

FREMONT ENVIRONMENTAL INC.

October 14, 2022

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

Subject: **Groundwater Data Submittal**
UPRC 27-9F Tank Battery
API # 05-123-15377
NESE Sec 27, T4N, R66W
Weld County, Colorado
Fremont Project No. C022-029
Location #327969, Remediation # 18876

Dear Mr. Peterson:

Enclosed please find a copy of the above referenced Site Investigation Report for the UPRC 27-9F tank battery site in Weld County, Colorado. The enclosed report describes site investigation and sampling efforts to assess soil and water quality at the site.

One soil boring was advanced to a maximum depth of 12 feet below ground surface with a geoprobe rig on July 13, 2022. The soil boring was completed as a one-inch, temporary, PVC stick-up monitoring well to further delineate the magnitude and extent of groundwater impacts at the UPRC 27-F tank battery following site decommissioning activities. The soil boring log, boring location and associated soil chemistry data are included in the attached enclosure.

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

Enclosure

TABLE 1
SUMMARY OF VOLATILE ORGANIC SOIL CHEMISTRY DATA
NOBLE ENERGY INC.
UPRC 27-9F, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C022-025

Sample	Date Sampled	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)
MW-1 8 Ft	3/30/2022	8	<0.0020	<0.0020	0.0186	<0.0020	0.0384	<0.0020	0.0162	7.18	<25.0	<100
MW-1 12 Ft	3/30/2022	12	<0.0020	<0.0020	0.0695	0.00828	0.061	<0.0020	0.0245	18.5	53.9	<100
MW-1 13 Ft	3/30/2022	13	<0.0020	<0.0020	0.074	<0.0020	0.0442	<0.0020	0.0303	70.0	40.5	<100
MW-1 15 Ft	3/30/2022	15	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0038	<0.200	<25.0	<100
SB-2 8 Ft	3/30/2022	8	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0038	<0.200	<25.0	<100
SB-3 4 Ft	3/30/2022	4	<0.0020	<0.0020	0.0759	<0.0020	3.01	2.58	0.0514	256	25.1	<100
SB-3 6 Ft	3/30/2022	6	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0038	<0.200	<25.0	<100
SB-4 4 Ft	3/30/2022	4	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0038	<0.200	<25.0	<100
SB-5 8 Ft	3/30/2022	8	<0.0020	<0.0020	<0.0020	<0.0020	0.00248	<0.0020	<0.0038	0.334	<25.0	<100
SB-5 12 Ft	3/30/2022	12	<0.0020	<0.0020	0.0168	<0.0020	0.02	<0.0020	0.012	3.73	<25.0	<100
SB-6 8 Ft	3/30/2022	8	<0.0020	<0.0020	<0.0020	<0.0020	0.00742	<0.0020	0.00682	2.74	<25.0	<100
BG-1 3 Ft	3/30/2022	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-7 3ft	07/13/2022	3	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
MW-7 12ft	07/13/2022	12	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
COGCC Table 915-1 Limits (Residential SSL)			1.2	490	5.8	58	30	27	2	500	500	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*	500*	500*

Bold faced values exceed the COGCC Table 915-1 concentrations

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

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

NA - Not analyzed

TABLE 2
SUMMARY OF ORGANIC GROUNDWATER CHEMISTRY DATA
NOBLE ENERGY INC.
UPRC 27-9F, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C022-025

SAMPLE LOCATION	DATE	BENZENE (µg/L)	TOLUENE (µg/L)	ETHYL BENZENE (µg/L)	TOTAL XYLENES (µg/L)	NAPH-THALENE (µg/L)	1,2,4 TMB (µg/L)	1,3,5 TMB (µg/L)	TOC ELEVATION (feet)	DEPTH TO GROUND WATER (ft)	GROUND WATER ELEVATION (ft)	FREE PRODUCT THICKNESS (ft)
MW-1	03/30/22	17.0	<1.0	1.44	11.0	<2.0	<2.0	20.7	99.47	NA	NA	NA
	07/28/22	46	<1.0	34	38	11	28	12		6.91	92.56	NP
MW-3	07/28/22	56	<1.0	150	11000	27	990	700	99.81	7.20	92.61	NP
MW-5	07/28/22	<1.0	<1.0	<1.0	20	<1.0	2.0	5.2	99.98	7.60	92.38	NP
MW-6	07/28/22	2.1	<1.0	<1.0	69	1.5	25	34	100.00	7.54	92.46	NP
MW-7	07/28/22	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	100.72	7.91	92.81	NP
MW-301015	07/28/22	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	95.71	3.09	92.62	NP
Table 915-1 Limits		5	560	700	1,400	140	67	67				

