

FREMONT ENVIRONMENTAL INC.

May 4, 2023

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

Subject: **Flowline Closure Data Submittal**
Born Sitzman 1 (Flowline)
API # 05-123-11308
NENE Sec. 27, T4N, R64W
Weld County, Colorado
Fremont Project No. C023-067
Facility # 243516, Remediation #25836

Dear Mr. Peterson:

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

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

Sincerely,

FREMONT ENVIRONMENTAL INC.



Paul V. Henehan, P.E.
Senior Consultant

Attachments:

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

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

Flowline Closure Checklist

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

Additional Attachments:		Tank Battery Closure		Wellhead Closure		Pit Closure		Partially Buried Vault Closure
Site Name & Number: COGCC Facility Born Sitzman 1, C 27-17 Facility: 447576		Date: 03/03/2023			Remediation Project #: 25836			
Associated Wells: Born Sitzman 1 API: 05-123-11308 Facility ID: 243516		Age of Site: 1983			Number of Photos Attached: 5 Photos			

Starting point: (GPS coordinates and descriptions) **40.289063, -104.529671**

End point: (GPS coordinates and descriptions) **40.290145, -104.529578**

USCS Soil Type: **SC** Estimated Depth to Groundwater: **N/A**

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

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

Flowlines

Flowline type	2" Steel							
Depth	Roughly 3ft							
Age	1983							
Length	390ft							
Construction Material	None Present							
Were flowlines pulled?	Yes							
Visual Integrity of lines	No Damage							
Visual impacts if trenched	N/A							
PID Readings if trenched	High @ 7.8ppm							
Sample taken? Location/Sample ID#	1FL01 @ 4.0' 1FL05 @ 3.0'							
Photo Number(s)	Photos 1A-1E							

Other observations regarding on location flowlines:

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: 5 samples		
Highest PID Reading: High @ 7.8ppm (1FL01 @ 4.0')		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?		No	Yes - not impacted or in contact with impacted soils	Yes - groundwater impacted and/or in contact with impacted soils
Measured depth to groundwater: N/A		Was remedial groundwater removal conducted? Yes No		
Date Groundwater was encountered: N/A		Commencement date of removal: N/A		
Sheen on groundwater? Yes No		Volume of groundwater removed prior to sampling: N/A		
Free product observed? Yes No		Volume of groundwater removed post sampling: N/A		
Total number of samples collected: N/A		Total Volume of groundwater removed: N/A		
Total number of samples submitted to lab for analysis: N/A				

TABLE 1
SUMMARY OF VOLATILE ORGANIC SOIL CHEMISTRY DATA
NOBLE ENERGY INC.
BORN SITZMAN 1, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C023-067

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		
1FL01@4.0'	3/3/2023	4.0 Ft	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
1FL05@3.0'	3/3/2023	3.0 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)

* 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.
BORN SITZMAN 1, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C023-067

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
1FL01@4.0'	3/3/2023	4.0 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
1FL05@3.0'	3/3/2023	3.0 Ft	<0.00500	<0.00500	0.00512	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00728	<0.00500	<0.00500	0.00843	<0.00500	<0.00500

