

# **FREMONT ENVIRONMENTAL INC.**

May 17, 2023

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

Subject:           **Facility Closure Data Submittal**  
31-4-64 SENE Tank Battery  
SENE Sec. 31, T4N, R64W  
Weld County, Colorado  
Fremont Project No. C023-135  
Facility # 467637, Remediation #26965

Dear Mr. Peterson:

As you requested, Fremont Environmental Inc. (Fremont) personnel conducted Facility Closure activities for the Noble Energy Inc. (Noble) 31-4-64 SENE Tank Battery. Impacted soil was encountered during abandonment activities. Details of the 31-4-64 SENE Tank Battery facility closure activities are documented in the attached Closure Report. Groundwater was not encountered during flowline abandonment activities.

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

Sincerely,

**FREMONT ENVIRONMENTAL INC.**



Paul V. Henehan, P.E.  
Senior Consultant

Attachments:

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

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

## Tank Battery Closure Checklist

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

Additional attachments (optional):		Pit Closure		Wellhead Closure		Flowline Closure	<b>X</b>	Partially Buried Vault Closure	
Site Name & COGCC Facility Number: 31-4-64 SENE Tank Battery Facility ID: 467637		Date: 05/17/2023					Remediation Project #: 26965		
Associated Wells: Timko C 31-22 Kildow PM C 31-8 Timko C 31-17		Age of Site: 1989					Number of Photos Attached: 7 Photos		
Location: (GPS coordinates of southeaster berm) 40.270999, -104.584526							Estimated Facility Size (acres): ~1 Acre		

*General Condition of Site: (General observations regarding housekeeping, corrosion, waste management, etc.)*  
**Good housekeeping. General condition for all the on-site equipment looked fine. Waste management well maintained.**

USCS Soil Type: <b>SC</b>	Estimated Depth to Groundwater: <b>N/A</b>
---------------------------	--

*Hydrocarbon Impacted Soils / Spills: (Note estimated size and if impact appears to be surficial or extends to an unknown depth)*  
 Impacts were discovered at the separator (SEP01@4.5'). Soil failed groundwater protection soil screening levels (GPSSLs) for Benzo (a) Anthracene. Refer to the volatile organic soil chemistry table (Table 1) for reference. Soil impacts were left in place. Further Investigation is required.

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

#### Tanks

Tank Contents	Oil	Oil						
Size (barrels)	300 BBLS	300 BBLS						
Age	1989	1989						
Construction Material	Steel	Steel						
Tank type (AST/DRV, etc.)	AST	AST						
Visual Integrity of Tank	No Damage	No Damage						
Condition of tank footprint	No Impacts Noted	No Impacts Noted						
PID Readings	High @ 36.5ppm	High @ 37.9ppm						
Soil impacts present at valves or hatches?	No Impacts Noted	No Impacts Noted						
PID Readings	N/A	N/A						
Sample taken? Location/ Sample ID#	40.270841, -104.584496 AST01@6.0"	40.270879, -104.584497 AST02@6.0"						
Photo Number(s)	Photo 1A	Photo 2A						

*Other observations regarding tanks:*  
 Tanks removed prior to sampling event. An exceedance in pH (5.56) was discovered at the northern above ground storage tank (AST02@6.0"). Refer to the inorganic soil chemistry table (Table 3) for reference.

#### Separators

Separator size	UNK							
Vertical or Horizontal	Horizontal							
Age	1989							
Soil impacts present at valves or hatches?	No Impacts Noted							
PID Readings	High @ 12.9ppm							
Sample taken? Location/ Sample ID#	40.271056, -104.584585 SEP01@4.5'							
Photo Number(s)	Photo 3A							

*Other observations regarding separators*  
**Separator removed prior to sampling event**

#### Third Party Equipment

Type	Meter Shed							
Age	1989							

Third Party Owner	Unknown								
Removal Date	Still On-site								
Sample taken? Location/Depth	MET01@6.0"								
PID Readings	High @ 0.4ppm								
Photo Number(s)	Photo 6A								

### Other Facility Equipment

Equipment type	Combustion Unit	Combustion Unit		
Equipment Condition	No Damage	No Damage		
Age	1989	1989		
Soil impacts	No Impacts Noted	No Impacts Noted		
PID Readings	High @ 0.0ppm	High @ 0.2ppm		
Sample taken? Location/Depth	ECD01@6.0"	ECD02@6.0"		
Photo Number(s)	Photo 7A	Photo 8A		

Other observations regarding other facility or third party equipment:

Combustion Units removed prior to sampling event

### Summary

Was impacted soil identified?	No	Yes - less than 10 cubic yards	Yes - more than 10 cubic yards
Total number of samples field screened:	3 Samples		Total number of samples collected: 7 Samples
Highest PID Reading:	High at 37.9ppm (AST02@6.0")		Total number of samples submitted to lab for analysis: 4 Samples
If more than 10 cubic yards of impacted soil were observed:			
Vertical extent:	Unknown		Estimated spill volume: Unknown
Lateral extent:	Unknown		Volume of soil removed: None
Is additional investigation required? Yes			
Was groundwater encountered during the investigation?	No	Yes - not impacted or in contact with impacted soils	Yes - groundwater impacted and/or in contact with impacted soils
Measured depth to groundwater:	N/A		Was remedial groundwater removal conducted? Yes No
Date Groundwater was encountered:	N/A		Commencement date of removal: N/A
Sheen on groundwater?	Yes	No	Volume of groundwater removed prior to sampling: N/A
Free product observed?	Yes	No	Volume of groundwater removed post sampling: N/A
Total number of samples collected:	N/A		Total Volume of groundwater removed: N/A
Total number of samples submitted to lab for analysis:	N/A		

## 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	X	Tank Battery Closure	
Site Name & COGCC Facility Number: 31-4-64 SENE Tank Battery Facility ID: 467637		Date: 05/17/2023						Remediation Project #: 26965	
Associated Wells: Timko C 31-22 Kildow PM C 31-8 Timko C 31-17		Age of Site: 1989						Number of Photos Attached: 7 Photos	
Location: (GPS coordinates of vault or southeastern tank berm for multiple)							40.270913, -104.584516		
General Condition of Site: (General observations regarding housekeeping, corrosion, waste management, etc.) Good housekeeping. General condition for all the on-site equipment looked fine. Waste management well maintained.									
USCS Soil Type: SW				Estimated Depth to Groundwater: N/A					
Hydrocarbon Impacted Soils / Spills: (Note estimated size and if impact appears to be surficial or extends to an unknown depth) None observed									
Salt Crusted Soils or Impacted Vegetation: (Note estimated size and if impact appears to be surficial or extends to an unknown depth) None observed									
Buried or Partially Buried Vessels									
Tank Contents	Produced Water								
Size (barrels)	<100 BBLs								
Age	1989								
Construction Material	PBV Concrete								
Visual Integrity of Tank	No Damage								
Condition of tank Footprint	No Impacts Noted								
PID Readings	High @ 21.4ppm								
Condition of Access Line	No Damage								
PID Readings	High @ 10.1ppm DL01 @ 4.0' DL02 @ 5.0'								
Sample taken? Location/Sample ID#	PWVB01 @ 6.0' PWVN01 @ 5.0'								
Photo Number(s)	Photo 4A-4E & 5A-5B								
Other observations regarding partially buried vessels: Dumplines were not trenched.									
Summary									
Was impacted soil identified? <b>No</b> Yes - less than 10 cubic yards Yes - more than 10 cubic yards									
Total number of samples field screened: 5 samples				Total number of samples collected: 7 samples					
Highest PID Reading: High @ 21.4ppm (PWVN01 @ 5.0')				Total number of samples submitted to lab for analysis: 2 samples					
If more than 10 cubic yards of impacted soil were observed:									
Vertical extent: N/A				Estimated spill volume: N/A					
Lateral extent: N/A				Volume of soil removed: N/A					
Is additional investigation required? N/A									
Was groundwater encountered during the investigation? <b>No</b> Yes - not impacted or in contact with impacted soils Yes - groundwater impacted and/or in contact with impacted soils									
Measured depth to groundwater: N/A				Was remedial groundwater removal conducted? Yes No					
Date Groundwater was encountered: N/A				Commencement date of removal: N/A					
Sheen on groundwater? Yes No				Volume of groundwater removed prior to sampling: N/A					
Free product observed? Yes No				Volume of groundwater removed post sampling: N/A					
Total number of samples collected: N/A				Total Volume of groundwater removed: N/A					
Total number of samples submitted to lab for analysis: N/A									

**TABLE 1**  
**SUMMARY OF VOLATILE ORGANIC SOIL CHEMISTRY DATA**  
**NOBLE ENERGY INC.**  
**31-4-64 SENE TANK BATTERY, WELD COUNTY, COLORADO**  
**FREMONT PROJECT NO. C023-135**

