FREMONT ENVIRONMENTAL INC.

July 29, 2022

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

Subject: **Site Investigation Report**
Howard A27-1 (Flowline)
API # 05-123-22848
NENE Sec. 27, T6N, R64W
Weld County, Colorado
Fremont Project No. C022-040
Facility # 276882, Remediation # 20374

Dear Mr. Peterson:

Enclosed please find a copy of the above referenced Site Investigation Report for the Howard A27-1 flowline location in Weld County, Colorado. The enclosed report describes site investigation and sampling efforts to assess soil and groundwater quality at the site.

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

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

SITE INVESTIGATION REPORT

NOBLE ENERGY INC.

HOWARD A27-1 (FLOWLINE)

WELD COUNTY, COLORADO

FREMONT PROJECT NO. C022-040

FACILITY # 276882, REMEDIATION # 20374

Prepared by:

Fremont Environmental Inc.
1759 Redwing Lane
Broomfield, CO 80020
(303) 956-8714

July 29, 2022

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SITE INVESTIGATION REPORT

NOBLE ENERGY INC.

HOWARD A27-1 (FLOWLINE)

WELD COUNTY, COLORADO

FREMONT PROJECT NO. C022-040

FACILITY # 276882, REMEDIATION # 20374

1.0 INTRODUCTION

The purpose of this document is to present information collected to delineate the extent of petroleum-impacted soil and groundwater at the Howard A27-1 (Howard) flowline location in Weld County, Colorado. Impacted soil was identified at the Howard flowline during its abandonment. Five soil borings were advanced at the site during a single-day site investigation to delineate the magnitude and extent of subsurface soil and groundwater impacts. The site investigation was completed on June 14, 2022.

2.0 BACKGROUND INFORMATION

2.1 Site Location

The Howard A27-1 flowline is located approximately one mile northeast of Gill, Colorado in Weld County as shown on Figure 1. The site is located in a rural and agricultural area approximately 0.18 miles southwest of the intersection of County Road 66 and County Road 57. The location is further described as the NE ¼ of the NE ¼ of Section 27, Township 6N, Range 64W.

2.2 Site History

The site consists of the wellhead for the Howard A27-1 natural gas well. The Howard A27-1 well was drilled in 2005 to a depth of approximately 7,036 feet.

A historical release was discovered beneath the Howard A27-1 flowline adjacent to the associated wellhead during flowline decommissioning activities at the Howard location in April 2022. As a result, a site investigation to determine the extent of soil impacts was undertaken on June 14, 2022. Groundwater was encountered at that time.

3.0 SITE INVESTIGATION ACTIVITIES

3.1 Soil Borings/Monitoring Wells

A total of five soil borings were advanced utilizing a Geoprobe rig during the single-day site investigation conducted at the Howard flowline on June 14, 2022. One of the five borings was completed as a flush-mounted, 1-inch diameter, temporary stick-up monitoring well. This monitoring well and the four soil borings were used to delineate the extent of soil and groundwater impacts at the site. The location of the soil borings and monitoring well are illustrated on the attached figures.

Generally, the subsurface consists of sand and silty sand that extends to a depth of approximately 10 feet. The maximum depth of the borings was 10 feet. Groundwater is present on site at a depth of approximately 7.5 feet. Geologic cross sections illustrating the soil lithology are presented on Figure 4.

The 1-inch diameter monitoring well was constructed with a seven-foot section of well screen placed at a total depth of approximately 10 feet and completed at the ground surface as a temporary PVC stick-up well. Soil samples from each of the borings were evaluated in the field using a photoionization detector (PID). Logs of the borings and monitoring well are presented in Appendix A.

Soil samples were collected from each of the borings and sent to Summit Scientific, Inc. in Golden, Colorado for the analyses of for benzene, toluene, ethylbenzene and total xylenes (BTEX), naphthalene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene (TMB),

Total Petroleum Hydrocarbons – Gasoline Range Organics (TPH-GRO) by EPA method 8260B, TPH – Diesel Range Organics (TPH-DRO), Extended Range Organics (TPH-ORO) by EPA method 8015, Polycyclic Aromatic Hydrocarbons (PAH) Acenaphthene, Anthracene, Benzo (a) anthracene, Benzo (a) pyrene, Benzo (b) fluoranthene, Chrysene, Dibenz (a,h) anthracene, Fluoranthene, Fluorene, Indeno (1,2,3-cd) pyrene, Pyrene, 1-Methylnaphthalene, 2-Methylnaphthalene by EPA method 8270D.

Soil impacts exceeding the COGCC Table 915-1 protection of groundwater soil screening levels (PGSSLs) for organic petroleum constituents were not observed in any of the five borings. The soil chemistry is presented on Figure 5 and summarized in Tables 1 through 3. The laboratory report and chain of custody documentation is provided in Appendix C.

3.2 Groundwater Monitoring

Groundwater was measured in monitoring well MW-1 on June 14, 2022 in accordance with the Sampling Plan included in Appendix B. The data is illustrated on Figure 6 and summarized in Tables 4 and 5.

3.3 Groundwater Sampling and Analysis

Groundwater samples were collected from MW-1 on June 14, 2022. The samples were submitted to Summit Scientific, Inc. in Golden, Colorado for the analyses of organic petroleum constituents benzene, toluene, ethylbenzene, xylenes (BTEX), 1,2,4-trimethylbenzene; 1,3,5-trimethylbenzene and naphthalene by EPA Method 8260B, inorganic petroleum constituents chloride and sulfate by EPA Method 300.0 and total dissolved solids (TDS) by Standard Method 2540C.

The groundwater concentrations in MW-1 were below the respective COGCC Table 915-1 organic and inorganic standards. The groundwater chemistry is shown on Figure

6 and the analytical data are summarized in Tables 4 and 5. The laboratory report and chain of custody documentation is provided in Appendix C.

4.0 DISCUSSION

A single-day site investigation was conducted at the Howard A27-1 flowline location on June 14, 2022 resulting from a historical release discovered beneath the flowline during decommissioning activities. Five soil boings were advanced, and one was completed as a temporary monitoring well on site to delineate the magnitude and extent of soil and groundwater impacts.

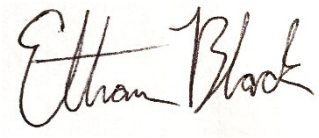
Soil impacts above the COGCC Table 915-1 protection of groundwater soil screening levels were not observed in any of the five soil borings. The groundwater data collected from the temporary monitoring well MW-1 indicates that the groundwater was less than the COGCC Table 915-1 organic and inorganic constituent standards. The soil and groundwater data are illustrated and summarized in the attached tables and figures.

Monitoring well MW-1 will continue to be monitored quarterly in accordance with the groundwater sampling plan outlined in Appendix B. After the site achieves four consecutive quarters of clean groundwater Noble will request closure under the COGCC Table 915-1 Residential Soil Screening levels.

5.0 REMARKS

The discussion and conclusions contained in this report represent our professional opinions. These opinions are based on currently available information and are arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended.

This report was prepared by **FREMONT ENVIRONMENTAL INC.**



7/29/22

_____ Date_____

Ethan D. Black, P.G.

Geologist

Reviewed by:

7/29/22

_____ Date_____

Paul V. Henehan, P.E.