Bold faced values exceed the COGCC Table 915-1 concentrations

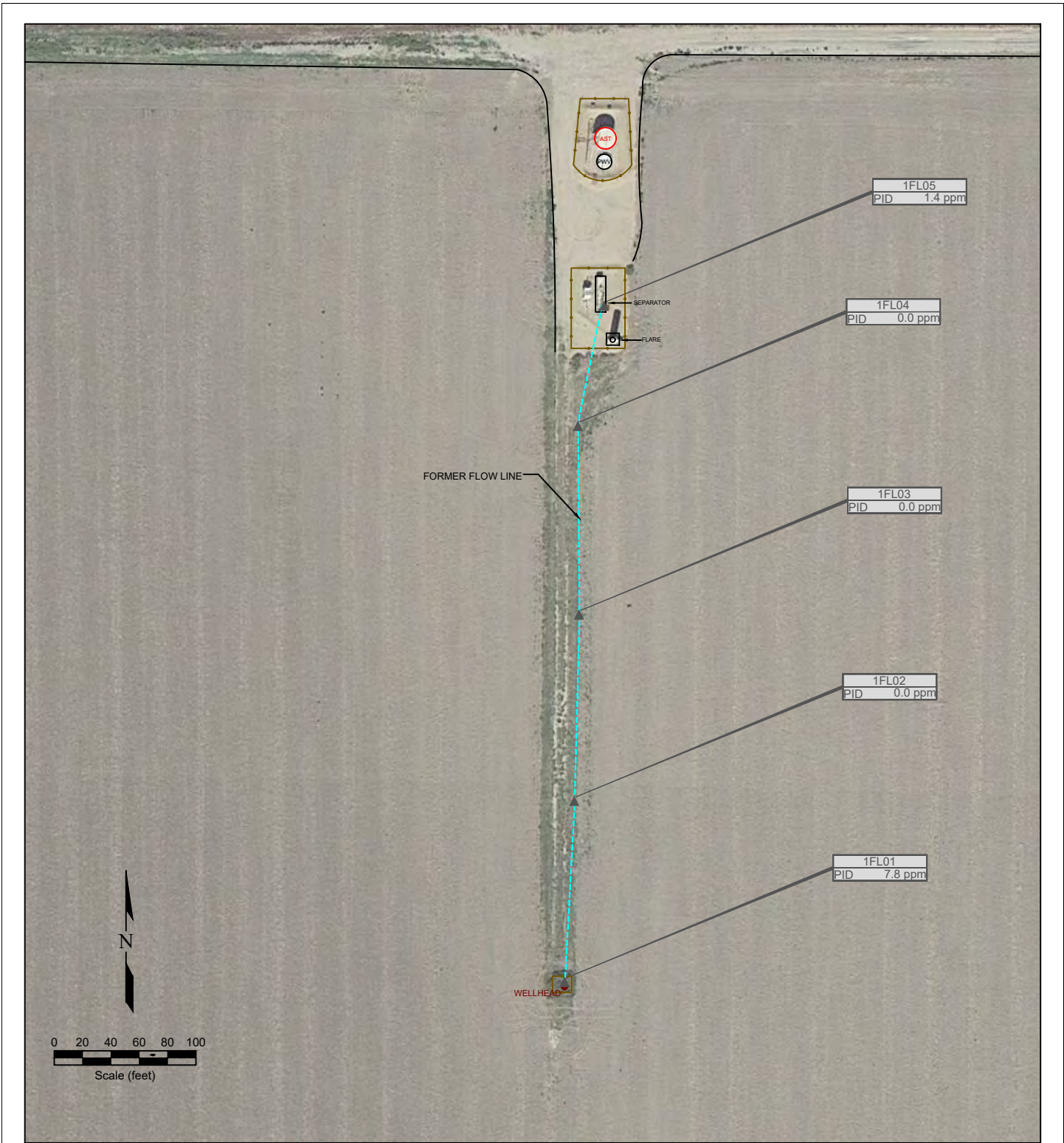
Red & blue highlighted 915-1 Limits indicate the referenced soil screening level (SSL)

TABLE 3
SUMMARY OF SOIL SUITABILITY FOR RECLAMATION
NOBLE ENERGY INC.
BORN SITZMAN 1, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C023-067

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
1FL01@4.0'	3/3/2023	4.0 Ft	8.03	0.174	0.831	0.490
1FL05@3.0'	3/3/2023	3.0 Ft	7.81	0.146	0.245	0.325