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@6.0"	5/17/2023	0.5 Ft	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
AST02@6.0"	5/17/2023	0.5 Ft	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
SEP01@4.5'	5/17/2023	4.5 Ft	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
PWVB01@6.0'	5/17/2023	6.0 Ft	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
PWVN01@5.0'	5/17/2023	5.0 Ft	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50

Bold faced values exceed the 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

TABLE 2  
SUMMARY OF POLYCYCLIC AROMATIC HYDROCARBON SOIL CHEMISTRY DATA  
NOBLE ENERGY INC.  
31-4-64 SENE TANK BATTERY, WELD COUNTY, COLORADO  
FREMONT PROJECT NO. C023-135

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@6.0"	5/17/2023	0.5 Ft	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
AST02@6.0"	5/17/2023	0.5 Ft	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
SEP01@4.5'	5/17/2023	4.5 Ft	0.00973	0.0178	<b>0.0317</b>	0.0196	0.0249	0.0100	0.0276	<0.00500	0.0846	0.0119	0.0135	0.0675	<0.00500	<0.00500
PWVB01@6.0'	5/17/2023	6.0 Ft	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
PWVN01@5.0'	5/17/2023	5.0 Ft	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500

Bold faced values exceed the 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

**TABLE 3**  
**SUMMARY OF SOIL SUITABILITY FOR RECLAMATION**  
**NOBLE ENERGY INC.**  
**31-4-64 SENE TANK BATTERY, WELD COUNTY, COLORADO**  
**FREMONT PROJECT NO. C023-135**

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@6.0"	5/17/2023	0.5 Ft	6.91	0.157	0.0802	0.211
AST02@6.0"	5/17/2023	0.5 Ft	<b>5.56</b>	0.0526	0.129	0.109
SEP01@4.5'	5/17/2023	4.5 Ft	7.76	0.258	0.126	0.232
PWVB01@6.0'	5/17/2023	6.0 Ft	7.67	1.29	1.04	0.218
PWVN01@5.0'	5/17/2023	5.0 Ft	7.73	0.527	0.0859	0.0983
BKG01@6.0"	5/17/2023	0.5 Ft	6.20	0.103	0.0482	0.104

Bold faced values exceed the COGCC Table 915-1 concentrations

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

Local Background Sample (BKG01@6.0")

**TABLE 4**  
**SUMMARY OF METALS IN SOIL CHEMISTRY DATA**  
**NOBLE ENERGY INC.**  
**31-4-64 SENE TANK BATTERY, WELD COUNTY, COLORADO**  
**FREMONT PROJECT NO. C023-135**

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)
COGCC Table 915-1 Limits (Residential SSL)			0.68	15000	71	0.3	3100	400	1500	390	390	23000
COGCC Table 915-1 Limits (Protection of Groundwater SSL)			0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
SEP01@4.5'	5/17/2023	4.5 Ft	<b>2.06</b>	68.1	<0.232	<0.30	<0.463	5.22	4.44	<0.301	0.0301	14.6
BKG01@6.0"	5/17/2023	0.5 Ft	<b>0.430</b>	49.2	<0.225	<0.30	1.31	4.48	1.50	<0.293	<0.0225	4.74

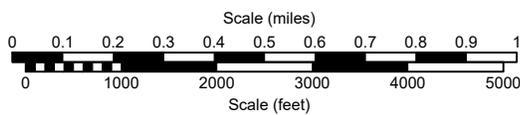
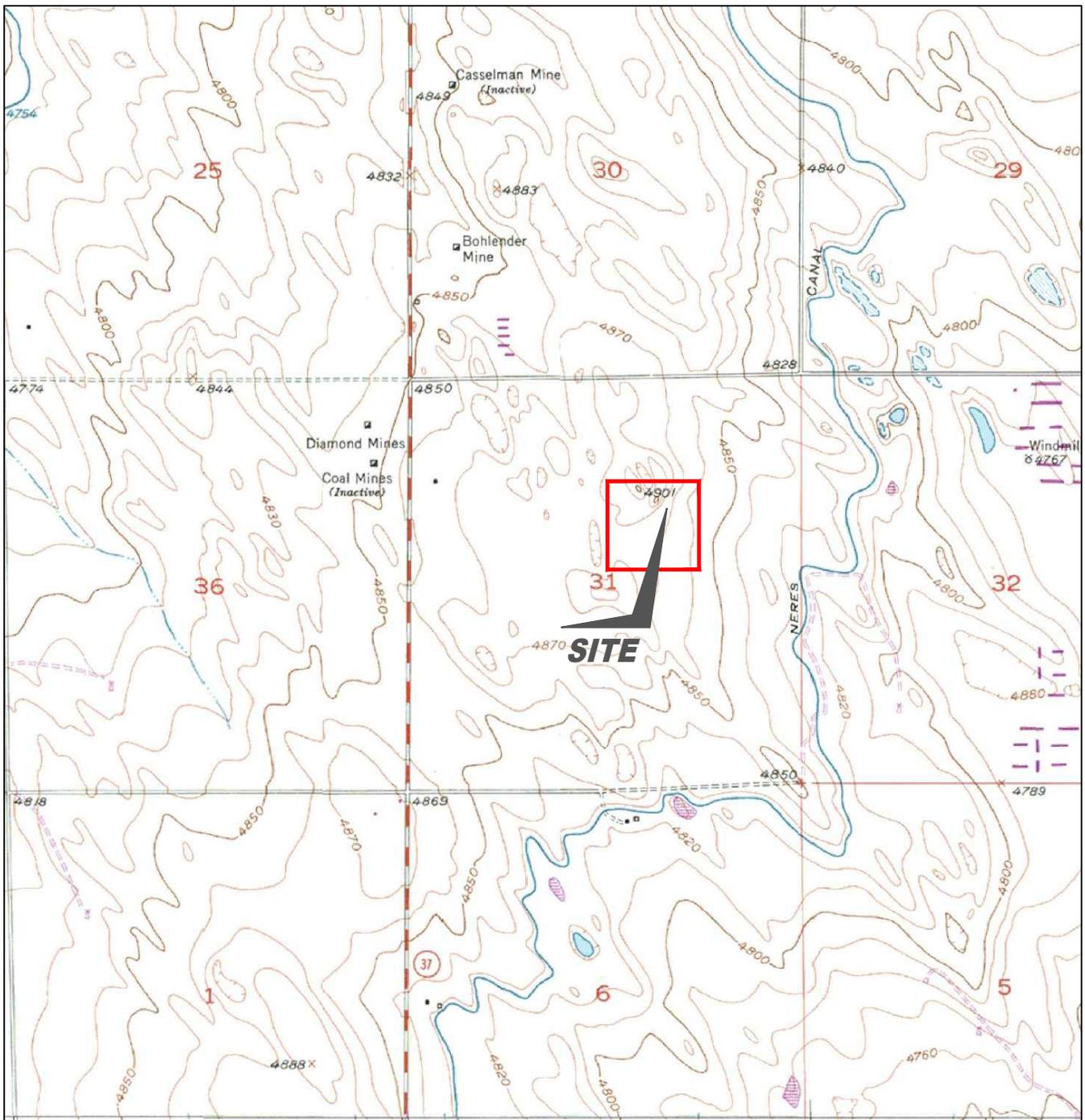
Bold faced values exceed the COGCC Table 915-1 concentrations

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

Local Background Sample (BKG01@6.0")



