**Batch BHC0140 - EPA 3050B**

**Blank (BHC0140-BLK1)**

Prepared: 03/06/24 Analyzed: 03/07/24

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 (BHC0140-BS1)**

Prepared: 03/06/24 Analyzed: 03/07/24

Arsenic	44.2	0.200	mg/kg wet	40.0	110	80-120
Barium	43.7	0.400	"	40.0	109	80-120
Cadmium	1.99	0.200	"	2.00	99.6	80-120
Copper	38.6	0.400	"	40.0	96.4	80-120
Lead	20.5	0.200	"	20.0	102	80-120
Nickel	38.4	0.400	"	40.0	96.0	80-120
Silver	2.03	0.0200	"	2.00	102	80-120
Zinc	39.2	0.400	"	40.0	98.0	80-120
Selenium	3.72	0.260	"	4.00	93.1	80-120

**Duplicate (BHC0140-DUP1)**

Source: 2402394-01

Prepared: 03/06/24 Analyzed: 03/07/24

Arsenic	4.10	0.200	mg/kg dry	3.68	10.9	20
Barium	96.3	0.400	"	80.6	17.8	20
Cadmium	0.197	0.200	"	0.184	6.59	20
Copper	3.53	0.400	"	3.50	0.596	20
Lead	7.40	0.200	"	6.82	8.18	20
Nickel	4.19	0.400	"	3.99	5.05	20
Silver	0.0544	0.0200	"	0.0535	1.72	20
Zinc	14.0	0.400	"	14.0	0.512	20
Selenium	ND	0.260	"	ND		20

Summit Scientific

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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC

Project Number: UWRWR-A3006-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 03/18/24 11:05

**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 BHC0140 - EPA 3050B**

**Matrix Spike (BHC0140-MS1)**

Source: 2402394-01

Prepared: 03/06/24 Analyzed: 03/07/24

Arsenic	61.9	0.200	mg/kg dry	46.5	3.68	125	75-125				
Barium	143	0.400	"	46.5	80.6	134	75-125				QM-05
Cadmium	2.77	0.200	"	2.33	0.184	111	75-125				
Copper	31.7	0.400	"	46.5	3.50	60.5	75-125				QM-05
Lead	30.7	0.200	"	23.3	6.82	103	75-125				
Nickel	33.0	0.400	"	46.5	3.99	62.4	75-125				QM-05
Silver	2.37	0.0200	"	2.33	0.0535	99.4	75-125				
Zinc	42.2	0.400	"	46.5	14.0	60.6	75-125				QM-05
Selenium	3.61	0.260	"	4.65	ND	77.6	75-125				

**Matrix Spike Dup (BHC0140-MSD1)**

Source: 2402394-01

Prepared: 03/06/24 Analyzed: 03/07/24

Arsenic	60.5	0.200	mg/kg dry	46.5	3.68	122	75-125	2.27	25		
Barium	143	0.400	"	46.5	80.6	135	75-125	0.285	25		QM-05
Cadmium	2.84	0.200	"	2.33	0.184	114	75-125	2.59	25		
Copper	32.9	0.400	"	46.5	3.50	63.1	75-125	3.74	25		QM-05
Lead	31.2	0.200	"	23.3	6.82	105	75-125	1.34	25		
Nickel	34.0	0.400	"	46.5	3.99	64.6	75-125	3.07	25		QM-05
Silver	2.40	0.0200	"	2.33	0.0535	101	75-125	1.50	25		
Zinc	43.6	0.400	"	46.5	14.0	63.7	75-125	3.37	25		QM-05
Selenium	4.06	0.260	"	4.65	ND	87.2	75-125	11.6	25		

Summit Scientific

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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC

Project Number: UWRWR-A3006-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 03/18/24 11:05

**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 BHC0067 - General Preparation**

**Blank (BHC0067-BLK1)**

Prepared: 03/04/24 Analyzed: 03/09/24

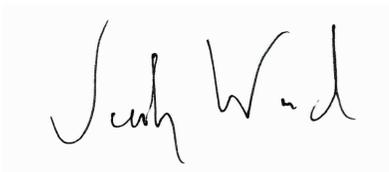
Calcium	ND	0.0500	mg/L wet							
Magnesium	ND	0.0500	"							
Sodium	ND	0.0500	"							

**LCS (BHC0067-BS1)**

Prepared: 03/04/24 Analyzed: 03/09/24

Calcium	5.10	0.0500	mg/L wet	5.00		102	70-130			
Magnesium	5.08	0.0500	"	5.00		102	70-130			
Sodium	5.17	0.0500	"	5.00		103	70-130			

Summit Scientific



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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC

Project Number: UWRWR-A3006-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 03/18/24 11:05

