

# **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. Henchan, P.E.  
Senior Consultant

Attachments:

Facility Closure Checklist  
Tables  
Figures  
Photos  
Laboratory Reports

**1759 REDWING LANE, BROOMFIELD, CO 80020  
(303) 956-8714 (DIRECT)**

# 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

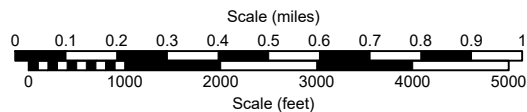
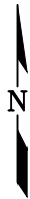
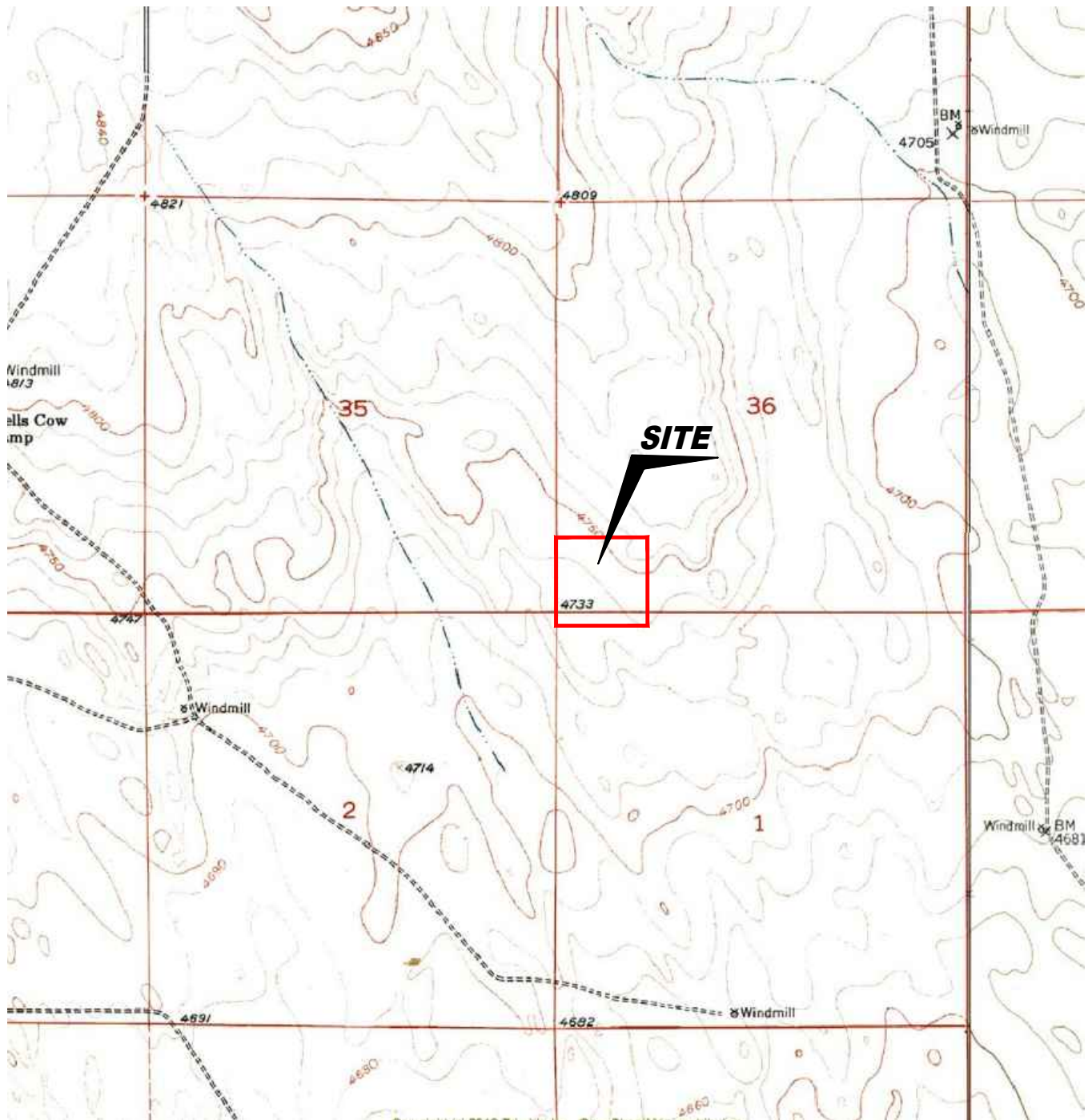
Red & blue highlighted 915-1 Limits indicate the referenced soil screening level (SSL)