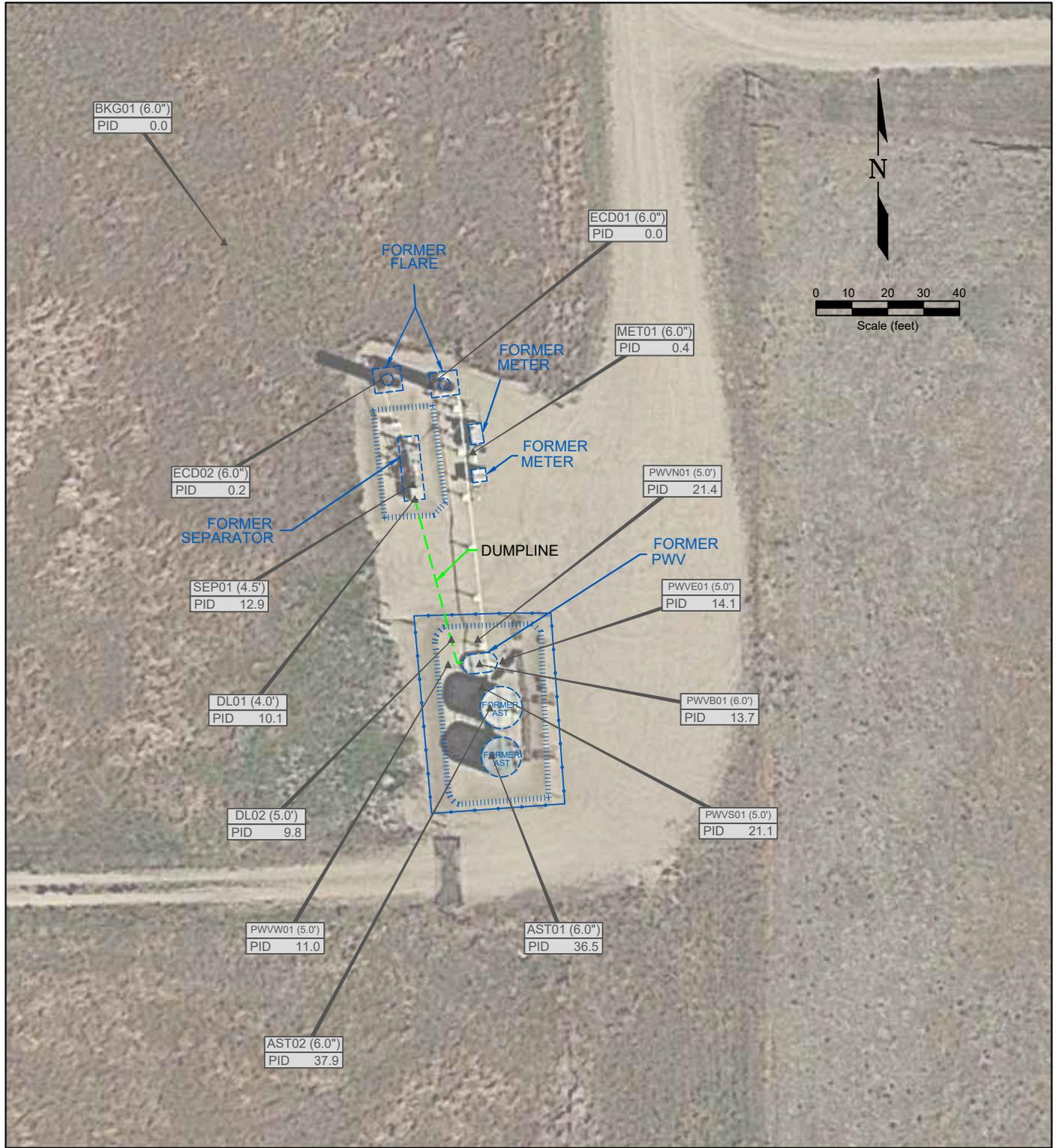
USGS 7.5 MINUTE SERIES (TOPOGRAPHIC)

Figure 1  
SITE LOCATION MAP

**NOBLE ENERGY INC - 31-4-64 SENE Tank Battery**  
 SENE Sec. 31, T4N, R64W, 6th PM  
 Weld County, Colorado  
 40.271089°, -104.584589°

Project # <b>CO23-135</b>	API #	Facility # <b>467637</b>
Date <b>10/31/2023</b>	Remediation # <b>26965</b>	Filename <b>23135T</b>





**LEGEND**

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

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

**Figure 2  
SITE MAP**

**NOBLE ENERGY INC - 31-4-64 SENE Tank Battery**  
 SENE Sec. 31, T4N, R64W, 6th PM  
 Weld County, Colorado  
 40.271089°, -104.584589°

Project # <b>CO23-135</b>	API #	Facility # <b>467637</b>
Date <b>10/31/2023</b>	Remediation # <b>26965</b>	Filename <b>23135Q</b>



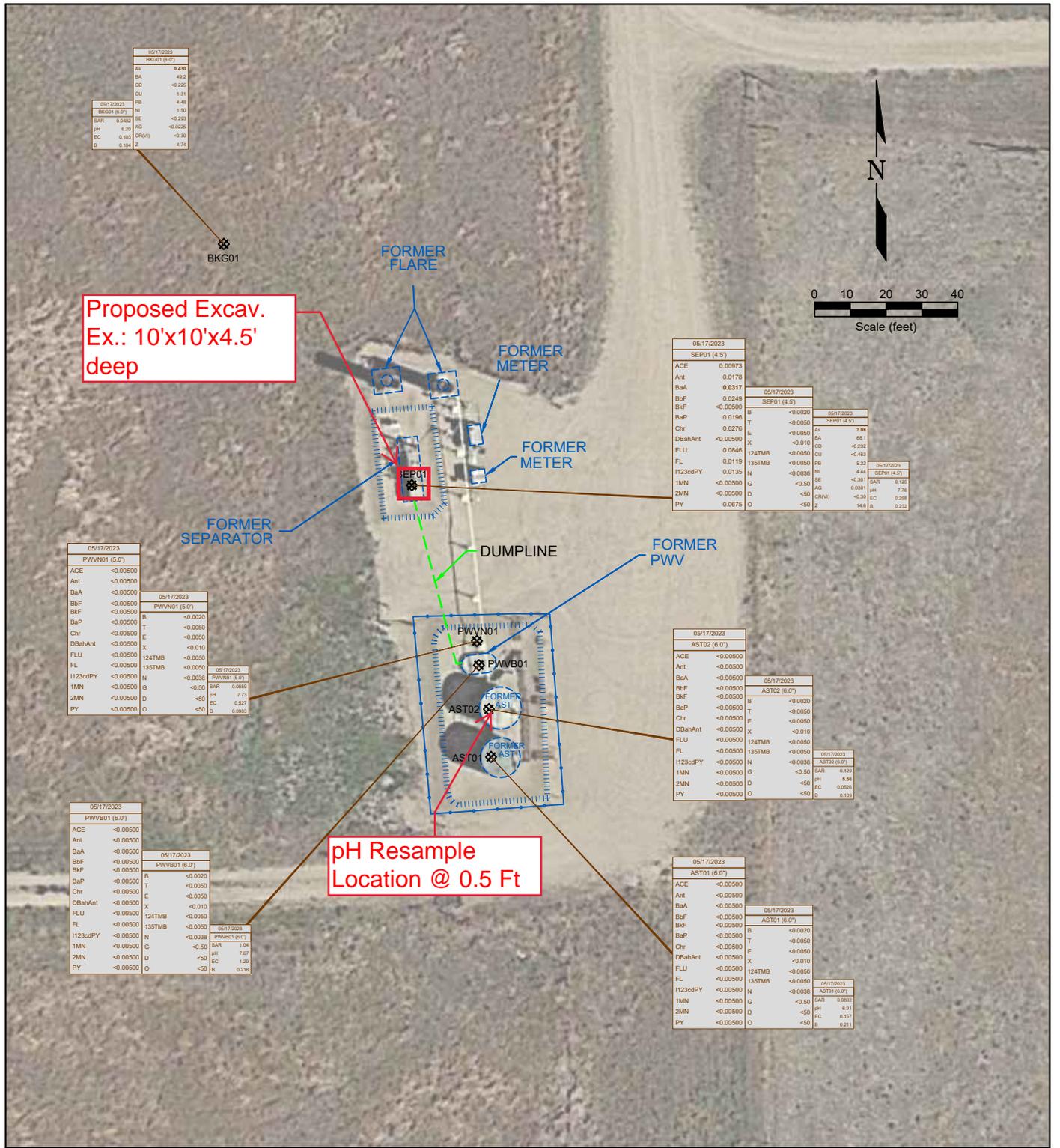


Figure 3  
SOIL CHEMISTRY MAP

**NOBLE ENERGY INC - 31-4-64 SENE Tank Battery**  
 SENE Sec. 31, T4N, R64W, 6th PM  
 Weld County, Colorado  
 40.271089°, -104.584589°

Project # <b>CO23-135</b>	API #	Facility # <b>467637</b>
Date <b>11/1/23</b>	Remediation # <b>26965</b>	Filename <b>23135Q</b>



DATE SAMPLED	SAMPLE ID and DEPTH (ft)	DATE SAMPLED	SAMPLE ID and DEPTH (ft)	DATE SAMPLED	SAMPLE ID and DEPTH (ft)
4/7/2023	FL61 (4')	4/7/2023	FL61 (4')	4/7/2023	FL61 (4')
ACE	<0.00500	ACE	<0.00500	ACE	<0.00500
Ant	<0.00500	Ant	<0.00500	Ant	<0.00500
BaA	<0.00500	BaA	<0.00500	BaA	<0.00500
BbF	<0.00500	BbF	<0.00500	BbF	<0.00500
BaP	<0.00500	BaP	<0.00500	BaP	<0.00500
Chr	<0.00500	Chr	<0.00500	Chr	<0.00500
DBahAnt	<0.00500	DBahAnt	<0.00500	DBahAnt	<0.00500
FLU	<0.00500	FLU	<0.00500	FLU	<0.00500
FL	<0.00500	FL	<0.00500	FL	<0.00500
H123cdPY	<0.00500	H123cdPY	<0.00500	H123cdPY	<0.00500
1MN	<0.00500	1MN	<0.00500	1MN	<0.00500
2MN	<0.00500	2MN	<0.00500	2MN	<0.00500
PY	<0.00500	PY	<0.00500	PY	<0.00500

# 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:*

--

# Photo Log



*Description:*

--

# Photo Log



*Description:*

--

# Summit Scientific

---

4653 Table Mountain Drive, Golden, Colorado 80401

303.277.9310

July 06, 2023

Paul Henehan

Fremont Environmental

PO Box 1289

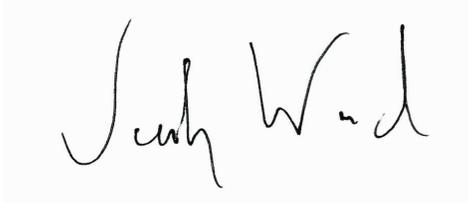
Wellington, CO 80549

RE: Noble - 31-4-64 SENE Tank Battery

Work Order # 2305459

Enclosed are the results of analyses for samples received by Summit Scientific on 05/18/23 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 a distinct "W".