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

**Summit Scientific**

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

**Batch BHC0090 - General Preparation**

**Duplicate (BHC0090-DUP1)**

**Source: 2402385-01**

Prepared: 03/05/24 Analyzed: 03/06/24

% Solids	89.3	%		88.7		0.656	20
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Summit Scientific



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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC  
 Project Number: UWRWR-A3006-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 03/18/24 11:05

**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 BHC0069 - General Preparation**

**Blank (BHC0069-BLK1)**

Prepared: 03/04/24 Analyzed: 03/06/24

Specific Conductance (EC) ND 0.0100 mmhos/cm

**LCS (BHC0069-BS1)**

Prepared: 03/04/24 Analyzed: 03/06/24

Specific Conductance (EC) 0.154 0.0100 mmhos/cm 0.150 102 95-105

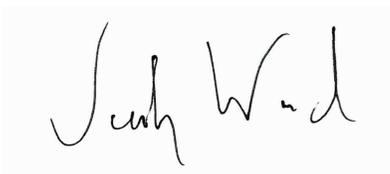
**Duplicate (BHC0069-DUP1)**

**Source: 2402384-01**

Prepared: 03/04/24 Analyzed: 03/06/24

Specific Conductance (EC) 0.424 0.0100 mmhos/cm 0.439 3.29 20

Summit Scientific



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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC

Project Number: UWRWR-A3006-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 03/18/24 11:05

**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 BHC0068 - General Preparation**

**LCS (BHC0068-BS1)**

Prepared: 03/04/24 Analyzed: 03/06/24

pH	9.07	pH Units	9.18	98.8	95-105
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**Duplicate (BHC0068-DUP1)**

Source: 2402384-01

Prepared: 03/04/24 Analyzed: 03/06/24

pH	9.77	pH Units	9.91	1.42	20
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Summit Scientific



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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA 35-62-1AHNC

Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 11:05

### Notes and Definitions

- QR-02 The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
- 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

# Summit Scientific

---

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

March 18, 2024

Paul Henchan

Fremont Environmental

PO Box 1289

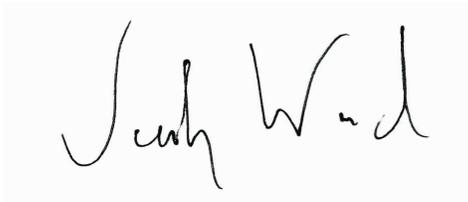
Wellington, CO 80549

RE: Noble - Wells Ranch AA (Backgrounds)

Work Order #2402397

Enclosed are the results of analyses for samples received by Summit Scientific on 02/22/24 17:35. 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 large initial "J" and a distinct "W".

Jacob Wood For Paul Shrewsbury

President



Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)

Project Number: UWRWR-A3006-ABN

Project Manager: Paul Henchan

**Reported:**  
03/18/24 15:20

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BKG01@6.0'	2402397-01	Soil	02/21/24 00:00	02/22/24 17:35
BKG01@7.0'	2402397-02	Soil	02/21/24 00:00	02/22/24 17:35
BKG02@6.0'	2402397-03	Soil	02/21/24 00:00	02/22/24 17:35
BKG02@7.0'	2402397-04	Soil	02/21/24 00:00	02/22/24 17:35
BKG03@6.0'	2402397-05	Soil	02/22/24 00:00	02/22/24 17:35
BKG03@7.0'	2402397-06	Soil	02/22/24 00:00	02/22/24 17:35
BKG04@6.0'	2402397-07	Soil	02/22/24 00:00	02/22/24 17:35
BKG04@7.0'	2402397-08	Soil	02/22/24 00:00	02/22/24 17:35
BKG05@6.0'	2402397-09	Soil	02/22/24 00:00	02/22/24 17:35
BKG06@6.0'	2402397-10	Soil	02/22/24 00:00	02/22/24 17:35
BKG07@6.0'	2402397-11	Soil	02/22/24 00:00	02/22/24 17:35

Summit Scientific

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# SUMMIT SCIENTIFIC

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

Lab ID 2402397 Page 1 of 1

Client: <u>Fremont Env</u>		Project Manager: <u>Paul Henahan</u>		Company: <u>Noble</u>	
Address:		E-Mail: <u>Paulh@fremontenv.com</u>		Project Name/Location:	
City/State/Zip:		<u>jeffg@fremontenv.com Ethanh@fremontenv.com</u>		AFE#:	
Phone:		Project Name: <u>Wells Ranch AA (Background)</u>		PO/Billing Codes: <u>UWRWR-A3006-ABN</u>	
Sampler Name: <u>JG</u>		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@6.0'	2/21/24		1			X			X			X	X		
2	BK601@7.0'	↓		↓			↓			↓			↓	↓		
3	BK602@6.0'															
4	BK602@7.0'	↓		↓			↓			↓			↓	↓		
5	BK603@6.0'	2/22/24		1			X			X			X	X		
6	BK603@7.0'	↓		↓			↓			↓			↓	↓		
7	BK604@6.0'	↓		↓			↓			↓			↓	↓		
8	BK604@7.0'	↓		↓			↓			↓			↓	↓		
9	BK605@6.0'	↓		↓			↓			↓			↓	↓		
10	BK606@6.0'	↓		↓			↓			↓			↓	↓		
11	BK607@6.0'	↓		↓			↓			↓			↓	↓		
12																
13																
14																
15																