\* 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)

Figure 1


**SITE LOCATION MAP**

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

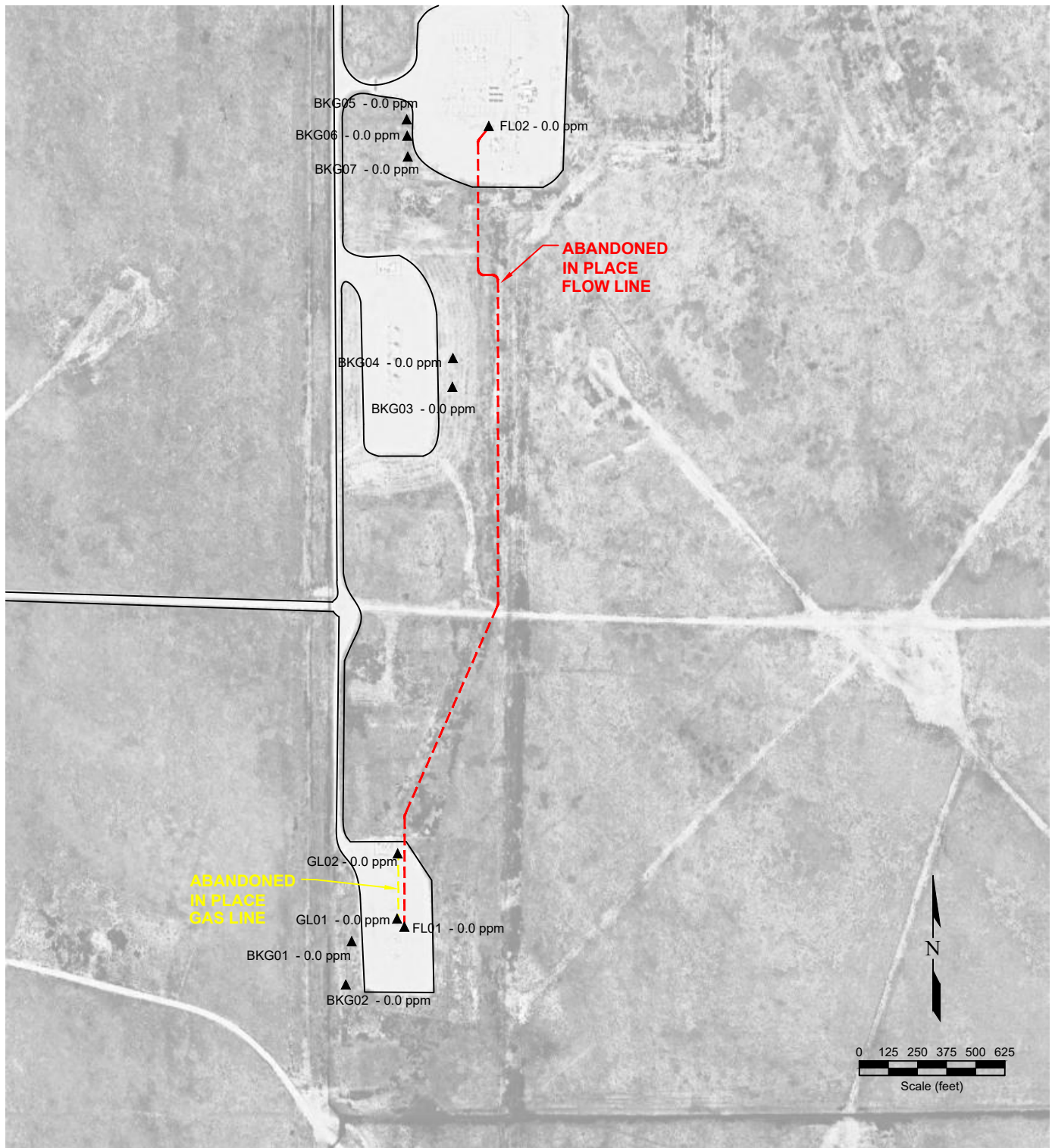
SWSW Sec. 36, T6N, R63W, 6th PM

Weld County, Colorado

40.437499°, -104.394114°

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

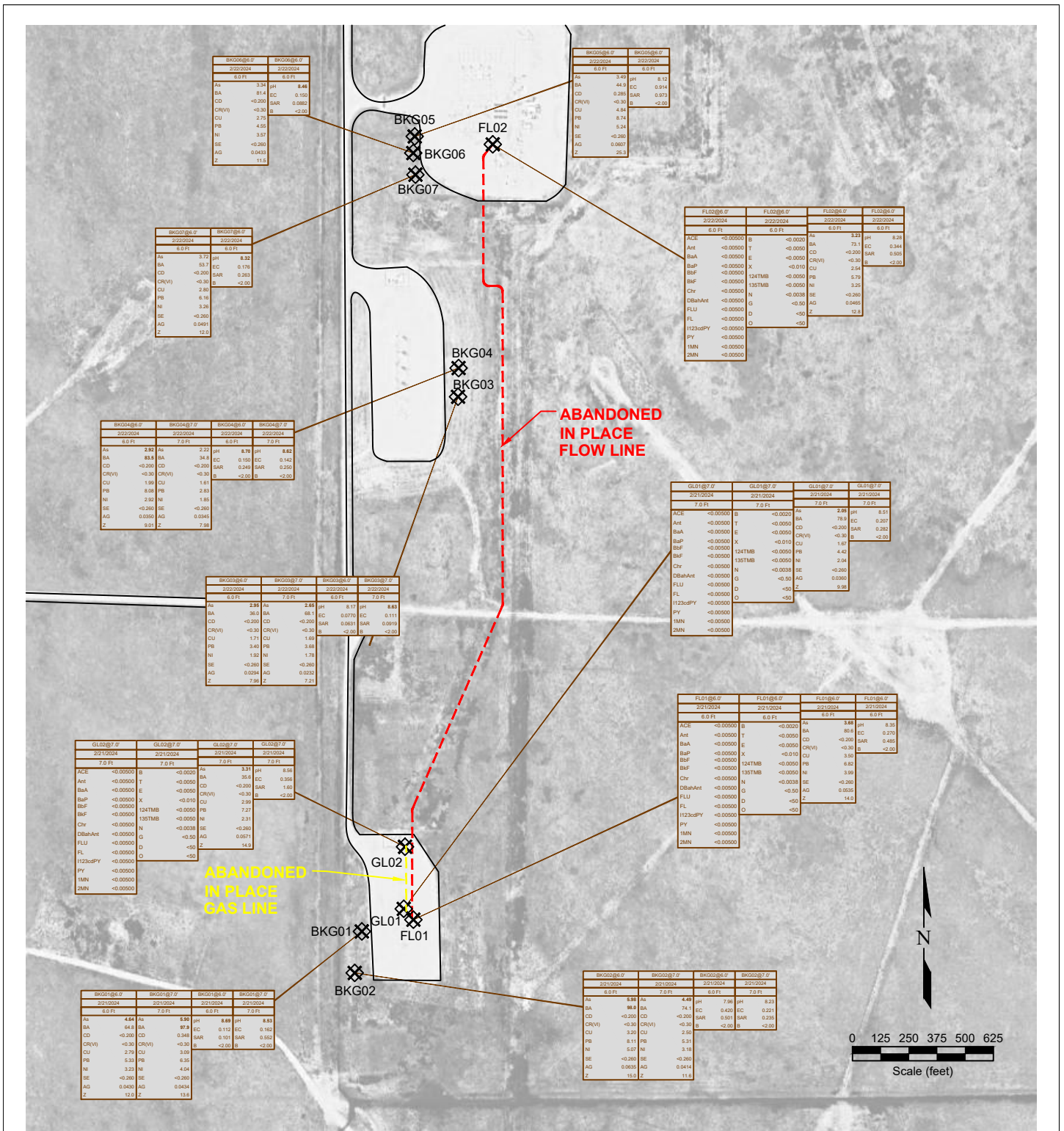
Figure 2  
SITE MAP

**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>	





<p><b>Legend</b></p> <p>WELL HEAD LOCATION</p> <p>SOIL SAMPLE LOCATION</p> <p>ABOVE GROUND STORAGE TANK</p> <p>FORMER FACILITY</p> <p>ABANDONED IN PLACE FLOW LINE</p> <p>ABANDONED IN PLACE GAS LINE</p> <p>FENCE LINE</p> <p>CONTAINMENT BERM</p> <p>CONTAINMENT WALL</p> <p>NOT ANALYZED</p>	<p><b>Figure 3</b></p> <p><b>SOIL CHEMISTRY MAP</b></p> <p><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>	<p><b>Project No.</b> <b>CO24-042</b></p> <p><b>Date</b> <b>8/3/24</b></p>	<p><b>API #</b> <b>05-123-38670</b></p> <p><b>Remediation #</b> <b>30294</b></p>	<p><b>Facility #</b></p> <p><b>Filename</b> <b>24042Q2</b></p>	<p><b>REMONT ENVIRONMENTAL</b></p>
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# Photo Log



***Description:***

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# Photo Log