Bold face values exceed the COGCC limits

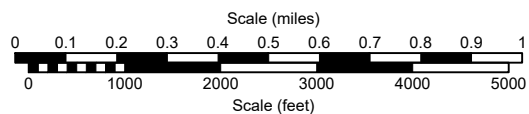
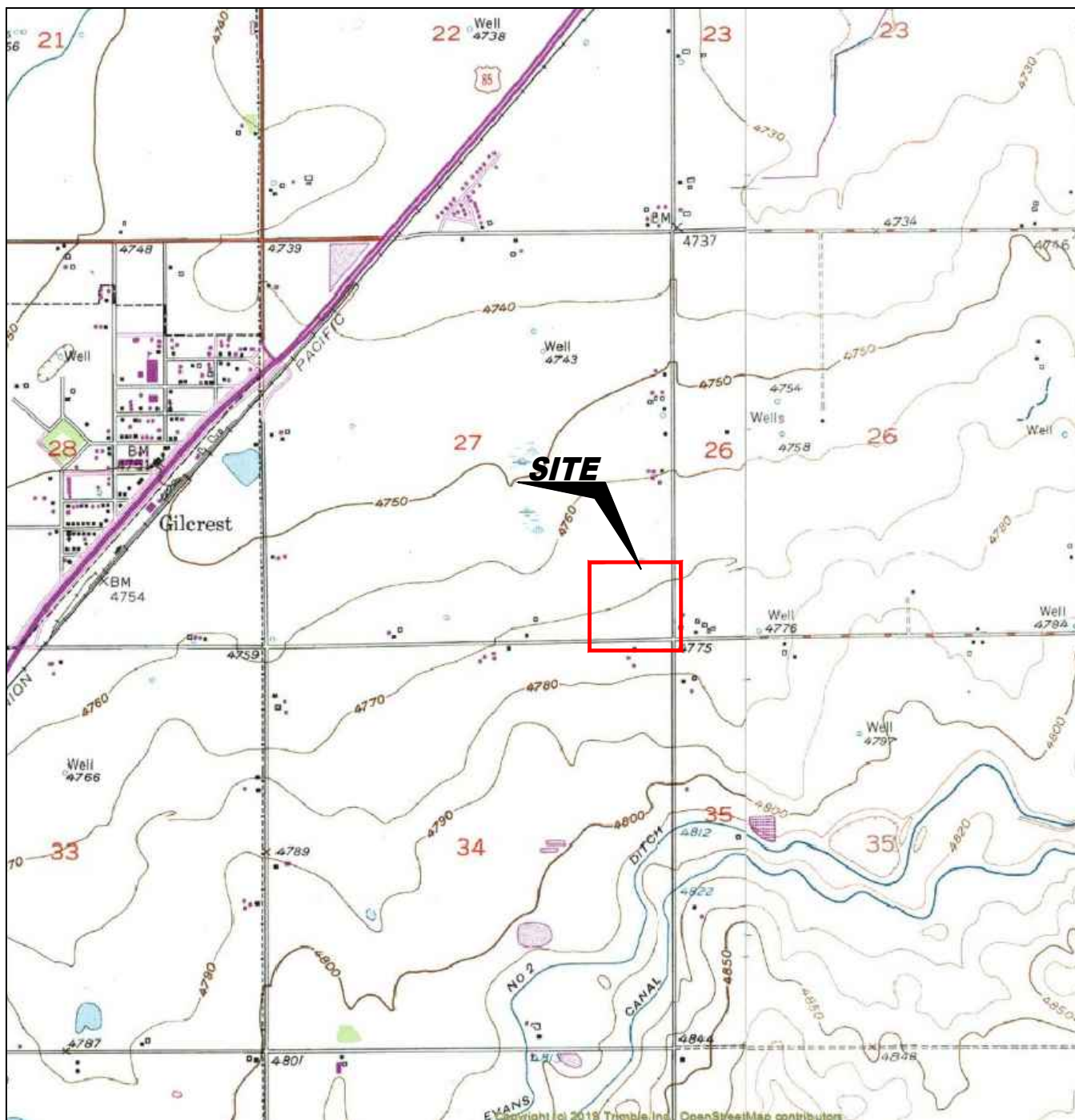
TABLE 3
SUMMARY OF INORGANIC GROUNDWATER CHEMISTRY DATA
NOBLE ENERGY INC.
UPRC 27-9F, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C022-025

SAMPLE LOCATION	DATE	TDS (mg/L)	CHLORIDE ION (mg/L)	SULFATE ION (mg/L)
MW-1	07/28/22	1050	176	193
MW-3	07/28/22	930	162	64.2
MW-5	07/28/22	1370	204	59.2
MW-6	07/28/22	1040	215	203
MW-7	07/28/22	945	212	196
MW-301015	07/28/22	927	194	219
Table 915-1 Limits		<1.25 x local background	250	250

Bold face values exceed the COGCC limits

NA - Not Analyzed

NAP - Not Applicable



USGS 7.5 MINUTE SERIES (TOPOGRAPHIC)

Figure 1
SITE LOCATION MAP

Noble Energy, Inc. ~ UPRC #27 - 9F
NESE Sec. 27, T4N, R66W, 6th PM
Weld County, Colorado
40.278319°, -104.754134°

Project # C022-025	API # 05-123-15377	Facility # 481568
Date 9/14/22	Remediation # 18876	Filename 22025T





LEGEND

● SOIL BORING LOCATION	○ ABOVE GROUND STORAGE TANK	FORMER FACILITY	CONTAINMENT BERM
● MONITORING WELL			
● NON-FREMONT MONITORING WELL			

Figure 2
SITE MAP

Noble Energy, Inc. ~ UPRC #27 - 9F
NESE Sec. 27, T4N, R66W, 6th PM
Weld County, Colorado
40.278319°, -104.754134°

Project No. C022-025	API # 05-123-15377	Facility # 327969
Date 9/14/22	Remediation # 18876	Filename 22025T





LEGEND

- SOIL BORING LOCATION
- ABOVE GROUND STORAGE TANK
- FORMER FACILITY
- ||||| CONTAINMENT BERM
- ⊕ MONITORING WELL
- ⊙ NON-FREMONT MONITORING WELL

(92.56)

GROUND WATER ELEVATION (ft above arbitrary datum)