Senior Consultant

TABLES

TABLE 1
SUMMARY OF VOLATILE ORGANIC SOIL CHEMISTRY DATA
NOBLE ENERGY INC.
HOWARD A27-1, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C022-040

Sample	Date Sampled	Depth (ft)	Location	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)	Naphth-alene (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)
1FL01@4.0'	4/14/2022	4.0'	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
1FL02@5.0'	4/14/2022	5.0'	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
MW-1 4ft	6/14/2022	4	Boring	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
MW-1 10ft	6/14/2022	10	Boring	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
SB-2 5ft	6/14/2022	5	Boring	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
SB-3 5ft	6/14/2022	5	Boring	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
SB-4 5ft	6/14/2022	5	Boring	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
SB-5 5ft	6/14/2022	5	Boring	<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

TABLE 2
SUMMARY OF POLYCYCLIC AROMATIC HYDROCARBON SOIL CHEMISTRY DATA
NOBLE ENERGY INC.
HOWARD A27-1, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C022-040

Sample	Date Sampled	Depth (ft)	Location	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)	Dibenz (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)
1FL01@4.0'	4/14/2022	4.0'	Floor	0.111	0.151	**0.186**	0.127	0.181	0.0610	0.151	0.0158	0.449	0.115	0.140	0.412	**0.00893**	0.0187
1FL02@5.0'	4/14/2022	5.0'	Floor	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
MW-1 4ft	6/14/2022	4	Boring	<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
MW-1 10ft	6/14/2022	10	Boring	<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
SB-2 5ft	6/14/2022	5	Boring	<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
SB-3 5ft	6/14/2022	5	Boring	<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
SB-4 5ft	6/14/2022	5	Boring	<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
SB-5 5ft	6/14/2022	5	Boring	<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
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

Bold faced values exceed the COGCC Table 915-1 concentrations

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

TABLE 3
SUMMARY OF INORGANIC SOIL CHEMISTRY DATA
NOBLE ENERGY INC.
HOWARD A27-1, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C022-040

SAMPLE LOCATION	DATE SAMPLED	DEPTH ft	EC mmhos/cm	pH pH units	SAR units	BORON mg/L
1FL01@4.0'	4/14/2022	4.0'	0.926	7.90	1.010	0.347
1FL02@5.0'	4/14/2022	5.0'	2.500	7.68	0.598	0.553
Table 915-1 Limits			<4	6-8.3	<6	2

Bold face values exceed the COGCC Limits

TABLE 4
SUMMARY OF ORGANIC GROUNDWATER CHEMISTRY DATA
NOBLE ENERGY INC.
HOWARD A27-1, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C022-040

SAMPLE LOCATION	DATE	BENZENE (µg/L)	TOLUENE (µg/L)	ETHYL BENZENE (µg/L)	TOTAL XYLENES (µg/L)	NAPHTHALENE (µg/L)	1,2,4 TRIMETHYL-BENZENE (µg/L)	1,3,5 TRIMETHYL-BENZENE (µg/L)
MW-1	6/14/2022	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
Table 915-1 Limits		5	560	700	1,400	140	67	67

Bold face values exceed the COGCC limits

NP - No Free Product

NA - Not Analyzed

NAP - Not Applicable

TABLE 5
SUMMARY OF INORGANIC GROUNDWATER CHEMISTRY DATA
NOBLE ENERGY INC.
HOWARD A27-1, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C022-040

SAMPLE LOCATION	DATE	TOTAL DISSOLVED SOLIDS (mg/L)	CHLORIDE ION (mg/L)	SULFATE ION (mg/L)
MW-1	6/14/2022	574	25.0	44.0
Table 915-1 Limits		<1.25 x local background	250	250

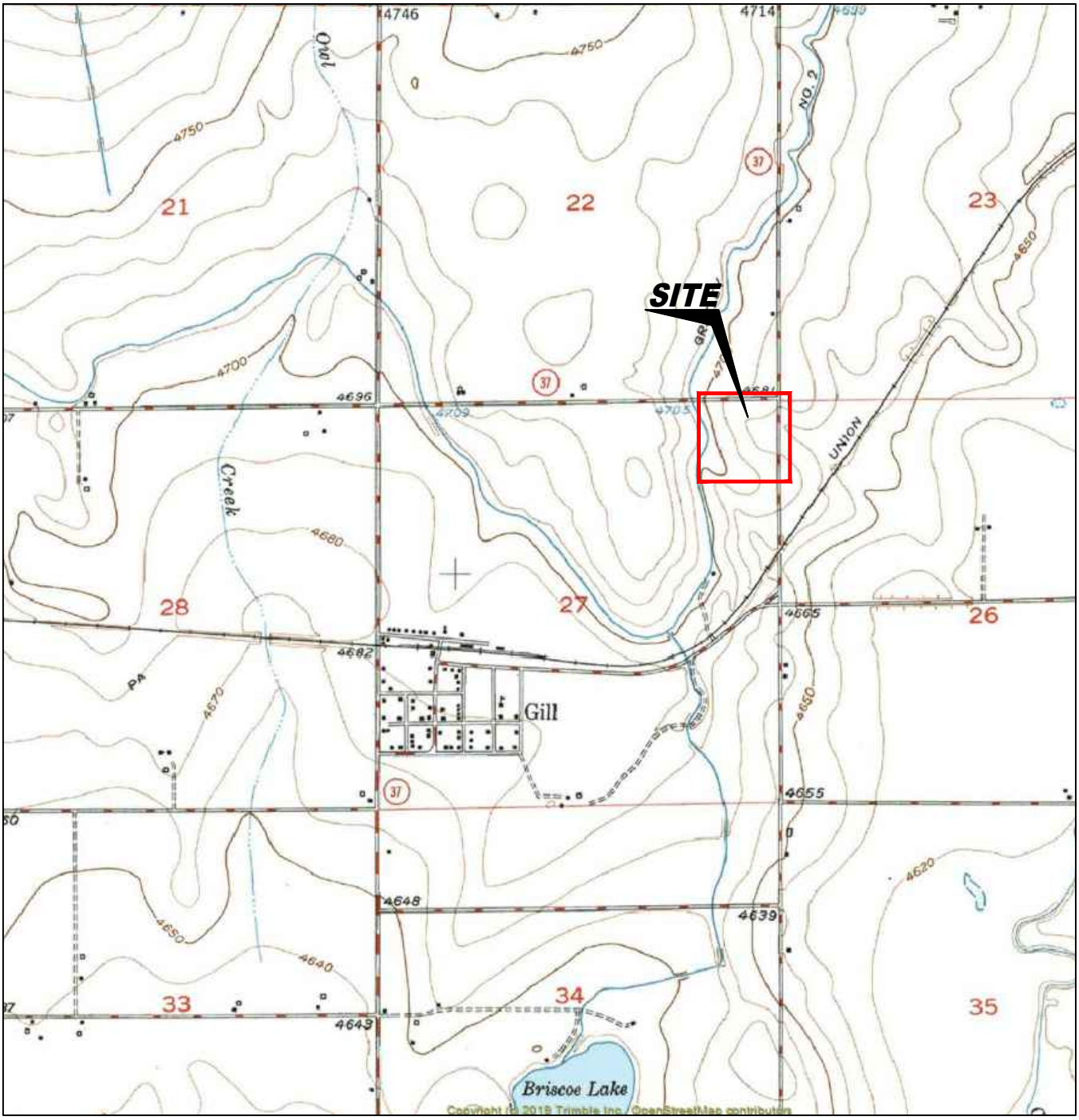
Bold face values exceed the COGCC limits

NP - No Free Product

NA - Not Analyzed

NAP - Not Applicable

FIGURES



N

Scale (miles)
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
0 1000 2000 3000 4000 5000
Scale (feet)