Relinquished by: <u>[Signature]</u>	Date/Time: <u>2/22/24</u>	Received by: <u>[Signature]</u>	Date/Time: <u>2/22/24 17:30</u>	TAT Business Days	Field DO	Notes:
				Same Day	Field EC	
Relinquished by:	Date/Time:	Received by:	Date/Time:	1 Day	Field ORP	
				2 Days	Field pH	
				3 Days	Field Temp.	
				Standard	<input checked="" type="checkbox"/> Field Turb.	
Temperature Upon Receipt: <u>14.2</u>	Corrected Temperature: _____	IR gun #: <u>2</u>	HNO3 lot #: _____			

S<sub>2</sub>

Sample Receipt Checklist

S2 Work Order# 2402397

Client: Fremont Client Project ID: Noble Wells Ranch AA (Backgrounds)

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

[ ] [ ] [ ] [ ] [ ]

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

Temp (°C) 14.2 Thermometer # 2

Table with 5 columns: Yes, No, N/A, Comments (if any). Rows include: If samples require cooling, is the temperature < 6°C? (1), If custody seals are present, are they intact? (1), Are samples due within 48 hours present?, Are water samples with short hold times present?, Is a chain-of-custody (COC) form present and filled out completely? (1), Were all samples received intact? (1), Was adequate sample volume provided? (1), Does the COC agree with the number and type of sample bottles received? (1), Do the sample IDs on the bottle labels match the COC? (1), For volatiles in water - is there headspace present? If yes, contact client and note in narrative., Are samples preserved that require preservation (excluding cooling)? (1), If samples are acid preserved for metals, is the pH <= 2? (1), If dissolved metals are requested, were samples field filtered?, Additional Comments (if any):, (1) If NO, then contact the client before proceeding with analysis and note in case narrative.

AS Custodian Printed Name

2/22/24 Date/Time



Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)

Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 15:20

**BKG01@6.0'**  
**2402397-01 (Soil)**

Summit Scientific

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHC0265	03/11/24	03/13/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	4.64	0.200	mg/kg dry	1	BHC0140	03/06/24	03/07/24	EPA 6020B	
Barium	64.8	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	2.79	0.400	"	"	"	"	"	"	
Lead	5.33	0.200	"	"	"	"	"	"	
Nickel	3.23	0.400	"	"	"	"	"	"	
Silver	0.0430	0.0200	"	"	"	"	"	"	
Zinc	12.0	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHC0460	03/15/24	03/15/24	EPA 7196A	

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

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	43.7	0.0500	mg/L dry	1	BHC0028	03/03/24	03/07/24	EPA 6020B	
Magnesium	3.93	0.0500	"	"	"	"	"	"	
Sodium	2.60	0.0500	"	"	"	"	"	"	

Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)  
Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 15:20

**BKG01@6.0'**  
**2402397-01 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.101	0.00100	units	1	BHC0234	03/08/24	03/08/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	93.9		%	1	BHC0124	03/06/24	03/08/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.112	0.0100	mmhos/cm	1	BHC0030	03/03/24	03/06/24	EPA 120.1	

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

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.69		pH Units	1	BHC0029	03/03/24	03/06/24	EPA 9045D	

Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)

Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 15:20

**BKG01@7.0'**  
**2402397-02 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHC0265	03/11/24	03/13/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	5.90	0.200	mg/kg dry	1	BHC0140	03/06/24	03/07/24	EPA 6020B	
Barium	97.9	0.400	"	"	"	"	"	"	
Cadmium	0.348	0.200	"	"	"	"	"	"	
Copper	3.09	0.400	"	"	"	"	"	"	
Lead	6.35	0.200	"	"	"	"	"	"	
Nickel	4.04	0.400	"	"	"	"	"	"	
Silver	0.0434	0.0200	"	"	"	"	"	"	
Zinc	13.6	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHC0460	03/15/24	03/15/24	EPA 7196A	

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

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	18.1	0.0500	mg/L dry	1	BHC0028	03/03/24	03/07/24	EPA 6020B	
Magnesium	4.13	0.0500	"	"	"	"	"	"	
Sodium	10.0	0.0500	"	"	"	"	"	"	

Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)  
Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 15:20

**BKG01@7.0'**  
**2402397-02 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.552	0.00100	units	1	BHC0234	03/08/24	03/08/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.4		%	1	BHC0124	03/06/24	03/08/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.162	0.0100	mmhos/cm	1	BHC0030	03/03/24	03/06/24	EPA 120.1	