Bold faced values exceed the COGCC Table 915-1 concentrations

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



LEGEND

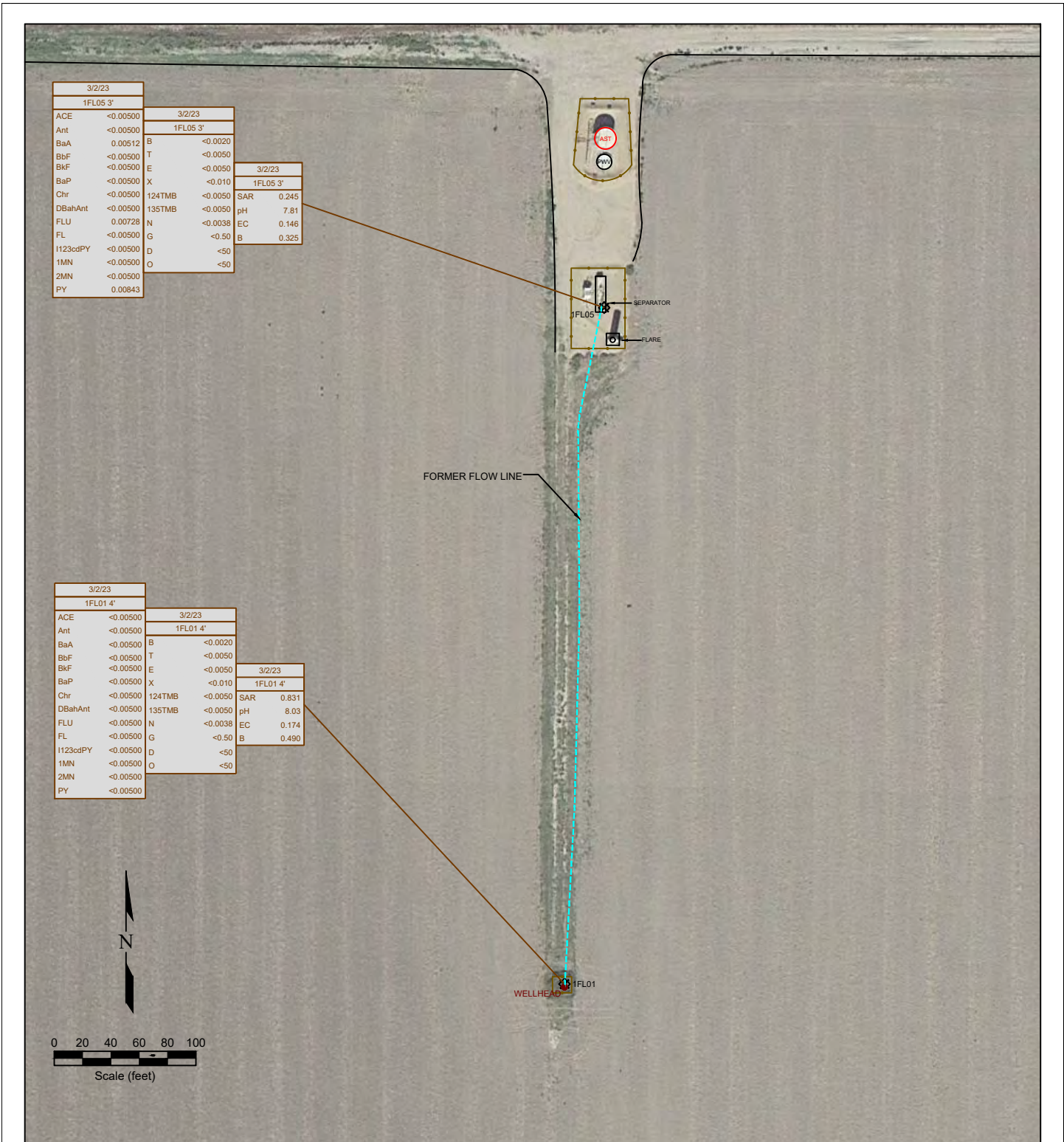
● WELL HEAD LOCATION	AST ABOVE GROUND STORAGE TANK	FORMER FACILITY	— FENCE LINE
▲ PID READING LOCATION			▤ CONTAINMENT BERM
			— CONTAINMENT WALL
			- - - FLOW LINE

**Figure 2
SITE MAP**

NOBLE ENERGY INC~ BORN SITZMAN 1

NENE Sec. 27, T4N, R64W, 6th PM
Weld County, Colorado
40.289050°, -104.529660°

Project No. C023-067	API # 05-123-11308	Facility # 243516	
Date 4/19/23	Remediation # 25836	Filename 23067Q	



3/2/23		3/2/23	
1FL05 3'		1FL05 3'	
ACE	<0.00500	B	<0.0020
Ant	<0.00500	T	<0.0050
BaA	0.00512	E	<0.0050
BbF	<0.00500	X	<0.010
BkF	<0.00500	124TMB	<0.0050
BaP	<0.00500	135TMB	<0.0050
Chr	<0.00500	N	<0.0038
DBahAnt	<0.00500	G	<0.50
FLU	0.00728	D	<50
FL	<0.00500	O	<50
I123cdPY	<0.00500		
1MN	<0.00500		
2MN	<0.00500		
PY	0.00843		

3/2/23		3/2/23	
1FL01 4'		1FL01 4'	
ACE	<0.00500	B	<0.0020
Ant	<0.00500	T	<0.0050
BaA	<0.00500	E	<0.0050
BbF	<0.00500	X	<0.010
BkF	<0.00500	124TMB	<0.0050
BaP	<0.00500	135TMB	<0.0050
Chr	<0.00500	N	<0.0038
DBahAnt	<0.00500	G	<0.50
FLU	<0.00500	D	<50
FL	<0.00500	O	<50
I123cdPY	<0.00500		
1MN	<0.00500		
2MN	<0.00500		
PY	<0.00500		