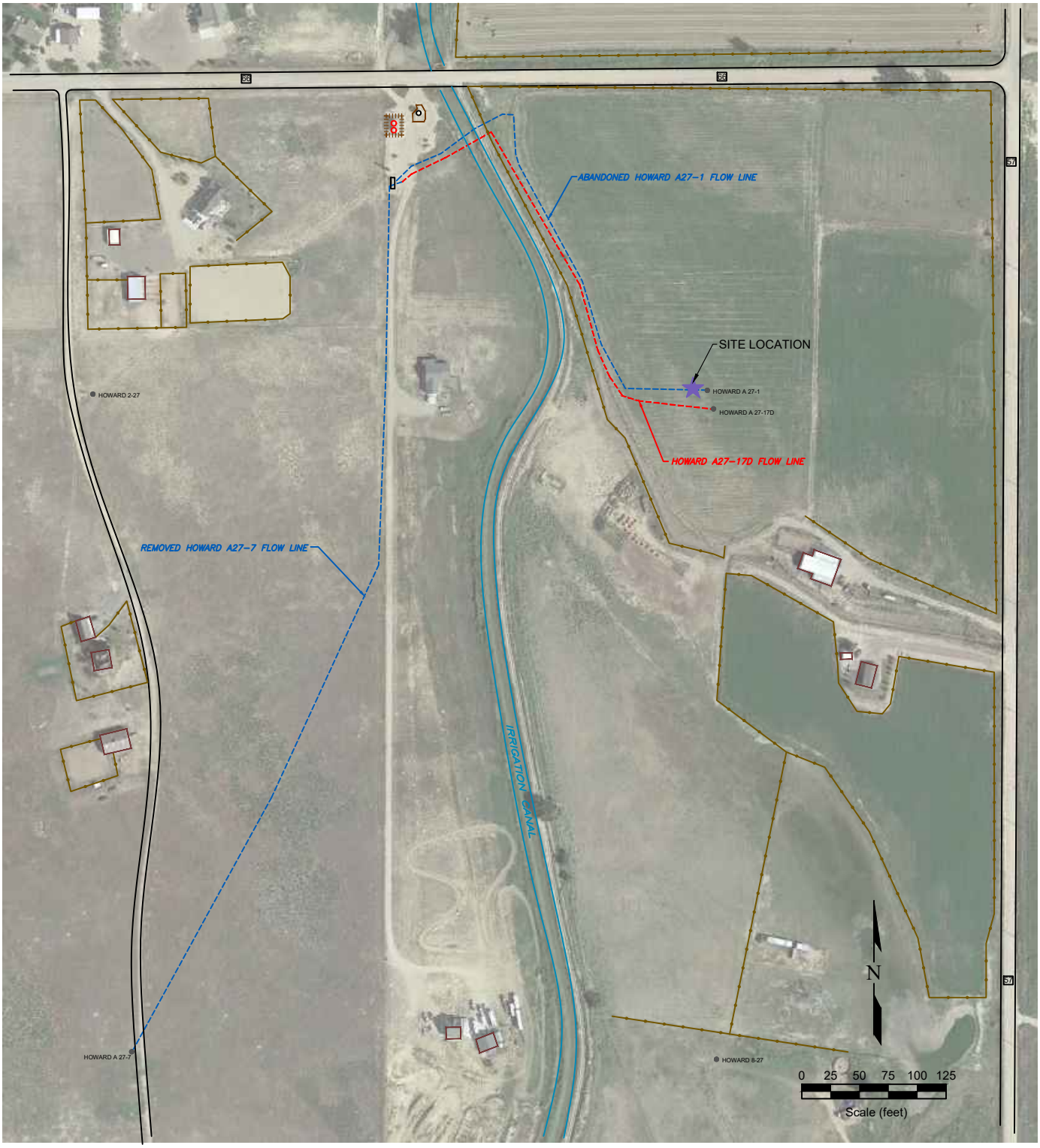
USGS 7.5 MINUTE SERIES (TOPOGRAPHIC)

Figure 1
SITE LOCATION MAP

Noble Energy, Inc. ~ Howard A27-1
NENE Sec. 27, T6N, R64W, 6th PM
Weld County, Colorado
40.462728°, -104.529151°

Project #	API #	Facility #
C022-040	**05-123-22848**	**276882**
Date	Remediation #	Filename
7/28/22	**20374**	**22040T**

FREMONT ENVIRONMENTAL



LEGEND

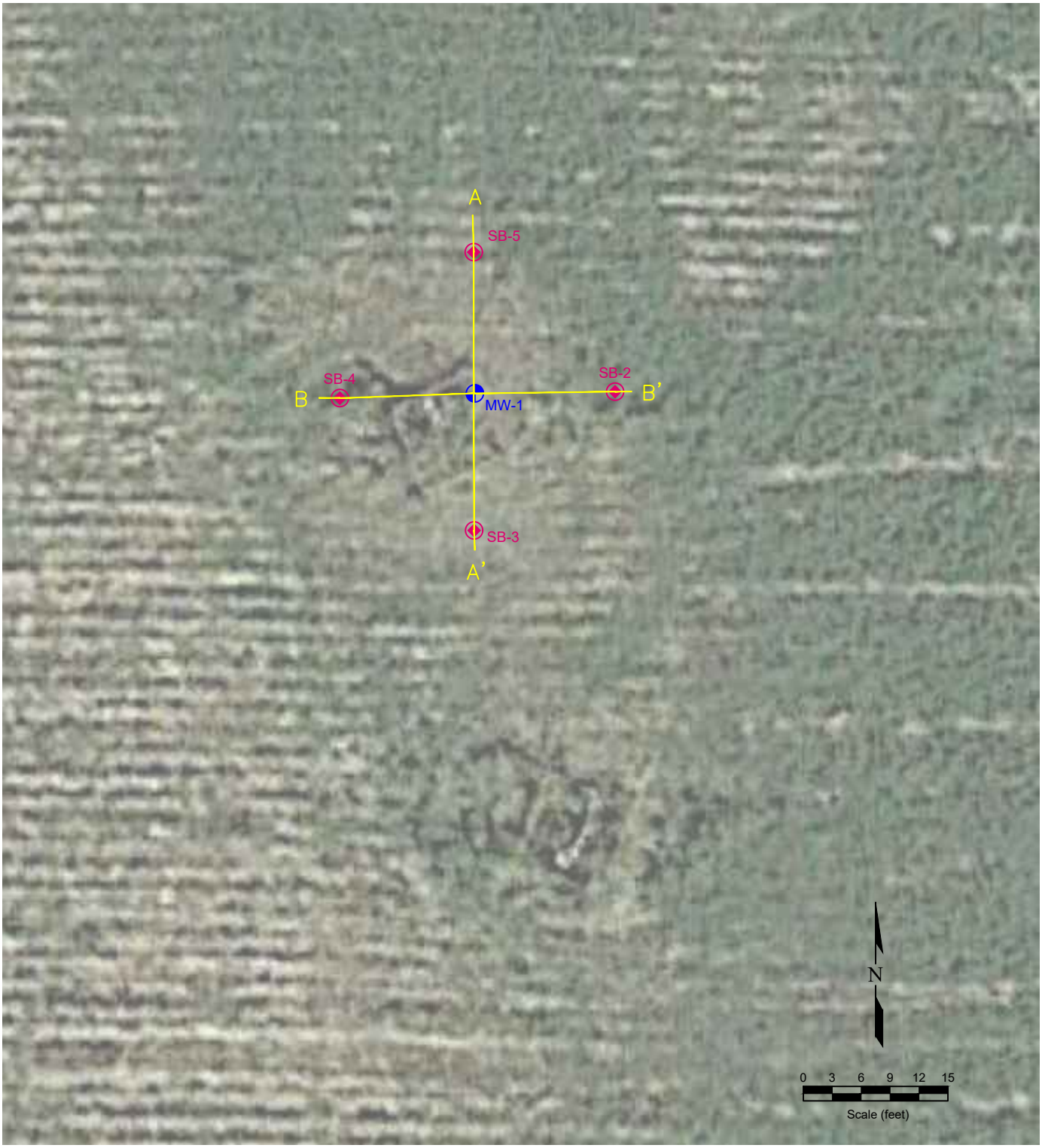
WELL HEAD LOCATION
SITE LOCATION
ABOVE GROUND STORAGE TANK
BUILDING
BUILDING
FORMER
FORMER FACILITY
FLOW LINE
CONTAINMENT BERM
CONTAINMENT WALL
FENCE LINE

Figure 2
SITE MAP

Noble Energy, Inc. ~ Howard A27-1
NENE Sec. 27, T6N, R64W, 6th PM
Weld County, Colorado
40.462728°, -104.529151°

Project No.	API #	Facility #
C022-040	**05-123-22848**	**276882**
Date	Remediation #	Filename
7/28/22	**20374**	**22040QS**

FREMONT ENVIRONMENTAL



LEGEND

- SOIL BORING
- MONITORING WELL
- A — A' CROSS SECTION CUT LINE

Figure 3

CROSS SECTION MAP

Noble Energy, Inc. ~ Howard A27-1
NENE Sec. 27, T6N, R64W, 6th PM
Weld County, Colorado
40.462728°, -104.529151°

