

FREMONT ENVIRONMENTAL INC.

February 2, 2024

Mr. Daniel Peterson
Noble Energy Inc.
2115 117th Avenue
Greeley, CO 80634

Subject: **Facility Closure Data Submittal**
 Jepsen-63N65W 2NESW
 NESW Sec. 2, T3N, R65W
 Weld County, Colorado
 Fremont Project No. C023-220
 Facility # 332956, Remediation # 27984

Dear Mr. Peterson:

As you requested, Fremont Environmental Inc. (Fremont) personnel conducted facility closure activities for the Noble Energy Inc. (Noble) Jepsen-63N65W 2NESW. Impacted soil was encountered during abandonment activities. Details of the Jepsen-63N65W 2NESW facility closure activities are documented in the attached Closure Report. Groundwater was not encountered during facility abandonment activities.

Please contact me at (303) 261-6246 if you require any additional information. Fremont appreciates the opportunity to provide this service.

Sincerely,

FREMONT ENVIRONMENTAL INC.



Stanley Gilbert
Environmental Scientist

Attachments:

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

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

<i>Third Party Removal Date</i>									
<i>Sample taken? Location/ Sample</i>									
<i>PID Readings</i>									
<i>Photo Number(s)</i>									

Other Facility Equipment

<i>Equipment type</i>					
<i>Equipment Condition Age</i>					
<i>Soil impacts</i>					
<i>PID Readings</i>					
<i>Sample taken? Location/ Sample</i>					
<i>Photo Number(s)</i>					

Other observations regarding other facility or third party equipment:

Summary

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

Buried or Partially Buried Vessel Closure Checklist

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

Additional attachments (optional):		Pit Closure		Wellhead Closure		Flowline Closure		Tank Battery Closure	
Site Name & COGCC Facility Number:		Date:						Remediation Project #:	
Associated Wells:		Age of Site:						Number of Photos Attached:	
Location: (GPS coordinates of vault or southeastern tank berm for multiple)							Estimated Facility Size (acres):		
General Condition of Site: (General observations regarding housekeeping, corrosion, waste management, etc.)									
USCS Soil Type:				Estimated Depth to Groundwater:					
Hydrocarbon Impacted Soils / Spills: (Note estimated size and if impact appears to be surficial or extends to an unknown depth)									
Salt Crusted Soils or Impacted Vegetation: (Note estimated size and if impact appears to be surficial or extends to an unknown depth)									
Buried or Partially Buried Vessels									
Tank Contents									
Size (barrels)									
Age									
Construction Material									
Visual Integrity of Tank									
Condition of tank Foundation									
PID Readings									
Condition of Dimple Line									
PID Readings									
Sample taken? Location/Sample ID#									
Photo Number(s)									
Other observations regarding partially buried vessels: The northern and western sidewalls of PWV excavation was the tie-in point for the dumpline to the separator. Dumplines were pulled									
Summary									
Was impacted soil identified? No Yes - less than 10 cubic yards Yes - more than 10 cubic yards									
Total number of samples field screened:				Total number of samples collected:					
Highest PID Reading:				Total number of samples submitted to lab for analysis:					
If more than 10 cubic yards of impacted soil were observed:									
Vertical extent:				Estimated spill volume:					
Lateral extent:				Volume of soil removed:					
Is additional investigation required?									
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:				Was remedial groundwater removal conducted? Yes No					
Date Groundwater was encountered:				Commencement date of removal:					
Sheen on groundwater? Yes No				Volume of groundwater removed prior to sampling:					
Free product observed? Yes No				Volume of groundwater removed post sampling:					
Total number of samples collected:				Total Volume of groundwater removed:					
Total number of samples submitted to lab for analysis:									

TABLE 1
SUMMARY OF METALS IN SOIL CHEMISTRY DATA
NOBLE ENERGY INC.
JEPSEN-63N65W, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C023-220

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)
COGCC Table 915-1 Limits (Residential SSL)			1.2	490	5.8	58	30	27	2	500**		
COGCC Table 915-1 Limits (Protection of Groundwater SSL)			0.0026	0.69	0.78	9.9	0.0081	0.0087	0.0038	500**		
AST01 0.5'	08/08/2023	0.5'	<0.0020	0.0074	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
AST02 0.5'	08/08/2023	0.5'	0.012	0.38	0.73	3.4	1.1	0.73	0.14	140	35	<50
E Wall 4'	08/08/2023	4'	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
FLOOR 5'	08/08/2023	5'	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
N Wall 4'	08/08/2023	4'	<0.020	<0.050	0.15	0.41	2.7	2.5	0.033	350	250	<50
SEP01 DL 3'	08/09/2023	3'	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
SEP02 DL 3'	08/09/2023	3'	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	1.4	<50	<50

Bold faced values exceed the COGCC 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

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

NA - Not analyzed

TABLE 2
SUMMARY OF METALS IN SOIL CHEMISTRY DATA
NOBLE ENERGY INC.
JEPSEN-63N65W, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C023-220

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)
COGCC 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
COGCC 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
AST01 0.5'	08/08/2023	0.5'	<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
AST02 0.5'	08/08/2023	0.5'	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0152	<0.00500	<0.00500	1.02	0.411
E Wall 4'	08/08/2023	4'	<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
FLOOR 5'	08/08/2023	5'	<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
N Wall 4'	08/08/2023	4'	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00991	<0.00500	<0.00500	1.11	0.511
SEP01 DL 3'	08/09/2023	3'	<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
SEP02 DL 3'	08/09/2023	3'	<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 COGCC 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

TABLE 3
SUMMARY OF METALS IN SOIL CHEMISTRY DATA
NOBLE ENERGY INC.
JEPSEN-63N65W, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C023-220

Sample ID	Sample Date	Depth (ft)	pH	EC (mmhos/cm)	SAR	Boron (mg/L)
COGCC Table 915-1 Soil Suitability Limits			6 - 8.3	<4	<6	2
AST01 0.5'	08/08/2023	0.5'	6.26	5.33	0.0697	1.06
AST02 0.5'	08/08/2023	0.5'	4.96	0.438	0.0509	1.03
E Wall 4'	08/08/2023	4'	8.23	0.26	1.46	1.06
FLOOR 5'	08/08/2023	5'	6.3	0.188	2.7	1.07
N Wall 4'	08/08/2023	4'	6.66	0.277	9.96	1.13
SEP01 DL 3'	08/09/2023	3'	7.64	0.400	0.911	0.502
SEP02 DL 3'	08/09/2023	3'	6.22	0.816	0.573	0.505

Bold faced values exceed the COGCC Table 915-1 concentrations

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

NA - Not analyzed

TABLE 4
SUMMARY OF METALS IN SOIL CHEMISTRY DATA
NOBLE ENERGY INC.
JEPSEN-63N65W, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C023-220

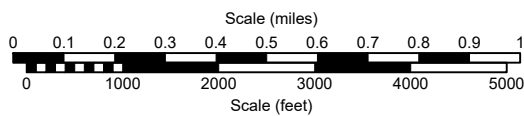
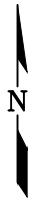
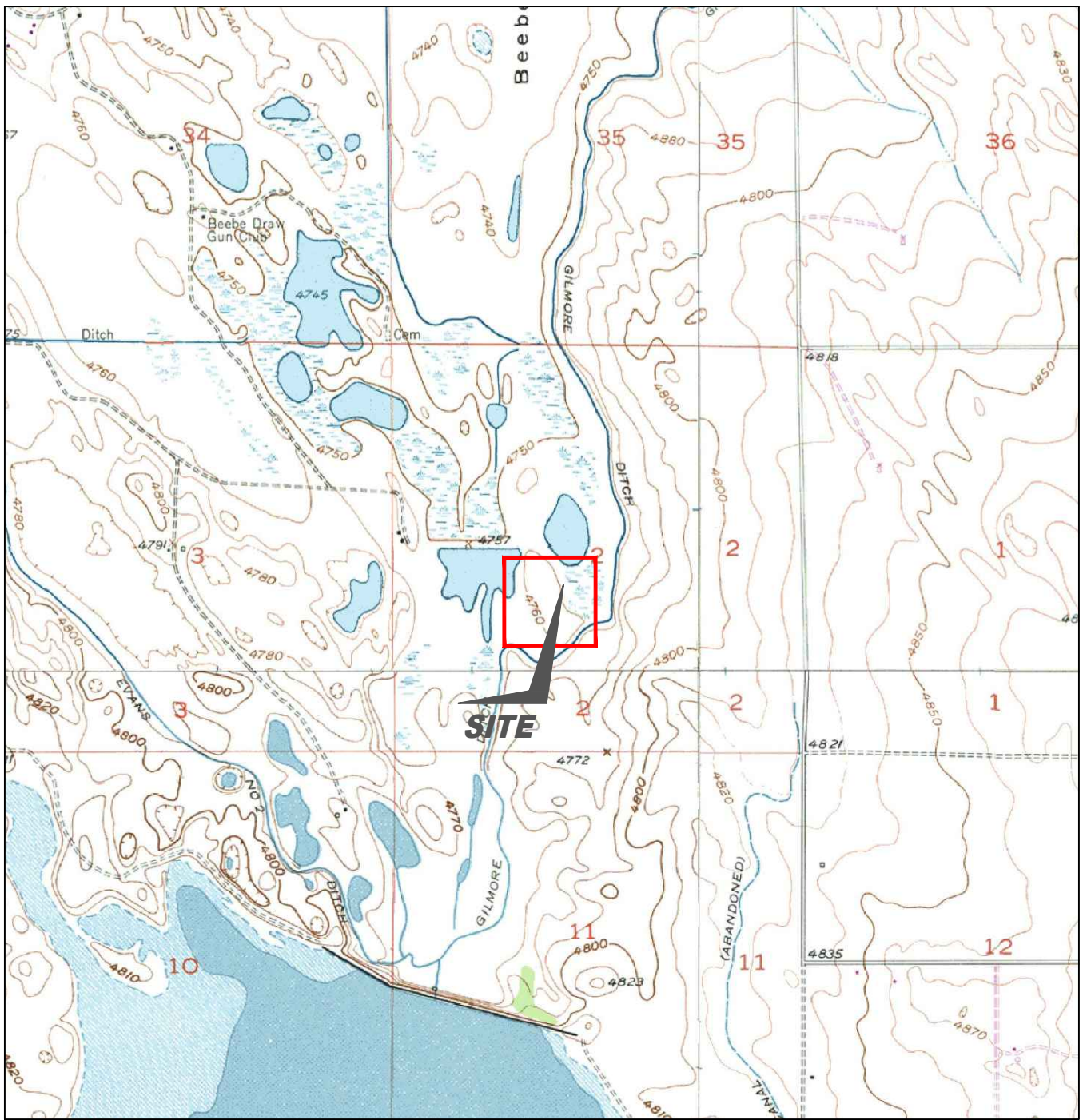
Sample ID	Sample Date	Depth (ft)	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (VI) (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Zinc (mg/kg)
ECMC Table 915-1 Limits (Residential SSL)			0.68	15000	71	0.3	3100	400	1500	390	390	23000
ECMC Table 915-1 Limits (Protection of Groundwater SSL)			0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
AST01 0.5'	08/08/2023	0.5'	0.694	51.1	<0.200	<0.30	1.71	2.35	1.40	<0.260	<0.0200	5.05
AST02 0.5'	08/08/2023	0.5'	0.446	26.5	<0.200	<0.30	2.06	12.4	0.966	<0.260	<0.0200	5.51
E Wall 4'	08/08/2023	4'	0.665	28.7	<0.200	<0.30	1.44	3.93	1.17	<0.260	<0.0200	4.38
FLOOR 5'	08/08/2023	5'	0.498	38.2	<0.200	<0.30	1.19	4.71	1.13	<0.260	<0.0200	4.81
N Wall 4'	08/08/2023	4'	0.424	32.7	<0.200	<0.30	1.31	4.52	0.998	<0.260	<0.0200	5.03
SEP01 DL 3'	08/09/2023	3'	0.703	42.3	<0.200	<0.30	1.93	5.25	1.18	<0.260	0.0214	6.44
SEP02 DL 3'	08/09/2023	3'	0.631	39.4	<0.200	<0.30	1.65	4.58	1.00	<0.260	0.0225	5.52