3/2/23	
1FL05 3'	
SAR	0.245
pH	7.81
EC	0.146
B	0.325

3/2/23	
1FL01 4'	
SAR	0.831
pH	8.03
EC	0.174
B	0.490

LEGEND

- WELL HEAD LOCATION
- ⊗ SOIL SAMPLE LOCATION
- AST ABOVE GROUND STORAGE TANK
- FORMER FACILITY
- FENCE LINE
- CONTAINMENT BERM
- CONTAINMENT WALL
- FLOW LINE

03/24/2021		DATE SAMPLED	
N Wall @ 3'		SAMPLE ID and DEPTH (ft)	
ACE	<0.005	ACENAPHTHENE (mg/kg)	
Ant	<0.005	ANTHRACENE (mg/kg)	
BaA	<0.005	BENZO (A) ANTHRACENE (mg/kg)	
BbF	<0.005	BENZO (B) FLUORANTHENE (mg/kg)	
BkF	<0.005	BENZO (K) FLUORANTHENE (mg/kg)	
BaP	<0.005	BENZO (A) PYRENE (mg/kg)	
Chr	<0.005	CHRYSENE (mg/kg)	
DBahAnt	<0.005	DBENZ (A,H) ANTHRACENE (mg/kg)	
FLU	<0.005	FLUORENE (mg/kg)	
FL	<0.005	FLUORANTHENE (mg/kg)	
I123cdPY	<0.005	INDENO (1,2,3-CD) PYRENE (mg/kg)	
1-MN	<0.005	1-METHYLNAPHTHALENE (mg/kg)	
2-MN	<0.005	2-METHYLNAPHTHALENE (mg/kg)	
PY	<0.005	PYRENE (mg/kg)	

Figure 3
SOIL CHEMISTRY MAP
NOBLE ENERGY INC~ BORN SITZMAN 1

NENE Sec. 27, T4N, R64W, 6th PM
 Weld County, Colorado
 40.289050°, -104.529660°

Project No. C023-067	API # 05-123-11308	Facility # 243516
Date 4/19/23	Remediation # 25836	Filename 23067Q

Photo Log



Description:

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Photo Log



Description:

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Photo Log



Description:

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Photo Log



Description:

Photo Log



Description:

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Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

March 14, 2023

Paul Henchan
Fremont Environmental
PO Box 1289
Wellington, CO 80549

RE: Noble - Born Sitzman 1
Work Order #2303101

Enclosed are the results of analyses for samples received by Summit Scientific on 03/03/23 13:55. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Scott Sheely For Paul Shrewsbury
President



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Born Sitzman 1

Project Number: [none]
Project Manager: Paul Henchan

Reported:
03/14/23 10:54

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
1FL01@4.0'	2303101-01	Soil	03/03/23 00:00	03/03/23 13:55
1FL05@3.0'	2303101-02	Soil	03/03/23 00:00	03/03/23 13:55

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.

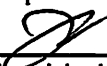

SUMMIT SCIENTIFIC

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

Lab ID	Page 1 of 1
2303101	

Client: Fremont Env	Send Data To: Project Manager: Paul Henehan	Send Invoice To: Company: Noble
Address:	E-Mail: Paulh@Fremontenv.com	Project Name/Location:
City/State/Zip:	jeffg@Fremontenv.com Ethahb@Fremontenv.com	AFE#:
Phone:	Project Name: Ron Sitzman 1	PO/Billing Codes:
Sampler Name: J6	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)	GR0, OR0, DR0	PAHs (915)	EC, PH, SAR, GERM		
1	1FL01@4.0'	03/03/23		1			X			X				X	X	X	X	X	
2	1FL05@3.0'	03/03/23		1			X			X				X	X	X	X	X	
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			

Relinquished by:  Date/Time: 03/03/23	Received by:  Date/Time: 03-03-23 13:55	TAT Business Days	Field DO	Notes: Bill to Noble
Relinquished by: _____ Date/Time: _____	Received by: _____ Date/Time: _____	Same Day	Field EC	
Relinquished by: _____ Date/Time: _____	Received by: _____ Date/Time: _____	1 Day	Field ORP	
Relinquished by: _____ Date/Time: _____	Received by: _____ Date/Time: _____	2 Days	Field pH	
Relinquished by: _____ Date/Time: _____	Received by: _____ Date/Time: _____	3 Days	Field Temp.	
Temperature Upon Receipt: 8.4	Corrected Temperature _____	Standard	<input checked="" type="checkbox"/> Field Turb.	
	IR gun #: 02	HNO3 lot #:		

S₂

Sample Receipt Checklist

S2 Work Order# 2303101

Client: Fremont End Client Project ID: Born Sitzman 7

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

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

Temp (°C) 8.4 Thermometer # 02

	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"/>	
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	pH
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling)? ⁽¹⁾ Note the type of preservative in the comments column – HCl, H ₂ SO ₄ , NaOH, HNO ₃ , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2? ⁽¹⁾ Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Additional Comments (if any):

