

FREMONT ENVIRONMENTAL INC.

February 8, 2023

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

Subject: **Flowline Closure Data Submittal**
Shelton H 01-24
API # 05-123-29948
NWSE Sec. 1, T3N, R65W
Weld County, Colorado
Fremont Project No. C023-033
Facility # 301290, Remediation #27003

Dear Mr. Peterson:

As you requested, Fremont Environmental Inc. (Fremont) personnel conducted Flowline Closure activities for the Noble Energy Inc. (Noble) Shelton H 01-24. Impacted soil was not encountered during abandonment activities. Details of the Shelton H 01-24 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 & COGCC Facility Number: <small>UPRC-63N65W 1NESW Facility: 327804</small>		Date: 02/08/2023			Remediation Project #: 27003			
Associated Wells: Shelton H 01-24 <small>Facility ID: 301290 API: 05-123-29948</small>		Age of Site: 2010			Number of Photos Attached: 5 Photos			

Starting point: (GPS coordinates and descriptions) **40.250787, -104.611332**

End point: (GPS coordinates and descriptions) **40.252983, -104.611651**

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

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

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

Flowlines

Flowline type	2" Steel							
Depth	Roughly 4ft							
Age	2010							
Length	806ft							
Construction Material	Non ACM / 2" Steel							
Were flowlines pulled?	Yes							
Visual Integrity of lines	No Damage							
Visual impacts if trenched	N/A							
PID Readings if trenched	High @ 0.4ppm							
Sample taken? Location/Sample ID#	SFL01 @6.0' SFL05 @5.0'							
Photo Number(s)	Photo 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 @ 0.4ppm (SFL05@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?		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.
SHELTON H 01-24, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C023-033

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		
SFL01@6.0'	2/8/2023	6.0 Ft	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
SFL05@5.0'	2/8/2023	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)

* 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.
SHELTON H 01-24, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C023-033

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
SFL01@6.0'	2/8/2023	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
SFL05@5.0'	2/8/2023	5.0 Ft	<0.00500	0.00950	0.0106	<0.00500	0.00810	<0.00500	0.00740	<0.00500	0.0232	0.00522	<0.00500	0.0186	<0.00500	<0.00500

Bold faced values exceed the COGCC Table 915-1 concentrations

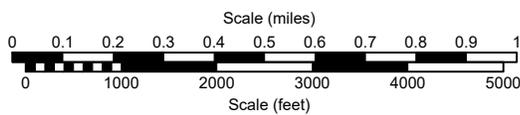
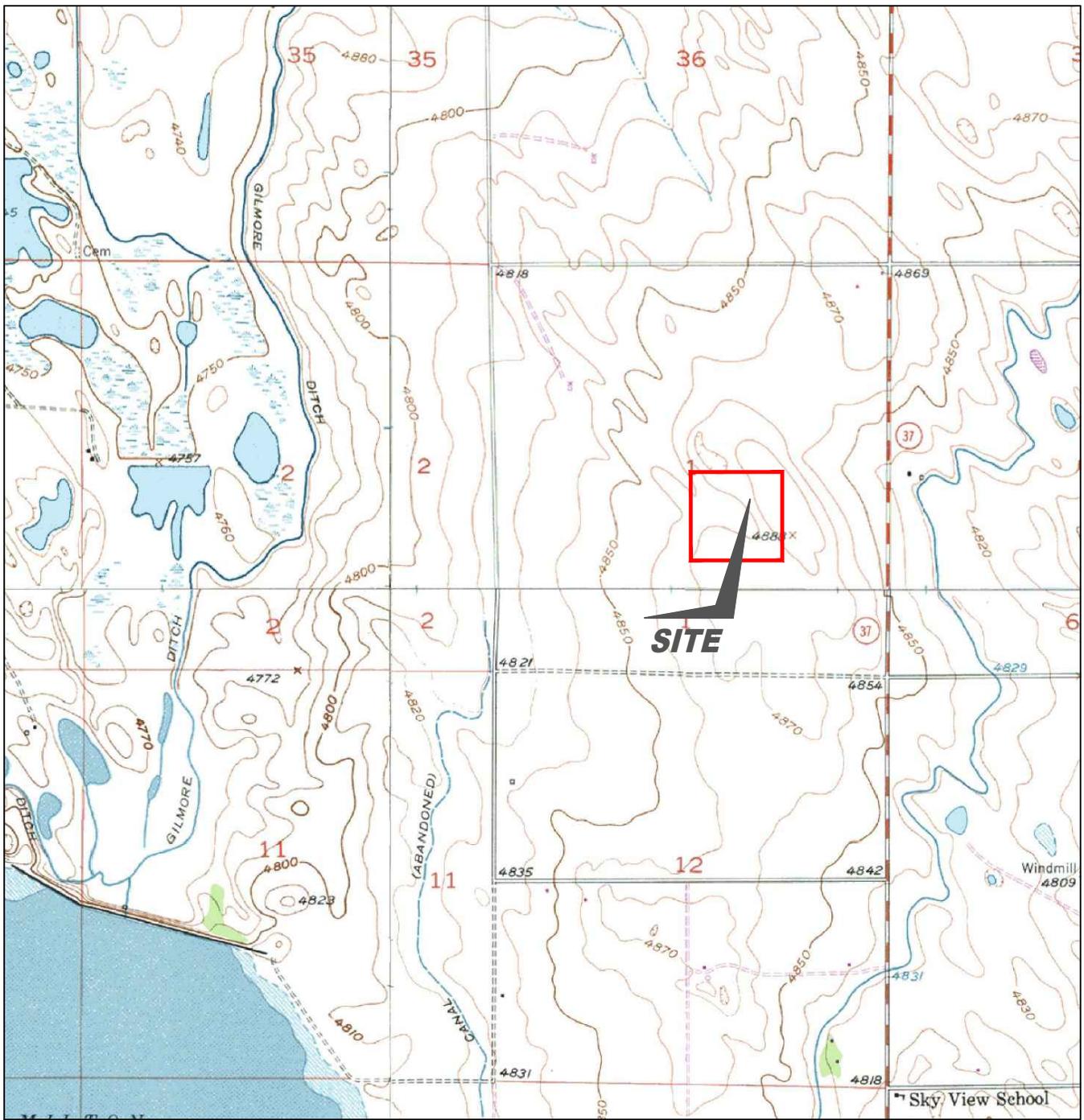
Red & blue highlighted 915-1 Limits indicate the referenced soil screening level (SSL)