WATER TABLE CONTOUR

GROUND WATER FLOW DIRECTION

Figure 3

INFERRED GROUNDWATER CONTOUR MAP

July 28, 2022

Noble Energy, Inc. ~ UPRC #27 - 9F

NESE Sec. 27, T4N, R66W, 6th PM

Weld County, Colorado

40.278319°, -104.754134°

Project No.
C022-025

API #
05-123-15377

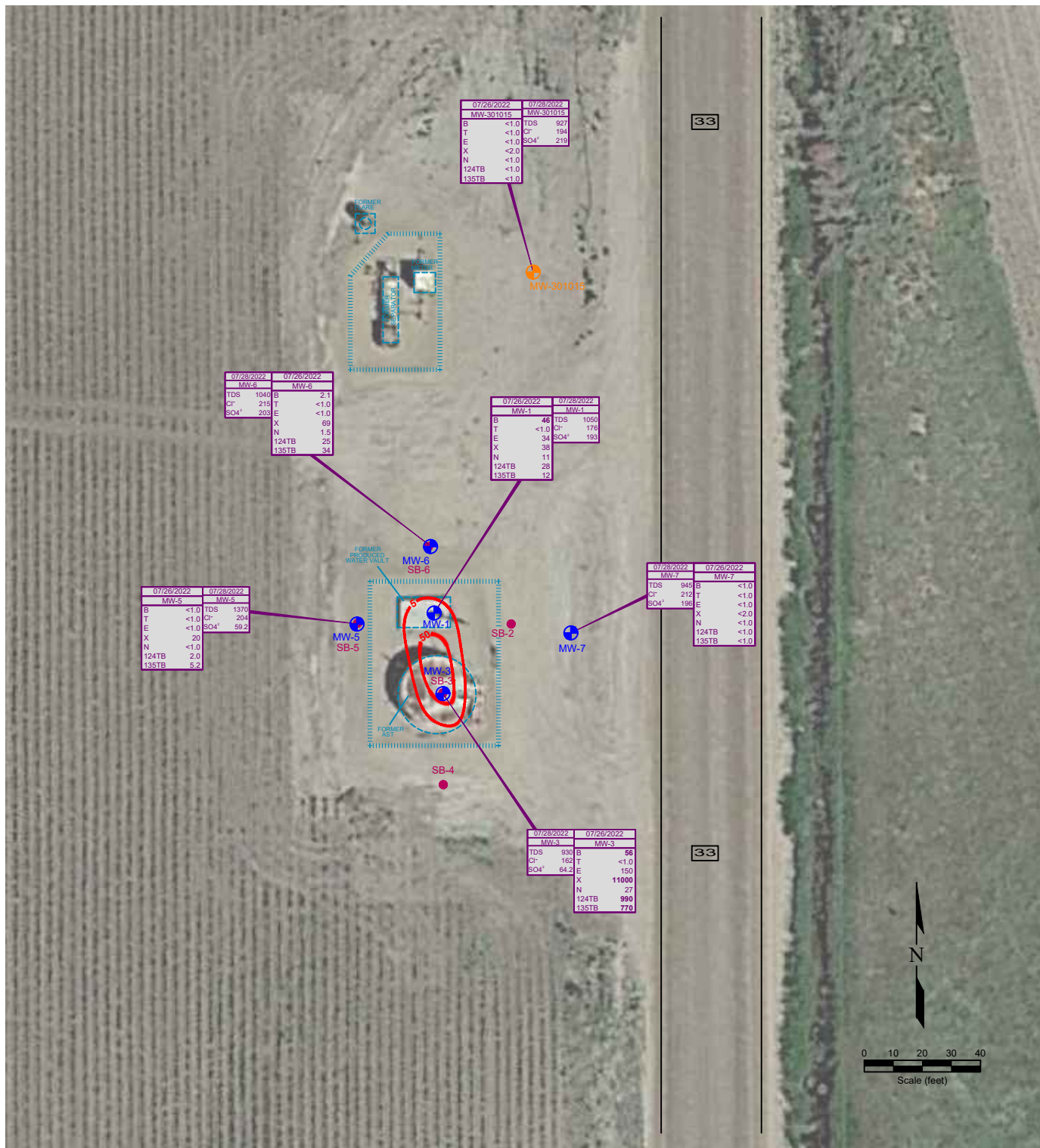
Facility #
327969

Date
9/14/22

Remediation #
18876

Filename
22025T





LEGEND

- SOIL BORING LOCATION
- ABOVE GROUND STORAGE TANK
- FORMER FACILITY
- FORMER FACILITY
- CONTAINMENT BERM
- MONITORING WELL
- MONITORING WELL
- NON-FREMONT MONITORING WELL

DATE SAMPLED	SAMPLE ID
07/28/2022	MW-1
B	46
T	<1.0
E	34
X	38
N	11
124TB	28
135TB	12

DATE SAMPLED	SAMPLE ID
07/28/2022	MW-3
TDS	1050
Cl ⁻	176
SO ₄ ²⁻	193
X	38
N	11
124TB	28
135TB	12

07/28/2022 MW-3
BENZENE ISOCENTRATION (μg/L)
Dashed where inferred

Figure 4

GROUNDWATER CHEMISTRY MAP

July 28, 2022

Noble Energy, Inc. ~ UPRC #27 - 9F

NESE Sec. 27, T4N, R66W, 6th PM

Weld County, Colorado

40.278319°, -104.754134°

Project No.
C022-025

API #
05-123-15377

Facility #
327969

Date
9/14/22

Remediation #
18876

Filename
22025T





LEGEND

- SOIL BORING LOCATION
- ABOVE GROUND STORAGE TANK
- MONITORING WELL
- NON-FREMONT MONITORING WELL
- FORMER FACILITY
- CONTAINMENT BERM

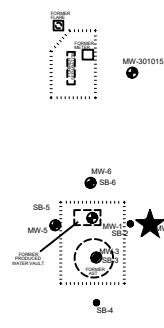
DATE SAMPLED	SAMPLE ID and DEPTH (ft)
07/13/2022	MW-7 (3')
B	<0.0020
T	<0.0050
E	<0.0050
X	<0.010
1,2,4-TB	<0.0050
1,3,5-TB	<0.0050
N	<0.0038
G	<0.50
D	<50
O	<50

Figure 5
SOIL CHEMISTRY MAP
July 13, 2022
Noble Energy, Inc. ~ UPRC #27 - 9F
 NESE Sec. 27, T4N, R66W, 6th PM
 Weld County, Colorado
 40.278319°, -104.754134°

Project No. C022-025	API # 05-123-15377	Facility # 327969	
Date 9/14/22	Remediation # 18876	Filename 22025T	