Bold faced values exceed the COGCC 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



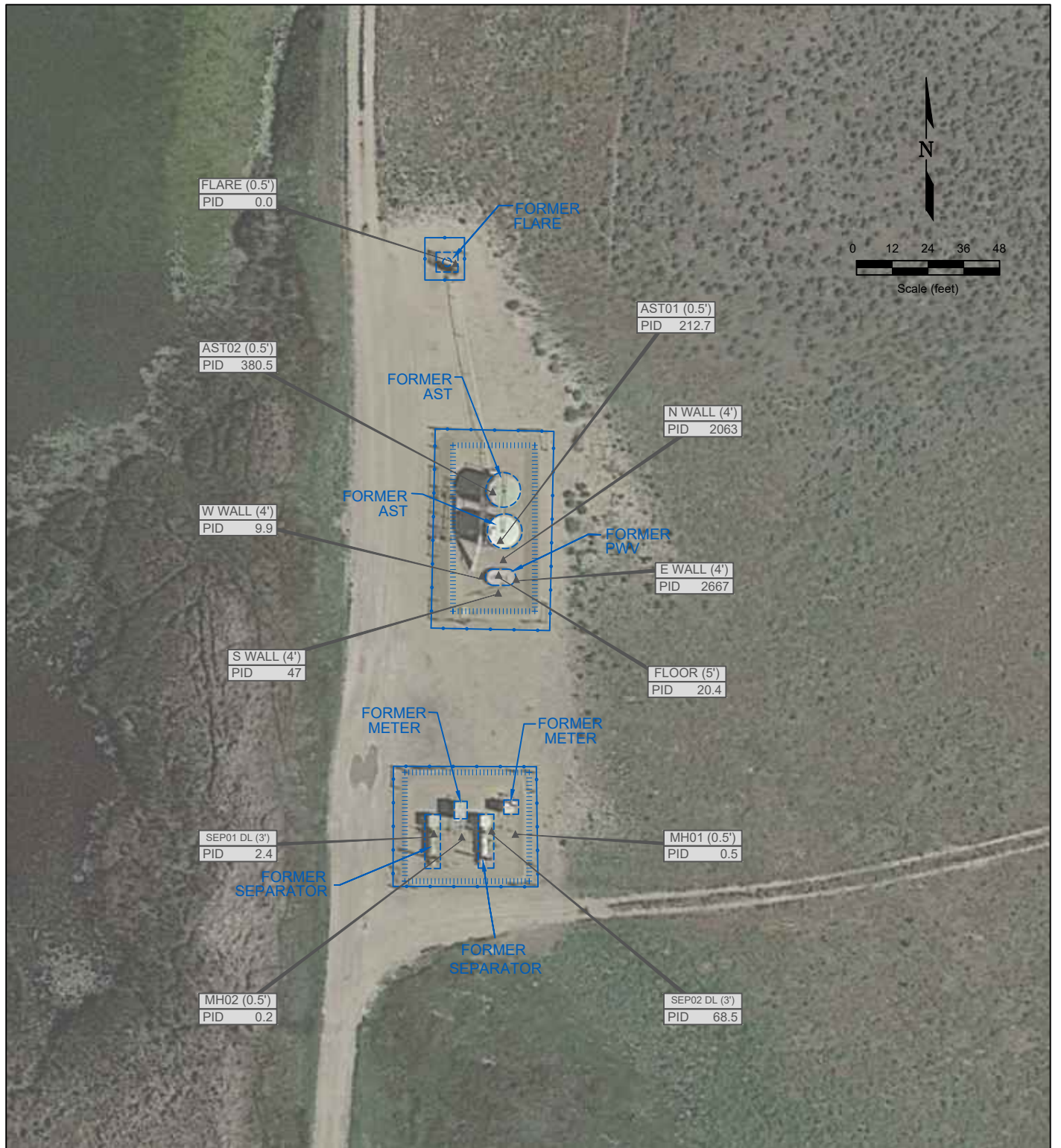
USGS 7.5 MINUTE SERIES (TOPOGRAPHIC)

Figure 1
SITE LOCATION MAP

NOBLE ENERGY INC - JEPSEN-63N65W
 NESW Sec. 2, T3N, R65W, 6th PM
 Weld County, Colorado
 40.252642°, -104.632524°

Project # CO23-220	API #	Facility # 332956
Date 3/26/24	Remediation # 27984	Filename 23220T





LEGEND

- WELLHEAD LOCATION
- ▲ PID READING LOCATION
- ABOVE GROUND STORAGE TANK
- FORMER FORMER FACILITY
- FLOW LINE
- CONTAINMENT BERM
- FENCE LINE

FL01 PID READING LOCATION IDENTIFICATION
 PID 0.1 PHOTO IONIZATION DETECTION (ppm)

Figure 2
SITE MAP

NOBLE ENERGY INC - JEPSEN-63N65W
 NESW Sec. 2, T3N, R65W, 6th PM
 Weld County, Colorado
 40.252642°, -104.632524°

Project # CO23-220	API #	Facility # 332956
Date 3/26/24	Remediation # 27984	Filename 23220Q





LEGEND

- WELLHEAD LOCATION
- ⊗ SOIL SAMPLE LOCATION
- ABOVE GROUND STORAGE TANK
- FORMER FACILITY
- FLOW LINE
- CONTAINMENT BERM
- FENCE LINE

47/2023	DATE SAMPLED	08/09/2023	DATE SAMPLED	08/09/2023	DATE SAMPLED	08/09/2023
FLU1 (F)	SAMPLE ID & DEPTH (ft)	SEP01 DL (3)	SAMPLE ID & DEPTH (ft)	SEP01 DL (3)	FLU1 (F)	SAMPLE ID & DEPTH (ft)
ACE	ACENAPHTHENE (mg/kg)	ACE	ACENAPHTHENE (mg/kg)	ACE	B	BENZENE (mg/kg)
Ant	ANTHRACENE (mg/kg)	Ant	ANTHRACENE (mg/kg)	Ant	T	TOLUENE (mg/kg)
BaA	BENZO (A) ANTHRACENE (mg/kg)	BaA	BENZO (A) ANTHRACENE (mg/kg)	BaA	E	ETHYLBENZENE (mg/kg)
BaP	BENZO (B) FLUORANTHENE (mg/kg)	BaP	BENZO (B) FLUORANTHENE (mg/kg)	BaP	X	TOTAL XYLENES (mg/kg)
BkF	BENZO (K) FLUORANTHENE (mg/kg)	BkF	BENZO (K) FLUORANTHENE (mg/kg)	BkF	124TMB	1,2,4-TRIMETHYLBENZENE (mg/kg)
BuP	BENZO (A) PYRENE (mg/kg)	BuP	BENZO (A) PYRENE (mg/kg)	BuP	135TMB	1,3,5-TRIMETHYLBENZENE (mg/kg)
Chr	CHRYSENE (mg/kg)	Chr	CHRYSENE (mg/kg)	Chr	N	NAPHTHALENE (mg/kg)
DBaHAnt	DIBENZO (A,H) ANTHRACENE (mg/kg)	DBaHAnt	DIBENZO (A,H) ANTHRACENE (mg/kg)	DBaHAnt	124TMB	TPH-GRO (mg/kg)
FLU	FLUORANTHENE (mg/kg)	FLU	FLUORANTHENE (mg/kg)	FLU	135TMB	TPH-GRO (mg/kg)
FL	FLUORENE (mg/kg)	FL	FLUORENE (mg/kg)	FL	N	TPH-GRO (mg/kg)
1123aPPY	INDENO (1,2,3-CD) PYRENE (mg/kg)	1123aPPY	INDENO (1,2,3-CD) PYRENE (mg/kg)	1123aPPY	G	
1MN	1-METHYLNAPHTHALENE (mg/kg)	1MN	1-METHYLNAPHTHALENE (mg/kg)	1MN	D	
2MN	2-METHYLNAPHTHALENE (mg/kg)	2MN	2-METHYLNAPHTHALENE (mg/kg)	2MN	<50	
PY	PYRENE (mg/kg)	PY	PYRENE (mg/kg)	PY	Z	

NOT ANALYZED

Figure 3
SOIL CHEMISTRY MAP

NOBLE ENERGY INC - JEPSSEN-63N65W
 NESW Sec. 2, T3N, R65W, 6th PM
 Weld County, Colorado
 40.252642°, -104.632524°

Project # CO23-220	API #	Facility # 332956
Date 3/26/24	Remediation # 27984	Filename 23220Q

Photo Log



Description:

--

Photo Log



Description:

--

Photo Log



Description:

--

Photo Log



Description:

Photo Log



Description:

--

Photo Log



Description:

Photo Log



Description:

--

Photo Log



Description:

--

Photo Log



Description:

Photo Log



Description:

--

Photo Log



Description:

--

Photo Log



Description:

--

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

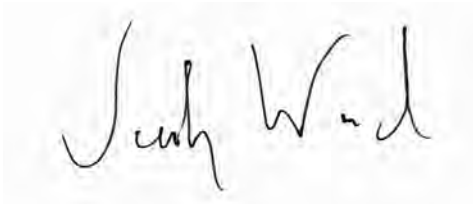
303.277.9310

August 22, 2023

Paul Henchan
Fremont Environmental
PO Box 1289
Wellington, CO 80549
RE: Noble - Jepsen 63N65W
Work Order #2308190

Enclosed are the results of analyses for samples received by Summit Scientific on 08/08/23 16:15. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Jacob Wood". The signature is written in a cursive style and is centered within a light gray rectangular box.

Jacob Wood For Paul Shrewsbury
President



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/22/23 14:08

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
AST01 0.5'	2308190-01	Soil	08/08/23 12:43	08/08/23 16:15
AST02 0.5'	2308190-02	Soil	08/08/23 12:45	08/08/23 16:15
E Wall 4'	2308190-03	Soil	08/08/23 12:32	08/08/23 16:15
FLOOR 5'	2308190-04	Soil	08/08/23 12:34	08/08/23 16:15
N Wall 4'	2308190-05	Soil	08/08/23 12:36	08/08/23 16:15

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.