TABLE 3
SUMMARY OF SOIL SUITABILITY FOR RECLAMATION
NOBLE ENERGY INC.
SHELTON H 01-24, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C023-033

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
SFL01@6.0'	2/8/2023	6.0 Ft	7.71	0.601	1.10	0.177
SFL05@5.0'	2/8/2023	5.0 Ft	7.43	0.614	0.437	0.103

Bold faced values exceed the COGCC Table 915-1 concentrations

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



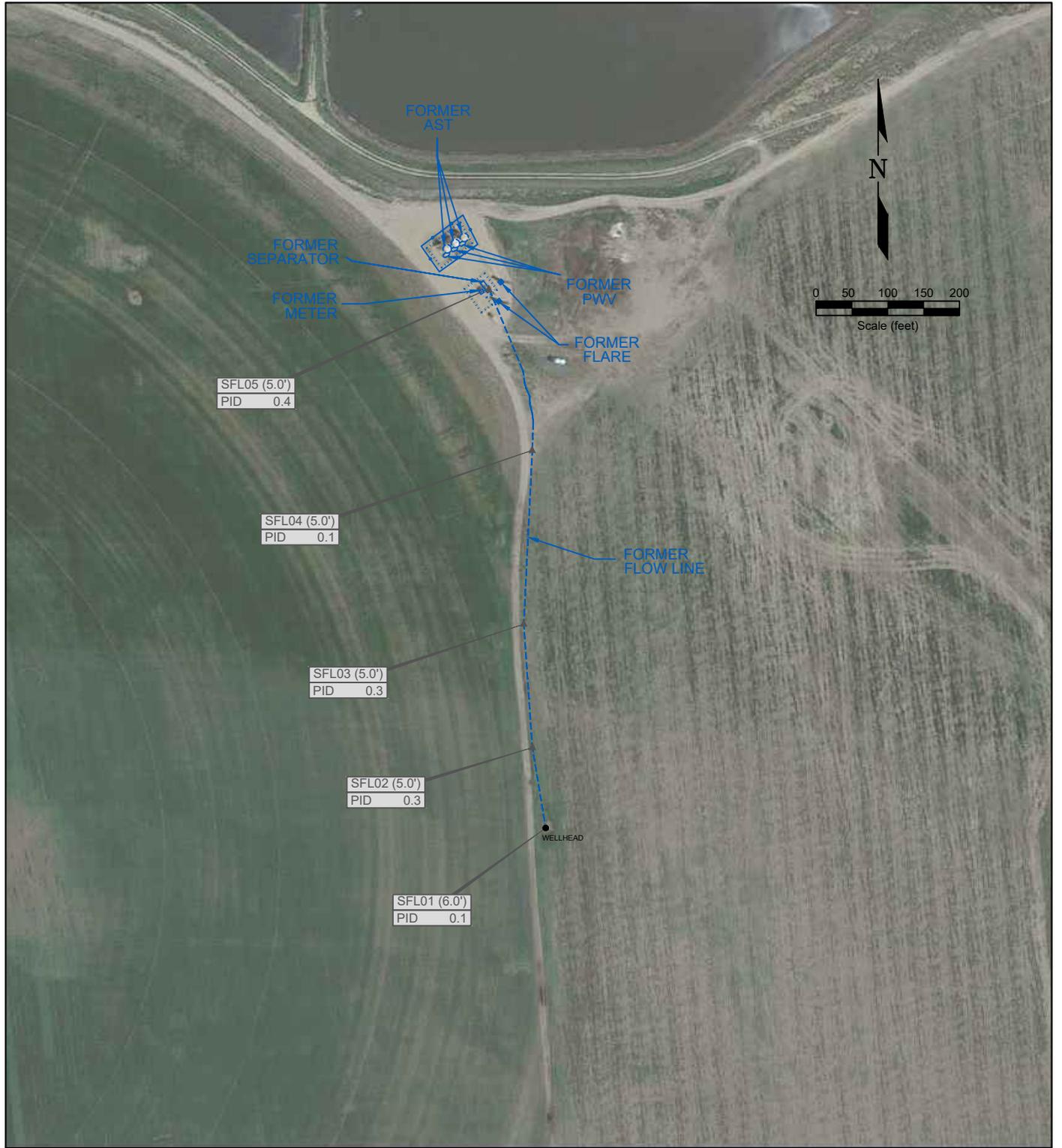
USGS 7.5 MINUTE SERIES (TOPOGRAPHIC)