BORING/WELL CONSTRUCTION LOG

Boring/Well Location Sketch Map



Page 1 of 1

Boring/Well No. MW-7		Total Depth 12'	Location Noble Energy, Inc. UPRC 27-9F NESE SEC. 27, T4N, R66W, 6th PM Weld County, Colorado		
Project No./Name C022-025 / Noble ~ UPRC 27-9F			Approved By		
Drilling Contractor/Driller Drill Pro			Geologist/Office Ethan Black / Fremont Environmental, Inc.		
Drilling Equipment/Method Geoprobe / Direct Push			Size/Type of Bit 2.5" direct push	Sampling Method direct push	Start/Finish Date 07/13/2022
Well Installed? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Casing Mtrl./Dia. SCH 40 PVC 1"	Screen: Type Slotted Mtrl. PVC Length 10' Dia. 1" Slot Size 0.010"			
Elevation of: (ft. above datum)	Ground Surface 100.72	Top of Well Casing .	Top of Screen .	Bottom of Screen .	Ground Water Surface/Date Measured 0.75 07/13/2022

DEPTH (feet)	WELL CONSTRUCTION		LITHOLOGY		Penetration Rate (blows/6")	Recovery (%)	Sample Interval (feet)	PID Values (ppm)
			GRAPHIC LOG	VISUAL DESCRIPTION				
	Bentonite	1" Blank		Road base 6" Sand: dark brown, moist, wet				0.0
			SP					0.0
	#10-20 Silica Sand	1" Screen						0.0
5			CS	Sandy Clay: brown, saturated, plastic, wet				0.0
			CL	Clay: brown and gray, slightly plastic, moist, oxidized				0.0
10								0.0
								0.0
15								0.0
								0.0
20								0.0

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

July 25, 2022

Paul Henchan
Fremont Environmental
PO Box 1289
Wellington, CO 80549
RE: Noble - UPRC 27-9F
Work Order #2207247

Enclosed are the results of analyses for samples received by Summit Scientific on 07/18/22 16:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. Shrewsbury', with a stylized, cursive script.

Paul Shrewsbury
President



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - UPRC 27-9F

Project Number: [none]
Project Manager: Paul Henchan

Reported:
07/25/22 11:06

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-7 3ft	2207247-01	Soil	07/13/22 00:00	07/18/22 16:00
MW-7 12ft	2207247-02	Soil	07/13/22 00:00	07/18/22 16:00

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

2207247

4653 Table Mountain Drive ♦ Golden, Colorado 80403
303-277-9310

Page 1 of 1

Client: Fremont Environmental

Project Manager: Henahan

Address:

E-Mail: fremont env dist list (jeffg, paulh, ethanb)

City/State/Zip:

Bill To: Noble

Phone:

Project Name: Noble - UPRC 27-9F

Sampler Name: Black

Project Number:

					Preservative				Matrix				Analysis Requested						Special Instructions		
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	VOCs (q15)	TPH (q15)	PAHs (q15)	TDS/Cl/SO4	SAR/EC/pH	Boron	Metals (q15)		
1	MW-7 3FT	7/13/22		2			X			X			X	X	X						
2	MW-7 12FT	1		2			X			X			X	X	X						
3	MW-9	1		1			X			X			X	X	X						
4																					
5																					
6																					
7																					
8																					
9																					
10																					

Relinquished by: <u>G. Henahan</u>	Date/Time: <u>7/15/22</u>	Received by: <u>[Signature]</u>	Date/Time: <u>7/19/22 1600</u>	Turn Around Time (Check)	Notes:
Relinquished by:	Date/Time:	Received by:	Date/Time:	Same Day <input type="checkbox"/>	
				24 hours <input type="checkbox"/>	
				48 hours <input type="checkbox"/>	Standard <input checked="" type="checkbox"/>
Temperature Upon Receipt: <u>9.1</u>	Corrected Temperature: <u>0</u>	HNO3 lot #		Sample Integrity:	
IR gun correction: <u>0</u>	IR gun #: <u>1</u>			Samples Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No	

S₂

2207247

S2 Work Order#

Sample Receipt Checklist


Client: Fremont Client Project ID: Noble-UPRC 27-9F

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

	-			
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Matrix (Check all that apply) Air ☐ Soil/Solid ☒ Water ☐ Other ☐Temp (°C) 9.1 Thermometer # 1

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6 °C ⁽¹⁾ ? NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	-			on ice
Were all samples received intact ⁽¹⁾ ?	-			
Was adequate sample volume provided ⁽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? 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			-	
Is a chain-of-custody (COC) form present and filled out completely ⁽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⁾ ?	-			
Is the COC properly relinquished by the client w/ date and time recorded ⁽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, H ₂ SO ₄ , NaOH, HNO ₃ , 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):				
⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.				


Custodian Printed Name

71822
Date/Time



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - UPRC 27-9F

Project Number: [none]
Project Manager: Paul Henchan

Reported:
07/25/22 11:06

MW-7 3ft
2207247-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/13/22 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	BFG0355	07/20/22	07/21/22	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: **07/13/22 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4	0.0421	105 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0566	141 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0472	118 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **07/13/22 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	BFG0357	07/20/22	07/20/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **07/13/22 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl	14.1	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 - UPRC 27-9F

Project Number: [none]
Project Manager: Paul Henchan

Reported:
07/25/22 11:06

MW-7 3ft
2207247-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **07/13/22 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Acenaphthene	ND	0.00500	mg/kg	1	BFG0327	07/19/22	07/23/22	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: **07/13/22 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 2-Methylnaphthalene-d10	0.0294	88.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0381	114 %	40-150		"	"	"	"	

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - UPRC 27-9F

Project Number: [none]
Project Manager: Paul Henehan

Reported:
07/25/22 11:06

MW-7 12ft
2207247-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/13/22 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BFG0355	07/20/22	07/21/22	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: **07/13/22 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0408	102 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0557	139 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0462	115 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **07/13/22 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BFG0357	07/20/22	07/20/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **07/13/22 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	13.3	106 %	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 - UPRC 27-9F

Project Number: [none]
Project Manager: Paul Henehan

Reported:
07/25/22 11:06

MW-7 12ft
2207247-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **07/13/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFG0327	07/19/22	07/23/22	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: **07/13/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0329	98.8 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0345	103 %	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 - UPRC 27-9F