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

Lab ID
2308190

Page **1** of **1**

		Send Data To:		Send Invoice To:	
Client: Fremont Environmental		Project Manager: Paul Henehan		Company: <i>Noble</i>	
Address:		E-Mail: Fremont Distribution List		Project Name/Location: <i>JEPSEN 63N65W</i>	
City/State/Zip:				AFE#:	
Phone: 303-261-6246		Project Name: <i>JEPSEN 63N65W</i>		PO/Billing Codes: <i>UWRWE-A3172-ABN</i>	
Sampler Name: Stanley Gilbert		Project Number:		Contact: <i>Dan Peterson</i> ^{SR} <i>Mike Montoya</i>	

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix		Air-Canister #	Other	Analysis Requested					HOLD	Special Instructions
					HCl	HNO3	None	Other	Water	Soil			BTEX, TMBs, Naph.	TPH	PAH (915)	EC, SAR, Ph, Boron	Metals (915)		
1	ASTO2 0.5'	8/8/23	12:43	2			X			X			X	X	X	X			
2	ASTO2 0.5'		12:45																
3	E Wall 4'		12:32																
4	FLOOR 5'		12:34																
5	N Wall 4'		12:36																
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			

Relinquished by: <i>[Signature]</i>	Date/Time: 8/8/23 16:15	Received by: <i>[Signature]</i>	Date/Time: 8/8/23 16:15	TAT Business Days	Field DO	Notes:
Relinquished by:	Date/Time:	Received by:	Date/Time:	Same Day	Field EC	
				1 Day	Field ORP	
				2 Days	Field pH	
				3 Days	Field Temp.	
				Standard	X Field Turb.	
Temperature Upon Receipt: 11.7	Corrected Temperature: 0	IR gun #:		HNO3 lot #:		

S₂

Sample Receipt Checklist

S2 Work Order# 2208190

Client: Fremont Client Project ID: Jeosen 1

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

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

Temp (°C) Thermometer #

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

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.

Josh
Custodian Printed Name

08/08/23
Date/Time

4.4



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/22/23 14:08

AST01 0.5'
2308190-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **08/08/23 12:43**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BGH0405	08/10/23	08/11/23	EPA 8260B	
Toluene	0.0074	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: **08/08/23 12:43**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0440	110 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0387	96.7 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0399	99.7 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **08/08/23 12:43**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BGH0408	08/10/23	08/11/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **08/08/23 12:43**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	8.98	71.8 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/22/23 14:08

AST01 0.5'
2308190-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **08/08/23 12:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGH0503	08/11/23	08/15/23	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: **08/08/23 12:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0151	45.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0166	49.7 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **08/08/23 12:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	1.06	0.0100	mg/L	1	BGH0497	08/11/23	08/12/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **08/08/23 12:43**

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

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/22/23 14:08

AST01 0.5'
2308190-01 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	0.694	0.200	mg/kg dry	1	BGH0328	08/09/23	08/10/23	EPA 6020B	
Barium	51.1	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.71	0.400	"	"	"	"	"	"	
Lead	2.35	0.200	"	"	"	"	"	"	
Nickel	1.40	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	5.05	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **08/08/23 12:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BGH0375	08/09/23	08/09/23	EPA 7196A	

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

Date Sampled: **08/08/23 12:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	292	0.0559	mg/L dry	1	BGH0508	08/11/23	08/14/23	EPA 6020B	
Magnesium	50.0	0.0559	"	"	"	"	"	"	
Sodium	4.90	0.0559	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **08/08/23 12:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0697	0.00100	units	1	BGH0580	08/15/23	08/15/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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.



Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Jepsen 63N65W
 Project Number: UWRWE-A3172-ABN
 Project Manager: Paul Henchan

Reported:
 08/22/23 14:08

AST01 0.5'
2308190-01 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **08/08/23 12:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.5		%	1	BGH0499	08/11/23	08/11/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **08/08/23 12:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	5.33	0.0100	mmhos/cm	1	BGH0544	08/14/23	08/14/23	EPA 120.1	

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

Date Sampled: **08/08/23 12:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	6.26		pH Units	1	BGH0543	08/14/23	08/14/23	EPA 9045D	

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/22/23 14:08

AST02 0.5'
2308190-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **08/08/23 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	0.012	0.0020	mg/kg	1	BGH0405	08/10/23	08/11/23	EPA 8260B	
Toluene	0.38	0.050	"	10	"	"	08/11/23	"	
Ethylbenzene	0.73	0.0050	"	1	"	"	08/11/23	"	
Xylenes (total)	3.4	0.10	"	10	"	"	08/11/23	"	
1,2,4-Trimethylbenzene	1.1	0.050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	0.73	0.050	"	"	"	"	"	"	
Naphthalene	0.14	0.0038	"	1	"	"	08/11/23	"	
Gasoline Range Hydrocarbons	35	5.0	"	10	"	"	08/11/23	"	

Date Sampled: **08/08/23 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0468	117 %	50-150		"	"	08/11/23	"	
Surrogate: Toluene-d8	0.0391	97.7 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0793	198 %	50-150		"	"	"	"	S-02

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **08/08/23 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	140	50	mg/kg	1	BGH0408	08/10/23	08/11/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **08/08/23 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	7.34	58.7 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/22/23 14:08

AST02 0.5'
2308190-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **08/08/23 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGH0503	08/11/23	08/15/23	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	0.0152	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	1.02	0.00500	"	"	"	"	"	"	E
2-Methylnaphthalene	0.411	0.00500	"	"	"	"	"	"	E

Date Sampled: **08/08/23 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0372	112 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0152	45.5 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **08/08/23 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	1.03	0.0100	mg/L	1	BGH0497	08/11/23	08/12/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **08/08/23 12:45**

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

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/22/23 14:08

AST02 0.5'
2308190-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Arsenic	0.446	0.200	mg/kg dry	1	BGH0328	08/09/23	08/10/23	EPA 6020B
Barium	26.5	0.400	"	"	"	"	"	"
Cadmium	ND	0.200	"	"	"	"	"	"
Copper	2.06	0.400	"	"	"	"	"	"
Lead	12.4	0.200	"	"	"	"	"	"
Nickel	0.966	0.400	"	"	"	"	"	"
Silver	ND	0.0200	"	"	"	"	"	"
Zinc	5.51	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **08/08/23 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BGH0375	08/09/23	08/09/23	EPA 7196A	

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

Date Sampled: **08/08/23 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	230	0.0594	mg/L dry	1	BGH0508	08/11/23	08/14/23	EPA 6020B	
Magnesium	40.1	0.0594	"	"	"	"	"	"	
Sodium	3.18	0.0594	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **08/08/23 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0509	0.00100	units	1	BGH0580	08/15/23	08/15/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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.



Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Jepsen 63N65W
 Project Number: UWRWE-A3172-ABN
 Project Manager: Paul Henchan

Reported:
 08/22/23 14:08

AST02 0.5'
2308190-02 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **08/08/23 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	84.1		%	1	BGH0499	08/11/23	08/11/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **08/08/23 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.438	0.0100	mmhos/cm	1	BGH0544	08/14/23	08/14/23	EPA 120.1	

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

Date Sampled: **08/08/23 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	4.96		pH Units	1	BGH0543	08/14/23	08/14/23	EPA 9045D	

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/22/23 14:08

E Wall 4'
2308190-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **08/08/23 12:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BGH0405	08/10/23	08/11/23	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: **08/08/23 12:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0457	114 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0399	99.8 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0421	105 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **08/08/23 12:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BGH0408	08/10/23	08/11/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **08/08/23 12:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	8.32	66.5 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/22/23 14:08

E Wall 4'
2308190-03 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **08/08/23 12:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGH0503	08/11/23	08/15/23	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: **08/08/23 12:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0160	48.0 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0143	43.0 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **08/08/23 12:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	1.06	0.0100	mg/L	1	BGH0497	08/11/23	08/12/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **08/08/23 12:32**

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

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/22/23 14:08

E Wall 4'
2308190-03 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	0.665	0.200	mg/kg dry	1	BGH0328	08/09/23	08/10/23	EPA 6020B	
Barium	28.7	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.44	0.400	"	"	"	"	"	"	
Lead	3.93	0.200	"	"	"	"	"	"	
Nickel	1.17	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	4.38	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **08/08/23 12:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BGH0375	08/09/23	08/09/23	EPA 7196A	

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

Date Sampled: **08/08/23 12:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	52.5	0.0539	mg/L dry	1	BGH0508	08/11/23	08/14/23	EPA 6020B	
Magnesium	16.4	0.0539	"	"	"	"	"	"	
Sodium	47.4	0.0539	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **08/08/23 12:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.46	0.00100	units	1	BGH0580	08/15/23	08/15/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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.



Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Jepsen 63N65W
 Project Number: UWRWE-A3172-ABN
 Project Manager: Paul Henchan

Reported:
 08/22/23 14:08

E Wall 4'
2308190-03 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **08/08/23 12:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	92.8		%	1	BGH0499	08/11/23	08/11/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **08/08/23 12:32**

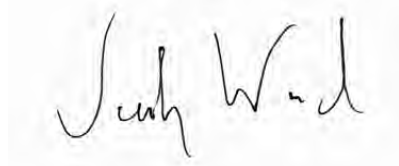
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.260	0.0100	mmhos/cm	1	BGH0544	08/14/23	08/14/23	EPA 120.1	

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

Date Sampled: **08/08/23 12:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.23		pH Units	1	BGH0543	08/14/23	08/14/23	EPA 9045D	

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/22/23 14:08

FLOOR 5'
2308190-04 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **08/08/23 12:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BGH0405	08/10/23	08/11/23	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: **08/08/23 12:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0434	109 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0393	98.2 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0408	102 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **08/08/23 12:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BGH0408	08/10/23	08/11/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **08/08/23 12:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	10.2	81.8 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/22/23 14:08

FLOOR 5'
2308190-04 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **08/08/23 12:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGH0503	08/11/23	08/15/23	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: **08/08/23 12:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0137	41.2 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0160	48.1 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **08/08/23 12:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	1.07	0.0100	mg/L	1	BGH0497	08/11/23	08/12/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **08/08/23 12:34**

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

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/22/23 14:08

FLOOR 5'
2308190-04 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	0.498	0.200	mg/kg dry	1	BGH0328	08/09/23	08/10/23	EPA 6020B	
Barium	38.2	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.19	0.400	"	"	"	"	"	"	
Lead	4.71	0.200	"	"	"	"	"	"	
Nickel	1.13	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	4.81	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **08/08/23 12:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BGH0375	08/09/23	08/09/23	EPA 7196A	

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

Date Sampled: **08/08/23 12:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	71.9	0.0558	mg/L dry	1	BGH0508	08/11/23	08/14/23	EPA 6020B	
Magnesium	56.6	0.0558	"	"	"	"	"	"	
Sodium	126	0.0558	"	"	"	"	"	"	

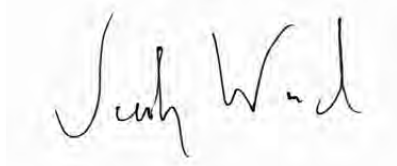
Calculated Analysis

Date Sampled: **08/08/23 12:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.70	0.00100	units	1	BGH0580	08/15/23	08/15/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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.



Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Jepsen 63N65W
 Project Number: UWRWE-A3172-ABN
 Project Manager: Paul Henchan

Reported:
 08/22/23 14:08

FLOOR 5'
2308190-04 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **08/08/23 12:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.6		%	1	BGH0499	08/11/23	08/11/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **08/08/23 12:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.188	0.0100	mmhos/cm	1	BGH0544	08/14/23	08/14/23	EPA 120.1	

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

Date Sampled: **08/08/23 12:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	6.30		pH Units	1	BGH0543	08/14/23	08/14/23	EPA 9045D	

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/22/23 14:08

N Wall 4'
2308190-05 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **08/08/23 12:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.020	mg/kg	10	BGH0405	08/10/23	08/11/23	EPA 8260B	
Toluene	ND	0.050	"	"	"	"	"	"	
Ethylbenzene	0.15	0.0050	"	1	"	"	08/11/23	"	
Xylenes (total)	0.41	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	2.7	0.050	"	10	"	"	08/11/23	"	
1,3,5-Trimethylbenzene	2.5	0.050	"	"	"	"	"	"	
Naphthalene	0.033	0.0038	"	1	"	"	08/11/23	"	
Gasoline Range Hydrocarbons	250	5.0	"	10	"	"	08/11/23	"	

Date Sampled: **08/08/23 12:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0410	102 %	50-150	"	"	"	08/11/23	"	
Surrogate: Toluene-d8	0.198	495 %	50-150	"	"	"	"	"	S-02
Surrogate: 4-Bromofluorobenzene	0.209	523 %	50-150	"	"	"	"	"	S-02

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **08/08/23 12:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	350	50	mg/kg	1	BGH0408	08/10/23	08/11/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **08/08/23 12:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	10.2	81.7 %	30-150	"	"	"	"	"	

PAH by EPA Method 8270D SIM

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/22/23 14:08

N Wall 4'
2308190-05 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **08/08/23 12:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGH0503	08/11/23	08/15/23	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	0.00991	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	1.11	0.00500	"	"	"	"	"	"	E
2-Methylnaphthalene	0.511	0.00500	"	"	"	"	"	"	E

Date Sampled: **08/08/23 12:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0255	76.6 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0162	48.5 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **08/08/23 12:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	1.13	0.0100	mg/L	1	BGH0497	08/11/23	08/12/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **08/08/23 12:36**

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

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/22/23 14:08

N Wall 4'
2308190-05 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	0.424	0.200	mg/kg dry	1	BGH0328	08/09/23	08/10/23	EPA 6020B	
Barium	32.7	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.31	0.400	"	"	"	"	"	"	
Lead	4.52	0.200	"	"	"	"	"	"	
Nickel	0.998	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	5.03	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **08/08/23 12:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BGH0375	08/09/23	08/09/23	EPA 7196A	

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

Date Sampled: **08/08/23 12:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	2320	0.0563	mg/L dry	1	BGH0508	08/11/23	08/14/23	EPA 6020B	
Magnesium	213	0.0563	"	"	"	"	"	"	
Sodium	1870	0.0563	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **08/08/23 12:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	9.96	0.00100	units	1	BGH0580	08/15/23	08/15/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/22/23 14:08

N Wall 4'
2308190-05 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **08/08/23 12:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	88.8		%	1	BGH0499	08/11/23	08/11/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **08/08/23 12:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.277	0.0100	mmhos/cm	1	BGH0544	08/14/23	08/14/23	EPA 120.1	

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

Date Sampled: **08/08/23 12:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	6.66		pH Units	1	BGH0543	08/14/23	08/14/23	EPA 9045D	

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/22/23 14:08

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BGH0405 - EPA 5030 Soil MS

Blank (BGH0405-BLK1)

Prepared & Analyzed: 08/10/23

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0478		"	0.0400		119	50-150			
<i>Surrogate: Toluene-d8</i>	0.0400		"	0.0400		100	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0437		"	0.0400		109	50-150			

LCS (BGH0405-BS1)

Prepared & Analyzed: 08/10/23

Benzene	0.121	0.0020	mg/kg	0.100		121	70-130			
Toluene	0.111	0.0050	"	0.100		111	70-130			
Ethylbenzene	0.118	0.0050	"	0.100		118	70-130			
m,p-Xylene	0.238	0.010	"	0.200		119	70-130			
o-Xylene	0.101	0.0050	"	0.100		101	70-130			
1,2,4-Trimethylbenzene	0.110	0.0050	"	0.100		110	70-130			
1,3,5-Trimethylbenzene	0.108	0.0050	"	0.100		108	70-130			
Naphthalene	0.0881	0.0038	"	0.100		88.1	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0428		"	0.0400		107	50-150			
<i>Surrogate: Toluene-d8</i>	0.0398		"	0.0400		99.6	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0377		"	0.0400		94.2	50-150			

Matrix Spike (BGH0405-MS1)

Source: 2308181-01

Prepared & Analyzed: 08/10/23

Benzene	0.132	0.0020	mg/kg	0.100	ND	132	70-130			QM-07
Toluene	0.121	0.0050	"	0.100	ND	121	70-130			
Ethylbenzene	0.124	0.0050	"	0.100	ND	124	70-130			
m,p-Xylene	0.248	0.010	"	0.200	ND	124	70-130			
o-Xylene	0.106	0.0050	"	0.100	ND	106	70-130			
1,2,4-Trimethylbenzene	0.115	0.0050	"	0.100	ND	115	70-130			
1,3,5-Trimethylbenzene	0.111	0.0050	"	0.100	ND	111	70-130			
Naphthalene	0.0962	0.0038	"	0.100	ND	96.2	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0464		"	0.0400		116	50-150			
<i>Surrogate: Toluene-d8</i>	0.0407		"	0.0400		102	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0386		"	0.0400		96.6	50-150			

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.



Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Jepsen 63N65W
 Project Number: UWRWE-A3172-ABN
 Project Manager: Paul Henchan

Reported:
 08/22/23 14:08

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

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

Batch BGH0405 - EPA 5030 Soil MS

Matrix Spike Dup (BGH0405-MSD1)	Source: 2308181-01			Prepared & Analyzed: 08/10/23						
Benzene	0.123	0.0020	mg/kg	0.100	ND	123	70-130	6.52	30	
Toluene	0.114	0.0050	"	0.100	ND	114	70-130	5.94	30	
Ethylbenzene	0.117	0.0050	"	0.100	ND	117	70-130	5.71	30	
m,p-Xylene	0.236	0.010	"	0.200	ND	118	70-130	5.15	30	
o-Xylene	0.102	0.0050	"	0.100	ND	102	70-130	4.42	30	
1,2,4-Trimethylbenzene	0.109	0.0050	"	0.100	ND	109	70-130	5.63	30	
1,3,5-Trimethylbenzene	0.106	0.0050	"	0.100	ND	106	70-130	4.83	30	
Naphthalene	0.0959	0.0038	"	0.100	ND	95.9	70-130	0.250	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0446</i>		<i>"</i>	<i>0.0400</i>		<i>111</i>	<i>50-150</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0408</i>		<i>"</i>	<i>0.0400</i>		<i>102</i>	<i>50-150</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0372</i>		<i>"</i>	<i>0.0400</i>		<i>93.0</i>	<i>50-150</i>			

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/22/23 14:08

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BGH0408 - EPA 3550A

Blank (BGH0408-BLK1)

Prepared: 08/10/23 Analyzed: 08/11/23

C10-C28 (DRO)	ND	50	mg/kg								
C28-C36 (ORO)	ND	50	"								
Surrogate: <i>o</i> -Terphenyl	11.0		"	12.5		88.0		30-150			

LCS (BGH0408-BS1)

Prepared: 08/10/23 Analyzed: 08/11/23

C10-C28 (DRO)	398	50	mg/kg	500		79.6		70-130			
Surrogate: <i>o</i> -Terphenyl	10.6		"	12.5		84.6		30-150			

Matrix Spike (BGH0408-MS1)

Source: 2308181-01

Prepared: 08/10/23 Analyzed: 08/11/23

C10-C28 (DRO)	402	50	mg/kg	500	6.28	79.2		70-130			
Surrogate: <i>o</i> -Terphenyl	10.6		"	12.5		84.7		30-150			

Matrix Spike Dup (BGH0408-MSD1)

Source: 2308181-01

Prepared: 08/10/23 Analyzed: 08/11/23

C10-C28 (DRO)	413	50	mg/kg	500	6.28	81.4		70-130	2.75	20	
Surrogate: <i>o</i> -Terphenyl	10.4		"	12.5		82.9		30-150			

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/22/23 14:08

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

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

Batch BGH0503 - EPA 5030 Soil MS

Blank (BGH0503-BLK1)

Prepared: 08/11/23 Analyzed: 08/15/23

Acenaphthene	ND	0.00500	mg/kg							
Anthracene	ND	0.00500	"							
Benzo (a) anthracene	ND	0.00500	"							
Benzo (a) pyrene	ND	0.00500	"							
Benzo (b) fluoranthene	ND	0.00500	"							
Benzo (k) fluoranthene	ND	0.00500	"							
Chrysene	ND	0.00500	"							
Dibenz (a,h) anthracene	ND	0.00500	"							
Fluoranthene	ND	0.00500	"							
Fluorene	ND	0.00500	"							
Indeno (1,2,3-cd) pyrene	ND	0.00500	"							
Pyrene	ND	0.00500	"							
1-Methylnaphthalene	ND	0.00500	"							
2-Methylnaphthalene	ND	0.00500	"							
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0217</i>		"	<i>0.0333</i>		<i>65.1</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0190</i>		"	<i>0.0333</i>		<i>57.1</i>	<i>40-150</i>			

LCS (BGH0503-BS1)

Prepared: 08/11/23 Analyzed: 08/15/23

Acenaphthene	0.0220	0.00500	mg/kg	0.0333		66.0	31-137			
Anthracene	0.0214	0.00500	"	0.0333		64.3	30-120			
Benzo (a) anthracene	0.0201	0.00500	"	0.0333		60.2	30-120			
Benzo (a) pyrene	0.0387	0.00500	"	0.0333		116	30-120			
Benzo (b) fluoranthene	0.0396	0.00500	"	0.0333		119	30-120			
Benzo (k) fluoranthene	0.0400	0.00500	"	0.0333		120	30-120			
Chrysene	0.0230	0.00500	"	0.0333		68.9	30-120			
Dibenz (a,h) anthracene	0.0366	0.00500	"	0.0333		110	30-120			
Fluoranthene	0.0218	0.00500	"	0.0333		65.3	30-120			
Fluorene	0.0219	0.00500	"	0.0333		65.7	30-120			
Indeno (1,2,3-cd) pyrene	0.0370	0.00500	"	0.0333		111	30-120			
Pyrene	0.0245	0.00500	"	0.0333		73.5	35-142			
1-Methylnaphthalene	0.0225	0.00500	"	0.0333		67.6	35-142			
2-Methylnaphthalene	0.0219	0.00500	"	0.0333		65.6	35-142			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0251</i>		"	<i>0.0333</i>		<i>75.4</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0219</i>		"	<i>0.0333</i>		<i>65.7</i>	<i>40-150</i>			