Figure 1
SITE LOCATION MAP

NOBLE ENERGY INC - SHELTON H 01-24
 NWSE Sec. 1, T3N, R65W, 6th PM
 Weld County, Colorado
 40.250795°, -104.611341°

Project # CO23-033	API # 05-123-29948	Facility # 301290
Date 11/01/2023	Remediation # 27003	Filename 23033T





LEGEND

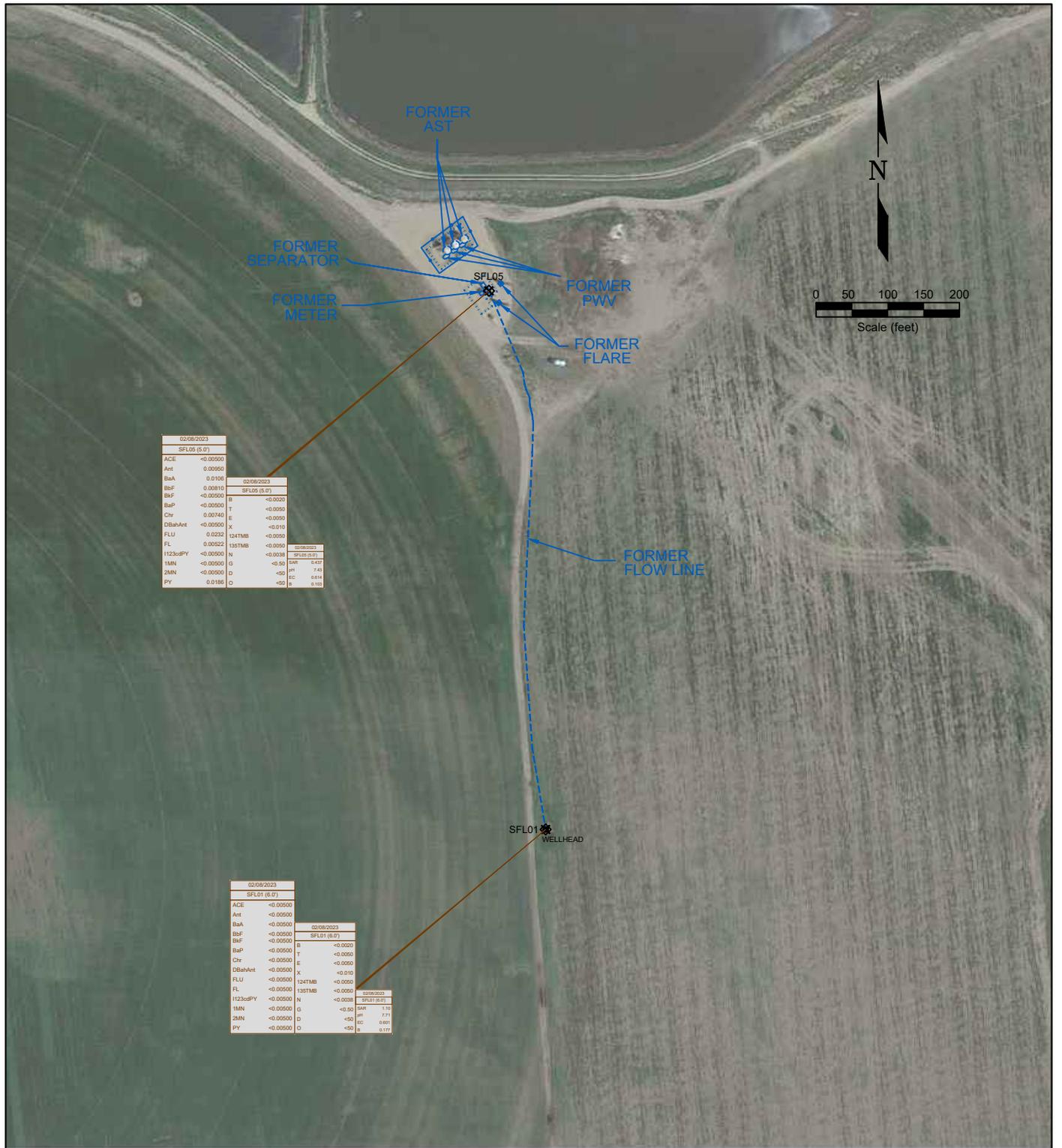
- WELLHEAD LOCATION
 - ▲ PID READING LOCATION
 - ABOVE GROUND STORAGE TANK
 - FORMER FACILITY
 - FLOW LINE
 - ▬ CONTAINMENT BERM
 - ▬ FENCE LINE
- | | |
|---------|-------------------------------------|
| FLO1 | PID READING LOCATION IDENTIFICATION |
| PID 0.1 | PHOTO IONIZATION DETECTION (ppm) |