Project Number: [none]
Project Manager: Paul Henchan

Reported:
07/25/22 11:06

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BFG0355 - EPA 5030 Soil MS

Blank (BFG0355-BLK1)

Prepared: 07/20/22 Analyzed: 07/23/22

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	0.0377		"	0.0400		94.3	50-150			
Surrogate: Toluene-d8	0.0388		"	0.0400		96.9	50-150			
Surrogate: 4-Bromofluorobenzene	0.0400		"	0.0400		99.9	50-150			

LCS (BFG0355-BS1)

Prepared: 07/20/22 Analyzed: 07/23/22

Benzene	0.0711	0.0020	mg/kg	0.100		71.1	70-130			
Toluene	0.0744	0.0050	"	0.100		74.4	70-130			
Ethylbenzene	0.0772	0.0050	"	0.100		77.2	70-130			
m,p-Xylene	0.153	0.010	"	0.200		76.5	70-130			
o-Xylene	0.0750	0.0050	"	0.100		75.0	70-130			
1,2,4-Trimethylbenzene	0.0821	0.0050	"	0.100		82.1	70-130			
1,3,5-Trimethylbenzene	0.0812	0.0050	"	0.100		81.2	70-130			
Naphthalene	0.0957	0.0038	"	0.100		95.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0332		"	0.0400		83.1	50-150			
Surrogate: Toluene-d8	0.0394		"	0.0400		98.6	50-150			
Surrogate: 4-Bromofluorobenzene	0.0400		"	0.0400		99.9	50-150			

Matrix Spike (BFG0355-MS1)

Source: 2207243-01

Prepared: 07/20/22 Analyzed: 07/23/22

Benzene	0.0776	0.0020	mg/kg	0.100	ND	77.6	70-130			
Toluene	0.0723	0.0050	"	0.100	ND	72.3	70-130			
Ethylbenzene	0.0785	0.0050	"	0.100	ND	78.5	70-130			
m,p-Xylene	0.158	0.010	"	0.200	ND	78.9	70-130			
o-Xylene	0.0746	0.0050	"	0.100	ND	74.6	70-130			
1,2,4-Trimethylbenzene	0.0835	0.0050	"	0.100	ND	83.5	70-130			
1,3,5-Trimethylbenzene	0.0829	0.0050	"	0.100	ND	82.9	70-130			
Naphthalene	0.111	0.0038	"	0.100	ND	111	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0319		"	0.0400		79.8	50-150			
Surrogate: Toluene-d8	0.0395		"	0.0400		98.8	50-150			
Surrogate: 4-Bromofluorobenzene	0.0381		"	0.0400		95.2	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 - UPRC 27-9F

Project Number: [none]
Project Manager: Paul Henchan

Reported:
07/25/22 11:06

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BFG0355 - EPA 5030 Soil MS

Matrix Spike Dup (BFG0355-MSD1)	Source: 2207243-01			Prepared: 07/20/22 Analyzed: 07/23/22						
Benzene	0.0774	0.0020	mg/kg	0.100	ND	77.4	70-130	0.271	30	
Toluene	0.0731	0.0050	"	0.100	ND	73.1	70-130	1.07	30	
Ethylbenzene	0.0779	0.0050	"	0.100	ND	77.9	70-130	0.805	30	
m,p-Xylene	0.156	0.010	"	0.200	ND	78.0	70-130	1.09	30	
o-Xylene	0.0750	0.0050	"	0.100	ND	75.0	70-130	0.602	30	
1,2,4-Trimethylbenzene	0.0846	0.0050	"	0.100	ND	84.6	70-130	1.25	30	
1,3,5-Trimethylbenzene	0.0826	0.0050	"	0.100	ND	82.6	70-130	0.326	30	
Naphthalene	0.123	0.0038	"	0.100	ND	123	70-130	10.4	30	
Surrogate: 1,2-Dichloroethane-d4	0.0339		"	0.0400		84.8	50-150			
Surrogate: Toluene-d8	0.0392		"	0.0400		97.9	50-150			
Surrogate: 4-Bromofluorobenzene	0.0381		"	0.0400		95.2	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 - UPRC 27-9F

Project Number: [none]
Project Manager: Paul Henchan

Reported:
07/25/22 11:06

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BFG0357 - EPA 3550A

Blank (BFG0357-BLK1)

Prepared & Analyzed: 07/20/22

C10-C28 (DRO)	ND	50	mg/kg
C28-C36 (ORO)	ND	50	"

LCS (BFG0357-BS1)

Prepared & Analyzed: 07/20/22

C10-C28 (DRO)	450	50	mg/kg	500	90.1	70-130
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Matrix Spike (BFG0357-MS1)

Source: 2207243-01

Prepared & Analyzed: 07/20/22

C10-C28 (DRO)	421	50	mg/kg	500	9.07	82.3	70-130
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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 - UPRC 27-9F

Project Number: [none]
Project Manager: Paul Henchan

Reported:
07/25/22 11:06

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BFG0327 - EPA 5030 Soil MS

Blank (BFG0327-BLK1)

Prepared: 07/19/22 Analyzed: 07/22/22

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	0.0378		"	0.0333		113	40-150			
Surrogate: Fluoranthene-d10	0.0275		"	0.0333		82.6	40-150			

LCS (BFG0327-BS1)