***Description:***

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# Photo Log



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***Description:***

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# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

March 18, 2024

Paul Henehan

Fremont Environmental

PO Box 1289

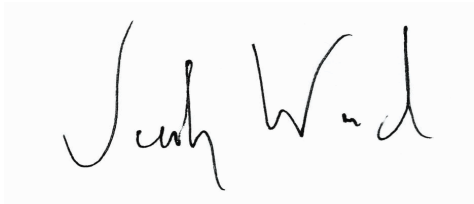
Wellington, CO 80549

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 black ink, appearing to read "Jacob Wood". The signature is written in a cursive, flowing style.

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>
<u>2402394</u>	

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-ABN</u>	
Sampler Name: <u>JG</u>	Project Number:	Contact:	

				Preservative				Matrix				Analysis Requested						Special Instructions	
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	BTEX+N	TMS (915)	DRO,ORO,680	PAHs (915)	EC,PH,SAR,BOD	Metals (915)	
1	<u>FLO1C6.0'</u>	<u>2/21/24</u>		<u>2</u>			<u>X</u>			<u>X</u>			<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	
2	<u><del>Q201</del> GLO1C7.0'</u>	<u>2/21/24</u>		<u>1</u>			<u>X</u>			<u>1</u>			<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
3	<u>FLO2C6.0'</u>	<u>2/22/24</u>		<u>1</u>			<u>1</u>			<u>1</u>			<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
4	<u>GLO2C7.0'</u>	<u>2/21/24</u>		<u>1</u>			<u>1</u>			<u>1</u>			<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
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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 11:38</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	
Relinquished by: Date/Time:	Received by: Date/Time:	3 Days	Field Temp.	
		Standard	<u>X</u> Field Turb.	
Temperature Upon Receipt: <u>14.0</u>	Corrected Temperature	IR gun #:	HNO3 lot #:	

S<sub>2</sub>

## Sample Receipt Checklist

S2 Work Order# 2402394Client: Fremont

Client Project ID:

Noble-wells Ranch AA 35-62-1AHNCShipped 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"/>	no sample times
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"/>	no time
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? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling)? <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"/>	
Additional Comments (if any):				
<sup>(1)</sup> If NO, then contact the client before proceeding with analysis and note in case narrative.				