Project No.	API #	Facility #
C022-040	**05-123-22848**	**276882**
Date	Remediation #	Filename
7/28/22	**20374**	**22040QSC**

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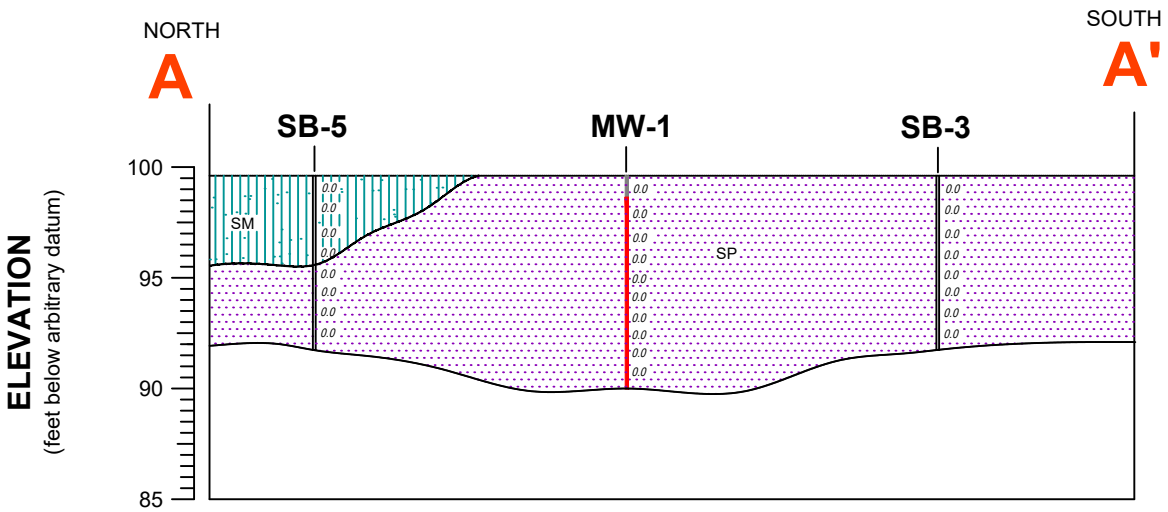
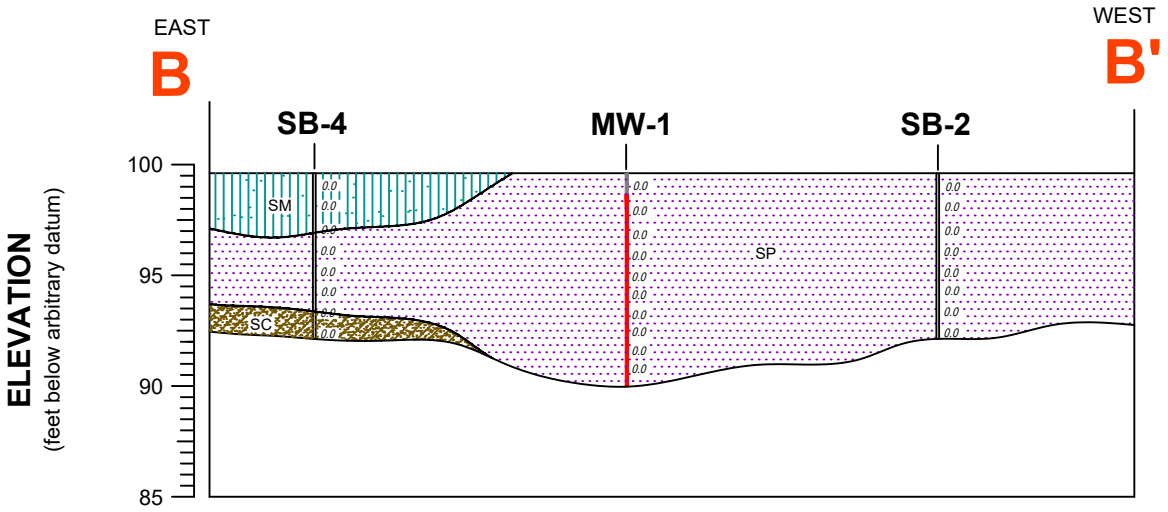
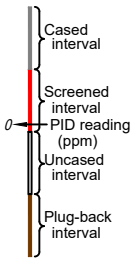
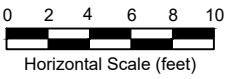








LEGEND

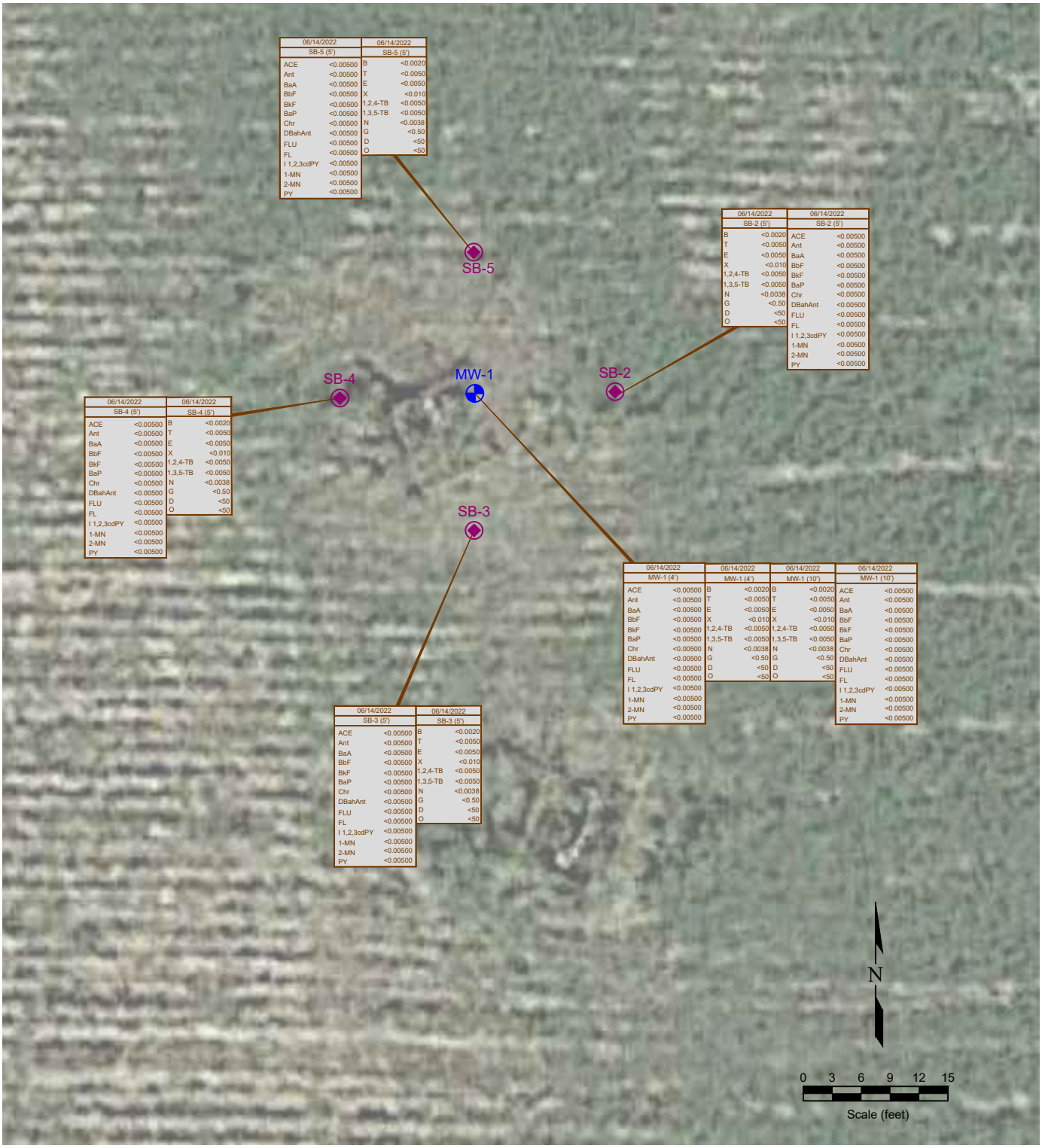
CH Clay, high plasticity	SW Sand, well-graded	Fill
CL Clay low plasticity	SP Sand, poorly-graded	Asphalt
MH Silt, high plasticity	SC Sand, clayey	Roadbase
ML Silt, low plasticity	SM Sand silty	Basin fill
CH-MH Clay, silty high plasticity	GW Gravel, well-graded	Claystone
CL-ML Clay, silty, low plasticity	GP Gravel, poorly-graded	Firm sandy clay
MH-CH Silt, clayey high plasticity	GC Gravel, clayey	Shale
ML-CL Silt, clayey low plasticity	GM Gravel, silty	Sandstone