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/22/23 14:08

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

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

Batch BGH0503 - EPA 5030 Soil MS

Matrix Spike (BGH0503-MS1)

Source: 2308190-01

Prepared: 08/11/23 Analyzed: 08/15/23

Acenaphthene	0.0181	0.00500	mg/kg	0.0333	ND	54.4	31-137			
Anthracene	0.0164	0.00500	"	0.0333	ND	49.3	30-120			
Benzo (a) anthracene	0.0172	0.00500	"	0.0333	ND	51.5	30-120			
Benzo (a) pyrene	0.0304	0.00500	"	0.0333	ND	91.2	30-120			
Benzo (b) fluoranthene	0.0228	0.00500	"	0.0333	ND	68.3	30-120			
Benzo (k) fluoranthene	0.0305	0.00500	"	0.0333	ND	91.4	30-120			
Chrysene	0.0171	0.00500	"	0.0333	ND	51.4	30-120			
Dibenz (a,h) anthracene	0.0261	0.00500	"	0.0333	ND	78.3	30-120			
Fluoranthene	0.0179	0.00500	"	0.0333	ND	53.7	30-120			
Fluorene	0.0189	0.00500	"	0.0333	ND	56.7	30-120			
Indeno (1,2,3-cd) pyrene	0.0311	0.00500	"	0.0333	ND	93.3	30-120			
Pyrene	0.0169	0.00500	"	0.0333	ND	50.7	35-142			
1-Methylnaphthalene	0.0191	0.00500	"	0.0333	ND	57.2	15-130			
2-Methylnaphthalene	0.0200	0.00500	"	0.0333	ND	59.9	15-130			
Surrogate: 2-Methylnaphthalene-d10	0.0174		"	0.0333		52.3	40-150			
Surrogate: Fluoranthene-d10	0.0182		"	0.0333		54.5	40-150			

Matrix Spike Dup (BGH0503-MSD1)

Source: 2308190-01

Prepared: 08/11/23 Analyzed: 08/15/23

Acenaphthene	0.0177	0.00500	mg/kg	0.0333	ND	53.1	31-137	2.38	30	
Anthracene	0.0160	0.00500	"	0.0333	ND	48.1	30-120	2.59	30	
Benzo (a) anthracene	0.0168	0.00500	"	0.0333	ND	50.4	30-120	2.18	30	
Benzo (a) pyrene	0.0310	0.00500	"	0.0333	ND	93.0	30-120	1.94	30	
Benzo (b) fluoranthene	0.0248	0.00500	"	0.0333	ND	74.3	30-120	8.38	30	
Benzo (k) fluoranthene	0.0268	0.00500	"	0.0333	ND	80.3	30-120	12.9	30	
Chrysene	0.0178	0.00500	"	0.0333	ND	53.3	30-120	3.55	30	
Dibenz (a,h) anthracene	0.0280	0.00500	"	0.0333	ND	84.1	30-120	7.12	30	
Fluoranthene	0.0176	0.00500	"	0.0333	ND	52.9	30-120	1.42	30	
Fluorene	0.0184	0.00500	"	0.0333	ND	55.2	30-120	2.77	30	
Indeno (1,2,3-cd) pyrene	0.0365	0.00500	"	0.0333	ND	110	30-120	16.0	30	
Pyrene	0.0174	0.00500	"	0.0333	ND	52.1	35-142	2.82	30	
1-Methylnaphthalene	0.0197	0.00500	"	0.0333	ND	59.1	15-130	3.25	50	
2-Methylnaphthalene	0.0217	0.00500	"	0.0333	ND	65.0	15-130	8.31	50	
Surrogate: 2-Methylnaphthalene-d10	0.0200		"	0.0333		60.1	40-150			
Surrogate: Fluoranthene-d10	0.0179		"	0.0333		53.8	40-150			

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.



Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Jepsen 63N65W
 Project Number: UWRWE-A3172-ABN
 Project Manager: Paul Henchan

Reported:
 08/22/23 14:08

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

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

Batch BGH0497 - EPA 3050B

Blank (BGH0497-BLK1)

Prepared: 08/11/23 Analyzed: 08/12/23

Boron ND 0.0100 mg/L

LCS (BGH0497-BS1)

Prepared: 08/11/23 Analyzed: 08/12/23

Boron 5.63 0.0100 mg/L 5.00 113 80-120

Duplicate (BGH0497-DUP1)

Source: 2308184-01

Prepared: 08/11/23 Analyzed: 08/12/23

Boron 1.26 0.0100 mg/L 1.27 0.574 20

Matrix Spike (BGH0497-MS1)

Source: 2308184-01

Prepared: 08/11/23 Analyzed: 08/12/23

Boron 6.11 0.0100 mg/L 5.00 1.27 96.7 75-125

Matrix Spike Dup (BGH0497-MSD1)

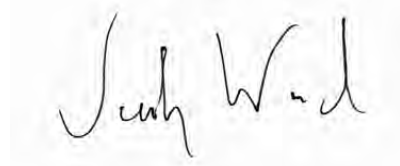
Source: 2308184-01

Prepared: 08/11/23 Analyzed: 08/12/23

Boron 6.41 0.0100 mg/L 5.00 1.27 103 75-125 4.85 25

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.





Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/22/23 14:08

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BGH0328 - EPA 3050B

Blank (BGH0328-BLK1)

Prepared & Analyzed: 08/09/23

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 (BGH0328-BS1)

Prepared & Analyzed: 08/09/23

Arsenic	40.1	0.200	mg/kg wet	40.0	100	80-120
Barium	41.1	0.400	"	40.0	103	80-120
Cadmium	2.01	0.200	"	2.00	101	80-120
Copper	40.6	0.400	"	40.0	101	80-120
Lead	20.7	0.200	"	20.0	103	80-120
Nickel	39.4	0.400	"	40.0	98.5	80-120
Silver	1.98	0.0200	"	2.00	99.0	80-120
Zinc	40.4	0.400	"	40.0	101	80-120

Duplicate (BGH0328-DUP1)

Source: 2307355-06RE1

Prepared & Analyzed: 08/09/23

Arsenic	0.479	0.200	mg/kg wet	0.591	20.9	20	QR-01
Barium	149	0.400	"	152	1.61	20	
Cadmium	0.142	0.200	"	0.0940	40.7	20	QR-01
Copper	2.00	0.400	"	2.31	14.2	20	
Lead	9.61	0.200	"	8.95	7.09	20	
Nickel	1.87	0.400	"	2.16	14.3	20	
Silver	0.0680	0.0200	"	0.0584	15.2	20	
Zinc	8.04	0.400	"	9.43	15.9	20	
Selenium	0.312	0.260	"	0.279	11.1	200	

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/22/23 14:08

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BGH0328 - EPA 3050B

Matrix Spike (BGH0328-MS1)

Source: 2307355-06RE1 Prepared & Analyzed: 08/09/23

Arsenic	6.03	0.200	mg/kg wet	40.0	0.591	13.6	75-125				QM-07
Barium	197	0.400	"	40.0	152	113	75-125				
Cadmium	2.13	0.200	"	2.00	0.0940	102	75-125				
Copper	7.88	0.400	"	40.0	2.31	13.9	75-125				QM-07
Lead	24.4	0.200	"	20.0	8.95	77.4	75-125				
Nickel	7.58	0.400	"	40.0	2.16	13.5	75-125				QM-07
Silver	1.89	0.0200	"	2.00	0.0584	91.5	75-125				
Zinc	13.4	0.400	"	40.0	9.43	9.87	75-125				QM-07

Matrix Spike Dup (BGH0328-MSD1)

Source: 2307355-06RE1 Prepared: 08/09/23 Analyzed: 08/10/23

Arsenic	6.05	0.200	mg/kg wet	40.0	0.591	13.6	75-125	0.278	25		QM-07
Barium	199	0.400	"	40.0	152	118	75-125	0.915	25		
Cadmium	2.18	0.200	"	2.00	0.0940	105	75-125	2.67	25		
Copper	7.90	0.400	"	40.0	2.31	14.0	75-125	0.299	25		QM-07
Lead	24.8	0.200	"	20.0	8.95	79.5	75-125	1.71	25		
Nickel	7.63	0.400	"	40.0	2.16	13.7	75-125	0.647	25		QM-07
Silver	1.94	0.0200	"	2.00	0.0584	94.2	75-125	2.86	25		
Zinc	13.4	0.400	"	40.0	9.43	10.0	75-125	0.483	25		QM-07

Batch BGH0442 - EPA 3050B

Blank (BGH0442-BLK1)

Prepared: 08/10/23 Analyzed: 08/21/23

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	"								

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/22/23 14:08

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BGH0442 - EPA 3050B

LCS (BGH0442-BS1)

Prepared: 08/10/23 Analyzed: 08/21/23

Arsenic	41.1	0.200	mg/kg wet	40.0		103	80-120			
Barium	42.6	0.400	"	40.0		106	80-120			
Cadmium	1.98	0.200	"	2.00		99.1	80-120			
Copper	41.1	0.400	"	40.0		103	80-120			
Lead	20.0	0.200	"	20.0		100	80-120			
Nickel	40.6	0.400	"	40.0		102	80-120			
Silver	2.01	0.0200	"	2.00		100	80-120			
Zinc	40.6	0.400	"	40.0		102	80-120			

Duplicate (BGH0442-DUP1)

Source: 2307450-01RE2

Prepared: 08/10/23 Analyzed: 08/21/23

Arsenic	7.19	0.200	mg/kg wet		7.35			2.22	20	
Barium	159	0.400	"		144			10.0	20	
Cadmium	0.319	0.200	"		0.331			3.69	20	
Copper	6.55	0.400	"		6.30			3.90	20	
Lead	9.23	0.200	"		9.18			0.556	20	
Nickel	7.11	0.400	"		6.97			2.02	20	
Silver	0.0656	0.0200	"		0.0576			13.0	20	
Zinc	26.2	0.400	"		24.9			5.07	20	
Selenium	0.208	0.260	"		0.201			3.71	200	

Matrix Spike (BGH0442-MS1)

Source: 2307450-01RE2

Prepared: 08/10/23 Analyzed: 08/21/23

Arsenic	49.5	0.200	mg/kg wet	40.0	7.35	105	75-125			
Barium	189	0.400	"	40.0	144	113	75-125			
Cadmium	2.42	0.200	"	2.00	0.331	104	75-125			
Copper	28.7	0.400	"	40.0	6.30	56.0	75-125			QM-07
Lead	29.8	0.200	"	20.0	9.18	103	75-125			
Nickel	29.9	0.400	"	40.0	6.97	57.2	75-125			QM-07
Silver	2.13	0.0200	"	2.00	0.0576	104	75-125			
Zinc	46.3	0.400	"	40.0	24.9	53.4	75-125			QM-07

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.



Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Jepsen 63N65W
 Project Number: UWRWE-A3172-ABN
 Project Manager: Paul Henchan

Reported:
 08/22/23 14:08

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BGH0442 - EPA 3050B

Matrix Spike Dup (BGH0442-MSD1)	Source: 2307450-01RE2			Prepared: 08/10/23		Analyzed: 08/21/23					
Arsenic	49.6	0.200	mg/kg wet	40.0	7.35	106	75-125	0.329	25		
Barium	187	0.400	"	40.0	144	109	75-125	0.932	25		
Cadmium	2.39	0.200	"	2.00	0.331	103	75-125	1.11	25		
Copper	28.6	0.400	"	40.0	6.30	55.8	75-125	0.286	25		QM-07
Lead	29.3	0.200	"	20.0	9.18	101	75-125	1.46	25		
Nickel	29.9	0.400	"	40.0	6.97	57.4	75-125	0.268	25		QM-07
Silver	2.11	0.0200	"	2.00	0.0576	103	75-125	0.754	25		
Zinc	46.4	0.400	"	40.0	24.9	53.7	75-125	0.284	25		QM-07

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.



Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Jepsen 63N65W
 Project Number: UWRWE-A3172-ABN
 Project Manager: Paul Henchan

Reported:
 08/22/23 14:08

Hexavalent Chromium by EPA Method 7196 - Quality Control
Summit Scientific

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

Batch BGH0375 - 3060A Mod

Blank (BGH0375-BLK1)

Prepared & Analyzed: 08/09/23

Chromium, Hexavalent ND 0.30 mg/kg wet

LCS (BGH0375-BS1)

Prepared & Analyzed: 08/09/23

Chromium, Hexavalent 22.8 0.30 mg/kg wet 25.0 91.0 80-120

Duplicate (BGH0375-DUP1)

Source: 2308188-01

Prepared & Analyzed: 08/09/23

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

Matrix Spike (BGH0375-MS1)

Source: 2308188-01

Prepared & Analyzed: 08/09/23

Chromium, Hexavalent 24.4 0.30 mg/kg dry 26.4 ND 92.4 75-125

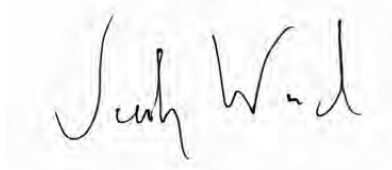
Matrix Spike Dup (BGH0375-MSD1)

Source: 2308188-01

Prepared & Analyzed: 08/09/23

Chromium, Hexavalent 25.2 0.30 mg/kg dry 26.4 ND 95.4 75-125 3.19 20

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.



Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Jepsen 63N65W
 Project Number: UWRWE-A3172-ABN
 Project Manager: Paul Henchan

Reported:
 08/22/23 14:08

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

Summit Scientific

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

Batch BGH0508 - General Preparation

Blank (BGH0508-BLK1)

Prepared: 08/11/23 Analyzed: 08/14/23

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

LCS (BGH0508-BS1)

Prepared: 08/11/23 Analyzed: 08/14/23

Calcium	5.10	0.0500	mg/L wet	5.00		102	70-130			
Magnesium	5.74	0.0500	"	5.00		115	70-130			
Sodium	5.99	0.0500	"	5.00		120	70-130			

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.



Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Jepsen 63N65W

Project Number: UWRWE-A3172-ABN

Project Manager: Paul Henchan

Reported:
 08/22/23 14:08

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

Summit Scientific

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

Batch BGH0499 - General Preparation

Duplicate (BGH0499-DUP1)

Source: 2308182-01

Prepared & Analyzed: 08/11/23

% Solids	81.4		%		80.2			1.44		20	
----------	------	--	---	--	------	--	--	------	--	----	--

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.



Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Jepsen 63N65W
 Project Number: UWRWE-A3172-ABN
 Project Manager: Paul Henchan

Reported:
 08/22/23 14:08

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

Summit Scientific

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

Batch BGH0544 - General Preparation

Blank (BGH0544-BLK1)

Prepared & Analyzed: 08/14/23

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BGH0544-BS1)

Prepared & Analyzed: 08/14/23

Specific Conductance (EC) 0.154 0.0100 mmhos/cm 0.150 103 95-105

Duplicate (BGH0544-DUP1)

Source: 2308187-01

Prepared & Analyzed: 08/14/23

Specific Conductance (EC) 0.345 0.0100 mmhos/cm 0.354 2.54 20

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.



Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Jepsen 63N65W
 Project Number: UWRWE-A3172-ABN
 Project Manager: Paul Henchan

Reported:
 08/22/23 14:08

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

Summit Scientific

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

Batch BGH0543 - General Preparation

LCS (BGH0543-BS1)

Prepared & Analyzed: 08/14/23

pH 9.01 pH Units 9.18 98.1 95-105

Duplicate (BGH0543-DUP1)

Source: 2308187-01

Prepared & Analyzed: 08/14/23

pH 7.43 pH Units 7.40 0.405 20

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W

Project Number: UWRWE-A3172-ABN

Project Manager: Paul Henchan

Reported:

08/22/23 14:08

Notes and Definitions

- S-02 The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
- 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-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS/LCSD recovery.
- E The concentration indicated for this analyte is an estimated value above the calibration range of the instrument.
- 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

August 24, 2023

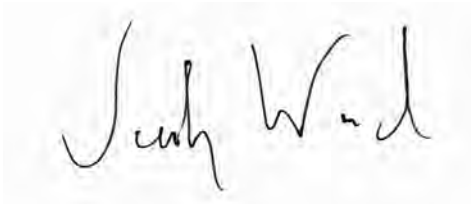
Paul Henchan
Fremont Environmental
PO Box 1289
Wellington, CO 80549

RE: Noble - Jepsen 63N65W

Work Order #2308204

Enclosed are the results of analyses for samples received by Summit Scientific on 08/09/23 16:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Jacob Wood". The signature is written in a cursive style with a large initial "J" and "W".

Jacob Wood For Paul Shrewsbury
President



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/24/23 10:34

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SEP01 DL 3'	2308204-01	Soil	08/09/23 11:41	08/09/23 16:30
SEP02 DL 3'	2308204-02	Soil	08/09/23 11:34	08/09/23 16:30

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.



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

Lab ID	Page 1 of 1
2308204	

		Send Data To:	Send Invoice To:
Client: Fremont Environmental		Project Manager: Paul Henehan	Company: <i>Noble</i>
Address:		E-Mail: Fremont Distribution List	Project Name/Location: <i>JEPSEN 63N65W</i>
City/State/Zip:			AFE#:
Phone: 303-261-6246		Project Name: <i>JEPSEN 63N65W</i>	PO/Billing Codes: <i>LWRWE-A3172-ABN</i>
Sampler Name: Stanley Gilbert		Project Number:	Contact: <i>Mike Montoya</i>

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested						Special Instructions	
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	BTEX, TMBs, Naph.	TPH	PAH (915)	EC, SAR, Ph, Boron	Metals (915)		TDS, Chloride, Sulfate
1	SEPO1 DL 3'	8/19/23	11:41	2			X			X			X	X	X	X	X		
2	SEPO2 DL 3'	8/19/23	11:34	2			X			X			X	X	X	X	X		
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			

Relinquished by: <i>[Signature]</i>	Date/Time: 8/19/23 16:30	Received by: <i>[Signature]</i>	Date/Time: 8/23 16:30	TAT Business Days	Field DO	Notes:
Relinquished by:	Date/Time:	Received by:	Date/Time:	Same Day	Field EC	
				1 Day	Field ORP	
				2 Days	Field pH	
				3 Days	Field Temp.	
				Standard	X Field Turb.	
Temperature Upon Receipt: 10.1	Corrected Temperature: \emptyset	IR gun #: 1	HNO3 lot #:			

S₂

Sample Receipt Checklist

S2 Work Order# 2308204

Client: Fremont Client Project ID: Jepson CSN USW

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

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

Temp (°C) 16.1

Thermometer # 1

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? ⁽¹⁾ NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>on ICE</u>
If custody seals are present, are they intact? ⁽¹⁾	<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 ²⁺), Hexavalent Chromium (Cr ⁶⁺ , 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? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC? ⁽¹⁾	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>no time stamps on jars</u>
For volatiles in water - is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling)? ⁽¹⁾ Note the type of preservative in the comments column - HCl, H ₂ SO ₄ , NaOH, HNO ₃ , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH < 2? ⁽¹⁾ Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Comments (if any):				

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.

AS

Custodian Printed Name

8/9/23

Date/Time

13



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/24/23 10:34

SEP01 DL 3'
2308204-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **08/09/23 11:41**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BGH0405	08/10/23	08/11/23	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: **08/09/23 11:41**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0464	116 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0356	89.0 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0359	89.7 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **08/09/23 11:41**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BGH0408	08/10/23	08/11/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **08/09/23 11:41**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	9.40	75.2 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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.



Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Jepsen 63N65W
 Project Number: UWRWE-A3172-ABN
 Project Manager: Paul Henchan

Reported:
 08/24/23 10:34

SEP01 DL 3'
2308204-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **08/09/23 11:41**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGH0465	08/11/23	08/12/23	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: **08/09/23 11:41**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0144	43.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0157	47.2 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **08/09/23 11:41**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.502	0.0100	mg/L	1	BGH0533	08/14/23	08/15/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **08/09/23 11:41**

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

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/24/23 10:34

SEP01 DL 3'
2308204-01 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	0.703	0.200	mg/kg dry	1	BGH0460	08/11/23	08/12/23	EPA 6020B	
Barium	42.3	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.93	0.400	"	"	"	"	"	"	
Lead	5.25	0.200	"	"	"	"	"	"	
Nickel	1.18	0.400	"	"	"	"	"	"	
Silver	0.0214	0.0200	"	"	"	"	"	"	
Zinc	6.44	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **08/09/23 11:41**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BGH0462	08/11/23	08/11/23	EPA 7196A	

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

Date Sampled: **08/09/23 11:41**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	33.3	0.0582	mg/L dry	1	BGH0553	08/14/23	08/16/23	EPA 6020B	
Magnesium	9.14	0.0582	"	"	"	"	"	"	
Sodium	23.0	0.0582	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **08/09/23 11:41**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.911	0.00100	units	1	BGH0715	08/17/23	08/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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.



Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Jepsen 63N65W
 Project Number: UWRWE-A3172-ABN
 Project Manager: Paul Henchan

Reported:
 08/24/23 10:34

SEP01 DL 3'
2308204-01 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **08/09/23 11:41**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	86.0		%	1	BGH0525	08/14/23	08/14/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **08/09/23 11:41**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.400	0.0100	mmhos/cm	1	BGH0651	08/16/23	08/16/23	EPA 120.1	

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

Date Sampled: **08/09/23 11:41**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.64		pH Units	1	BGH0650	08/16/23	08/16/23	EPA 9045D	

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/24/23 10:34

SEP02 DL 3'
2308204-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **08/09/23 11:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BGH0405	08/10/23	08/11/23	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	1.4	0.50	"	"	"	"	"	"	

Date Sampled: **08/09/23 11:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0460	115 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0357	89.3 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0477	119 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **08/09/23 11:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BGH0408	08/10/23	08/11/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **08/09/23 11:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	9.65	77.2 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/24/23 10:34

SEP02 DL 3'
2308204-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **08/09/23 11:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGH0465	08/11/23	08/12/23	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: **08/09/23 11:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0176	52.9 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0147	44.1 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **08/09/23 11:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.505	0.0100	mg/L	1	BGH0533	08/14/23	08/15/23	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **08/09/23 11:34**

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

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/24/23 10:34

SEP02 DL 3'
2308204-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	0.631	0.200	mg/kg dry	1	BGH0460	08/11/23	08/12/23	EPA 6020B	
Barium	39.4	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.65	0.400	"	"	"	"	"	"	
Lead	4.58	0.200	"	"	"	"	"	"	
Nickel	1.00	0.400	"	"	"	"	"	"	
Silver	0.0225	0.0200	"	"	"	"	"	"	
Zinc	5.52	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **08/09/23 11:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BGH0462	08/11/23	08/11/23	EPA 7196A	

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

Date Sampled: **08/09/23 11:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	69.3	0.0585	mg/L dry	1	BGH0553	08/14/23	08/16/23	EPA 6020B	
Magnesium	18.5	0.0585	"	"	"	"	"	"	
Sodium	20.8	0.0585	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **08/09/23 11:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.573	0.00100	units	1	BGH0715	08/17/23	08/17/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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.



Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Jepsen 63N65W
 Project Number: UWRWE-A3172-ABN
 Project Manager: Paul Henchan

Reported:
 08/24/23 10:34

SEP02 DL 3'
2308204-02 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **08/09/23 11:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	85.5		%	1	BGH0525	08/14/23	08/14/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **08/09/23 11:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.816	0.0100	mmhos/cm	1	BGH0651	08/16/23	08/16/23	EPA 120.1	

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

Date Sampled: **08/09/23 11:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	6.22		pH Units	1	BGH0650	08/16/23	08/16/23	EPA 9045D	

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/24/23 10:34

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BGH0405 - EPA 5030 Soil MS

Blank (BGH0405-BLK1)

Prepared & Analyzed: 08/10/23

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0478		"	0.0400		119	50-150			
<i>Surrogate: Toluene-d8</i>	0.0400		"	0.0400		100	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0437		"	0.0400		109	50-150			

LCS (BGH0405-BS1)

Prepared & Analyzed: 08/10/23

Benzene	0.121	0.0020	mg/kg	0.100		121	70-130			
Toluene	0.111	0.0050	"	0.100		111	70-130			
Ethylbenzene	0.118	0.0050	"	0.100		118	70-130			
m,p-Xylene	0.238	0.010	"	0.200		119	70-130			
o-Xylene	0.101	0.0050	"	0.100		101	70-130			
1,2,4-Trimethylbenzene	0.110	0.0050	"	0.100		110	70-130			
1,3,5-Trimethylbenzene	0.108	0.0050	"	0.100		108	70-130			
Naphthalene	0.0881	0.0038	"	0.100		88.1	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0428		"	0.0400		107	50-150			
<i>Surrogate: Toluene-d8</i>	0.0398		"	0.0400		99.6	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0377		"	0.0400		94.2	50-150			

Matrix Spike (BGH0405-MS1)

Source: 2308181-01

Prepared & Analyzed: 08/10/23

Benzene	0.132	0.0020	mg/kg	0.100	ND	132	70-130			QM-07
Toluene	0.121	0.0050	"	0.100	ND	121	70-130			
Ethylbenzene	0.124	0.0050	"	0.100	ND	124	70-130			
m,p-Xylene	0.248	0.010	"	0.200	ND	124	70-130			
o-Xylene	0.106	0.0050	"	0.100	ND	106	70-130			
1,2,4-Trimethylbenzene	0.115	0.0050	"	0.100	ND	115	70-130			
1,3,5-Trimethylbenzene	0.111	0.0050	"	0.100	ND	111	70-130			
Naphthalene	0.0962	0.0038	"	0.100	ND	96.2	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0464		"	0.0400		116	50-150			
<i>Surrogate: Toluene-d8</i>	0.0407		"	0.0400		102	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0386		"	0.0400		96.6	50-150			

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.



Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Jepsen 63N65W
 Project Number: UWRWE-A3172-ABN
 Project Manager: Paul Henchan

Reported:
 08/24/23 10:34

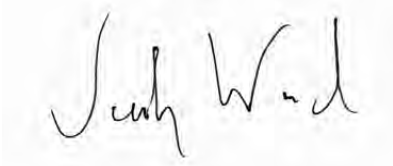
Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

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

Batch BGH0405 - EPA 5030 Soil MS

Matrix Spike Dup (BGH0405-MSD1)	Source: 2308181-01			Prepared & Analyzed: 08/10/23						
Benzene	0.123	0.0020	mg/kg	0.100	ND	123	70-130	6.52	30	
Toluene	0.114	0.0050	"	0.100	ND	114	70-130	5.94	30	
Ethylbenzene	0.117	0.0050	"	0.100	ND	117	70-130	5.71	30	
m,p-Xylene	0.236	0.010	"	0.200	ND	118	70-130	5.15	30	
o-Xylene	0.102	0.0050	"	0.100	ND	102	70-130	4.42	30	
1,2,4-Trimethylbenzene	0.109	0.0050	"	0.100	ND	109	70-130	5.63	30	
1,3,5-Trimethylbenzene	0.106	0.0050	"	0.100	ND	106	70-130	4.83	30	
Naphthalene	0.0959	0.0038	"	0.100	ND	95.9	70-130	0.250	30	
Surrogate: 1,2-Dichloroethane-d4	0.0446		"	0.0400		111	50-150			
Surrogate: Toluene-d8	0.0408		"	0.0400		102	50-150			
Surrogate: 4-Bromofluorobenzene	0.0372		"	0.0400		93.0	50-150			

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/24/23 10:34

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BGH0408 - EPA 3550A

Blank (BGH0408-BLK1)

Prepared: 08/10/23 Analyzed: 08/11/23

C10-C28 (DRO)	ND	50	mg/kg								
C28-C36 (ORO)	ND	50	"								
Surrogate: <i>o</i> -Terphenyl	11.0		"	12.5		88.0	30-150				

LCS (BGH0408-BS1)

Prepared: 08/10/23 Analyzed: 08/11/23

C10-C28 (DRO)	398	50	mg/kg	500		79.6	70-130				
Surrogate: <i>o</i> -Terphenyl	10.6		"	12.5		84.6	30-150				

Matrix Spike (BGH0408-MS1)

Source: 2308181-01

Prepared: 08/10/23 Analyzed: 08/11/23

C10-C28 (DRO)	402	50	mg/kg	500	6.28	79.2	70-130				
Surrogate: <i>o</i> -Terphenyl	10.6		"	12.5		84.7	30-150				

Matrix Spike Dup (BGH0408-MSD1)

Source: 2308181-01

Prepared: 08/10/23 Analyzed: 08/11/23

C10-C28 (DRO)	413	50	mg/kg	500	6.28	81.4	70-130	2.75	20		
Surrogate: <i>o</i> -Terphenyl	10.4		"	12.5		82.9	30-150				

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/24/23 10:34

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BGH0465 - EPA 5030 Soil MS

Blank (BGH0465-BLK1)

Prepared: 08/11/23 Analyzed: 08/12/23

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	0.0199		"	0.0333		59.7	40-150				
Surrogate: Fluoranthene-d10	0.0209		"	0.0333		62.6	40-150				

LCS (BGH0465-BS1)

Prepared: 08/11/23 Analyzed: 08/12/23

Acenaphthene	0.0213	0.00500	mg/kg	0.0333		63.9	31-137				
Anthracene	0.0216	0.00500	"	0.0333		64.8	30-120				
Benzo (a) anthracene	0.0183	0.00500	"	0.0333		54.8	30-120				
Benzo (a) pyrene	0.0208	0.00500	"	0.0333		62.5	30-120				
Benzo (b) fluoranthene	0.0206	0.00500	"	0.0333		61.7	30-120				
Benzo (k) fluoranthene	0.0201	0.00500	"	0.0333		60.4	30-120				
Chrysene	0.0228	0.00500	"	0.0333		68.3	30-120				
Dibenz (a,h) anthracene	0.0218	0.00500	"	0.0333		65.4	30-120				
Fluoranthene	0.0212	0.00500	"	0.0333		63.7	30-120				
Fluorene	0.0214	0.00500	"	0.0333		64.1	30-120				
Indeno (1,2,3-cd) pyrene	0.0218	0.00500	"	0.0333		65.3	30-120				
Pyrene	0.0248	0.00500	"	0.0333		74.5	35-142				
1-Methylnaphthalene	0.0183	0.00500	"	0.0333		54.9	35-142				
2-Methylnaphthalene	0.0221	0.00500	"	0.0333		66.3	35-142				
Surrogate: 2-Methylnaphthalene-d10	0.0228		"	0.0333		68.5	40-150				
Surrogate: Fluoranthene-d10	0.0234		"	0.0333		70.2	40-150				

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/24/23 10:34

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

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

Batch BGH0465 - EPA 5030 Soil MS

Matrix Spike (BGH0465-MS1)	Source: 2308180-01			Prepared: 08/11/23 Analyzed: 08/12/23						
Acenaphthene	0.0150	0.00500	mg/kg	0.0333	ND	45.1	31-137			
Anthracene	0.0156	0.00500	"	0.0333	ND	46.9	30-120			
Benzo (a) anthracene	0.0153	0.00500	"	0.0333	ND	45.9	30-120			
Benzo (a) pyrene	0.0156	0.00500	"	0.0333	ND	46.9	30-120			
Benzo (b) fluoranthene	0.0159	0.00500	"	0.0333	ND	47.6	30-120			
Benzo (k) fluoranthene	0.0161	0.00500	"	0.0333	ND	48.4	30-120			
Chrysene	0.0167	0.00500	"	0.0333	ND	50.0	30-120			
Dibenz (a,h) anthracene	0.0156	0.00500	"	0.0333	ND	46.7	30-120			
Fluoranthene	0.0159	0.00500	"	0.0333	ND	47.8	30-120			
Fluorene	0.0162	0.00500	"	0.0333	ND	48.6	30-120			
Indeno (1,2,3-cd) pyrene	0.0162	0.00500	"	0.0333	ND	48.7	30-120			
Pyrene	0.0176	0.00500	"	0.0333	ND	52.8	35-142			
1-Methylnaphthalene	0.0149	0.00500	"	0.0333	ND	44.8	15-130			
2-Methylnaphthalene	0.0163	0.00500	"	0.0333	ND	48.8	15-130			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0179</i>		<i>"</i>	<i>0.0333</i>		<i>53.8</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0178</i>		<i>"</i>	<i>0.0333</i>		<i>53.3</i>	<i>40-150</i>			