Prepared: 07/19/22 Analyzed: 07/22/22

Acenaphthene	0.0355	0.00500	mg/kg	0.0333	107	31-137
Anthracene	0.0370	0.00500	"	0.0333	111	30-120
Benzo (a) anthracene	0.0373	0.00500	"	0.0333	112	30-120
Benzo (a) pyrene	0.0397	0.00500	"	0.0333	119	30-120
Benzo (b) fluoranthene	0.0359	0.00500	"	0.0333	108	30-120
Benzo (k) fluoranthene	0.0381	0.00500	"	0.0333	114	30-120
Chrysene	0.0364	0.00500	"	0.0333	109	30-120
Dibenz (a,h) anthracene	0.0344	0.00500	"	0.0333	103	30-120
Fluoranthene	0.0358	0.00500	"	0.0333	107	30-120
Fluorene	0.0324	0.00500	"	0.0333	97.1	30-120
Indeno (1,2,3-cd) pyrene	0.0368	0.00500	"	0.0333	110	30-120
Pyrene	0.0321	0.00500	"	0.0333	96.2	35-142
1-Methylnaphthalene	0.0385	0.00500	"	0.0333	115	35-142
2-Methylnaphthalene	0.0359	0.00500	"	0.0333	108	35-142
Surrogate: 2-Methylnaphthalene-d10	0.0353		"	0.0333	106	40-150
Surrogate: Fluoranthene-d10	0.0307		"	0.0333	92.2	40-150

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - UPRC 27-9F

Project Number: [none]
Project Manager: Paul Henchan

Reported:
07/25/22 11:06

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BFG0327 - EPA 5030 Soil MS

Matrix Spike (BFG0327-MS1)

Source: 2207239-01

Prepared: 07/19/22 Analyzed: 07/22/22

Acenaphthene	0.0248	0.00500	mg/kg	0.0333	ND	74.4	31-137				
Anthracene	0.0365	0.00500	"	0.0333	ND	110	30-120				
Benzo (a) anthracene	0.0299	0.00500	"	0.0333	ND	89.6	30-120				
Benzo (a) pyrene	0.0295	0.00500	"	0.0333	ND	88.5	30-120				
Benzo (b) fluoranthene	0.0293	0.00500	"	0.0333	ND	88.0	30-120				
Benzo (k) fluoranthene	0.0339	0.00500	"	0.0333	ND	102	30-120				
Chrysene	0.0333	0.00500	"	0.0333	ND	99.9	30-120				
Dibenz (a,h) anthracene	0.0299	0.00500	"	0.0333	ND	89.8	30-120				
Fluoranthene	0.0399	0.00500	"	0.0333	ND	120	30-120				
Fluorene	0.0237	0.00500	"	0.0333	ND	71.0	30-120				
Indeno (1,2,3-cd) pyrene	0.0272	0.00500	"	0.0333	ND	81.7	30-120				
Pyrene	0.0362	0.00500	"	0.0333	ND	109	35-142				
1-Methylnaphthalene	0.0305	0.00500	"	0.0333	ND	91.4	15-130				
2-Methylnaphthalene	0.0250	0.00500	"	0.0333	ND	74.8	15-130				
Surrogate: 2-Methylnaphthalene-d10	0.0260		"	0.0333		78.1	40-150				
Surrogate: Fluoranthene-d10	0.0360		"	0.0333		108	40-150				

Matrix Spike Dup (BFG0327-MSD1)

Source: 2207239-01

Prepared: 07/19/22 Analyzed: 07/22/22

Acenaphthene	0.0228	0.00500	mg/kg	0.0333	ND	68.5	31-137	8.26	30		
Anthracene	0.0312	0.00500	"	0.0333	ND	93.7	30-120	15.6	30		
Benzo (a) anthracene	0.0267	0.00500	"	0.0333	ND	80.1	30-120	11.1	30		
Benzo (a) pyrene	0.0272	0.00500	"	0.0333	ND	81.7	30-120	7.92	30		
Benzo (b) fluoranthene	0.0264	0.00500	"	0.0333	ND	79.2	30-120	10.5	30		
Benzo (k) fluoranthene	0.0307	0.00500	"	0.0333	ND	92.1	30-120	9.94	30		
Chrysene	0.0305	0.00500	"	0.0333	ND	91.6	30-120	8.71	30		
Dibenz (a,h) anthracene	0.0264	0.00500	"	0.0333	ND	79.3	30-120	12.4	30		
Fluoranthene	0.0317	0.00500	"	0.0333	ND	95.2	30-120	22.9	30		
Fluorene	0.0227	0.00500	"	0.0333	ND	68.2	30-120	3.96	30		
Indeno (1,2,3-cd) pyrene	0.0247	0.00500	"	0.0333	ND	74.2	30-120	9.61	30		
Pyrene	0.0366	0.00500	"	0.0333	ND	110	35-142	1.00	30		
1-Methylnaphthalene	0.0278	0.00500	"	0.0333	ND	83.3	15-130	9.34	50		
2-Methylnaphthalene	0.0227	0.00500	"	0.0333	ND	68.0	15-130	9.66	50		
Surrogate: 2-Methylnaphthalene-d10	0.0233		"	0.0333		70.0	40-150				
Surrogate: Fluoranthene-d10	0.0295		"	0.0333		88.6	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 - UPRC 27-9F

Project Number: [none]
Project Manager: Paul Henchan

Reported:
07/25/22 11:06

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

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

August 08, 2022

Paul Henchan
Fremont Environmental
PO Box 1289
Wellington, CO 80549
RE: Noble - UPRC 27-9F
Work Order #2207410

Enclosed are the results of analyses for samples received by Summit Scientific on 07/28/22 16:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Mikayla Axtell For Paul Shrewsbury
President



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - UPRC 27-9F

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/08/22 08:43

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	2207410-01	Water	07/28/22 00:00	07/28/22 16:00
MW-3	2207410-03	Water	07/28/22 00:00	07/28/22 16:00
MW-5	2207410-05	Water	07/28/22 00:00	07/28/22 16:00
MW-6	2207410-06	Water	07/28/22 00:00	07/28/22 16:00
MW-7	2207410-07	Water	07/28/22 00:00	07/28/22 16:00
MW-301015	2207410-08	Water	07/28/22 00:00	07/28/22 16:00

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

S₂

2207410

4653 Table Mountain Drive ♦ Golden, Colorado 80403
303-277-9310

Page 1 of 1

Client: Fremont Env. Inc.