Jacob Wood For Paul Shrewsbury

President



Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - 31-4-64 SENE Tank Battery

Project Number: [none]  
Project Manager: Paul Henehan

**Reported:**  
07/06/23 11:10

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
AST01@6.0'	2305459-01	Soil	05/17/23 00:00	05/18/23 16:30
AST02@6.0'	2305459-02	Soil	05/17/23 00:00	05/18/23 16:30
SEP01@4.5'	2305459-03	Soil	05/17/23 00:00	05/18/23 16:30
PWVB01@6.0'	2305459-04	Soil	05/17/23 00:00	05/18/23 16:30
PWVN01@5.0'	2305459-05	Soil	05/17/23 00:00	05/18/23 16:30
BKG01@6.0''	2305459-06	Soil	05/17/23 00:00	05/18/23 16:30

### Case Narrative

Jeff G requested Metals be added to SEP01@4.5' on 6/26/2023. This report includes those results.

Summit Scientific

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

# SUMMIT SCIENTIFIC

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

Lab ID	Page 1 of 1
<b>2305459</b>	

Client: <u>Fremont Env</u>	Send Data To: Project Manager: <u>Paul Henehan</u>	Send Invoice To: Company: <u>Noble</u>
Address:	E-Mail: <u>Paulh@fremontenv.com</u>	Project Name/Location:
City/State/Zip:	<u>jeffg@fremontenv.com Ethomb@fremontenv.com</u>	AFE#:
Phone:	Project Name: <u>31-4-64 SENE Tank Battery</u>	PO/Billing Codes:
Sampler Name: <u>JG</u>	Project Number:	Contact:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested						Special Instructions	
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	BTEX+N	TMBs (915)	DRD, DRD, GRO	PAHs (915)	EC, pH, SAR, BERD		Metals (915)
1	AST01@6.0"	5/17/23		2			X			X			X	X	X	X	X		
2	AST02@6.0"	↓		1															
3	SEP01@4.5'	↓		1															
4	PWV B01@6.0'	↓		1															
5	PWV N01@5.0'	↓		2									X	X	X	X			
6	BKG01@6.0"	↓		1												X	X		
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			

Relinquished by: <u>[Signature]</u>	Date/Time: <u>5/18/23 13:57</u>	Received by: <u>Summit North</u>	Date/Time: <u>5/18/23 13:57</u>	TAT Business Days	Field DO	Notes:  <u>Bill to Noble</u>
Relinquished by: <u>SZ</u>	Date/Time: <u>5/18/23 1630</u>	Received by: <u>[Signature]</u>	Date/Time: <u>5/18/23 1630</u>	Same Day <input checked="" type="checkbox"/>	Field EC	
				1 Day	Field ORP	
				2 Days	Field pH	
				3 Days	Field Temp.	
Temperature Upon Receipt: <u>11.3</u>	Corrected Temperature: <u>[Symbol]</u>	IR gun #: <u>1</u>	HNO3 lot #:	Standard <input checked="" type="checkbox"/>	Field Turb.	

S<sub>2</sub>

Sample Receipt Checklist

S2 Work Order# 2305459

Client: Fremont Client Project ID: 3-4-04 SEINE Tank Battery

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

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

Temp (°C) 11.3 Thermometer # 1

Table with 5 columns: Yes, No, N/A, Comments (if any). Rows include: If samples require cooling, is the temperature < 6°C? (1), If custody seals are present, are they intact? (1), Are samples due within 48 hours present?, Are water samples with short hold times present?, Is a chain-of-custody (COC) form present and filled out completely? (1), Is the COC properly relinquished by the client w/ date and time recorded? (1), Were all samples received intact? (1), Was adequate sample volume provided? (1), Does the COC agree with the number and type of sample bottles received? (1), Do the sample IDs on the bottle labels match the COC? (1), For volatiles in water - is there headspace present? If yes, contact client and note in narrative., Are samples preserved that require preservation (excluding cooling)? (1) Note the type of preservative in the comments column - HCl, H2SO4, NaOH, HNO3, etc., If samples are acid preserved for metals, is the pH <= 2? (1) Record the pH in Comments., If dissolved metals are requested, were samples field filtered?

Additional Comments (if any): Samples didn't have project name, neither did the sploek they came in

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

AS 5/18/23
Custodian Printed Name Date/Time



Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: Noble - 31-4-64 SENE Tank Battery

Project Number: [none]  
 Project Manager: Paul Henehan

Reported:  
 07/06/23 11:10

**AST01@6.0"**  
**2305459-01 (Soil)**

**Summit Scientific**

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Benzene	ND	0.0020		mg/kg	1	BGE0794	05/23/23	05/24/23	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: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 1,2-Dichloroethane-d4		101 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		102 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		103 %		50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
C10-C28 (DRO)	ND	50		mg/kg	1	BGE0797	05/23/23	05/23/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: o-Terphenyl		117 %		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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
Project Manager: Paul Henehan

**Reported:**  
07/06/23 11:10

**AST01@6.0"**  
**2305459-01 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Acenaphthene	ND	0.00500		mg/kg	1	BGE0785	05/23/23	05/23/23	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: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 2-Methylnaphthalene-d10		63.0 %		40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		71.4 %		40-150		"	"	"	"	

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
<b>Boron</b>	<b>0.211</b>	0.0100		mg/L	1	BGE0838	05/24/23	05/25/23	EPA 6020B	

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

Date Sampled: **05/17/23 00:00**

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

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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
 Project Manager: Paul Henehan

**Reported:**  
 07/06/23 11:10

**AST01@6.0"**  
**2305459-01 (Soil)**

**Summit Scientific**

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

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	88.8	0.0529		mg/L dry	1	BGE0874	05/24/23	05/27/23	EPA 6020B	
Magnesium	18.9	0.0529		"	"	"	"	"	"	
Sodium	3.19	0.0529		"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0802	0.00100		units	1	BGE1005	05/29/23	05/29/23	Calculation	

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	94.5			%	1	BGE0863	05/24/23	05/24/23	Calculation	

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.157	0.0100		mmhos/cm	1	BGE0902	05/25/23	05/25/23	EPA 120.1	

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	6.91			pH Units	1	BGE0903	05/25/23	05/25/23	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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
Project Manager: Paul Henehan

**Reported:**  
07/06/23 11:10

**AST02@6.0"**  
**2305459-02 (Soil)**

**Summit Scientific**

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Benzene	ND	0.0020		mg/kg	1	BGE0794	05/23/23	05/24/23	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: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 1,2-Dichloroethane-d4		99.9 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		97.7 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		103 %		50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
C10-C28 (DRO)	ND	50		mg/kg	1	BGE0797	05/23/23	05/23/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: o-Terphenyl		113 %		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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
Project Manager: Paul Henehan

**Reported:**  
07/06/23 11:10

**AST02@6.0"**  
**2305459-02 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Acenaphthene	ND	0.00500		mg/kg	1	BGE0785	05/23/23	05/23/23	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: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 2-Methylnaphthalene-d10		61.5 %		40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		63.0 %		40-150		"	"	"	"	

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
<b>Boron</b>	<b>0.109</b>	0.0100		mg/L	1	BGE0838	05/24/23	05/25/23	EPA 6020B	

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

Date Sampled: **05/17/23 00:00**

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

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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
Project Manager: Paul Henehan

**Reported:**  
07/06/23 11:10

**AST02@6.0"**  
**2305459-02 (Soil)**

**Summit Scientific**

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

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	56.2	0.0566		mg/L dry	1	BGE0874	05/24/23	05/27/23	EPA 6020B	
Magnesium	12.7	0.0566		"	"	"	"	"	"	
Sodium	4.10	0.0566		"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.129	0.00100		units	1	BGE1005	05/29/23	05/29/23	Calculation	