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

Gavin Stonehouse
Custodian Printed Name

03-03-23 13:59
Date/Time



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Born Sitzman 1

Project Number: [none]
Project Manager: Paul Henchan

Reported:
03/14/23 10:54

1FL01@4.0'
2303101-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/03/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BGC0128	03/06/23	03/06/23	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: **03/03/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0285	71.2 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0326	81.5 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0340	85.0 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/03/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BGC0131	03/06/23	03/07/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **03/03/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	9.27	74.1 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Born Sitzman 1

Project Number: [none]
Project Manager: Paul Henchan

Reported:
03/14/23 10:54

1FL01@4.0'
2303101-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/03/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGC0123	03/06/23	03/07/23	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: **03/03/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0196	58.7 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0182	54.7 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/03/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.490	0.0100	mg/L	1	BGC0145	03/06/23	03/08/23	EPA 6020B	

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

Date Sampled: **03/03/23 00:00**

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

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Born Sitzman 1

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 03/14/23 10:54

1FL01@4.0'
2303101-01 (Soil)

Summit Scientific

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	48.8	0.0620	mg/L dry	1	BGC0273	03/09/23	03/14/23	EPA 6020B	
Magnesium	12.0	0.0620	"	"	"	"	"	"	
Sodium	25.0	0.0620	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **03/03/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.831	0.00100	units	1	BGC0379	03/14/23	03/14/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/03/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	80.7		%	1	BGC0196	03/07/23	03/08/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/03/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.174	0.0100	mmhos/cm	1	BGC0303	03/10/23	03/10/23	EPA 120.1	

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

Date Sampled: **03/03/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.03		pH Units	1	BGC0304	03/10/23	03/10/23	EPA 9045D	

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PO Box 1289
Wellington CO, 80549

Project: Noble - Born Sitzman 1

Project Number: [none]
Project Manager: Paul Henchan

Reported:
03/14/23 10:54

1FL05@3.0'
2303101-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/03/23 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	BGC0128	03/06/23	03/06/23	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: **03/03/23 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4	0.0279	69.8 %	50-150	"	"	"	"	"	
Surrogate: Toluene-d8	0.0331	82.7 %	50-150	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0343	85.8 %	50-150	"	"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/03/23 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	BGC0131	03/06/23	03/07/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **03/03/23 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl	10.5	83.9 %	30-150	"	"	"	"	"	

PAH by EPA Method 8270D SIM

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Project: Noble - Born Sitzman 1

Project Number: [none]
Project Manager: Paul Henchan

Reported:
03/14/23 10:54

1FL05@3.0'
2303101-02 (Soil)

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PAH by EPA Method 8270D SIM

Date Sampled: **03/03/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGC0123	03/06/23	03/07/23	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	0.00512	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	0.00728	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	0.00843	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **03/03/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0224	67.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0244	73.3 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/03/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.325	0.0100	mg/L	1	BGC0145	03/06/23	03/08/23	EPA 6020B	

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

Date Sampled: **03/03/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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PO Box 1289
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Project: Noble - Born Sitzman 1

Project Number: [none]
Project Manager: Paul Henchan

Reported:
03/14/23 10:54

1FL05@3.0'
2303101-02 (Soil)

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	42.4	0.0608	mg/L dry	1	BGC0273	03/09/23	03/14/23	EPA 6020B	
Magnesium	13.1	0.0608	"	"	"	"	"	"	
Sodium	7.12	0.0608	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **03/03/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.245	0.00100	units	1	BGC0379	03/14/23	03/14/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/03/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	82.2		%	1	BGC0196	03/07/23	03/08/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/03/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.146	0.0100	mmhos/cm	1	BGC0303	03/10/23	03/10/23	EPA 120.1	

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

Date Sampled: **03/03/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.81		pH Units	1	BGC0304	03/10/23	03/10/23	EPA 9045D	

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Project: Noble - Born Sitzman 1

Project Number: [none]
Project Manager: Paul Henchan

Reported:
03/14/23 10:54

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 BGC0128 - EPA 5030 Soil MS

Blank (BGC0128-BLK1)

Prepared & Analyzed: 03/06/23

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>	0.0429		"	0.0400		107	50-150			
<i>Surrogate: Toluene-d8</i>	0.0396		"	0.0400		99.1	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0416		"	0.0400		104	50-150			

LCS (BGC0128-BS1)