AS  
Custodian Printed Name2/22/24  
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 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	0.0400	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 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	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**

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	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	0.0409	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	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	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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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**

**Total Metals by EPA 6020B**

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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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**

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

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

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
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	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: **02/22/24 00:00**

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

**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**

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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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	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	0.0413	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	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	14.7	118 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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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

**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**

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	

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

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

### Summit Scientific

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

#### 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	"							
Surrogate: 1,2-Dichloroethane-d4	0.0388		"	0.0400		97.1	50-150			
Surrogate: Toluene-d8	0.0345		"	0.0400		86.2	50-150			
Surrogate: 4-Bromofluorobenzene	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			
Surrogate: 1,2-Dichloroethane-d4	0.0378		"	0.0400		94.6	50-150			
Surrogate: Toluene-d8	0.0363		"	0.0400		90.8	50-150			
Surrogate: 4-Bromofluorobenzene	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			
Surrogate: 1,2-Dichloroethane-d4	0.0358		"	0.0400		89.4	50-150			
Surrogate: Toluene-d8	0.0370		"	0.0400		92.6	50-150			
Surrogate: 4-Bromofluorobenzene	0.0386		"	0.0400		96.5	50-150			

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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

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

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

**Batch BHB0772 - EPA 5030 Soil MS**

Matrix Spike Dup (BHB0772-MSD1)		Source: 2402394-01			Prepared: 02/23/24 Analyzed: 02/24/24					
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	
Surrogate: 1,2-Dichloroethane-d4		0.0390	"	0.0400		97.6	50-150			
Surrogate: Toluene-d8		0.0379	"	0.0400		94.6	50-150			
Surrogate: 4-Bromofluorobenzene		0.0397	"	0.0400		99.3	50-150			

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

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

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

**Batch BHB0778 - EPA 3550A**

**Blank (BHB0778-BLK1)**

Prepared & Analyzed: 02/23/24

C10-C28 (DRO)	ND	50	mg/kg							
Surrogate: o-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: o-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: o-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: o-Terphenyl	12.7		"	12.5	101	30-150				

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

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

#### Summit Scientific

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

#### 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	"							
Surrogate: 2-Methylnaphthalene-d10	0.0441		"	0.0333		132	40-150			
Surrogate: Fluoranthene-d10	0.0281		"	0.0333		84.3	40-150			

##### 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			
Surrogate: 2-Methylnaphthalene-d10	0.0318		"	0.0333		95.3	40-150			
Surrogate: Fluoranthene-d10	0.0363		"	0.0333		109	40-150			

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	
	Result	Limit	Units	Level		Result		%REC	Limits	RPD	Limit
Notes											

#### Batch BHB0791 - EPA 5030 Soil MS

##### Matrix Spike (BHB0791-MS1)

Source: 2402394-01

Prepared & Analyzed: 02/26/24

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				
Surrogate: 2-Methylnaphthalene-d10	0.0209		"	0.0333		62.7	40-150				
Surrogate: Fluoranthene-d10	0.0160		"	0.0333		48.1	40-150				

##### Matrix Spike Dup (BHB0791-MSD1)

Source: 2402394-01

Prepared & Analyzed: 02/26/24

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		
Surrogate: 2-Methylnaphthalene-d10	0.0138		"	0.0333		41.3	40-150				
Surrogate: Fluoranthene-d10	0.0161		"	0.0333		48.4	40-150				

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

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

**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	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

**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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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		%REC		RPD	
		Limit	Units		Result	%REC	Limits	RPD	Limit	Notes

**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**

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

**Batch BHC0090 - General Preparation**

<b>Duplicate (BHC0090-DUP1)</b>		<b>Source: 2402385-01</b>			Prepared: 03/05/24 Analyzed: 03/06/24						
% Solids	89.3		%		88.7			0.656		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

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

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

**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 Level	Source		%REC		RPD	
		Limit	Units		Result	%REC	Limits	RPD	Limit	Notes

**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

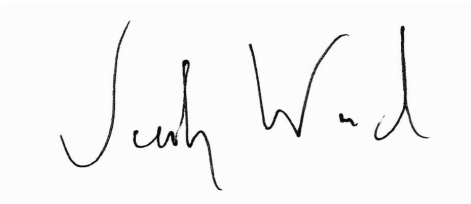
Wellington, CO 80549

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 black ink, appearing to read "Jacob Wood". The signature is written in a cursive, flowing style.