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	88.4			%	1	BGE0863	05/24/23	05/24/23	Calculation	

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.0526	0.0100		mmhos/cm	1	BGE0902	05/25/23	05/25/23	EPA 120.1	

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	5.56			pH Units	1	BGE0903	05/25/23	05/25/23	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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
Project Manager: Paul Henehan

**Reported:**  
07/06/23 11:10

**SEP01@4.5'**  
**2305459-03 (Soil)**

**Summit Scientific**

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Benzene	ND	0.0020		mg/kg	1	BGE0794	05/23/23	05/24/23	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: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 1,2-Dichloroethane-d4		98.0 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		99.6 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		103 %		50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
C10-C28 (DRO)	ND	50		mg/kg	1	BGE0797	05/23/23	05/23/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: o-Terphenyl		113 %		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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
Project Manager: Paul Henehan

**Reported:**  
07/06/23 11:10

**SEP01@4.5'**  
**2305459-03 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	0.00973	0.00500		mg/kg	1	BGE0785	05/23/23	05/23/23	EPA 8270D SIM	
Anthracene	0.0178	0.00500		"	"	"	"	"	"	
Benzo (a) anthracene	0.0317	0.00500		"	"	"	"	"	"	
Benzo (a) pyrene	0.0196	0.00500		"	"	"	"	"	"	
Benzo (b) fluoranthene	0.0249	0.00500		"	"	"	"	"	"	
Benzo (k) fluoranthene	0.0100	0.00500		"	"	"	"	"	"	
Chrysene	0.0276	0.00500		"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500		"	"	"	"	"	"	
Fluoranthene	0.0846	0.00500		"	"	"	"	"	"	
Fluorene	0.0119	0.00500		"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	0.0135	0.00500		"	"	"	"	"	"	
Pyrene	0.0675	0.00500		"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500		"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500		"	"	"	"	"	"	

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		57.8 %		40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		58.1 %		40-150		"	"	"	"	

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.232	0.0100		mg/L	1	BGE0838	05/24/23	05/25/23	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting Limit	MDL	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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
Project Manager: Paul Henehan

**Reported:**  
07/06/23 11:10

**SEP01@4.5'**  
**2305459-03 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	2.06	0.232		mg/kg dry	1	BGF1008	06/28/23	07/02/23	EPA 6020B	
Barium	68.1	0.463		"	"	"	"	"	"	
Cadmium	ND	0.232		"	"	"	"	"	"	
Copper	ND	0.463		"	"	"	"	"	"	
Lead	5.22	0.232		"	"	"	"	"	"	
Nickel	4.44	0.463		"	"	"	"	"	"	
Selenium	ND	0.301	0.203	"	"	"	"	"	"	
Silver	0.0301	0.0232		"	"	"	"	"	"	
Zinc	14.6	0.463		"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGF1098	06/30/23	06/30/23	EPA 7196A	I-02

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	47.9	0.0579		mg/L dry	1	BGE0874	05/24/23	05/27/23	EPA 6020B	
Magnesium	8.31	0.0579		"	"	"	"	"	"	
Sodium	3.59	0.0579		"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.126	0.00100		units	1	BGE1005	05/29/23	05/29/23	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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
 Project Manager: Paul Henehan

**Reported:**  
 07/06/23 11:10

**SEP01@4.5'**  
**2305459-03 (Soil)**

**Summit Scientific**

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
% Solids	86.4			%	1	BGE0863	05/24/23	05/24/23	Calculation	

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

Date Sampled: **05/17/23 00:00**

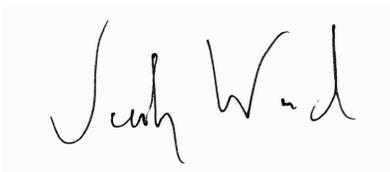
Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Specific Conductance (EC)	0.258	0.0100		mmhos/cm	1	BGE0902	05/25/23	05/25/23	EPA 120.1	

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
pH	7.76			pH Units	1	BGE0903	05/25/23	05/25/23	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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
Project Manager: Paul Henehan

**Reported:**  
07/06/23 11:10

**PWVB01@6.0'**  
**2305459-04 (Soil)**

**Summit Scientific**

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Benzene	ND	0.0020		mg/kg	1	BGE0794	05/23/23	05/24/23	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: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 1,2-Dichloroethane-d4		97.0 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		100 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %		50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
C10-C28 (DRO)	ND	50		mg/kg	1	BGE0797	05/23/23	05/23/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: o-Terphenyl		112 %		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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
Project Manager: Paul Henehan

Reported:  
07/06/23 11:10

**PWVB01@6.0'**  
**2305459-04 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Acenaphthene	ND	0.00500		mg/kg	1	BGE0785	05/23/23	05/23/23	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: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 2-Methylnaphthalene-d10		60.8 %		40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		67.6 %		40-150		"	"	"	"	

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
<b>Boron</b>	<b>0.218</b>	0.0100		mg/L	1	BGE0838	05/24/23	05/25/23	EPA 6020B	

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

Date Sampled: **05/17/23 00:00**

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

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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
Project Manager: Paul Henehan

**Reported:**  
07/06/23 11:10

**PWVB01@6.0'**  
**2305459-04 (Soil)**

**Summit Scientific**

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

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	121	0.0569		mg/L dry	1	BGE0874	05/24/23	05/27/23	EPA 6020B	
Magnesium	27.0	0.0569		"	"	"	"	"	"	
Sodium	48.7	0.0569		"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.04	0.00100		units	1	BGE1005	05/29/23	05/29/23	Calculation	

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	87.8			%	1	BGE0863	05/24/23	05/24/23	Calculation	

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.29	0.0100		mmhos/cm	1	BGE0902	05/25/23	05/25/23	EPA 120.1	

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.67			pH Units	1	BGE0903	05/25/23	05/25/23	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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
Project Manager: Paul Henehan

**Reported:**  
07/06/23 11:10

**PWVN01@5.0'**  
**2305459-05 (Soil)**

**Summit Scientific**

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Benzene	ND	0.0020		mg/kg	1	BGE0794	05/23/23	05/24/23	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: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 1,2-Dichloroethane-d4		100 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		100 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %		50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
C10-C28 (DRO)	ND	50		mg/kg	1	BGE0797	05/23/23	05/23/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: o-Terphenyl		117 %		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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
Project Manager: Paul Henehan

**Reported:**  
07/06/23 11:10

**PWVN01@5.0'**  
**2305459-05 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Acenaphthene	ND	0.00500		mg/kg	1	BGE0785	05/23/23	05/23/23	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: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 2-Methylnaphthalene-d10		45.0 %		40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		40.2 %		40-150		"	"	"	"	

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
<b>Boron</b>	<b>0.0983</b>	0.0100		mg/L	1	BGE0838	05/24/23	05/25/23	EPA 6020B	

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

Date Sampled: **05/17/23 00:00**

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

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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
 Project Manager: Paul Henehan

**Reported:**  
 07/06/23 11:10

**PWVN01@5.0'**  
**2305459-05 (Soil)**

**Summit Scientific**

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

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	55.0	0.0600		mg/L dry	1	BGE0874	05/24/23	05/27/23	EPA 6020B	
Magnesium	16.2	0.0600		"	"	"	"	"	"	
Sodium	2.82	0.0600		"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0859	0.00100		units	1	BGE1005	05/29/23	05/29/23	Calculation	

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	83.3			%	1	BGE0863	05/24/23	05/24/23	Calculation	

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.527	0.0100		mmhos/cm	1	BGE0902	05/25/23	05/25/23	EPA 120.1	

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.73			pH Units	1	BGE0903	05/25/23	05/25/23	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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
Project Manager: Paul Henehan

**Reported:**  
07/06/23 11:10

**BKG01@6.0"**  
**2305459-06 (Soil)**

**Summit Scientific**

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
<b>Boron</b>	<b>0.104</b>	0.0100		mg/L	1	BGE0838	05/24/23	05/25/23	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
<b>Arsenic</b>	<b>0.430</b>	0.225		mg/kg dry	1	BGE0784	05/23/23	05/24/23	EPA 6020B	
<b>Barium</b>	<b>49.2</b>	0.451		"	"	"	"	"	"	
<b>Cadmium</b>	<b>ND</b>	0.225		"	"	"	"	"	"	
<b>Copper</b>	<b>1.31</b>	0.451		"	"	"	"	"	"	
<b>Lead</b>	<b>4.48</b>	0.225		"	"	"	"	"	"	
<b>Nickel</b>	<b>1.50</b>	0.451		"	"	"	"	"	"	
<b>Selenium</b>	<b>ND</b>	0.293	0.197	"	"	"	"	"	"	
<b>Silver</b>	<b>ND</b>	0.0225		"	"	"	"	"	"	
<b>Zinc</b>	<b>4.74</b>	0.451		"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BGE0685	05/19/23	05/19/23	EPA 7196A	