**Figure 2
SITE MAP**

NOBLE ENERGY INC - SHELTON H 01-24
 NWSE Sec. 1, T3N, R65W, 6th PM
 Weld County, Colorado
 40.250795°, -104.611341°

Project # CO23-033	API # 05-123-29948	Facility # 301290
Date 11/01/2023	Remediation # 27003	Filename 23033Q





02/08/2023	
SFL05 (8.0')	
ACE	<0.00500
Ant	0.00500
BaA	0.0186
BbF	0.00810
BaP	<0.00500
Chr	0.00760
DBahAnt	<0.00500
FLU	0.0232
FL	0.00522
1123cdPY	<0.00500
1MN	<0.00500
2MN	<0.00500
PY	0.0186

02/08/2023	
SFL05 (8.0')	
SAR	0.427
pH	7.43
EC	0.14
Cl	0.38

02/08/2023	
SFL01 (8.0')	
ACE	<0.00500
Ant	<0.00500
BaA	<0.00500
BbF	<0.00500
BaP	<0.00500
Chr	<0.00500
DBahAnt	<0.00500
FLU	<0.00500
FL	<0.00500
1123cdPY	<0.00500
1MN	<0.00500
2MN	<0.00500
PY	<0.00500

02/08/2023	
SFL01 (8.0')	
SAR	1.10
pH	7.77
EC	0.601
Cl	0.177

LEGEND

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

4/7/2023	DATE SAMPLED	4/7/2023	DATE SAMPLED	4/7/2023	DATE SAMPLED
FL01 (4')	SAMPLE ID and DEPTH (ft)	FL01 (4')	SAMPLE ID and DEPTH (ft)	FL01 (4')	SAMPLE ID and DEPTH (ft)
ACE	<0.00500	B	<0.00500	SAR	0.999
Ant	<0.00500	T	<0.00500	pH	8.94
BaA	<0.00500	E	<0.00500	EC	0.385
BbF	<0.00500	X	<0.010	Cl	0.255
BaP	<0.00500	N	<0.0038	[NA]	NOT ANALYZED
Chr	<0.00500	G	<0.50		
DBahAnt	<0.00500	D	<50		
FLU	<0.00500	O	<50		
FL	<0.00500				
1123cdPY	<0.00500				
1MN	<0.00500				
2MN	<0.00500				
PY	<0.00500				

Figure 3
SOIL CHEMISTRY MAP

NOBLE ENERGY INC - SHELTON H 01-24
NWSE Sec. 1, T3N, R65W, 6th PM
Weld County, Colorado
40.250795°, -104.611341°

Project # CO23-033	API # 05-123-29948	Facility # 301290	
Date 11/01/2023	Remediation # 27003	Filename 23033Q	

Photo Log



Description:

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Photo Log



Description:

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Photo Log



Description:

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Photo Log



Description:

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Photo Log



Description:

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Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

February 21, 2023

Paul Henchan
Fremont Environmental
PO Box 1289
Wellington, CO 80549

RE: Noble - Shelton H 01-24

Work Order #2302138

Enclosed are the results of analyses for samples received by Summit Scientific on 02/08/23 15:23. 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 - Shelton H 01-24

Project Number: [none]
Project Manager: Paul Henchan

Reported:
02/21/23 11:10

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SFL01@6.0'	2302138-01	Soil	02/08/23 00:00	02/08/23 15:23
SFL05@5.0'	2302138-02	Soil	02/08/23 00:00	02/08/23 15:23

Summit Scientific

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SUMMIT SCIENTIFIC

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

Lab ID	Page 1 of 1
2302/38	

Send Data To:		Send Invoice To:	
Client: Fremont Env	Project Manager: Paul Henahan	Company: Noble	
Address:	E-Mail: Paulh@fremontenv.com	Project Name/Location:	
City/State/Zip:	jeff@fremontenv.com Ethan@fremontenv.com	AFE#:	
Phone:	Project Name: Shelton H 01-24	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)	GRO,ORO,DRP	PAHs (915)		EC,PH,SAR,Baron
1	SFL01@6.0'	2/8/23		2			X			X			X	X	X	X	X	
2	SFL05@5.0'	2/8/23		2			X			X			X	X	X	X	X	
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		