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	Page <u>1</u> of <u>1</u>
<u>2402397</u>	

Send Data To:		Send Invoice To:	
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>Jeff@fremontenv.com</u> <u>Ethan@fremontenv.com</u>	AFE#:	
Phone:	Project Name: <u>Wells Ranch AA</u> <del>2020</del> (Background)	PO/Billing Codes: <u>UWRWR-A3006-ABN</u>	
Sampler Name: <u>JG</u>	Project Number:	Contact:	

					Preservative				Matrix			Analysis Requested								Special Instructions	
ID	Sample Description	Date Sampled	Time Sampled	# of containers	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'	↓		↓			X			X			↓	↓							
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 17:35</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	
Relinquished by:	Date/Time:	Received by:	Date/Time:	3 Days	Field Temp.	
				Standard	X 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# 2402397Client: Fremont Client Project ID: Noble Wells Ranch AA (Background)Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other ☐ ☐ ☐ ☐ ☐ Airbill #: \_\_\_\_\_Matrix (Check all that apply) Air ☐ Soil/Solid ☒ Water ☐ Other ☐Temp (°C) 14.2Thermometer # 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"/>	
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"/>	
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 <b>(excluding cooling)</b> ? <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"/>	
Additional Comments (if any):				
<sup>(1)</sup> If NO, then contact the client before proceeding with analysis and note in case narrative.				

AS  
Custodian Printed Name2/22/24  
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		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: **02/21/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
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		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: **02/21/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
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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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	

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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

**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		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: **02/21/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
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		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: **02/21/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
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		"	"	"	"	"	"	

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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	

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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

**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	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: **02/21/24 00:00**

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

**Hexavalent Chromium by EPA Method 7196**

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

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

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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

**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	

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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

**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						
Arsenic	4.49	0.200	mg/kg dry	1	BHC0140	03/06/24	03/07/24	EPA 6020B	
Barium	74.1	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	2.50	0.400	"	"	"	"	"	"	
Lead	5.31	0.200	"	"	"	"	"	"	
Nickel	3.18	0.400	"	"	"	"	"	"	
Silver	0.0414	0.0200	"	"	"	"	"	"	
Zinc	11.6	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	24.7	0.0500	mg/L dry	1	BHC0028	03/03/24	03/07/24	EPA 6020B	
Magnesium	4.03	0.0500	"	"	"	"	"	"	
Sodium	4.78	0.0500	"	"	"	"	"	"	

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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

**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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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	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							
Arsenic	2.95	0.200	mg/kg dry	1	BHC0140	03/06/24	03/07/24	EPA 6020B	
Barium	36.0	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.71	0.400	"	"	"	"	"	"	
Lead	3.40	0.200	"	"	"	"	"	"	
Nickel	1.92	0.400	"	"	"	"	"	"	
Silver	0.0294	0.0200	"	"	"	"	"	"	
Zinc	7.96	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							
Calcium	85.9	0.0500	mg/L dry	1	BHC0028	03/03/24	03/07/24	EPA 6020B	
Magnesium	19.0	0.0500	"	"	"	"	"	"	
Sodium	2.48	0.0500	"	"	"	"	"	"	

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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

**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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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		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	2.65	0.200	mg/kg dry	1	BHC0140	03/06/24	03/07/24	EPA 6020B	
Barium	68.1	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.69	0.400	"	"	"	"	"	"	
Lead	3.68	0.200	"	"	"	"	"	"	
Nickel	1.78	0.400	"	"	"	"	"	"	
Silver	0.0232	0.0200	"	"	"	"	"	"	
Zinc	7.21	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	44.5	0.0500	mg/L dry	1	BHC0028	03/03/24	03/07/24	EPA 6020B	
Magnesium	8.15	0.0500	"	"	"	"	"	"	
Sodium	2.54	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