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

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.53		pH Units	1	BHC0029	03/03/24	03/06/24	EPA 9045D	

Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)

Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 15:20

**BKG02@6.0'**  
**2402397-03 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHC0265	03/11/24	03/13/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	<b>5.98</b>	0.200	mg/kg dry	1	BHC0140	03/06/24	03/07/24	EPA 6020B	
Barium	<b>98.0</b>	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	<b>3.20</b>	0.400	"	"	"	"	"	"	
Lead	<b>8.11</b>	0.200	"	"	"	"	"	"	
Nickel	<b>5.07</b>	0.400	"	"	"	"	"	"	
Silver	<b>0.0635</b>	0.0200	"	"	"	"	"	"	
Zinc	<b>15.0</b>	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHC0460	03/15/24	03/15/24	EPA 7196A	

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

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	<b>41.2</b>	0.0500	mg/L dry	1	BHC0028	03/03/24	03/07/24	EPA 6020B	
Magnesium	<b>7.96</b>	0.0500	"	"	"	"	"	"	
Sodium	<b>13.4</b>	0.0500	"	"	"	"	"	"	

Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)  
Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 15:20

**BKG02@6.0'**  
**2402397-03 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.501	0.00100	units	1	BHC0234	03/08/24	03/08/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	93.3		%	1	BHC0124	03/06/24	03/08/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.420	0.0100	mmhos/cm	1	BHC0030	03/03/24	03/06/24	EPA 120.1	

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

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.96		pH Units	1	BHC0029	03/03/24	03/06/24	EPA 9045D	

Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)

Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 15:20

**BKG02@7.0'**  
**2402397-04 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHC0265	03/11/24	03/13/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Arsenic</b>	<b>4.49</b>	0.200	mg/kg dry	1	BHC0140	03/06/24	03/07/24	EPA 6020B	
<b>Barium</b>	<b>74.1</b>	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
<b>Copper</b>	<b>2.50</b>	0.400	"	"	"	"	"	"	
<b>Lead</b>	<b>5.31</b>	0.200	"	"	"	"	"	"	
<b>Nickel</b>	<b>3.18</b>	0.400	"	"	"	"	"	"	
<b>Silver</b>	<b>0.0414</b>	0.0200	"	"	"	"	"	"	
<b>Zinc</b>	<b>11.6</b>	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHC0460	03/15/24	03/15/24	EPA 7196A	

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

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Calcium</b>	<b>24.7</b>	0.0500	mg/L dry	1	BHC0028	03/03/24	03/07/24	EPA 6020B	
<b>Magnesium</b>	<b>4.03</b>	0.0500	"	"	"	"	"	"	
<b>Sodium</b>	<b>4.78</b>	0.0500	"	"	"	"	"	"	

Summit Scientific

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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)  
 Project Number: UWRWR-A3006-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 03/18/24 15:20

**BKG02@7.0'**  
**2402397-04 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.235	0.00100	units	1	BHC0234	03/08/24	03/08/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	96.5		%	1	BHC0124	03/06/24	03/08/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.221	0.0100	mmhos/cm	1	BHC0030	03/03/24	03/06/24	EPA 120.1	

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

Date Sampled: **02/21/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.23		pH Units	1	BHC0029	03/03/24	03/06/24	EPA 9045D	

Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)

Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 15:20

**BKG03@6.0'**  
**2402397-05 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHC0265	03/11/24	03/13/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Arsenic</b>	<b>2.95</b>	0.200	mg/kg dry	1	BHC0140	03/06/24	03/07/24	EPA 6020B	
<b>Barium</b>	<b>36.0</b>	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
<b>Copper</b>	<b>1.71</b>	0.400	"	"	"	"	"	"	
<b>Lead</b>	<b>3.40</b>	0.200	"	"	"	"	"	"	
<b>Nickel</b>	<b>1.92</b>	0.400	"	"	"	"	"	"	
<b>Silver</b>	<b>0.0294</b>	0.0200	"	"	"	"	"	"	
<b>Zinc</b>	<b>7.96</b>	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHC0460	03/15/24	03/15/24	EPA 7196A	

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

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Calcium</b>	<b>85.9</b>	0.0500	mg/L dry	1	BHC0028	03/03/24	03/07/24	EPA 6020B	
<b>Magnesium</b>	<b>19.0</b>	0.0500	"	"	"	"	"	"	
<b>Sodium</b>	<b>2.48</b>	0.0500	"	"	"	"	"	"	

Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)  
Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 15:20

**BKG03@6.0'**  
**2402397-05 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0631	0.00100	units	1	BHC0234	03/08/24	03/08/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	96.6		%	1	BHC0124	03/06/24	03/08/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.0770	0.0100	mmhos/cm	1	BHC0030	03/03/24	03/06/24	EPA 120.1	