Relinquished by: 	Date/Time: 2/8/23	Received by: 	Date/Time: 2/8/23 1523	TAT Business Days	Field DO	Notes: Bill to Noble
Relinquished by:	Date/Time:	Received by:	Date/Time:	Same Day	Field EC	
				1 Day	Field ORP	
				2 Days	Field pH	
				3 Days	Field Temp.	
				Standard	<input checked="" type="checkbox"/> Field Turb.	
Temperature Upon Receipt: 7.4	Corrected Temperature: —	IR gun #: 02	HNO3 lot #:			

S₂

Sample Receipt Checklist

S2 Work Order# 2302138

Client: Fremont Env Client Project ID: Shelton H 01-24

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

[] [] [] [] []

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

Temp (°C) 7.4

Thermometer # []

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? (1) NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	[x]	[]	[]	on Ice
If custody seals are present, are they intact? (1)	[]	[]	[x]	
Are samples due within 48 hours present?	[]	[x]	[]	
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	[]	[x]	[]	JK 2/8/23
Is a chain-of-custody (COC) form present and filled out Completely? (1)	[x]	[]	[]	
Is the COC properly relinquished by the client w/ date and time recorded? (1)	[x]	[]	[]	
Were all samples received intact? (1)	[x]	[]	[]	
Was adequate sample volume provided? (1)	[x]	[]	[]	
Does the COC agree with the number and type of sample bottles received? (1)	[x]	[]	[]	
Do the sample IDs on the bottle labels match the COC? (1)	[x]	[]	[]	
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	[]	[]	[x]	
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.	[]	[]	[x]	
If samples are acid preserved for metals, is the pH ≤ 2? (1) Record the pH in Comments.	[]	[]	[x]	
If dissolved metals are requested, were samples field filtered?	[]	[]	[x]	
Additional Comments (if any):				
(1) If NO, then contact the client before proceeding with analysis and note in case narrative.				

JJ
Custodian Printed Name

2/8/23 1523
Date/Time



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Shelton H 01-24

Project Number: [none]
Project Manager: Paul Henchan

Reported:
02/21/23 11:10

SFL01@6.0'
2302138-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/08/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BGB0243	02/09/23	02/10/23	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: **02/08/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0328	82.0 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0365	91.4 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0398	99.5 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **02/08/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BGB0246	02/09/23	02/11/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **02/08/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	14.4	115 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Shelton H 01-24

Project Number: [none]
Project Manager: Paul Henchan

Reported:
02/21/23 11:10

SFL01@6.0'
2302138-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **02/08/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGB0297	02/10/23	02/11/23	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: **02/08/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0192	57.5 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0267	80.2 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **02/08/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.177	0.0100	mg/L	1	BGB0312	02/10/23	02/13/23	EPA 6020B	

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

Date Sampled: **02/08/23 00:00**

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

Project: Noble - Shelton H 01-24

Project Number: [none]
Project Manager: Paul Henchan

Reported:
02/21/23 11:10

SFL01@6.0'
2302138-01 (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	84.8	0.0547	mg/L dry	1	BGB0374	02/13/23	02/15/23	EPA 6020B	
Magnesium	34.8	0.0547	"	"	"	"	"	"	
Sodium	47.7	0.0547	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **02/08/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.10	0.00100	units	1	BGB0455	02/15/23	02/15/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **02/08/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	91.4		%	1	BGB0366	02/13/23	02/13/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **02/08/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.601	0.0100	mmhos/cm	1	BGB0397	02/14/23	02/14/23	EPA 120.1	

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

Date Sampled: **02/08/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.71		pH Units	1	BGB0396	02/14/23	02/14/23	EPA 9045D	

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Shelton H 01-24

Project Number: [none]
Project Manager: Paul Henchan

Reported:
02/21/23 11:10

SFL05@5.0'
2302138-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/08/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BGB0243	02/09/23	02/10/23	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: **02/08/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0320	80.0 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0352	88.1 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0380	95.0 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **02/08/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BGB0246	02/09/23	02/11/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **02/08/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	13.1	105 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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PO Box 1289
Wellington CO, 80549

Project: Noble - Shelton H 01-24

Project Number: [none]
Project Manager: Paul Henchan

Reported:
02/21/23 11:10

SFL05@5.0'
2302138-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **02/08/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGB0297	02/10/23	02/11/23	EPA 8270D SIM	
Anthracene	0.00950	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	0.0106	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	0.00810	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	0.00740	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	0.0232	0.00500	"	"	"	"	"	"	
Fluorene	0.00522	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	0.0186	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **02/08/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0235	70.4 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0289	86.7 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **02/08/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.103	0.0100	mg/L	1	BGB0312	02/10/23	02/13/23	EPA 6020B	

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

Date Sampled: **02/08/23 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 - Shelton H 01-24