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
<b>Calcium</b>	<b>69.2</b>	0.0564		mg/L dry	1	BGE0874	05/24/23	05/27/23	EPA 6020B	
<b>Magnesium</b>	<b>18.0</b>	0.0564		"	"	"	"	"	"	
<b>Sodium</b>	<b>1.74</b>	0.0564		"	"	"	"	"	"	

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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
 Project Manager: Paul Henehan

**Reported:**  
 07/06/23 11:10

**BKG01@6.0''  
 2305459-06 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0482	0.00100		units	1	BGE1005	05/29/23	05/29/23	Calculation	

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	88.7			%	1	BGE0863	05/24/23	05/24/23	Calculation	

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.103	0.0100		mmhos/cm	1	BGE0902	05/25/23	05/25/23	EPA 120.1	

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

Date Sampled: **05/17/23 00:00**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	6.20			pH Units	1	BGE0903	05/25/23	05/25/23	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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
Project Manager: Paul Henehan

Reported:  
07/06/23 11:10

### 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 BGE0794 - EPA 5030 Soil MS

##### Blank (BGE0794-BLK1)

Prepared & Analyzed: 05/23/23

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	"							
Surrogate: 1,2-Dichloroethane-d4	0.0435		"	0.0400		109	50-150			
Surrogate: Toluene-d8	0.0398		"	0.0400		99.5	50-150			
Surrogate: 4-Bromofluorobenzene	0.0412		"	0.0400		103	50-150			

##### LCS (BGE0794-BS1)

Prepared: 05/23/23 Analyzed: 05/24/23

Benzene	0.145	0.0020	mg/kg	0.150		96.8	70-130			
Toluene	0.158	0.0050	"	0.150		106	70-130			
Ethylbenzene	0.152	0.0050	"	0.150		101	70-130			
m,p-Xylene	0.305	0.010	"	0.300		102	70-130			
o-Xylene	0.149	0.0050	"	0.150		99.5	70-130			
1,2,4-Trimethylbenzene	0.142	0.0050	"	0.150		94.4	70-130			
1,3,5-Trimethylbenzene	0.143	0.0050	"	0.150		95.6	70-130			
Naphthalene	0.133	0.0038	"	0.150		88.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0402		"	0.0400		100	50-150			
Surrogate: Toluene-d8	0.0411		"	0.0400		103	50-150			
Surrogate: 4-Bromofluorobenzene	0.0404		"	0.0400		101	50-150			

##### Matrix Spike (BGE0794-MS1)

Source: 2305459-01

Prepared: 05/23/23 Analyzed: 05/24/23

Benzene	0.131	0.0020	mg/kg	0.150	ND	87.5	70-130			
Toluene	0.142	0.0050	"	0.150	ND	94.7	70-130			
Ethylbenzene	0.139	0.0050	"	0.150	ND	92.7	70-130			
m,p-Xylene	0.274	0.010	"	0.300	ND	91.4	70-130			
o-Xylene	0.133	0.0050	"	0.150	ND	89.0	70-130			
1,2,4-Trimethylbenzene	0.127	0.0050	"	0.150	ND	84.7	70-130			
1,3,5-Trimethylbenzene	0.129	0.0050	"	0.150	ND	86.1	70-130			
Naphthalene	0.118	0.0038	"	0.150	ND	78.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0386		"	0.0400		96.4	50-150			
Surrogate: Toluene-d8	0.0402		"	0.0400		100	50-150			
Surrogate: 4-Bromofluorobenzene	0.0398		"	0.0400		99.5	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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
 Project Manager: Paul Henehan

**Reported:**  
 07/06/23 11:10

**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 BGE0794 - EPA 5030 Soil MS**

<b>Matrix Spike Dup (BGE0794-MSD1)</b>	<b>Source: 2305459-01</b>			<b>Prepared: 05/23/23 Analyzed: 05/24/23</b>						
Benzene	0.136	0.0020	mg/kg	0.150	ND	90.7	70-130	3.62	30	
Toluene	0.149	0.0050	"	0.150	ND	99.2	70-130	4.58	30	
Ethylbenzene	0.143	0.0050	"	0.150	ND	95.6	70-130	3.08	30	
m,p-Xylene	0.287	0.010	"	0.300	ND	95.7	70-130	4.62	30	
o-Xylene	0.138	0.0050	"	0.150	ND	92.0	70-130	3.34	30	
1,2,4-Trimethylbenzene	0.131	0.0050	"	0.150	ND	87.3	70-130	3.00	30	
1,3,5-Trimethylbenzene	0.134	0.0050	"	0.150	ND	89.2	70-130	3.49	30	
Naphthalene	0.119	0.0038	"	0.150	ND	79.3	70-130	0.912	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0384</i>		<i>"</i>	<i>0.0400</i>		<i>96.1</i>	<i>50-150</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0399</i>		<i>"</i>	<i>0.0400</i>		<i>99.8</i>	<i>50-150</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0398</i>		<i>"</i>	<i>0.0400</i>		<i>99.5</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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
 Project Manager: Paul Henehan

**Reported:**  
 07/06/23 11:10

**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 BGE0797 - EPA 3550A**

**Blank (BGE0797-BLK1)**

Prepared & Analyzed: 05/23/23

C10-C28 (DRO)	ND	50	mg/kg								
C28-C36 (ORO)	ND	50	"								
Surrogate: <i>o</i> -Terphenyl	15.0		"	12.5		120		30-150			

**LCS (BGE0797-BS1)**

Prepared & Analyzed: 05/23/23

C10-C28 (DRO)	459	50	mg/kg	500		91.9		70-130			
Surrogate: <i>o</i> -Terphenyl	15.3		"	12.5		122		30-150			

**Matrix Spike (BGE0797-MS1)**

Source: 2305459-01

Prepared & Analyzed: 05/23/23

C10-C28 (DRO)	523	50	mg/kg	500	ND	105		70-130			
Surrogate: <i>o</i> -Terphenyl	14.9		"	12.5		119		30-150			

**Matrix Spike Dup (BGE0797-MSD1)**

Source: 2305459-01

Prepared & Analyzed: 05/23/23

C10-C28 (DRO)	514	50	mg/kg	500	ND	103		70-130	1.78	20	
Surrogate: <i>o</i> -Terphenyl	14.4		"	12.5		115		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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
Project Manager: Paul Henehan

**Reported:**  
07/06/23 11:10

**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 BGE0785 - EPA 5030 Soil MS**

**Blank (BGE0785-BLK1)**

Prepared & Analyzed: 05/23/23

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>0.0365</i>		<i>"</i>	<i>0.0333</i>		<i>109</i>		<i>40-150</i>		
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0278</i>		<i>"</i>	<i>0.0333</i>		<i>83.3</i>		<i>40-150</i>		

**LCS (BGE0785-BS1)**

Prepared & Analyzed: 05/23/23

Acenaphthene	0.0306	0.00500	mg/kg	0.0333	91.9	31-137
Anthracene	0.0289	0.00500	"	0.0333	86.7	30-120
Benzo (a) anthracene	0.0271	0.00500	"	0.0333	81.2	30-120
Benzo (a) pyrene	0.0252	0.00500	"	0.0333	75.6	30-120
Benzo (b) fluoranthene	0.0227	0.00500	"	0.0333	68.1	30-120
Benzo (k) fluoranthene	0.0288	0.00500	"	0.0333	86.4	30-120
Chrysene	0.0317	0.00500	"	0.0333	95.0	30-120
Dibenz (a,h) anthracene	0.0204	0.00500	"	0.0333	61.1	30-120
Fluoranthene	0.0296	0.00500	"	0.0333	88.8	30-120
Fluorene	0.0303	0.00500	"	0.0333	91.0	30-120
Indeno (1,2,3-cd) pyrene	0.0166	0.00500	"	0.0333	49.8	30-120
Pyrene	0.0306	0.00500	"	0.0333	91.7	35-142
1-Methylnaphthalene	0.0264	0.00500	"	0.0333	79.1	35-142
2-Methylnaphthalene	0.0282	0.00500	"	0.0333	84.6	35-142
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0295</i>		<i>"</i>	<i>0.0333</i>	<i>88.5</i>	<i>40-150</i>
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0301</i>		<i>"</i>	<i>0.0333</i>	<i>90.2</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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
Project Manager: Paul Henehan