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

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.17		pH Units	1	BHC0029	03/03/24	03/06/24	EPA 9045D	

Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)

Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 15:20

**BKG03@7.0'**  
**2402397-06 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Boron	ND	2.00		mg/L	1	BHC0265	03/11/24	03/13/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Arsenic</b>	<b>2.65</b>	0.200		mg/kg dry	1	BHC0140	03/06/24	03/07/24	EPA 6020B	
<b>Barium</b>	<b>68.1</b>	0.400		"	"	"	"	"	"	
Cadmium	ND	0.200		"	"	"	"	"	"	
<b>Copper</b>	<b>1.69</b>	0.400		"	"	"	"	"	"	
<b>Lead</b>	<b>3.68</b>	0.200		"	"	"	"	"	"	
<b>Nickel</b>	<b>1.78</b>	0.400		"	"	"	"	"	"	
<b>Silver</b>	<b>0.0232</b>	0.0200		"	"	"	"	"	"	
<b>Zinc</b>	<b>7.21</b>	0.400		"	"	"	"	"	"	
Selenium	ND	0.260		"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BHC0460	03/15/24	03/15/24	EPA 7196A	

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

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Calcium</b>	<b>44.5</b>	0.0500		mg/L dry	1	BHC0028	03/03/24	03/07/24	EPA 6020B	
<b>Magnesium</b>	<b>8.15</b>	0.0500		"	"	"	"	"	"	
<b>Sodium</b>	<b>2.54</b>	0.0500		"	"	"	"	"	"	

Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)  
Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 15:20

**BKG03@7.0'**  
**2402397-06 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0919	0.00100	units	1	BHC0234	03/08/24	03/08/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	96.7		%	1	BHC0124	03/06/24	03/08/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.111	0.0100	mmhos/cm	1	BHC0030	03/03/24	03/06/24	EPA 120.1	

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

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.63		pH Units	1	BHC0029	03/03/24	03/06/24	EPA 9045D	

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Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)  
Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 15:20

**BKG04@6.0'**  
**2402397-07 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHC0265	03/11/24	03/13/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Arsenic</b>	<b>2.92</b>	0.200	mg/kg dry	1	BHC0140	03/06/24	03/07/24	EPA 6020B	
<b>Barium</b>	<b>83.5</b>	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
<b>Copper</b>	<b>1.99</b>	0.400	"	"	"	"	"	"	
<b>Lead</b>	<b>8.08</b>	0.200	"	"	"	"	"	"	
<b>Nickel</b>	<b>2.92</b>	0.400	"	"	"	"	"	"	
<b>Silver</b>	<b>0.0350</b>	0.0200	"	"	"	"	"	"	
<b>Zinc</b>	<b>9.01</b>	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHC0460	03/15/24	03/15/24	EPA 7196A	

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

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Calcium</b>	<b>56.2</b>	0.0500	mg/L dry	1	BHC0028	03/03/24	03/07/24	EPA 6020B	
<b>Magnesium</b>	<b>5.18</b>	0.0500	"	"	"	"	"	"	
<b>Sodium</b>	<b>7.27</b>	0.0500	"	"	"	"	"	"	

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Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)  
Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 15:20

**BKG04@6.0'**  
**2402397-07 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	<b>0.249</b>	0.00100	units	1	BHC0234	03/08/24	03/08/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	<b>96.0</b>		%	1	BHC0124	03/06/24	03/08/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	<b>0.150</b>	0.0100	mmhos/cm	1	BHC0030	03/03/24	03/06/24	EPA 120.1	

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

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	<b>8.70</b>		pH Units	1	BHC0029	03/03/24	03/06/24	EPA 9045D	

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)

Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 15:20

**BKG04@7.0'**  
**2402397-08 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Boron	ND	2.00		mg/L	1	BHC0265	03/11/24	03/13/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Arsenic</b>	<b>2.22</b>	0.200		mg/kg dry	1	BHC0140	03/06/24	03/07/24	EPA 6020B	
<b>Barium</b>	<b>34.8</b>	0.400		"	"	"	"	"	"	
Cadmium	ND	0.200		"	"	"	"	"	"	
<b>Copper</b>	<b>1.61</b>	0.400		"	"	"	"	"	"	
<b>Lead</b>	<b>2.83</b>	0.200		"	"	"	"	"	"	
<b>Nickel</b>	<b>1.85</b>	0.400		"	"	"	"	"	"	
<b>Silver</b>	<b>0.0345</b>	0.0200		"	"	"	"	"	"	
<b>Zinc</b>	<b>7.98</b>	0.400		"	"	"	"	"	"	
Selenium	ND	0.260		"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BHC0460	03/15/24	03/15/24	EPA 7196A	