Project Number: [none]
Project Manager: Paul Henchan

Reported:
02/21/23 11:10

SFL05@5.0'
2302138-02 (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	54.5	0.0581	mg/L dry	1	BGB0374	02/13/23	02/15/23	EPA 6020B	
Magnesium	14.2	0.0581	"	"	"	"	"	"	
Sodium	14.0	0.0581	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **02/08/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.437	0.00100	units	1	BGB0455	02/15/23	02/15/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **02/08/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	86.0		%	1	BGB0366	02/13/23	02/13/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **02/08/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.614	0.0100	mmhos/cm	1	BGB0397	02/14/23	02/14/23	EPA 120.1	

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

Date Sampled: **02/08/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.43		pH Units	1	BGB0396	02/14/23	02/14/23	EPA 9045D	

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PO Box 1289
Wellington CO, 80549

Project: Noble - Shelton H 01-24

Project Number: [none]
Project Manager: Paul Henchan

Reported:
02/21/23 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 BGB0243 - EPA 5030 Soil MS

Blank (BGB0243-BLK1)

Prepared & Analyzed: 02/09/23

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>	0.0376		"	0.0400		94.1	50-150			
<i>Surrogate: Toluene-d8</i>	0.0445		"	0.0400		111	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0468		"	0.0400		117	50-150			

LCS (BGB0243-BS1)

Prepared & Analyzed: 02/09/23

Benzene	0.101	0.0020	mg/kg	0.100		101	70-130			
Toluene	0.113	0.0050	"	0.100		113	70-130			
Ethylbenzene	0.104	0.0050	"	0.100		104	70-130			
m,p-Xylene	0.211	0.010	"	0.200		105	70-130			
o-Xylene	0.0974	0.0050	"	0.100		97.4	70-130			
1,2,4-Trimethylbenzene	0.0921	0.0050	"	0.100		92.1	70-130			
1,3,5-Trimethylbenzene	0.0995	0.0050	"	0.100		99.5	70-130			
Naphthalene	0.0860	0.0038	"	0.100		86.0	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0301		"	0.0400		75.2	50-150			
<i>Surrogate: Toluene-d8</i>	0.0424		"	0.0400		106	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0376		"	0.0400		93.9	50-150			

Matrix Spike (BGB0243-MS1)

Source: 2302119-01

Prepared: 02/09/23 Analyzed: 02/10/23

Benzene	0.0784	0.0020	mg/kg	0.100	ND	78.4	70-130			
Toluene	0.0981	0.0050	"	0.100	ND	98.1	70-130			
Ethylbenzene	0.101	0.0050	"	0.100	ND	101	70-130			
m,p-Xylene	0.215	0.010	"	0.200	ND	108	70-130			
o-Xylene	0.101	0.0050	"	0.100	ND	101	70-130			
1,2,4-Trimethylbenzene	0.102	0.0050	"	0.100	ND	102	70-130			
1,3,5-Trimethylbenzene	0.0998	0.0050	"	0.100	ND	99.8	70-130			
Naphthalene	0.0778	0.0038	"	0.100	ND	77.8	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0238		"	0.0400		59.6	50-150			
<i>Surrogate: Toluene-d8</i>	0.0264		"	0.0400		66.0	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0381		"	0.0400		95.3	50-150			

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 PO Box 1289
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Project: Noble - Shelton H 01-24

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 02/21/23 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 BGB0243 - EPA 5030 Soil MS

Matrix Spike Dup (BGB0243-MSD1)	Source: 2302119-01			Prepared: 02/09/23 Analyzed: 02/10/23						
Benzene	0.0868	0.0020	mg/kg	0.100	ND	86.8	70-130	10.1	30	
Toluene	0.0930	0.0050	"	0.100	ND	93.0	70-130	5.31	30	
Ethylbenzene	0.102	0.0050	"	0.100	ND	102	70-130	1.42	30	
m,p-Xylene	0.217	0.010	"	0.200	ND	108	70-130	0.639	30	
o-Xylene	0.0993	0.0050	"	0.100	ND	99.3	70-130	1.83	30	
1,2,4-Trimethylbenzene	0.0957	0.0050	"	0.100	ND	95.7	70-130	6.81	30	
1,3,5-Trimethylbenzene	0.0976	0.0050	"	0.100	ND	97.6	70-130	2.28	30	
Naphthalene	0.0700	0.0038	"	0.100	ND	70.0	70-130	10.6	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0272</i>		<i>"</i>	<i>0.0400</i>		<i>68.0</i>	<i>50-150</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0346</i>		<i>"</i>	<i>0.0400</i>		<i>86.6</i>	<i>50-150</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0376</i>		<i>"</i>	<i>0.0400</i>		<i>94.0</i>	<i>50-150</i>			

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Shelton H 01-24

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 02/21/23 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 BGB0246 - EPA 3550A

Blank (BGB0246-BLK1)

Prepared: 02/09/23 Analyzed: 02/10/23

C10-C28 (DRO)	ND	50	mg/kg								
C28-C36 (ORO)	ND	50	"								
Surrogate: <i>o</i> -Terphenyl	14.4		"	12.5		115		30-150			

LCS (BGB0246-BS1)