Figure 4
CROSS SECTION A-A" and B-B'

Noble Energy, Inc. ~ Howard A27-1
NENE Sec. 27, T6N, R64W, 6th PM
Weld County, Colorado
40.462728°, -104.529151°

Project No.	API #	Location #
C022-040	**05-123-22848**	**276882**
Date	Remediation #	Filename
7/28/22	**20374**	**22040X**

FREMONT ENVIRONMENTAL



LEGEND

- SOIL BORING
- MONITORING WELL
- [NA] NOT ANALYZED

06/14/2022 MW-1 (4')	
ACE	<0.00500
Ant	<0.00500
BaA	<0.00500
BbF	<0.00500
BkF	<0.00500
BaP	<0.00500
Chr	<0.00500
DBahAnt	<0.00500
FLU	<0.00500
FL	<0.00500
I 1,2,3cdPY	<0.00500
1-MN	<0.00500
2-MN	<0.00500
PY	<0.00500

DATE SAMPLED
SAMPLE ID and DEPTH (ft)
ACENAPHTHENE (mg/kg)
ANTHRACENE (mg/kg)
BENZO (A) ANTHRACENE (mg/kg)
BENZO (B) FLUORANTHENE (mg/kg)
BENZO (K) FLUORANTHENE(mg/kg)
BENZO (A) PYRENE (mg/kg)
CHRYSENE (mg/kg)
DIBENZ (A,H) ANTHRACENE (mg/kg)
FLUORANTHENE (mg/kg)
FLUORENE (mg/kg)
INDENO (1,2,3-CD) PYRENE(mg/kg)
1-METHYLNAPHTHALENE (mg/kg)
2-METHYLNAPHTHALENE (mg/kg)
PYRENE (mg/kg)

06/14/2022 MW-1 (4')	
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

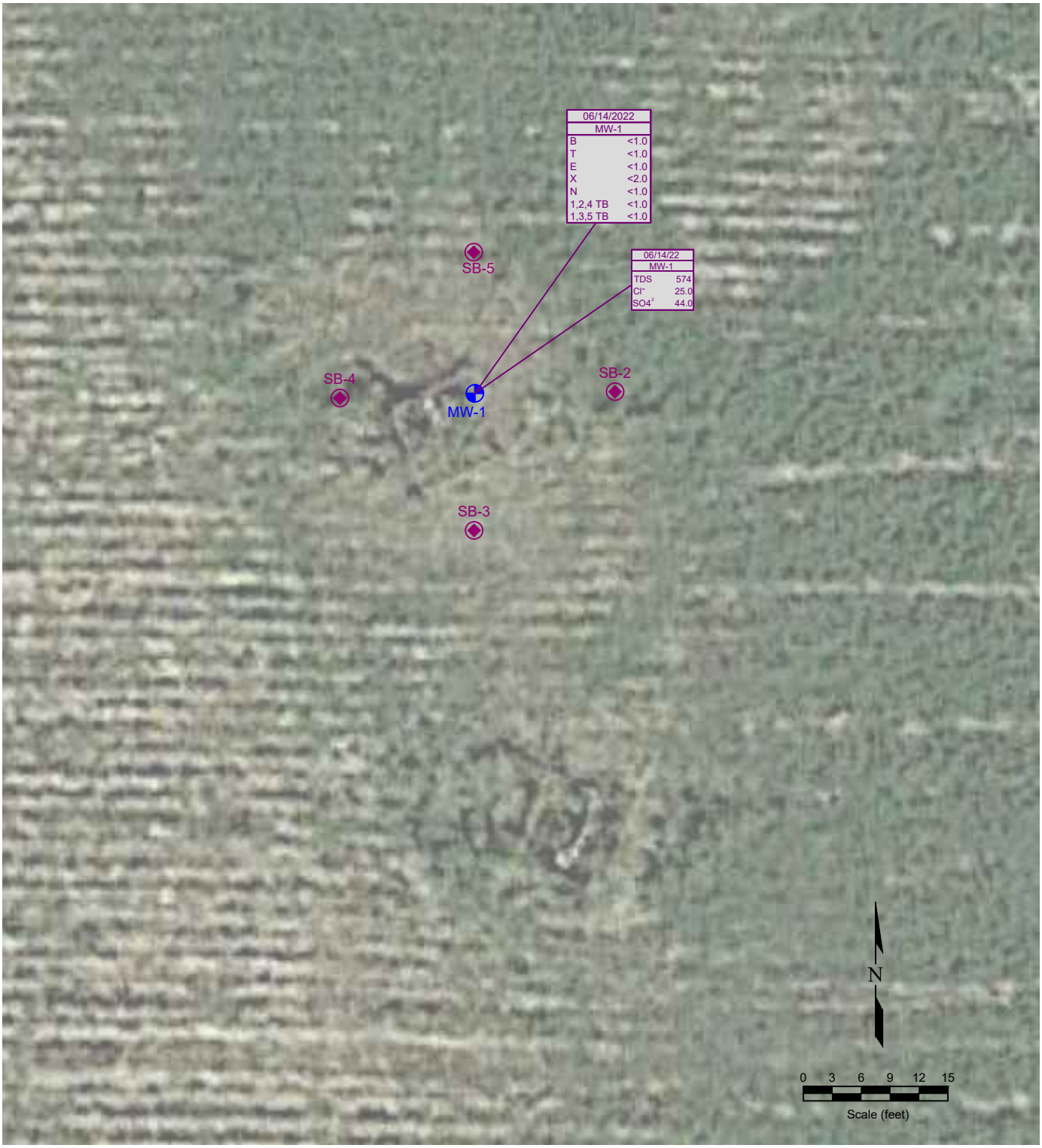
DATE SAMPLED
SAMPLE ID and DEPTH (ft)
BENZENE (mg/kg)
TOLUENE (mg/kg)
ETHYLBENZENE (mg/kg)
TOTAL XYLENES (mg/kg)
1,2,4-TRIMETHYLBENZENE (mg/kg)
1,3,5-TRIMETHYLBENZENE (mg/kg)
NAPHTHALENE (mg/kg)
TPH-GRO (mg/kg)
TPH-DRO (mg/kg)
TPH-ORO (mg/kg)

Figure 5
SOIL CHEMISTRY MAP
June 14, 2022

Noble Energy, Inc. ~ Howard A27-1
NENE Sec. 27, T6N, R64W, 6th PM
Weld County, Colorado
40.462728°, -104.529151°

Project No.	API #	Facility #
C022-040	**05-123-22848**	**276882**
Date	Remediation #	Filename
7/28/22	**20374**	**22040QSC**

FREMONT ENVIRONMENTAL



LEGEND

- SOIL BORING
- MONITORING WELL

06/14/2022	
MW-1	
B	<1.0
T	<1.0
E	<1.0
X	<2.0
N	<1.0
1,2,4 TB	<1.0
1,3,5 TB	<1.0

DATE SAMPLED
SAMPLE ID
BENZENE (ug/L)
TOLUENE (ug/L)
ETHYLBENZENE (ug/L)
TOTAL XYLENES (ug/L)
NAPHTHALENE (ug/L)
1,2,4-TRIMETHYLBENZENE (ug/L)
1,3,5-TRIMETHYLBENZENE (ug/L)