Reported:  
07/06/23 11:10

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 BGE0785 - EPA 5030 Soil MS

Matrix Spike (BGE0785-MS1)	Source: 2305459-01			Prepared & Analyzed: 05/23/23						
Acenaphthene	0.0221	0.00500	mg/kg	0.0333	ND	66.3	31-137			
Anthracene	0.0207	0.00500	"	0.0333	ND	62.1	30-120			
Benzo (a) anthracene	0.0207	0.00500	"	0.0333	ND	62.0	30-120			
Benzo (a) pyrene	0.0185	0.00500	"	0.0333	ND	55.6	30-120			
Benzo (b) fluoranthene	0.0155	0.00500	"	0.0333	ND	46.6	30-120			
Benzo (k) fluoranthene	0.0185	0.00500	"	0.0333	ND	55.5	30-120			
Chrysene	0.0219	0.00500	"	0.0333	ND	65.7	30-120			
Dibenz (a,h) anthracene	0.0144	0.00500	"	0.0333	ND	43.3	30-120			
Fluoranthene	0.0198	0.00500	"	0.0333	ND	59.3	30-120			
Fluorene	0.0221	0.00500	"	0.0333	ND	66.2	30-120			
Indeno (1,2,3-cd) pyrene	0.0139	0.00500	"	0.0333	ND	41.6	30-120			
Pyrene	0.0222	0.00500	"	0.0333	ND	66.6	35-142			
1-Methylnaphthalene	0.0200	0.00500	"	0.0333	ND	60.1	15-130			
2-Methylnaphthalene	0.0213	0.00500	"	0.0333	ND	63.8	15-130			
Surrogate: 2-Methylnaphthalene-d10	0.0214		"	0.0333		64.2	40-150			
Surrogate: Fluoranthene-d10	0.0210		"	0.0333		62.9	40-150			

Matrix Spike Dup (BGE0785-MSD1)	Source: 2305459-01			Prepared & Analyzed: 05/23/23						
Acenaphthene	0.0168	0.00500	mg/kg	0.0333	ND	50.5	31-137	27.1	30	
Anthracene	0.0163	0.00500	"	0.0333	ND	48.8	30-120	23.9	30	
Benzo (a) anthracene	0.0165	0.00500	"	0.0333	ND	49.6	30-120	22.2	30	
Benzo (a) pyrene	0.0153	0.00500	"	0.0333	ND	46.0	30-120	19.0	30	
Benzo (b) fluoranthene	0.0140	0.00500	"	0.0333	ND	42.0	30-120	10.4	30	
Benzo (k) fluoranthene	0.0167	0.00500	"	0.0333	ND	50.0	30-120	10.5	30	
Chrysene	0.0170	0.00500	"	0.0333	ND	50.9	30-120	25.4	30	
Dibenz (a,h) anthracene	0.0154	0.00500	"	0.0333	ND	46.1	30-120	6.37	30	
Fluoranthene	0.0158	0.00500	"	0.0333	ND	47.4	30-120	22.4	30	
Fluorene	0.0170	0.00500	"	0.0333	ND	50.9	30-120	26.3	30	
Indeno (1,2,3-cd) pyrene	0.0135	0.00500	"	0.0333	ND	40.4	30-120	2.93	30	
Pyrene	0.0167	0.00500	"	0.0333	ND	50.1	35-142	28.4	30	
1-Methylnaphthalene	0.0169	0.00500	"	0.0333	ND	50.8	15-130	16.7	50	
2-Methylnaphthalene	0.0168	0.00500	"	0.0333	ND	50.5	15-130	23.2	50	
Surrogate: 2-Methylnaphthalene-d10	0.0178		"	0.0333		53.5	40-150			
Surrogate: Fluoranthene-d10	0.0167		"	0.0333		50.1	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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
 Project Manager: Paul Henehan

**Reported:**  
 07/06/23 11:10

**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 BGE0838 - EPA 3050B**

**Blank (BGE0838-BLK1)**

Prepared: 05/24/23 Analyzed: 05/25/23

Boron ND 0.0100 mg/L

**LCS (BGE0838-BS1)**

Prepared: 05/24/23 Analyzed: 05/25/23

Boron 4.13 0.0100 mg/L 5.00 82.7 80-120

**Duplicate (BGE0838-DUP1)**

**Source: 2305459-01**

Prepared: 05/24/23 Analyzed: 05/25/23

Boron 0.194 0.0100 mg/L 0.211 8.35 20

**Matrix Spike (BGE0838-MS1)**

**Source: 2305459-01**

Prepared: 05/24/23 Analyzed: 05/25/23

Boron 4.16 0.0100 mg/L 5.00 0.211 79.0 75-125

**Matrix Spike Dup (BGE0838-MSD1)**

**Source: 2305459-01**

Prepared: 05/24/23 Analyzed: 05/25/23

Boron 4.48 0.0100 mg/L 5.00 0.211 85.3 75-125 7.27 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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
Project Manager: Paul Henehan

**Reported:**  
07/06/23 11:10

**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 BGE0784 - EPA 3050B**

**Blank (BGE0784-BLK1)**

Prepared: 05/23/23 Analyzed: 05/24/23

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	"							
Selenium	ND	0.260	"							
Silver	ND	0.0200	"							
Zinc	ND	0.400	"							

**LCS (BGE0784-BS1)**

Prepared: 05/23/23 Analyzed: 05/24/23

Arsenic	32.2	0.200	mg/kg wet	40.0	80.6	80-120
Barium	34.4	0.400	"	40.0	86.1	80-120
Cadmium	1.75	0.200	"	2.00	87.5	80-120
Copper	32.8	0.400	"	40.0	82.1	80-120
Lead	16.5	0.200	"	20.0	82.4	80-120
Nickel	32.3	0.400	"	40.0	80.7	80-120
Selenium	3.57	0.260	"	4.00	89.2	80-120
Silver	1.80	0.0200	"	2.00	90.2	80-120
Zinc	32.0	0.400	"	40.0	80.1	80-120

**Duplicate (BGE0784-DUP1)**

Source: 2305451-01

Prepared: 05/23/23 Analyzed: 05/24/23

Arsenic	0.606	0.244	mg/kg dry	0.540	11.6	20
Barium	110	0.487	"	99.2	10.2	20
Cadmium	0.125	0.244	"	0.120	3.98	20
Copper	2.14	0.487	"	2.01	6.30	20
Lead	7.17	0.244	"	7.02	2.14	20
Nickel	2.05	0.487	"	1.96	4.30	20
Selenium	ND	0.317	"	ND		20
Silver	0.0477	0.0244	"	0.0390	20.2	20
Zinc	7.98	0.487	"	7.08	11.9	20

QR-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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
Project Manager: Paul Henehan

**Reported:**  
07/06/23 11:10

**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 BGE0784 - EPA 3050B**

<b>Matrix Spike (BGE0784-MS1)</b>	<b>Source: 2305451-01</b>			Prepared: 05/23/23		Analyzed: 05/24/23					
Arsenic	9.57	0.244	mg/kg dry	48.7	0.540	18.5	75-125				QM-07
Barium	157	0.487	"	48.7	99.2	119	75-125				
Cadmium	2.20	0.244	"	2.44	0.120	85.5	75-125				
Copper	12.0	0.487	"	48.7	2.01	20.5	75-125				QM-07
Lead	26.2	0.244	"	24.4	7.02	78.6	75-125				
Nickel	12.1	0.487	"	48.7	1.96	20.7	75-125				QM-07
Selenium	3.89	0.317	"	4.87	ND	80.0	75-125				
Silver	2.24	0.0244	"	2.44	0.0390	90.5	75-125				
Zinc	18.3	0.487	"	48.7	7.08	23.0	75-125				QM-07

<b>Matrix Spike Dup (BGE0784-MSD1)</b>	<b>Source: 2305451-01</b>			Prepared: 05/23/23		Analyzed: 05/24/23					
Arsenic	9.80	0.244	mg/kg dry	48.7	0.540	19.0	75-125	2.37	25		QM-07
Barium	143	0.487	"	48.7	99.2	89.9	75-125	9.40	25		
Cadmium	2.02	0.244	"	2.44	0.120	78.1	75-125	8.56	25		
Copper	12.3	0.487	"	48.7	2.01	21.1	75-125	2.30	25		QM-07
Lead	24.3	0.244	"	24.4	7.02	71.1	75-125	7.25	25		QM-07
Nickel	12.5	0.487	"	48.7	1.96	21.6	75-125	3.50	25		QM-07
Selenium	3.82	0.317	"	4.87	ND	78.4	75-125	2.02	25		
Silver	2.03	0.0244	"	2.44	0.0390	81.7	75-125	10.1	25		
Zinc	19.0	0.487	"	48.7	7.08	24.5	75-125	3.80	25		QM-07

**Batch BGF1008 - EPA 3050B**

<b>Blank (BGF1008-BLK1)</b>				Prepared: 06/28/23		Analyzed: 07/02/23					
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	"								
Selenium	ND	0.260	"								
Silver	ND	0.0200	"								
Zinc	ND	0.400	"								