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

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Calcium</b>	<b>21.6</b>	0.0500		mg/L dry	1	BHC0028	03/03/24	03/07/24	EPA 6020B	
<b>Magnesium</b>	<b>3.28</b>	0.0500		"	"	"	"	"	"	
<b>Sodium</b>	<b>4.72</b>	0.0500		"	"	"	"	"	"	

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)  
Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 15:20

**BKG04@7.0'**  
**2402397-08 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	<b>0.250</b>	0.00100	units	1	BHC0234	03/08/24	03/08/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	<b>96.2</b>		%	1	BHC0124	03/06/24	03/08/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	<b>0.142</b>	0.0100	mmhos/cm	1	BHC0030	03/03/24	03/06/24	EPA 120.1	

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

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	<b>8.62</b>		pH Units	1	BHC0029	03/03/24	03/06/24	EPA 9045D	

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)

Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 15:20

**BKG05@6.0'**  
**2402397-09 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHC0265	03/11/24	03/13/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	3.49	0.200	mg/kg dry	1	BHC0140	03/06/24	03/07/24	EPA 6020B	
Barium	44.9	0.400	"	"	"	"	"	"	
Cadmium	0.285	0.200	"	"	"	"	"	"	
Copper	4.84	0.400	"	"	"	"	"	"	
Lead	8.74	0.200	"	"	"	"	"	"	
Nickel	5.24	0.400	"	"	"	"	"	"	
Silver	0.0607	0.0200	"	"	"	"	"	"	
Zinc	25.3	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHC0460	03/15/24	03/15/24	EPA 7196A	

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

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	62.6	0.0500	mg/L dry	1	BHC0028	03/03/24	03/07/24	EPA 6020B	
Magnesium	33.6	0.0500	"	"	"	"	"	"	
Sodium	38.4	0.0500	"	"	"	"	"	"	

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PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)  
Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 15:20

**BKG05@6.0'**  
**2402397-09 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.973	0.00100	units	1	BHC0234	03/08/24	03/08/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.6		%	1	BHC0124	03/06/24	03/08/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.914	0.0100	mmhos/cm	1	BHC0030	03/03/24	03/06/24	EPA 120.1	

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

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.12		pH Units	1	BHC0029	03/03/24	03/06/24	EPA 9045D	

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)

Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 15:20

**BKG06@6.0'**  
**2402397-10 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Boron	ND	2.00		mg/L	1	BHC0265	03/11/24	03/13/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Arsenic</b>	<b>3.34</b>	0.200		mg/kg dry	1	BHC0140	03/06/24	03/07/24	EPA 6020B	
<b>Barium</b>	<b>81.4</b>	0.400		"	"	"	"	"	"	
Cadmium	ND	0.200		"	"	"	"	"	"	
<b>Copper</b>	<b>2.75</b>	0.400		"	"	"	"	"	"	
<b>Lead</b>	<b>4.55</b>	0.200		"	"	"	"	"	"	
<b>Nickel</b>	<b>3.57</b>	0.400		"	"	"	"	"	"	
<b>Silver</b>	<b>0.0433</b>	0.0200		"	"	"	"	"	"	
<b>Zinc</b>	<b>11.5</b>	0.400		"	"	"	"	"	"	
Selenium	ND	0.260		"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BHC0460	03/15/24	03/15/24	EPA 7196A	

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

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Calcium</b>	<b>20.6</b>	0.0500		mg/L dry	1	BHC0028	03/03/24	03/07/24	EPA 6020B	
<b>Magnesium</b>	<b>6.22</b>	0.0500		"	"	"	"	"	"	
<b>Sodium</b>	<b>1.78</b>	0.0500		"	"	"	"	"	"	

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)  
Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 15:20

**BKG06@6.0'**  
**2402397-10 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	<b>0.0882</b>	0.00100	units	1	BHC0234	03/08/24	03/08/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	<b>92.4</b>		%	1	BHC0124	03/06/24	03/08/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	<b>0.150</b>	0.0100	mmhos/cm	1	BHC0030	03/03/24	03/06/24	EPA 120.1	

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

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	<b>8.46</b>		pH Units	1	BHC0029	03/03/24	03/06/24	EPA 9045D	

Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)

Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 15:20

**BKG07@6.0'**  
**2402397-11 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHC0265	03/11/24	03/13/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Arsenic</b>	<b>3.72</b>	0.200	mg/kg dry	1	BHC0140	03/06/24	03/07/24	EPA 6020B	
<b>Barium</b>	<b>53.7</b>	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
<b>Copper</b>	<b>2.80</b>	0.400	"	"	"	"	"	"	
<b>Lead</b>	<b>6.16</b>	0.200	"	"	"	"	"	"	
<b>Nickel</b>	<b>3.26</b>	0.400	"	"	"	"	"	"	
<b>Silver</b>	<b>0.0491</b>	0.0200	"	"	"	"	"	"	
<b>Zinc</b>	<b>12.0</b>	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHC0460	03/15/24	03/15/24	EPA 7196A	