Prepared: 02/09/23 Analyzed: 02/10/23

C10-C28 (DRO)	384	50	mg/kg	500		76.7		70-130			
Surrogate: <i>o</i> -Terphenyl	13.9		"	12.5		111		30-150			

Matrix Spike (BGB0246-MS1)

Source: 2302119-01

Prepared: 02/09/23 Analyzed: 02/10/23

C10-C28 (DRO)	381	50	mg/kg	500	11.8	73.8		70-130			
Surrogate: <i>o</i> -Terphenyl	10.2		"	12.5		81.8		30-150			

Matrix Spike Dup (BGB0246-MSD1)

Source: 2302119-01

Prepared: 02/09/23 Analyzed: 02/10/23

C10-C28 (DRO)	398	50	mg/kg	500	11.8	77.3		70-130	4.48	20	
Surrogate: <i>o</i> -Terphenyl	12.7		"	12.5		102		30-150			

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Project: Noble - Shelton H 01-24

Project Number: [none]
Project Manager: Paul Henchan

Reported:
02/21/23 11:10

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BGB0297 - EPA 5030 Soil MS

Blank (BGB0297-BLK1)

Prepared: 02/10/23 Analyzed: 02/11/23

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>0.0221</i>		"	<i>0.0333</i>		<i>66.4</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0294</i>		"	<i>0.0333</i>		<i>88.3</i>	<i>40-150</i>			

LCS (BGB0297-BS1)

Prepared: 02/10/23 Analyzed: 02/11/23

Acenaphthene	0.0299	0.00500	mg/kg	0.0333		89.8	31-137			
Anthracene	0.0299	0.00500	"	0.0333		89.8	30-120			
Benzo (a) anthracene	0.0269	0.00500	"	0.0333		80.8	30-120			
Benzo (a) pyrene	0.0254	0.00500	"	0.0333		76.1	30-120			
Benzo (b) fluoranthene	0.0258	0.00500	"	0.0333		77.4	30-120			
Benzo (k) fluoranthene	0.0272	0.00500	"	0.0333		81.6	30-120			
Chrysene	0.0307	0.00500	"	0.0333		92.0	30-120			
Dibenz (a,h) anthracene	0.0188	0.00500	"	0.0333		56.4	30-120			
Fluoranthene	0.0304	0.00500	"	0.0333		91.1	30-120			
Fluorene	0.0310	0.00500	"	0.0333		93.1	30-120			
Indeno (1,2,3-cd) pyrene	0.0194	0.00500	"	0.0333		58.3	30-120			
Pyrene	0.0323	0.00500	"	0.0333		96.9	35-142			
1-Methylnaphthalene	0.0266	0.00500	"	0.0333		79.9	35-142			
2-Methylnaphthalene	0.0212	0.00500	"	0.0333		63.5	35-142			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0286</i>		"	<i>0.0333</i>		<i>85.9</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0302</i>		"	<i>0.0333</i>		<i>90.7</i>	<i>40-150</i>			

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Project: Noble - Shelton H 01-24