06/14/22	
MW-1	
TDS	574
Cl⁻	25.0
SO4²⁻	44.0

DATE SAMPLED
SAMPLE ID
TOTAL DISSOLVED SOLIDS (mg/L)
CHLORIDE ION (mg/L)
SULFATE ION (mg/L)

Figure 6

GROUNDWATER CHEMISTRY MAP

June 14, 2022

Noble Energy, Inc. ~ Howard A27-1

NENE Sec. 27, T6N, R64W, 6th PM

Weld County, Colorado

40.462728°, -104.529151°

Project No.	API #	Facility #
C022-040	**05-123-22848**	**276882**
Date	Remediation #	Filename
7/28/22	**20374**	**22040QSC**

FREMONT ENVIRONMENTAL

APPENDIX A

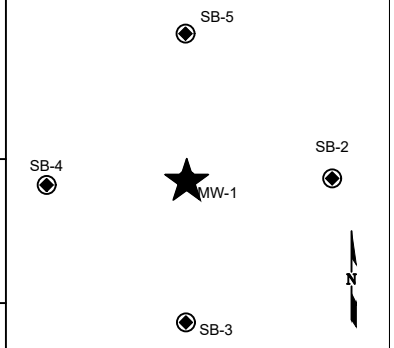
BORING LOGS

FREMONT ENVIRONMENTAL

BORING/WELL CONSTRUCTION LOG

Page 1 of 1

Boring/Well Location Sketch Map



Boring/Well No.	Total Depth	Location
MW-1	10'	Noble Energy, Inc. Howard A27-1 NENE Sec 27, T6N, R64W, 6th PM Weld County, Colorado

Project No./Name	Approved By
C022-040 Noble Howard A27-1	

Drilling Contractor/Driller	Geologist/Office
DrillPro/Terrence A, Glen and Hayward	Ethan Black/Fremont Environmental, Inc.

Drilling Equipment/Method	Size/Type of Bit	Sampling Method	Start/Finish Date
Geoprobe	2.5" direct push	direct push	06/14/2022

Well Installed?	Casing Mtrl./Dia.	Screen: Type	Mtrl.	Length	Dia.	Slot Size
Yes [X] No [ ]	SCH 40 PVC	Slotted	PVC	8'	2"	0.010

Elevation of:	Ground Surface	Top of Well Casing	Top of Screen	Bottom of Screen	Ground Water Surface/Date Measured
(ft. above datum)	.	.	.	.	7.47 06/14/2022

DEPTH (feet)	WELL CONSTRUCTION	LITHOLOGY: GRAPHIC LOG	LITHOLOGY: VISUAL DESCRIPTION	Penetration Rate (blows/6")	Recovery (%)	Sample Interval (feet)	PID Values (ppm)
	Bentonite; #10-20 Silica Sand; 1" Screen	SP	Sand: tan, fine, moist				0.0
							0.0
							0.0
							0.0
			- 1" gray sand lens				
5			- some medium sand gradus				0.0
							0.0
			- saturated				0.0
							0.0
			- wet				0.0
10			TD 10'				0.0
15							
20							

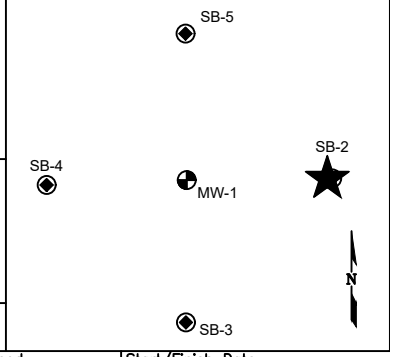
FREMONT ENVIRONMENTAL

BORING/WELL CONSTRUCTION LOG

Page 1 of 1

Boring/Well No.	Total Depth	Location
SB-2	8'	Noble Energy, Inc. Howard A27-1 NENE Sec 27, T6N, R64W, 6th PM Weld County, Colorado
Project No./Name: C022-040 Noble Howard A27-1		
Drilling Contractor/Driller: DrillPro/Terrence A, Glen and Hayward		
Geologist/Office: Ethan Black/Fremont Environmental, Inc.		Approved By:

Boring/Well Location Sketch Map



Drilling Equipment/Method	Size/Type of Bit	Sampling Method	Start/Finish Date
Geoprobe	2.5" direct push	direct push	06/14/2022

Well Installed?	Casing Mtrl./Dia.	Screen: Type	Mtrl.	Length	Dia.	Slot Size
Yes ☐ No ☒	.	.	.	.	.	.

Elevation of:	Ground Surface	Top of Well Casing	Top of Screen	Bottom of Screen	Ground Water Surface/Date Measured
(ft. above datum)	.	.	.	.	. .

DEPTH (feet)	WELL CONSTRUCTION	LITHOLOGY: GRAPHIC LOG	LITHOLOGY: VISUAL DESCRIPTION	Penetration Rate (blows/6")	Recovery (%)	Sample Interval (feet)	PID Values (ppm)
			Sand: tan, fine, moist				0.0
							0.0
		SP					0.0
							0.0
5							0.0
							0.0
			- saturated				0.0
			TD 8'				0.0
10							
15							
20							

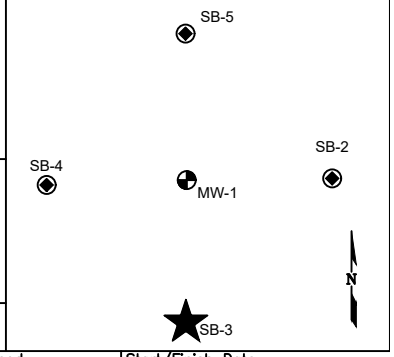
FREMONT ENVIRONMENTAL

BORING/WELL CONSTRUCTION LOG

Page 1 of 1

Boring/Well No.	Total Depth	Location
SB-3	8'	Noble Energy, Inc. Howard A27-1 NENE Sec 27, T6N, R64W, 6th PM Weld County, Colorado
Project No./Name: C022-040 Noble Howard A27-1		
Drilling Contractor/Driller: DrillPro/Terrence A, Glen and Hayward		
Geologist/Office: Ethan Black/Fremont Environmental, Inc.		Approved By:

Boring/Well Location Sketch Map



Drilling Equipment/Method	Size/Type of Bit	Sampling Method	Start/Finish Date
Geoprobe	2.5" direct push	direct push	06/14/2022

Well Installed?	Casing Mtrl./Dia.	Screen: Type	Mtrl.	Length	Dia.	Slot Size
Yes ☐ No ☒	.	.	.	.	.	.

Elevation of:	Ground Surface	Top of Well Casing	Top of Screen	Bottom of Screen	Ground Water Surface/Date Measured
(ft. above datum)	.	.	.	.	. .

DEPTH (feet)	WELL CONSTRUCTION	LITHOLOGY: GRAPHIC LOG	LITHOLOGY: VISUAL DESCRIPTION	Penetration Rate (blows/6")	Recovery (%)	Sample Interval (feet)	PID Values (ppm)
			Sand: tan, fine, moist				0.0
							0.0
		SP					0.0
							0.0
5			- saturated, some oxidization				0.0
							0.0
							0.0
			TD 8'				0.0
10							
15							
20							

FREMONT ENVIRONMENTAL

BORING/WELL CONSTRUCTION LOG

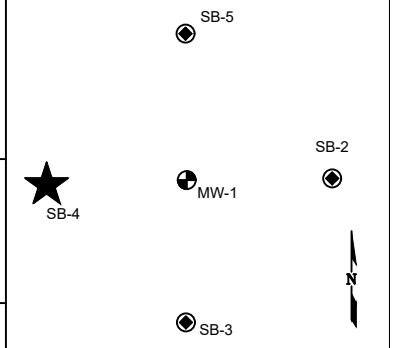
Page 1 of 1

Boring/Well No.	Total Depth	Location
SB-4	8'	Noble Energy, Inc. Howard A27-1 NENE Sec 27, T6N, R64W, 6th PM Weld County, Colorado

Project No./Name	Approved By
C022-040 Noble Howard A27-1	

Drilling Contractor/Driller	Geologist/Office
DrillPro/Terrence A, Glen and Hayward	Ethan Black/Fremont Environmental, Inc.