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

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Calcium</b>	<b>27.8</b>	0.0500	mg/L dry	1	BHC0028	03/03/24	03/07/24	EPA 6020B	
<b>Magnesium</b>	<b>6.03</b>	0.0500	"	"	"	"	"	"	
<b>Sodium</b>	<b>5.87</b>	0.0500	"	"	"	"	"	"	

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)  
Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 15:20

**BKG07@6.0'**  
**2402397-11 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.263	0.00100	units	1	BHC0234	03/08/24	03/08/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	94.5		%	1	BHC0124	03/06/24	03/08/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.176	0.0100	mmhos/cm	1	BHC0030	03/03/24	03/06/24	EPA 120.1	

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

Date Sampled: **02/22/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.32		pH Units	1	BHC0029	03/03/24	03/06/24	EPA 9045D	

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 Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)

Project Number: UWRWR-A3006-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 03/18/24 15:20

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

**Summit Scientific**

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

**Batch BHC0265 - EPA 3050B**

**Blank (BHC0265-BLK1)**

Prepared: 03/11/24 Analyzed: 03/13/24

Boron ND 2.00 mg/L

**LCS (BHC0265-BS1)**

Prepared: 03/11/24 Analyzed: 03/13/24

Boron 5.97 2.00 mg/L 5.00 119 80-120

**Duplicate (BHC0265-DUP1)**

Source: 2402396-01

Prepared: 03/11/24 Analyzed: 03/13/24

Boron 0.0650 2.00 mg/L ND 200 20 QR-01

**Matrix Spike (BHC0265-MS1)**

Source: 2402396-01

Prepared: 03/11/24 Analyzed: 03/13/24

Boron 5.76 2.00 mg/L 5.00 ND 115 75-125

**Matrix Spike Dup (BHC0265-MSD1)**

Source: 2402396-01

Prepared: 03/11/24 Analyzed: 03/13/24

Boron 5.90 2.00 mg/L 5.00 ND 118 75-125 2.39 25

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Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)

Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 15:20

**Total Metals by EPA 6020B - Quality Control**  
**Summit Scientific**

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

**Batch BHC0140 - EPA 3050B**

**Blank (BHC0140-BLK1)**

Prepared: 03/06/24 Analyzed: 03/07/24

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 (BHC0140-BS1)**

Prepared: 03/06/24 Analyzed: 03/07/24

Arsenic	44.2	0.200	mg/kg wet	40.0		110	80-120
Barium	43.7	0.400	"	40.0		109	80-120
Cadmium	1.99	0.200	"	2.00		99.6	80-120
Copper	38.6	0.400	"	40.0		96.4	80-120
Lead	20.5	0.200	"	20.0		102	80-120
Nickel	38.4	0.400	"	40.0		96.0	80-120
Silver	2.03	0.0200	"	2.00		102	80-120
Zinc	39.2	0.400	"	40.0		98.0	80-120
Selenium	3.72	0.260	"	4.00		93.1	80-120

**Duplicate (BHC0140-DUP1)**

Source: 2402394-01

Prepared: 03/06/24 Analyzed: 03/07/24

Arsenic	4.10	0.200	mg/kg dry		3.68		10.9	20
Barium	96.3	0.400	"		80.6		17.8	20
Cadmium	0.197	0.200	"		0.184		6.59	20
Copper	3.53	0.400	"		3.50		0.596	20
Lead	7.40	0.200	"		6.82		8.18	20
Nickel	4.19	0.400	"		3.99		5.05	20
Silver	0.0544	0.0200	"		0.0535		1.72	20
Zinc	14.0	0.400	"		14.0		0.512	20
Selenium	ND	0.260	"		ND			20

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Fremont Environmental  
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 Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)

Project Number: UWRWR-A3006-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 03/18/24 15:20

**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 BHC0140 - EPA 3050B**

**Matrix Spike (BHC0140-MS1)**

Source: 2402394-01

Prepared: 03/06/24 Analyzed: 03/07/24

Arsenic	61.9	0.200	mg/kg dry	46.5	3.68	125	75-125				
Barium	143	0.400	"	46.5	80.6	134	75-125				QM-05
Cadmium	2.77	0.200	"	2.33	0.184	111	75-125				
Copper	31.7	0.400	"	46.5	3.50	60.5	75-125				QM-05
Lead	30.7	0.200	"	23.3	6.82	103	75-125				
Nickel	33.0	0.400	"	46.5	3.99	62.4	75-125				QM-05
Silver	2.37	0.0200	"	2.33	0.0535	99.4	75-125				
Zinc	42.2	0.400	"	46.5	14.0	60.6	75-125				QM-05
Selenium	3.61	0.260	"	4.65	ND	77.6	75-125				