Prepared & Analyzed: 03/06/23

Benzene	0.154	0.0020	mg/kg	0.150		103	70-130			
Toluene	0.156	0.0050	"	0.150		104	70-130			
Ethylbenzene	0.159	0.0050	"	0.150		106	70-130			
m,p-Xylene	0.322	0.010	"	0.300		107	70-130			
o-Xylene	0.156	0.0050	"	0.150		104	70-130			
1,2,4-Trimethylbenzene	0.162	0.0050	"	0.150		108	70-130			
1,3,5-Trimethylbenzene	0.162	0.0050	"	0.150		108	70-130			
Naphthalene	0.181	0.0038	"	0.150		121	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0422		"	0.0400		106	50-150			
<i>Surrogate: Toluene-d8</i>	0.0394		"	0.0400		98.6	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0402		"	0.0400		100	50-150			

Matrix Spike (BGC0128-MS1)

Source: 2303077-01

Prepared & Analyzed: 03/06/23

Benzene	0.141	0.0020	mg/kg	0.150	ND	93.7	70-130			
Toluene	0.144	0.0050	"	0.150	ND	96.2	70-130			
Ethylbenzene	0.144	0.0050	"	0.150	ND	95.8	70-130			
m,p-Xylene	0.290	0.010	"	0.300	ND	96.7	70-130			
o-Xylene	0.141	0.0050	"	0.150	ND	93.8	70-130			
1,2,4-Trimethylbenzene	0.144	0.0050	"	0.150	ND	96.0	70-130			
1,3,5-Trimethylbenzene	0.145	0.0050	"	0.150	ND	96.7	70-130			
Naphthalene	0.166	0.0038	"	0.150	ND	111	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0441		"	0.0400		110	50-150			
<i>Surrogate: Toluene-d8</i>	0.0402		"	0.0400		100	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0408		"	0.0400		102	50-150			

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Project: Noble - Born Sitzman 1

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 03/14/23 10:54

Volatile Organic Compounds by EPA Method 8260B - Quality Control

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

Batch BGC0128 - EPA 5030 Soil MS

Matrix Spike Dup (BGC0128-MSD1)	Source: 2303077-01			Prepared & Analyzed: 03/06/23						
Benzene	0.141	0.0020	mg/kg	0.150	ND	93.7	70-130	0.00	30	
Toluene	0.143	0.0050	"	0.150	ND	95.3	70-130	0.961	30	
Ethylbenzene	0.143	0.0050	"	0.150	ND	95.1	70-130	0.817	30	
m,p-Xylene	0.288	0.010	"	0.300	ND	96.0	70-130	0.758	30	
o-Xylene	0.139	0.0050	"	0.150	ND	92.7	70-130	1.16	30	
1,2,4-Trimethylbenzene	0.142	0.0050	"	0.150	ND	94.4	70-130	1.72	30	
1,3,5-Trimethylbenzene	0.142	0.0050	"	0.150	ND	94.9	70-130	1.82	30	
Naphthalene	0.164	0.0038	"	0.150	ND	109	70-130	1.69	30	
Surrogate: 1,2-Dichloroethane-d4	0.0440		"	0.0400		110	50-150			
Surrogate: Toluene-d8	0.0403		"	0.0400		101	50-150			
Surrogate: 4-Bromofluorobenzene	0.0403		"	0.0400		101	50-150			

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Project: Noble - Born Sitzman 1

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 03/14/23 10:54

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 BGC0131 - EPA 3550A

Blank (BGC0131-BLK1)

Prepared & Analyzed: 03/06/23

C10-C28 (DRO)	ND	50	mg/kg								
C28-C36 (ORO)	ND	50	"								
Surrogate: <i>o</i> -Terphenyl	12.5		"	12.5	100	30-150					

LCS (BGC0131-BS1)

Prepared & Analyzed: 03/06/23

C10-C28 (DRO)	469	50	mg/kg	500	93.9	70-130					
Surrogate: <i>o</i> -Terphenyl	13.0		"	12.5	104	30-150					

Matrix Spike (BGC0131-MS1)

Source: 2303077-01

Prepared & Analyzed: 03/06/23

C10-C28 (DRO)	497	50	mg/kg	500	11.1	97.1	70-130				
Surrogate: <i>o</i> -Terphenyl	8.06		"	12.5	64.5	30-150					

Matrix Spike Dup (BGC0131-MSD1)

Source: 2303077-01

Prepared & Analyzed: 03/06/23

C10-C28 (DRO)	504	50	mg/kg	500	11.1	98.6	70-130	1.51	20		
Surrogate: <i>o</i> -Terphenyl	7.71		"	12.5	61.7	30-150					