Boring/Well Location Sketch Map



Drilling Equipment/Method	Size/Type of Bit	Sampling Method	Start/Finish Date
Geoprobe	2.5" direct push	direct push	06/14/2022

Well Installed?	Casing Mtrl./Dia.	Screen: Type	Mtrl.	Length	Dia.	Slot Size
Yes ☐ No ☒	.	.	.	.	.	.

Elevation of:	Ground Surface	Top of Well Casing	Top of Screen	Bottom of Screen	Ground Water Surface/Date Measured
(ft. above datum)	.	.	.	.	.

DEPTH (feet)	WELL CONSTRUCTION	LITHOLOGY: GRAPHIC LOG	LITHOLOGY: VISUAL DESCRIPTION	Penetration Rate (blows/6")	Recovery (%)	Sample Interval (feet)	PID Values (ppm)
		SM	Silty Sand: brown, fine and medium sand, moist, slightly oxidized				0.0
							0.0
							0.0
		SP	Sand: tan, fine, moist, oxidized				0.0
5							0.0
							0.0
		SC	Sandy-Clay: orange, fine sand moist, heavily oxidized				0.0
			TD 8'				0.0
10							
15							
20							

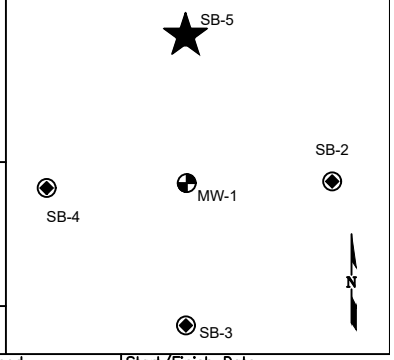
FREMONT ENVIRONMENTAL

BORING/WELL CONSTRUCTION LOG

Page 1 of 1

Boring/Well No.: SB-5	Total Depth: 8'
Project No./Name: C022-040 Noble Howard A27-1	
Drilling Contractor/Driller: DrillPro/Terrence A, Glen and Hayward	
Geologist/Office: Ethan Black/Fremont Environmental, Inc.	
Location: Noble Energy, Inc. Howard A27-1 NENE Sec 27, T6N, R64W, 6th PM Weld County, Colorado	
Approved By:	
Drilling Equipment/Method: Geoprobe	Size/Type of Bit: 2.5" direct push
Sampling Method: direct push	Start/Finish Date: 06/14/2022
Well Installed? Yes ☐ No ☒	Casing Mtrl./Dia.: .
Screen: Type . Mtrl. . Length . Dia. . Slot Size .	
Elevation of: (ft. above datum) Ground Surface	Top of Well Casing
Top of Screen	Bottom of Screen
Ground Water Surface/Date Measured	

Boring/Well Location Sketch Map



DEPTH (feet)	WELL CONSTRUCTION	LITHOLOGY: GRAPHIC LOG	LITHOLOGY: VISUAL DESCRIPTION	Penetration Rate (blows/6")	Recovery (%)	Sample Interval (feet)	PID Values (ppm)
		SM	Silty Sand: brown to beige with white silty clasts, fine sand, moist				0.0
							0.0
							0.0
							0.0
		SP	Sand: tan and beige, fine, moist, oxidized				0.0
			- saturated				0.0
							0.0
			TD 8'				0.0

5 10 15 20

APPENDIX B

SAMPLING PLAN

SAMPLING METHODS AND PROCEDURES

Water Level Measurements

All groundwater level measurements will be obtained using an electric measuring device, which indicates when a probe is in contact with groundwater. Measurements will be obtained by lowering the device into the well until the water surface had been encountered, and by measuring the distance from the top of the inside riser pipe to the probe. All the measurements will be recorded to the nearest 0.01 ft. To minimize cross-contamination, the water level indicator will be decontaminated with isopropyl alcohol and distilled water between each well.

Monitoring Well Sampling

All monitoring wells were sampled from the "cleanest" to the "most contaminated" according to the protocols listed below.

Field Protocol

Step 1 Measure water level in each well.

Step 2 Purge each monitoring well by evacuating a minimum of three well bore volumes using a disposable polyethylene bailer.

Step 3 Collect water samples using a disposable polyethylene bailer.

Step 4 Cool samples to approximately 4°C for transportation.

Step 5 Store water samples and transport to a specific laboratory, following all documentation and chain-of-custody procedures.

Upon completion of groundwater sampling, a chain-of-custody log will be completed. Chain-of-custody records include the following information: project, project number, shipped by, shipped to, suspected hazard, sampling point, location, field identification number, date collected, sample type, number of containers, analysis required, and sampler's signature.

The chain-of-custody records will be shipped with the samples to the laboratory. Upon arrival at the laboratory the samples will be checked in and signed by the appropriate laboratory personnel. Laboratory identification numbers will be noted on the chain-of-custody record. Upon completion of the laboratory analysis, the completed chain-of-custody record will be returned to the project manager.

Analytical Methods

The following list identifies the various chemical constituents and analytical methods which will be used for their quantification.

Chemical Parameter	Method
Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX)	EPA Method – 8260B
1,2,4- and 1,3,5-Trimethylbenzene and Naphthalene	EPA Method – 8260B
Chloride and Sulfate Anions	EPA Method – 300.0
Total Dissolved Solids (TDS)	Standard Method 2540C

APPENDIX C

LABORATORY DOCUMENTATION

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

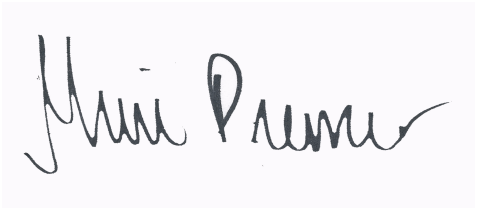
April 26, 2022

Paul Henehan
Fremont Environmental
PO Box 1289
Wellington, CO 80549

RE: Noble - Howard A27-01
Work Order #2204220

Enclosed are the results of analyses for samples received by Summit Scientific on 04/14/22 17:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Muri Premer For Paul Shrewsbury
President

S2

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 Project Number: [none] Project Manager: Paul Henehan	**Reported:** 04/26/22 13:27

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
1FL01@4.0'	2204220-01	Soil	04/14/22 00:00	04/14/22 17:20
1FL02@5.0'	2204220-02	Soil	04/14/22 00:00	04/14/22 17:20

Summit Scientific

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

Summit Scientific

2204220

S2

4653 Table Mountain Drive ♦ Golden, Colorado 80403
303-277-9310 ♦ 303-374-5933 (f)

Client: Fremont Environmental
Address: P.O Box 1289
City/State/Zip: Wellington, CO 80549
Phone: 303-956-8714
Sampler Name: JT

Project Manager: Paul Henehan
E-Mail: paulh@fremontenv.com, ethanb@fremontenv.com
Bill to: Jacob
Project Name: Howard A27-01
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	GBTEXN - 915	BTEX - 910	GRO	DRO/ORO	SAR	EC	pH	Boron	PAH - 915	
1	1FL01E4.0'	04/14/22		3			X			X			X		X	X	X	X	X	X	X	
2	1FL02E5.0'	04/14/22		3			X			X			X		X	X	X	X	X	X	X	
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						

Relinquished by:	Date/Time:	Received by:	Date/Time:
	04/14/22		04-14-22 15:20
Relinquished by:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Date/Time:	Received by:	Date/Time:

Turn Around Time (Check)
Same Day ___ 72 hours ___
24 hours ___ Standard X
48 hours ___

Sample Integrity:
Temperature Upon Receipt: 7.4
Samples Intact: (Yes) No

Notes:

S2

Sample Receipt Checklist S2 Work Order# 2204220

Client: Fdmont Client Project ID: Howard A25-01

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

Matrix (Check all that apply) Air [ ] Soil/Solid [✓] 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.	✓			Gn 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_2SO_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

4/14/ 17:20
Date/Time

S2

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 Project Number: [none] Project Manager: Paul Henehan	**Reported:** 04/26/22 13:27

1FL01@4.0'