Project Manager: Honehan

Address:

E-Mail: Fremont Dist. List

City/State/Zip:

Bill To: Noble

Phone:

Project Name: Noble - UPRC 27-9F

Sampler Name: Black

Project Number:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested						Special Instructions	
					HCl	HNO ₃	None	Other	Water	Soil	Air-Canister #	Other	VOCs (915)	MS/C1/S2					
1	MW-1	7/28/22		4			X		X				X	X					
2	MW-2	I		I			I		I				I	I					
3	MW-3																		
4	MW-4																		
5	MW-5	I		I			I		I				I	I					
6																			
7																			
8																			
9																			
10																			

Relinquished by: <u>John Black</u>	Date/Time: <u>7/28/22</u>	Received by: <u>[Signature]</u>	Date/Time: <u>7/28/22</u> <u>1600</u>	Turn Around Time (Check)	Notes:
Relinquished by:	Date/Time:	Received by:	Date/Time:	Same Day <input type="checkbox"/>	72 hours <input type="checkbox"/>
				24 hours <input type="checkbox"/>	Standard <input checked="" type="checkbox"/>
				48 hours <input type="checkbox"/>	
Temperature Upon Receipt: <u>8.0</u>	Corrected Temperature: <u>0</u>	HNO ₃ lot #		Sample Integrity:	
IR gun correction: <u>0</u>	IR gun #: <u>1</u>			Samples Intact: <u>Yes</u> No	

S₂

Sample Receipt Checklist

S2 Work Order# 2207410Client: Fremont Client Project ID: Noble- URC 27-9F

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

	-			
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Matrix (Check all that apply) Air ☐ Soil/Solid ☐ ~~Water~~ ☒ Other ☐Temp (°C) 8.0 Thermometer # 1

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6 °C ⁽¹⁾ ? NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	-			ON ICE
Were all samples received intact ⁽¹⁾ ?	-			
Was adequate sample volume provided ⁽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? 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			-	
Is a chain-of-custody (COC) form present and filled out completely ⁽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⁾ ?	-			
Is the COC properly relinquished by the client w/ date and time recorded ⁽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, H ₂ SO ₄ , NaOH, HNO ₃ , 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):

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

 Custodian Printed Name

7/28/22
 Date/Time



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - UPRC 27-9F

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/08/22 08:43

MW-1
2207410-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/28/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	46	1.0	ug/l	1	BFG0538	07/29/22	07/30/22	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	34	1.0	"	"	"	"	"	"	
Xylenes (total)	38	2.0	"	"	"	"	"	"	
Naphthalene	11	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	28	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	12	1.0	"	"	"	"	"	"	

Date Sampled: **07/28/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		101 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		94.7 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		113 %	21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **07/28/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	176	12.0	mg/L	200	BFH0084	08/03/22	08/03/22	EPA 300.0	
Sulfate	193	60.0	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **07/28/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	1050	10.0	mg/L	1	BFH0033	08/01/22	08/01/22	SM2540C	

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - UPRC 27-9F

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/08/22 08:43

MW-3
2207410-03 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/28/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	56	1.0	ug/l	1	BFG0538	07/29/22	07/30/22	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	150	1.0	"	"	"	"	"	"	
Xylenes (total)	11000	200	"	100	"	"	08/01/22	"	
Naphthalene	27	1.0	"	1	"	"	07/30/22	"	
1,2,4-Trimethylbenzene	990	100	"	100	"	"	08/01/22	"	
1,3,5-Trimethylbenzene	700	100	"	"	"	"	"	"	

Date Sampled: **07/28/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		99.2 %	23-173		"	"	07/30/22	"	
Surrogate: Toluene-d8		96.0 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		110 %	21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **07/28/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	162	12.0	mg/L	200	BFH0084	08/03/22	08/04/22	EPA 300.0	
Sulfate	64.2	60.0	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **07/28/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	930	10.0	mg/L	1	BFH0033	08/01/22	08/01/22	SM2540C	

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - UPRC 27-9F

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/08/22 08:43

MW-5
2207410-05 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/28/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	BFG0538	07/29/22	07/30/22	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	20	2.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	2.0	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	5.2	1.0	"	"	"	"	"	"	

Date Sampled: **07/28/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		103 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		95.3 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		128 %	21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **07/28/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	204	12.0	mg/L	200	BFH0084	08/03/22	08/04/22	EPA 300.0	
Sulfate	59.2	6.00	"	20	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **07/28/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	1370	10.0	mg/L	1	BFH0033	08/01/22	08/01/22	SM2540C	

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - UPRC 27-9F

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/08/22 08:43

MW-6
2207410-06 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/28/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	2.1	1.0	ug/l	1	BFG0538	07/29/22	07/30/22	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	69	2.0	"	"	"	"	"	"	
Naphthalene	1.5	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	25	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	34	1.0	"	"	"	"	"	"	

Date Sampled: **07/28/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		95.9 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		99.4 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		107 %	21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **07/28/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	215	12.0	mg/L	200	BFH0084	08/03/22	08/04/22	EPA 300.0	
Sulfate	203	60.0	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **07/28/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	1040	10.0	mg/L	1	BFH0033	08/01/22	08/01/22	SM2540C	

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - UPRC 27-9F

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/08/22 08:43

MW-7
2207410-07 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/28/22 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BFG0538	07/29/22	07/30/22	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	

Date Sampled: **07/28/22 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		95.9 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		99.7 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %	21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **07/28/22 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chloride	212	12.0	mg/L	200	BFH0084	08/03/22	08/04/22	EPA 300.0	
Sulfate	196	60.0	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **07/28/22 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Total Dissolved Solids	945	10.0	mg/L	1	BFH0033	08/01/22	08/01/22	SM2540C	

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - UPRC 27-9F

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/08/22 08:43

MW-301015
2207410-08 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/28/22 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BFG0538	07/29/22	07/30/22	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	
Naphthalene	ND	1.0		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	