Project Number: [none]
Project Manager: Paul Henchan

Reported:
02/21/23 11:10

PAH by EPA Method 8270D SIM - Quality Control

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

Batch BGB0297 - EPA 5030 Soil MS

Matrix Spike (BGB0297-MS1)	Source: 2302124-01			Prepared: 02/10/23 Analyzed: 02/11/23					
Acenaphthene	0.0225	0.00500	mg/kg	0.0333	ND	67.4	31-137		
Anthracene	0.0228	0.00500	"	0.0333	0.00180	62.9	30-120		
Benzo (a) anthracene	0.0253	0.00500	"	0.0333	ND	76.0	30-120		
Benzo (a) pyrene	0.0200	0.00500	"	0.0333	ND	59.9	30-120		
Benzo (b) fluoranthene	0.0185	0.00500	"	0.0333	ND	55.5	30-120		
Benzo (k) fluoranthene	0.0178	0.00500	"	0.0333	ND	53.5	30-120		
Chrysene	0.0217	0.00500	"	0.0333	ND	65.2	30-120		
Dibenz (a,h) anthracene	0.0182	0.00500	"	0.0333	ND	54.7	30-120		
Fluoranthene	0.0258	0.00500	"	0.0333	ND	77.5	30-120		
Fluorene	0.0238	0.00500	"	0.0333	ND	71.3	30-120		
Indeno (1,2,3-cd) pyrene	0.0187	0.00500	"	0.0333	ND	56.1	30-120		
Pyrene	0.0260	0.00500	"	0.0333	ND	77.9	35-142		
1-Methylnaphthalene	0.0222	0.00500	"	0.0333	ND	66.7	15-130		
2-Methylnaphthalene	0.0181	0.00500	"	0.0333	ND	54.4	15-130		
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0250</i>		<i>"</i>	<i>0.0333</i>		<i>75.0</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 (BGB0297-MSD1)	Source: 2302124-01			Prepared: 02/10/23 Analyzed: 02/11/23					
Acenaphthene	0.0233	0.00500	mg/kg	0.0333	ND	69.9	31-137	3.59	30
Anthracene	0.0243	0.00500	"	0.0333	0.00180	67.5	30-120	6.47	30
Benzo (a) anthracene	0.0256	0.00500	"	0.0333	ND	76.9	30-120	1.19	30
Benzo (a) pyrene	0.0195	0.00500	"	0.0333	ND	58.6	30-120	2.10	30
Benzo (b) fluoranthene	0.0177	0.00500	"	0.0333	ND	53.0	30-120	4.61	30
Benzo (k) fluoranthene	0.0166	0.00500	"	0.0333	ND	49.9	30-120	6.94	30
Chrysene	0.0212	0.00500	"	0.0333	ND	63.5	30-120	2.68	30
Dibenz (a,h) anthracene	0.0193	0.00500	"	0.0333	ND	57.9	30-120	5.70	30
Fluoranthene	0.0254	0.00500	"	0.0333	ND	76.1	30-120	1.89	30
Fluorene	0.0247	0.00500	"	0.0333	ND	74.1	30-120	3.82	30
Indeno (1,2,3-cd) pyrene	0.0206	0.00500	"	0.0333	ND	61.7	30-120	9.50	30
Pyrene	0.0240	0.00500	"	0.0333	ND	72.0	35-142	7.86	30
1-Methylnaphthalene	0.0265	0.00500	"	0.0333	ND	79.4	15-130	17.3	50
2-Methylnaphthalene	0.0208	0.00500	"	0.0333	ND	62.5	15-130	13.9	50
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0290</i>		<i>"</i>	<i>0.0333</i>		<i>87.0</i>	<i>40-150</i>		
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0251</i>		<i>"</i>	<i>0.0333</i>		<i>75.3</i>	<i>40-150</i>		

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Shelton H 01-24

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 02/21/23 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 BGB0312 - EPA 3050B

Blank (BGB0312-BLK1)

Prepared: 02/10/23 Analyzed: 02/12/23

Boron ND 0.0100 mg/L

LCS (BGB0312-BS1)

Prepared: 02/10/23 Analyzed: 02/12/23

Boron 5.75 0.0100 mg/L 5.00 115 80-120

Duplicate (BGB0312-DUP1)

Source: 2302124-01

Prepared: 02/10/23 Analyzed: 02/12/23

Boron 0.146 0.0100 mg/L 0.183 22.1 20 QR-03

Matrix Spike (BGB0312-MS1)

Source: 2302124-01

Prepared: 02/10/23 Analyzed: 02/12/23

Boron 6.22 0.0100 mg/L 5.00 0.183 121 75-125

Matrix Spike Dup (BGB0312-MSD1)

Source: 2302124-01

Prepared: 02/10/23 Analyzed: 02/12/23

Boron 6.59 0.0100 mg/L 5.00 0.183 128 75-125 5.79 25 QM-07

Summit Scientific

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Shelton H 01-24

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 02/21/23 11:10

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 BGB0374 - General Preparation

Blank (BGB0374-BLK1)

Prepared: 02/13/23 Analyzed: 02/15/23

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

LCS (BGB0374-BS1)

Prepared: 02/13/23 Analyzed: 02/15/23

Calcium	5.27	0.0500	mg/L wet	5.00		105	70-130			
Magnesium	4.75	0.0500	"	5.00		94.9	70-130			
Sodium	4.43	0.0500	"	5.00		88.5	70-130			

Summit Scientific

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Shelton H 01-24

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 02/21/23 11:10

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

Summit Scientific

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

Batch BGB0366 - General Preparation

Duplicate (BGB0366-DUP1)

Source: 2302121-01

Prepared & Analyzed: 02/13/23

% Solids	98.4		%		86.9			12.4	20	
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Summit Scientific

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Shelton H 01-24

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 02/21/23 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 BGB0397 - General Preparation

Blank (BGB0397-BLK1)

Prepared & Analyzed: 02/14/23

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BGB0397-BS1)

Prepared & Analyzed: 02/14/23

Specific Conductance (EC) 0.151 0.0100 mmhos/cm 0.150 101 95-105

Duplicate (BGB0397-DUP1)

Source: 2302138-01

Prepared & Analyzed: 02/14/23

Specific Conductance (EC) 0.594 0.0100 mmhos/cm 0.601 1.20 20

Summit Scientific

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Shelton H 01-24

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 02/21/23 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 BGB0396 - General Preparation

LCS (BGB0396-BS1)

Prepared & Analyzed: 02/14/23

pH 9.12 pH Units 9.18 99.3 95-105

Duplicate (BGB0396-DUP1)

Source: 2302138-01

Prepared & Analyzed: 02/14/23

pH 7.72 pH Units 7.71 0.130 20

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Shelton H 01-24

Project Number: [none]
Project Manager: Paul Henchan

Reported:
02/21/23 11:10

Notes and Definitions

- QR-03 The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
- 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.
- 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