Matrix Spike Dup (BGH0465-MSD1)	Source: 2308180-01			Prepared: 08/11/23 Analyzed: 08/12/23						
Acenaphthene	0.0133	0.00500	mg/kg	0.0333	ND	40.0	31-137	11.9	30	
Anthracene	0.0145	0.00500	"	0.0333	ND	43.4	30-120	7.60	30	
Benzo (a) anthracene	0.0148	0.00500	"	0.0333	ND	44.3	30-120	3.51	30	
Benzo (a) pyrene	0.0145	0.00500	"	0.0333	ND	43.5	30-120	7.57	30	
Benzo (b) fluoranthene	0.0148	0.00500	"	0.0333	ND	44.4	30-120	6.97	30	
Benzo (k) fluoranthene	0.0158	0.00500	"	0.0333	ND	47.5	30-120	1.86	30	
Chrysene	0.0151	0.00500	"	0.0333	ND	45.4	30-120	9.70	30	
Dibenz (a,h) anthracene	0.0134	0.00500	"	0.0333	ND	40.3	30-120	14.8	30	
Fluoranthene	0.0142	0.00500	"	0.0333	ND	42.5	30-120	11.8	30	
Fluorene	0.0152	0.00500	"	0.0333	ND	45.5	30-120	6.52	30	
Indeno (1,2,3-cd) pyrene	0.0144	0.00500	"	0.0333	ND	43.3	30-120	11.7	30	
Pyrene	0.0142	0.00500	"	0.0333	ND	42.7	35-142	21.2	30	
1-Methylnaphthalene	0.0160	0.00500	"	0.0333	ND	47.9	15-130	6.80	50	
2-Methylnaphthalene	0.0152	0.00500	"	0.0333	ND	45.7	15-130	6.61	50	
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0137</i>		<i>"</i>	<i>0.0333</i>		<i>41.1</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0149</i>		<i>"</i>	<i>0.0333</i>		<i>44.8</i>	<i>40-150</i>			

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.



Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Jepsen 63N65W
 Project Number: UWRWE-A3172-ABN
 Project Manager: Paul Henchan

Reported:
 08/24/23 10:34

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

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

Batch BGH0533 - EPA 3050B

Blank (BGH0533-BLK1)

Prepared: 08/14/23 Analyzed: 08/15/23

Boron ND 0.0100 mg/L

LCS (BGH0533-BS1)

Prepared: 08/14/23 Analyzed: 08/15/23

Boron 5.22 0.0100 mg/L 5.00 104 80-120

Duplicate (BGH0533-DUP1)

Source: 2308180-01

Prepared: 08/14/23 Analyzed: 08/15/23

Boron 0.273 0.0100 mg/L 0.319 15.3 20

Matrix Spike (BGH0533-MS1)

Source: 2308180-01

Prepared: 08/14/23 Analyzed: 08/15/23

Boron 5.22 0.0100 mg/L 5.00 0.319 98.1 75-125

Matrix Spike Dup (BGH0533-MSD1)

Source: 2308180-01

Prepared: 08/14/23 Analyzed: 08/15/23

Boron 5.38 0.0100 mg/L 5.00 0.319 101 75-125 3.03 25

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W
Project Number: UWRWE-A3172-ABN
Project Manager: Paul Henchan

Reported:
08/24/23 10:34

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BGH0460 - EPA 3050B

Blank (BGH0460-BLK1)

Prepared: 08/11/23 Analyzed: 08/12/23

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 (BGH0460-BS1)

Prepared: 08/11/23 Analyzed: 08/12/23

Arsenic	34.5	0.200	mg/kg wet	40.0	86.3	80-120
Barium	37.6	0.400	"	40.0	94.0	80-120
Cadmium	1.86	0.200	"	2.00	93.1	80-120
Copper	32.9	0.400	"	40.0	82.2	80-120
Lead	18.4	0.200	"	20.0	92.2	80-120
Nickel	32.1	0.400	"	40.0	80.1	80-120
Silver	1.77	0.0200	"	2.00	88.4	80-120
Zinc	34.9	0.400	"	40.0	87.1	80-120

Duplicate (BGH0460-DUP1)

Source: 2306321-01RE1

Prepared: 08/11/23 Analyzed: 08/12/23

Arsenic	0.800	0.200	mg/kg wet	0.629	24.0	20	QR-01
Barium	30.0	0.400	"	25.0	17.9	20	
Cadmium	0.390	0.200	"	0.288	30.2	20	QR-01
Copper	4.07	0.400	"	3.79	7.12	20	
Lead	17.2	0.200	"	14.9	14.2	20	
Nickel	3.06	0.400	"	2.35	26.3	20	QR-01
Silver	0.0408	0.0200	"	0.0360	12.5	20	
Zinc	17.8	0.400	"	14.1	23.6	20	QR-04
Selenium	ND	0.260	"	ND		200	

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.



Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Jepsen 63N65W
 Project Number: UWRWE-A3172-ABN
 Project Manager: Paul Henchan

Reported:
 08/24/23 10:34

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BGH0460 - EPA 3050B

Matrix Spike (BGH0460-MS1)

Source: 2306321-01RE1 Prepared: 08/11/23 Analyzed: 08/12/23

Arsenic	8.33	0.200	mg/kg wet	40.0	0.629	19.3	75-125				QM-01
Barium	72.9	0.400	"	40.0	25.0	120	75-125				
Cadmium	2.27	0.200	"	2.00	0.288	98.9	75-125				
Copper	11.5	0.400	"	40.0	3.79	19.2	75-125				QM-01
Lead	33.3	0.200	"	20.0	14.9	92.2	75-125				
Nickel	10.2	0.400	"	40.0	2.35	19.7	75-125				QM-01
Silver	1.91	0.0200	"	2.00	0.0360	93.7	75-125				
Zinc	23.8	0.400	"	40.0	14.1	24.2	75-125				QM-01

Matrix Spike Dup (BGH0460-MSD1)

Source: 2306321-01RE1 Prepared: 08/11/23 Analyzed: 08/12/23

Arsenic	8.45	0.200	mg/kg wet	40.0	0.629	19.6	75-125	1.41	25		QM-01
Barium	77.8	0.400	"	40.0	25.0	132	75-125	6.46	25		QM-01
Cadmium	2.45	0.200	"	2.00	0.288	108	75-125	7.77	25		
Copper	11.5	0.400	"	40.0	3.79	19.3	75-125	0.362	25		QM-01
Lead	34.7	0.200	"	20.0	14.9	99.0	75-125	4.01	25		
Nickel	10.2	0.400	"	40.0	2.35	19.7	75-125	0.0117	25		QM-01
Silver	2.03	0.0200	"	2.00	0.0360	99.6	75-125	6.03	25		
Zinc	23.9	0.400	"	40.0	14.1	24.5	75-125	0.435	25		QM-01

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.



Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Jepsen 63N65W
 Project Number: UWRWE-A3172-ABN
 Project Manager: Paul Henchan

Reported:
 08/24/23 10:34

Hexavalent Chromium by EPA Method 7196 - Quality Control
Summit Scientific

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

Batch BGH0462 - 3060A Mod

Blank (BGH0462-BLK1)

Prepared & Analyzed: 08/11/23

Chromium, Hexavalent ND 0.30 mg/kg wet

LCS (BGH0462-BS1)

Prepared & Analyzed: 08/11/23

Chromium, Hexavalent 25.8 0.30 mg/kg wet 25.0 103 80-120

Duplicate (BGH0462-DUP1)

Source: 2308038-08

Prepared & Analyzed: 08/11/23

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

Matrix Spike (BGH0462-MS1)

Source: 2308038-08

Prepared & Analyzed: 08/11/23

Chromium, Hexavalent 31.6 0.30 mg/kg dry 31.2 ND 101 75-125

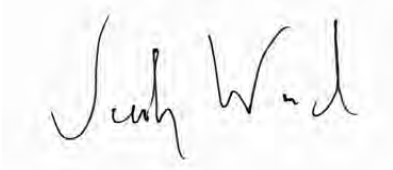
Matrix Spike Dup (BGH0462-MSD1)

Source: 2308038-08

Prepared & Analyzed: 08/11/23

Chromium, Hexavalent 32.6 0.30 mg/kg dry 31.2 ND 104 75-125 2.92 20

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.



Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Jepsen 63N65W
 Project Number: UWRWE-A3172-ABN
 Project Manager: Paul Henchan

Reported:
 08/24/23 10:34

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

Summit Scientific

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

Batch BGH0553 - General Preparation

Blank (BGH0553-BLK1)

Prepared: 08/14/23 Analyzed: 08/16/23

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

LCS (BGH0553-BS1)

Prepared: 08/14/23 Analyzed: 08/16/23

Calcium	5.73	0.0500	mg/L wet	5.00		115	70-130			
Magnesium	6.29	0.0500	"	5.00		126	70-130			
Sodium	6.29	0.0500	"	5.00		126	70-130			

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.



Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Jepsen 63N65W

Project Number: UWRWE-A3172-ABN

Project Manager: Paul Henchan

Reported:
 08/24/23 10:34

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

Summit Scientific

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

Batch BGH0525 - General Preparation

Duplicate (BGH0525-DUP1)

Source: 2308039-07

Prepared & Analyzed: 08/14/23

% Solids	87.9		%		91.2			3.62		20	
----------	------	--	---	--	------	--	--	------	--	----	--

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.



Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Jepsen 63N65W
 Project Number: UWRWE-A3172-ABN
 Project Manager: Paul Henchan

Reported:
 08/24/23 10:34

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

Summit Scientific

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

Batch BGH0651 - General Preparation

Blank (BGH0651-BLK1)

Prepared & Analyzed: 08/16/23

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BGH0651-BS1)

Prepared & Analyzed: 08/16/23

Specific Conductance (EC) 0.153 0.0100 mmhos/cm 0.150 102 95-105

Duplicate (BGH0651-DUP1)

Source: 2308203-01

Prepared & Analyzed: 08/16/23

Specific Conductance (EC) 0.258 0.0100 mmhos/cm 0.258 0.0775 20

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.



Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Jepsen 63N65W
 Project Number: UWRWE-A3172-ABN
 Project Manager: Paul Henchan

Reported:
 08/24/23 10:34

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

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

Batch BGH0650 - General Preparation

LCS (BGH0650-BS1)

Prepared & Analyzed: 08/16/23

pH	8.95	pH Units	9.18	97.5	95-105
----	------	----------	------	------	--------

Duplicate (BGH0650-DUP1)

Source: 2308203-01

Prepared & Analyzed: 08/16/23

pH	7.65	pH Units	7.65	0.00	20
----	------	----------	------	------	----

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Jepsen 63N65W

Project Number: UWRWE-A3172-ABN

Project Manager: Paul Henchan

Reported:
08/24/23 10:34

Notes and Definitions

- QR-04 The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
- QR-01 Analyses are not controlled on RPD values from sample concentrations less than 10 times the reporting limit. QC batch accepted based on LCS and/or LCSD QC results.
- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS/LCSD recovery.
- QM-01 The spike recovery for this QC sample is outside of established control limits due to sample matrix interference.
- 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