Date Sampled: **07/28/22 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		97.5 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		101 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		103 %		21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **07/28/22 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chloride	194	12.0		mg/L	200	BFH0084	08/03/22	08/04/22	EPA 300.0	
Sulfate	219	60.0		"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **07/28/22 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Total Dissolved Solids	927	10.0		mg/L	1	BFH0033	08/01/22	08/01/22	SM2540C	

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - UPRC 27-9F

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/08/22 08:43

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BFG0538 - EPA 5030 Water MS

Blank (BFG0538-BLK1)

Prepared & Analyzed: 07/29/22

Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	2.0	"							
Naphthalene	ND	1.0	"							
1,2,4-Trimethylbenzene	ND	1.0	"							
1,3,5-Trimethylbenzene	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	13.2		"	13.3		98.6	23-173			
Surrogate: Toluene-d8	13.4		"	13.3		100	20-170			
Surrogate: 4-Bromofluorobenzene	13.6		"	13.3		102	21-167			

LCS (BFG0538-BS1)

Prepared & Analyzed: 07/29/22

Benzene	21.4	1.0	ug/l	41.7		51.5	51-132			
Toluene	39.0	1.0	"	41.7		93.6	51-138			
Ethylbenzene	44.9	1.0	"	41.7		108	58-146			
m,p-Xylene	89.5	2.0	"	83.3		107	57-144			
o-Xylene	44.0	1.0	"	41.7		106	53-146			
Naphthalene	34.0	1.0	"	41.7		81.6	70-130			
1,2,4-Trimethylbenzene	51.2	1.0	"	41.7		123	70-130			
1,3,5-Trimethylbenzene	52.4	1.0	"	41.7		126	70-130			
Surrogate: 1,2-Dichloroethane-d4	12.8		"	13.3		96.4	23-173			
Surrogate: Toluene-d8	13.6		"	13.3		102	20-170			
Surrogate: 4-Bromofluorobenzene	13.4		"	13.3		101	21-167			

Matrix Spike (BFG0538-MS1)

Source: 2207406-01

Prepared & Analyzed: 07/29/22

Benzene	21.3	1.0	ug/l	41.7	ND	51.1	34-141			
Toluene	38.9	1.0	"	41.7	ND	93.4	27-151			
Ethylbenzene	44.9	1.0	"	41.7	ND	108	29-160			
m,p-Xylene	90.3	2.0	"	83.3	ND	108	20-166			
o-Xylene	44.3	1.0	"	41.7	ND	106	33-159			
Naphthalene	38.8	1.0	"	41.7	ND	93.1	70-130			
1,2,4-Trimethylbenzene	51.6	1.0	"	41.7	ND	124	70-130			
1,3,5-Trimethylbenzene	53.0	1.0	"	41.7	ND	127	70-130			
Surrogate: 1,2-Dichloroethane-d4	14.0		"	13.3		105	23-173			
Surrogate: Toluene-d8	13.8		"	13.3		103	20-170			
Surrogate: 4-Bromofluorobenzene	13.7		"	13.3		102	21-167			

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - UPRC 27-9F

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/08/22 08:43

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

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

Batch BFG0538 - EPA 5030 Water MS

Matrix Spike Dup (BFG0538-MSD1)		Source: 2207406-01			Prepared & Analyzed: 07/29/22					
Benzene	21.8	1.0	ug/l	41.7	ND	52.2	34-141	2.18	30	
Toluene	39.9	1.0	"	41.7	ND	95.8	27-151	2.46	30	
Ethylbenzene	47.0	1.0	"	41.7	ND	113	29-160	4.54	30	
m,p-Xylene	93.2	2.0	"	83.3	ND	112	20-166	3.11	30	
o-Xylene	45.9	1.0	"	41.7	ND	110	33-159	3.54	30	
Naphthalene	41.9	1.0	"	41.7	ND	101	70-130	7.78	30	
1,2,4-Trimethylbenzene	53.3	1.0	"	41.7	ND	128	70-130	3.26	30	
1,3,5-Trimethylbenzene	54.2	1.0	"	41.7	ND	130	70-130	2.29	30	
<hr/>										
Surrogate: 1,2-Dichloroethane-d4	14.4		"	13.3		108	23-173			
Surrogate: Toluene-d8	13.6		"	13.3		102	20-170			
Surrogate: 4-Bromofluorobenzene	13.6		"	13.3		102	21-167			

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - UPRC 27-9F

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/08/22 08:43

Anions by EPA Method 300.0 - Quality Control

Summit Scientific

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

Batch BFH0084 - General Preparation

Blank (BFH0084-BLK1)

Prepared & Analyzed: 08/03/22

Chloride	ND	0.0600	mg/L
Sulfate	ND	0.300	"

LCS (BFH0084-BS1)

Prepared & Analyzed: 08/03/22

Chloride	3.25	0.0600	mg/L	3.00	108	90-110
Sulfate	15.8	0.300	"	15.0	105	90-110

Duplicate (BFH0084-DUP1)

Source: 2207407-01

Prepared & Analyzed: 08/03/22

Chloride	10.0	1.20	mg/L	11.2	11.3	20
Sulfate	79.6	60.0	"	81.0	1.74	20

Matrix Spike (BFH0084-MS1)

Source: 2207407-01

Prepared & Analyzed: 08/03/22

Chloride	647	12.0	mg/L	600	11.2	106	80-120
Sulfate	3680	60.0	"	3000	81.0	120	80-120

Summit Scientific

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PO Box 1289
Wellington CO, 80549

Project: Noble - UPRC 27-9F

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/08/22 08:43

Total Dissolved Solids by SM2540C - Quality Control
Summit Scientific

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

Batch BFH0033 - General Preparation

Blank (BFH0033-BLK1)

Prepared & Analyzed: 08/01/22

Total Dissolved Solids ND 10.0 mg/L

Duplicate (BFH0033-DUP1)

Source: 2207410-01

Prepared & Analyzed: 08/01/22

Total Dissolved Solids 1070 10.0 mg/L 1050 2.45 20

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - UPRC 27-9F

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/08/22 08:43

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