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Project: Noble - Born Sitzman 1

Project Number: [none]
Project Manager: Paul Henchan

Reported:
03/14/23 10:54

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 BGC0123 - EPA 5030 Soil MS

Blank (BGC0123-BLK1)

Prepared & Analyzed: 03/06/23

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	0.0491		"	0.0333		147	40-150			
Surrogate: Fluoranthene-d10	0.0269		"	0.0333		80.8	40-150			

LCS (BGC0123-BS1)

Prepared & Analyzed: 03/06/23

Acenaphthene	0.0308	0.00500	mg/kg	0.0333		92.5	31-137			
Anthracene	0.0334	0.00500	"	0.0333		100	30-120			
Benzo (a) anthracene	0.0257	0.00500	"	0.0333		77.0	30-120			
Benzo (a) pyrene	0.0338	0.00500	"	0.0333		101	30-120			
Benzo (b) fluoranthene	0.0293	0.00500	"	0.0333		87.9	30-120			
Benzo (k) fluoranthene	0.0311	0.00500	"	0.0333		93.3	30-120			
Chrysene	0.0325	0.00500	"	0.0333		97.5	30-120			
Dibenz (a,h) anthracene	0.0323	0.00500	"	0.0333		96.8	30-120			
Fluoranthene	0.0364	0.00500	"	0.0333		109	30-120			
Fluorene	0.0399	0.00500	"	0.0333		120	30-120			
Indeno (1,2,3-cd) pyrene	0.0322	0.00500	"	0.0333		96.7	30-120			
Pyrene	0.0332	0.00500	"	0.0333		99.7	35-142			
1-Methylnaphthalene	0.0330	0.00500	"	0.0333		99.0	35-142			
2-Methylnaphthalene	0.0303	0.00500	"	0.0333		90.8	35-142			
Surrogate: 2-Methylnaphthalene-d10	0.0333		"	0.0333		99.9	40-150			
Surrogate: Fluoranthene-d10	0.0355		"	0.0333		107	40-150			

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Born Sitzman 1

Project Number: [none]
Project Manager: Paul Henchan

Reported:
03/14/23 10:54

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 BGC0123 - EPA 5030 Soil MS

Matrix Spike (BGC0123-MS1)	Source: 2303077-01			Prepared & Analyzed: 03/06/23							
Acenaphthene	0.0188	0.00500	mg/kg	0.0333	ND	56.5	31-137				
Anthracene	0.0212	0.00500	"	0.0333	ND	63.7	30-120				
Benzo (a) anthracene	0.0187	0.00500	"	0.0333	ND	56.1	30-120				
Benzo (a) pyrene	0.0198	0.00500	"	0.0333	ND	59.3	30-120				
Benzo (b) fluoranthene	0.0156	0.00500	"	0.0333	ND	46.7	30-120				
Benzo (k) fluoranthene	0.0163	0.00500	"	0.0333	ND	48.8	30-120				
Chrysene	0.0165	0.00500	"	0.0333	ND	49.4	30-120				
Dibenz (a,h) anthracene	0.0213	0.00500	"	0.0333	ND	63.9	30-120				
Fluoranthene	0.0248	0.00500	"	0.0333	ND	74.3	30-120				
Fluorene	0.0278	0.00500	"	0.0333	ND	83.3	30-120				
Indeno (1,2,3-cd) pyrene	0.0188	0.00500	"	0.0333	ND	56.5	30-120				
Pyrene	0.0221	0.00500	"	0.0333	ND	66.4	35-142				
1-Methylnaphthalene	0.0233	0.00500	"	0.0333	ND	70.0	15-130				
2-Methylnaphthalene	0.0256	0.00500	"	0.0333	ND	76.8	15-130				
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0260</i>		<i>"</i>	<i>0.0333</i>		<i>78.0</i>	<i>40-150</i>				
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0259</i>		<i>"</i>	<i>0.0333</i>		<i>77.7</i>	<i>40-150</i>				