**Matrix Spike Dup (BHC0140-MSD1)**

Source: 2402394-01

Prepared: 03/06/24 Analyzed: 03/07/24

Arsenic	60.5	0.200	mg/kg dry	46.5	3.68	122	75-125	2.27	25		
Barium	143	0.400	"	46.5	80.6	135	75-125	0.285	25		QM-05
Cadmium	2.84	0.200	"	2.33	0.184	114	75-125	2.59	25		
Copper	32.9	0.400	"	46.5	3.50	63.1	75-125	3.74	25		QM-05
Lead	31.2	0.200	"	23.3	6.82	105	75-125	1.34	25		
Nickel	34.0	0.400	"	46.5	3.99	64.6	75-125	3.07	25		QM-05
Silver	2.40	0.0200	"	2.33	0.0535	101	75-125	1.50	25		
Zinc	43.6	0.400	"	46.5	14.0	63.7	75-125	3.37	25		QM-05
Selenium	4.06	0.260	"	4.65	ND	87.2	75-125	11.6	25		

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Project: Noble - Wells Ranch AA (Backgrounds)

Project Number: UWRWR-A3006-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 03/18/24 15:20

**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 BHC0460 - 3060A Mod**

**Blank (BHC0460-BLK1)**

Prepared & Analyzed: 03/15/24

Chromium, Hexavalent      ND      0.30    mg/kg wet

**LCS (BHC0460-BS1)**

Prepared & Analyzed: 03/15/24

Chromium, Hexavalent      24.6      0.30    mg/kg wet      25.0      98.2      80-120

**Duplicate (BHC0460-DUP1)**

**Source: 2402397-01**

Prepared & Analyzed: 03/15/24

Chromium, Hexavalent      ND      0.30    mg/kg dry      ND      20

**Matrix Spike (BHC0460-MS1)**

**Source: 2402397-01**

Prepared & Analyzed: 03/15/24

Chromium, Hexavalent      27.8      0.30    mg/kg dry      26.6      ND      105      75-125

**Matrix Spike Dup (BHC0460-MSD1)**

**Source: 2402397-01**

Prepared & Analyzed: 03/15/24

Chromium, Hexavalent      27.8      0.30    mg/kg dry      26.6      ND      105      75-125      0.00      20

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Project: Noble - Wells Ranch AA (Backgrounds)

Project Number: UWRWR-A3006-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 03/18/24 15:20

**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 BHC0028 - General Preparation**

**Blank (BHC0028-BLK1)**

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

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

**LCS (BHC0028-BS1)**

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

Calcium	5.14	0.0500	mg/L wet	5.00		103	70-130			
Magnesium	5.06	0.0500	"	5.00		101	70-130			
Sodium	5.15	0.0500	"	5.00		103	70-130			

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Project: Noble - Wells Ranch AA (Backgrounds)

Project Number: UWRWR-A3006-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 03/18/24 15:20

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

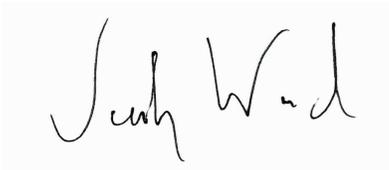
**Summit Scientific**

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

**Batch BHC0124 - General Preparation**

Duplicate (BHC0124-DUP1)	Source: 2402395-01		Prepared: 03/06/24 Analyzed: 03/08/24		
% Solids	92.0	%	91.8	0.232	20

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Project: Noble - Wells Ranch AA (Backgrounds)

Project Number: UWRWR-A3006-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 03/18/24 15:20

**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 BHC0030 - General Preparation**

**Blank (BHC0030-BLK1)**

Prepared: 03/03/24 Analyzed: 03/06/24

Specific Conductance (EC) ND 0.0100 mmhos/cm

**LCS (BHC0030-BS1)**

Prepared: 03/03/24 Analyzed: 03/06/24

Specific Conductance (EC) 0.156 0.0100 mmhos/cm 0.150 104 95-105

**Duplicate (BHC0030-DUP1)**

Source: 2402397-01

Prepared: 03/03/24 Analyzed: 03/06/24

Specific Conductance (EC) 0.113 0.0100 mmhos/cm 0.112 1.16 20

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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)

Project Number: UWRWR-A3006-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 03/18/24 15:20

**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 BHC0029 - General Preparation**

**LCS (BHC0029-BS1)**

Prepared: 03/03/24 Analyzed: 03/06/24

pH	9.06	pH Units	9.18	98.7	95-105
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**Duplicate (BHC0029-DUP1)**

Source: 2402397-01

Prepared: 03/03/24 Analyzed: 03/06/24

pH	8.69	pH Units	8.69	0.00	20
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Summit Scientific

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Wellington CO, 80549

Project: Noble - Wells Ranch AA (Backgrounds)

Project Number: UWRWR-A3006-ABN  
Project Manager: Paul Henchan

**Reported:**  
03/18/24 15:20

### Notes and Definitions

- 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