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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
Project Manager: Paul Henehan

**Reported:**  
07/06/23 11:10

**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 BGF1008 - EPA 3050B**

**LCS (BGF1008-BS1)**

Prepared: 06/28/23 Analyzed: 07/02/23

Arsenic	38.1	0.200	mg/kg wet	40.0		95.1	80-120			
Barium	40.3	0.400	"	40.0		101	80-120			
Cadmium	1.60	0.200	"	2.00		80.2	80-120			
Copper	42.6	0.400	"	40.0		107	80-120			
Lead	22.4	0.200	"	20.0		112	80-120			
Nickel	38.4	0.400	"	40.0		96.0	80-120			
Selenium	4.01	0.260	"	4.00		100	80-120			
Silver	2.36	0.0200	"	2.00		118	80-120			
Zinc	41.2	0.400	"	40.0		103	80-120			

**Duplicate (BGF1008-DUP1)**

Source: 2305459-03

Prepared: 06/28/23 Analyzed: 07/02/23

Arsenic	4.58	0.232	mg/kg dry		2.06			75.7	20	QR-04
Barium	73.9	0.463	"		68.1			8.16	20	
Cadmium	0.216	0.232	"		0.166			25.9	20	QR-01
Copper	ND	0.463	"		ND				20	
Lead	8.33	0.232	"		5.22			45.9	20	QR-04
Nickel	5.72	0.463	"		4.44			25.1	20	QR-04
Selenium	ND	0.301	"		ND				20	
Silver	0.0329	0.0232	"		0.0301			8.82	20	
Zinc	22.9	0.463	"		14.6			44.5	20	QR-04

**Matrix Spike (BGF1008-MS1)**

Source: 2305459-03

Prepared: 06/28/23 Analyzed: 07/02/23

Arsenic	12.2	0.232	mg/kg dry	46.3	2.06	21.8	75-125			QM-07
Barium	113	0.463	"	46.3	68.1	97.6	75-125			
Cadmium	0.822	0.232	"	2.32	0.166	28.3	75-125			QM-07
Copper	2.09	0.463	"	46.3	ND	4.52	75-125			QM-07
Lead	14.3	0.232	"	23.2	5.22	39.2	75-125			QM-07
Nickel	14.0	0.463	"	46.3	4.44	20.5	75-125			QM-07
Selenium	0.732	0.301	"	4.63	ND	15.8	75-125			QM-07
Silver	0.493	0.0232	"	2.32	0.0301	20.0	75-125			QM-07
Zinc	32.5	0.463	"	46.3	14.6	38.7	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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
 Project Manager: Paul Henehan

**Reported:**  
 07/06/23 11:10

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

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

**Batch BGF1008 - EPA 3050B**

Matrix Spike Dup (BGF1008-MSD1)	Source: 2305459-03			Prepared: 06/28/23 Analyzed: 07/02/23							
Arsenic	10.4	0.232	mg/kg dry	46.3	2.06	17.9	75-125	16.2	25	QM-07	
Barium	87.6	0.463	"	46.3	68.1	42.2	75-125	25.6	25	QM-07	
Cadmium	0.638	0.232	"	2.32	0.166	20.4	75-125	25.3	25	QM-07	
Copper	0.796	0.463	"	46.3	ND	1.72	75-125	89.7	25	QM-07	
Lead	10.3	0.232	"	23.2	5.22	21.8	75-125	32.9	25	QM-07	
Nickel	11.6	0.463	"	46.3	4.44	15.4	75-125	18.8	25	QM-07	
Selenium	0.893	0.301	"	4.63	ND	19.3	75-125	19.9	25	QM-07	
Silver	0.460	0.0232	"	2.32	0.0301	18.6	75-125	6.90	25	QM-07	
Zinc	24.1	0.463	"	46.3	14.6	20.5	75-125	29.8	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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
 Project Manager: Paul Henehan

**Reported:**  
 07/06/23 11:10

**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 BGE0685 - 3060A Mod**

<b>Blank (BGE0685-BLK1)</b>											Prepared & Analyzed: 05/19/23	
Chromium, Hexavalent	ND	0.30	mg/kg wet									
<b>LCS (BGE0685-BS1)</b>											Prepared & Analyzed: 05/19/23	
Chromium, Hexavalent	24.1	0.30	mg/kg wet	25.0		96.4	80-120					
<b>Duplicate (BGE0685-DUP1)</b>											Prepared & Analyzed: 05/19/23	
Chromium, Hexavalent	ND	0.30	mg/kg dry		ND					20		
<b>Matrix Spike (BGE0685-MS1)</b>											Prepared & Analyzed: 05/19/23	
Chromium, Hexavalent	27.0	0.30	mg/kg dry	28.7	ND	94.2	75-125					
<b>Matrix Spike Dup (BGE0685-MSD1)</b>											Prepared & Analyzed: 05/19/23	
Chromium, Hexavalent	27.1	0.30	mg/kg dry	28.7	ND	94.4	75-125	0.212		20		

**Batch BGF1098 - 3060A Mod**

<b>Blank (BGF1098-BLK1)</b>											Prepared & Analyzed: 06/30/23	
Chromium, Hexavalent	ND	0.30	mg/kg wet									
<b>LCS (BGF1098-BS1)</b>											Prepared & Analyzed: 06/30/23	
Chromium, Hexavalent	24.2	0.30	mg/kg wet	25.0		96.8	80-120					
<b>Duplicate (BGF1098-DUP1)</b>											Prepared & Analyzed: 06/30/23	
Chromium, Hexavalent	ND	0.30	mg/kg dry		ND					20		
<b>Matrix Spike (BGF1098-MS1)</b>											Prepared & Analyzed: 06/30/23	
Chromium, Hexavalent	27.6	0.30	mg/kg dry	28.9	ND	95.2	75-125					

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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
 Project Manager: Paul Henehan

**Reported:**  
 07/06/23 11:10

**Hexavalent Chromium by EPA Method 7196 - Quality Control**  
**Summit Scientific**

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

**Batch BGF1098 - 3060A Mod**

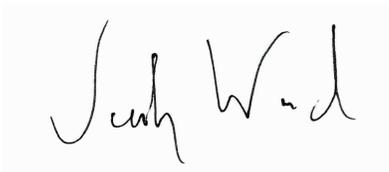
**Matrix Spike Dup (BGF1098-MSD1)**

Source: 2305459-03

Prepared & Analyzed: 06/30/23

Chromium, Hexavalent	27.6	0.30	mg/kg dry	28.9	ND	95.2	75-125	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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
 Project Manager: Paul Henehan

**Reported:**  
 07/06/23 11:10

**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 BGE0874 - General Preparation**

**Blank (BGE0874-BLK1)**

Prepared: 05/24/23 Analyzed: 05/27/23

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

**LCS (BGE0874-BS1)**

Prepared: 05/24/23 Analyzed: 05/27/23

Calcium	4.70	0.0500	mg/L wet	5.00		94.0	70-130			
Magnesium	4.60	0.0500	"	5.00		92.0	70-130			
Sodium	4.58	0.0500	"	5.00		91.5	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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
 Project Manager: Paul Henehan

**Reported:**  
 07/06/23 11:10

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

**Summit Scientific**

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

**Batch BGE0863 - General Preparation**

<b>Duplicate (BGE0863-DUP1)</b>		<b>Source: 2305455-01</b>			<b>Prepared &amp; Analyzed: 05/24/23</b>					
% Solids	73.8		%		76.1		3.00	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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
 Project Manager: Paul Henehan

**Reported:**  
 07/06/23 11:10

**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 BGE0902 - General Preparation**

**Blank (BGE0902-BLK1)**

Prepared & Analyzed: 05/25/23

Specific Conductance (EC) ND 0.0100 mmhos/cm

**LCS (BGE0902-BS1)**

Prepared & Analyzed: 05/25/23

Specific Conductance (EC) 0.150 0.0100 mmhos/cm 0.150 100 95-105

**Duplicate (BGE0902-DUP1)**

Source: 2305456-01

Prepared & Analyzed: 05/25/23

Specific Conductance (EC) 0.609 0.0100 mmhos/cm 0.615 0.931 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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
 Project Manager: Paul Henehan

**Reported:**  
 07/06/23 11:10

**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 BGE0903 - General Preparation**

**LCS (BGE0903-BS1)**

Prepared & Analyzed: 05/25/23

pH 8.99 pH Units 9.18 97.9 95-105

**Duplicate (BGE0903-DUP1)**

Source: 2305456-01

Prepared & Analyzed: 05/25/23

pH 7.73 pH Units 7.77 0.516 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 - 31-4-64 SENE Tank Battery

Project Number: [none]  
Project Manager: Paul Henehan

**Reported:**  
07/06/23 11:10

### 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.
- I-02 This sample was analyzed outside of the recommended holding time.
- 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