Matrix Spike Dup (BGC0123-MSD1)	Source: 2303077-01			Prepared & Analyzed: 03/06/23							
Acenaphthene	0.0185	0.00500	mg/kg	0.0333	ND	55.5	31-137	1.87	30		
Anthracene	0.0227	0.00500	"	0.0333	ND	68.0	30-120	6.58	30		
Benzo (a) anthracene	0.0209	0.00500	"	0.0333	ND	62.8	30-120	11.3	30		
Benzo (a) pyrene	0.0212	0.00500	"	0.0333	ND	63.7	30-120	7.22	30		
Benzo (b) fluoranthene	0.0165	0.00500	"	0.0333	ND	49.4	30-120	5.54	30		
Benzo (k) fluoranthene	0.0175	0.00500	"	0.0333	ND	52.6	30-120	7.46	30		
Chrysene	0.0180	0.00500	"	0.0333	ND	53.9	30-120	8.81	30		
Dibenz (a,h) anthracene	0.0234	0.00500	"	0.0333	ND	70.2	30-120	9.39	30		
Fluoranthene	0.0252	0.00500	"	0.0333	ND	75.7	30-120	1.84	30		
Fluorene	0.0290	0.00500	"	0.0333	ND	87.0	30-120	4.35	30		
Indeno (1,2,3-cd) pyrene	0.0220	0.00500	"	0.0333	ND	66.1	30-120	15.7	30		
Pyrene	0.0233	0.00500	"	0.0333	ND	69.8	35-142	5.04	30		
1-Methylnaphthalene	0.0220	0.00500	"	0.0333	ND	65.9	15-130	6.10	50		
2-Methylnaphthalene	0.0242	0.00500	"	0.0333	ND	72.5	15-130	5.81	50		
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0244</i>		<i>"</i>	<i>0.0333</i>		<i>73.1</i>	<i>40-150</i>				
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0256</i>		<i>"</i>	<i>0.0333</i>		<i>76.8</i>	<i>40-150</i>				

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Fremont Environmental
 PO Box 1289
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Project: Noble - Born Sitzman 1

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 03/14/23 10:54

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 BGC0145 - EPA 3050B

Blank (BGC0145-BLK1)

Prepared: 03/06/23 Analyzed: 03/08/23

Boron ND 0.0100 mg/L

LCS (BGC0145-BS1)

Prepared: 03/06/23 Analyzed: 03/08/23

Boron 10.1 0.0100 mg/L 10.0 101 80-120

Duplicate (BGC0145-DUP1)

Source: 2303075-02

Prepared: 03/06/23 Analyzed: 03/08/23

Boron 0.128 0.0100 mg/L 0.141 9.93 20

Matrix Spike (BGC0145-MS1)

Source: 2303075-02

Prepared: 03/06/23 Analyzed: 03/08/23

Boron 10.1 0.0100 mg/L 10.0 0.141 99.6 75-125

Matrix Spike Dup (BGC0145-MSD1)

Source: 2303075-02

Prepared: 03/06/23 Analyzed: 03/08/23

Boron 10.1 0.0100 mg/L 10.0 0.141 99.3 75-125 0.286 25

Summit Scientific

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Born Sitzman 1

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 03/14/23 10:54

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 BGC0273 - General Preparation

Blank (BGC0273-BLK1)

Prepared: 03/09/23 Analyzed: 03/14/23

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

LCS (BGC0273-BS1)

Prepared: 03/09/23 Analyzed: 03/14/23

Calcium	5.40	0.0500	mg/L wet	5.00		108	70-130			
Magnesium	5.10	0.0500	"	5.00		102	70-130			
Sodium	4.97	0.0500	"	5.00		99.5	70-130			

Summit Scientific

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Born Sitzman 1

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 03/14/23 10:54

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

Summit Scientific

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

Batch BGC0196 - General Preparation

Duplicate (BGC0196-DUP1)	Source: 2302120-32	Prepared: 03/07/23	Analyzed: 03/08/23
% Solids	88.6	%	88.7
			0.128
			20

Summit Scientific

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Born Sitzman 1

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 03/14/23 10:54

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

Summit Scientific

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

Batch BGC0303 - General Preparation

Blank (BGC0303-BLK1)

Prepared & Analyzed: 03/10/23

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BGC0303-BS1)

Prepared & Analyzed: 03/10/23

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

Duplicate (BGC0303-DUP1)

Source: 2303075-01

Prepared & Analyzed: 03/10/23

Specific Conductance (EC) 0.101 0.0100 mmhos/cm 0.100 0.199 20

Summit Scientific

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Born Sitzman 1

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 03/14/23 10:54

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 BGC0304 - General Preparation

LCS (BGC0304-BS1)

Prepared & Analyzed: 03/10/23

pH	9.21	pH Units	9.18	100	95-105
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Duplicate (BGC0304-DUP1)

Source: 2303075-01

Prepared & Analyzed: 03/10/23

pH	7.80	pH Units	7.90	1.27	20
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Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Born Sitzman 1

Project Number: [none]
Project Manager: Paul Henchan

Reported:
03/14/23 10:54

Notes and Definitions

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