**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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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@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	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							
Arsenic	2.92	0.200	mg/kg dry	1	BHC0140	03/06/24	03/07/24	EPA 6020B	
Barium	83.5	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.99	0.400	"	"	"	"	"	"	
Lead	8.08	0.200	"	"	"	"	"	"	
Nickel	2.92	0.400	"	"	"	"	"	"	
Silver	0.0350	0.0200	"	"	"	"	"	"	
Zinc	9.01	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							
Calcium	56.2	0.0500	mg/L dry	1	BHC0028	03/03/24	03/07/24	EPA 6020B	
Magnesium	5.18	0.0500	"	"	"	"	"	"	
Sodium	7.27	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@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	0.249	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	96.0		%	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)	0.150	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	8.70		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		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	2.22	0.200	mg/kg dry	1	BHC0140	03/06/24	03/07/24	EPA 6020B	
Barium	34.8	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.61	0.400	"	"	"	"	"	"	
Lead	2.83	0.200	"	"	"	"	"	"	
Nickel	1.85	0.400	"	"	"	"	"	"	
Silver	0.0345	0.0200	"	"	"	"	"	"	
Zinc	7.98	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	21.6	0.0500	mg/L dry	1	BHC0028	03/03/24	03/07/24	EPA 6020B	
Magnesium	3.28	0.0500	"	"	"	"	"	"	
Sodium	4.72	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

**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	0.250	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	96.2		%	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)	0.142	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	8.62		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		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								
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		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								
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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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**

**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		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	3.34	0.200	mg/kg dry	1	BHC0140	03/06/24	03/07/24	EPA 6020B	
Barium	81.4	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	2.75	0.400	"	"	"	"	"	"	
Lead	4.55	0.200	"	"	"	"	"	"	
Nickel	3.57	0.400	"	"	"	"	"	"	
Silver	0.0433	0.0200	"	"	"	"	"	"	
Zinc	11.5	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	20.6	0.0500	mg/L dry	1	BHC0028	03/03/24	03/07/24	EPA 6020B	
Magnesium	6.22	0.0500	"	"	"	"	"	"	
Sodium	1.78	0.0500	"	"	"	"	"	"	

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

**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	0.0882	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	92.4		%	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)	0.150	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	8.46		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

**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	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							
Arsenic	3.72	0.200	mg/kg dry	1	BHC0140	03/06/24	03/07/24	EPA 6020B	
Barium	53.7	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	2.80	0.400	"	"	"	"	"	"	
Lead	6.16	0.200	"	"	"	"	"	"	
Nickel	3.26	0.400	"	"	"	"	"	"	
Silver	0.0491	0.0200	"	"	"	"	"	"	
Zinc	12.0	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							
Calcium	27.8	0.0500	mg/L dry	1	BHC0028	03/03/24	03/07/24	EPA 6020B	
Magnesium	6.03	0.0500	"	"	"	"	"	"	
Sodium	5.87	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

**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	

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

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

**Summit Scientific**

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

**Batch BHC0265 - EPA 3050B**

**Blank (BHC0265-BLK1)**

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

Boron	ND	2.00	mg/L
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**LCS (BHC0265-BS1)**

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

Boron	5.97	2.00	mg/L	5.00	119	80-120
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**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
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**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
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**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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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

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

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

**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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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	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

**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	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

**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		%REC		RPD	
		Limit	Units		Result	%REC	Limits	RPD	Limit	Notes

**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

Summit Scientific

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Fremont Environmental  
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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 Level	Source		%REC		RPD	
		Limit	Units		Result	%REC	Limits	RPD	Limit	Notes

**Batch BHC0124 - General Preparation**

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

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

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

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

Summit Scientific

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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

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

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

**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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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

### 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