2204220-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFD0345	04/18/22	04/19/22	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: **04/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*109 %*	*50-150*		"	"	"	"	
Surrogate: Toluene-d8		*101 %*	*50-150*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*100 %*	*50-150*		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

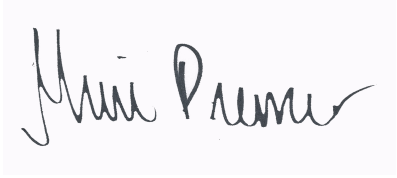
Date Sampled: **04/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFD0346	04/18/22	04/19/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **04/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		*96.2 %*	*30-150*		"	"	"	"	

PAH by EPA Method 8270D SIM



S2

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 Project Number: [none] Project Manager: Paul Henehan	**Reported:** 04/26/22 13:27

1FL01@4.0'

2204220-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **04/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	**0.111**	0.00500	mg/kg	1	BFD0364	04/19/22	04/20/22	EPA 8270D SIM	
Anthracene	**0.151**	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	**0.186**	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	**0.127**	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	**0.181**	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	**0.0610**	0.00500	"	"	"	"	"	"	
Chrysene	**0.151**	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	**0.0158**	0.00500	"	"	"	"	"	"	
Fluoranthene	**0.449**	0.0500	"	10	"	"	"	"	
Fluorene	**0.115**	0.00500	"	1	"	"	"	"	
Indeno (1,2,3-cd) pyrene	**0.140**	0.00500	"	"	"	"	"	"	
Pyrene	**0.412**	0.0500	"	10	"	"	"	"	
1-Methylnaphthalene	**0.00893**	0.00500	"	1	"	"	"	"	
2-Methylnaphthalene	**0.0187**	0.00500	"	"	"	"	"	"	

Date Sampled: **04/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		*49.7 %*	*40-150*		"	"	"	"	
Surrogate: Fluoranthene-d10		*56.7 %*	*40-150*		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **04/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	**0.347**	0.0100	mg/L	1	BFD0380	04/19/22	04/23/22	EPA 6020B	

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

Date Sampled: **04/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	**42.1**	0.0570	mg/L dry	1	BFD0456	04/21/22	04/25/22	EPA 6020B	

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.

S2

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 Project Number: [none] Project Manager: Paul Henehan	**Reported:** 04/26/22 13:27

1FL01@4.0'

2204220-01 (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
Magnesium	**23.3**	0.0570	mg/L dry	1	BFD0456	04/21/22	04/25/22	EPA 6020B	
Sodium	**33.0**	0.0570	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **04/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	**1.01**	0.00100	units	1	BFD0536	04/25/22	04/25/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **04/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	**87.7**		%	1	BFD0428	04/20/22	04/20/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **04/14/22 00:00**

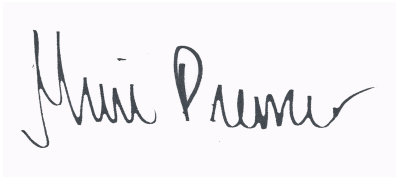
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	**0.926**	0.0100	mmhos/cm	1	BFD0487	04/22/22	04/22/22	EPA 120.1	

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

Date Sampled: **04/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	**7.90**		pH Units	1	BFD0486	04/22/22	04/22/22	EPA 9045D	

Summit Scientific



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

S2

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 Project Number: [none] Project Manager: Paul Henehan	**Reported:** 04/26/22 13:27

1FL02@5.0'

2204220-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFD0345	04/18/22	04/19/22	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: **04/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*112 %*	*50-150*		"	"	"	"	
Surrogate: Toluene-d8		*99.8 %*	*50-150*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.8 %*	*50-150*		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **04/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFD0346	04/18/22	04/19/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **04/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		*97.0 %*	*30-150*		"	"	"	"	

PAH by EPA Method 8270D SIM

S2

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 Project Number: [none] Project Manager: Paul Henehan	**Reported:** 04/26/22 13:27

1FL02@5.0'

2204220-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **04/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFD0364	04/19/22	04/20/22	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: **04/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		*51.7 %*	*40-150*		"	"	"	"	
Surrogate: Fluoranthene-d10		*49.8 %*	*40-150*		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **04/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	**0.553**	0.0100	mg/L	1	BFD0380	04/19/22	04/23/22	EPA 6020B	

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

Date Sampled: **04/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

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S2

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 Project Number: [none] Project Manager: Paul Henehan	**Reported:** 04/26/22 13:27

1FL02@5.0'

2204220-02 (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	**205**	0.0622	mg/L dry	1	BFD0456	04/21/22	04/25/22	EPA 6020B	
Magnesium	**74.0**	0.0622	"	"	"	"	"	"	
Sodium	**39.3**	0.0622	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **04/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	**0.598**	0.00100	units	1	BFD0536	04/25/22	04/25/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **04/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	**80.3**		%	1	BFD0428	04/20/22	04/20/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **04/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	**2.50**	0.0100	mmhos/cm	1	BFD0487	04/22/22	04/22/22	EPA 120.1	

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

Date Sampled: **04/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	**7.68**		pH Units	1	BFD0486	04/22/22	04/22/22	EPA 9045D	

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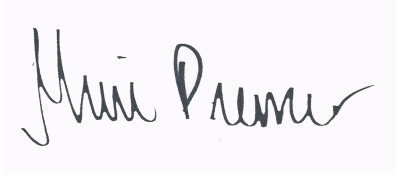

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S2

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 Project Number: [none] Project Manager: Paul Henehan	**Reported:** 04/26/22 13:27

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFD0345 - EPA 5030 Soil MS										
Blank (BFD0345-BLK1)				Prepared: 04/18/22 Analyzed: 04/19/22						
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	*0.0414*		*"*	*0.0400*		*104*	*50-150*			
Surrogate: Toluene-d8	*0.0400*		*"*	*0.0400*		*99.9*	*50-150*			
Surrogate: 4-Bromofluorobenzene	*0.0400*		*"*	*0.0400*		*99.9*	*50-150*			
LCS (BFD0345-BS1)				Prepared: 04/18/22 Analyzed: 04/19/22						
Benzene	0.0613	0.0020	mg/kg	0.0750		81.7	70-130			
Toluene	0.0697	0.0050	"	0.0750		92.9	70-130			
Ethylbenzene	0.0668	0.0050	"	0.0750		89.0	70-130			
m,p-Xylene	0.142	0.010	"	0.150		94.5	70-130			
o-Xylene	0.0680	0.0050	"	0.0750		90.7	70-130			
1,2,4-Trimethylbenzene	0.0718	0.0050	"	0.0750		95.7	70-130			
1,3,5-Trimethylbenzene	0.0683	0.0050	"	0.0750		91.0	70-130			
Naphthalene	0.0733	0.0038	"	0.0750		97.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.0402*		*"*	*0.0400*		*100*	*50-150*			
Surrogate: Toluene-d8	*0.0407*		*"*	*0.0400*		*102*	*50-150*			
Surrogate: 4-Bromofluorobenzene	*0.0405*		*"*	*0.0400*		*101*	*50-150*			
Matrix Spike (BFD0345-MS1)		**Source: 2204214-01**		Prepared: 04/18/22 Analyzed: 04/19/22						
Benzene	0.0621	0.0020	mg/kg	0.0750	ND	82.8	70-130			
Toluene	0.0700	0.0050	"	0.0750	ND	93.3	70-130			
Ethylbenzene	0.0653	0.0050	"	0.0750	ND	87.1	70-130			
m,p-Xylene	0.139	0.010	"	0.150	ND	92.3	70-130			
o-Xylene	0.0672	0.0050	"	0.0750	ND	89.6	70-130			
1,2,4-Trimethylbenzene	0.0702	0.0050	"	0.0750	ND	93.6	70-130			
1,3,5-Trimethylbenzene	0.0679	0.0050	"	0.0750	ND	90.5	70-130			
Naphthalene	0.0765	0.0038	"	0.0750	ND	102	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.0413*		*"*	*0.0400*		*103*	*50-150*			
Surrogate: Toluene-d8	*0.0414*		*"*	*0.0400*		*104*	*50-150*			
Surrogate: 4-Bromofluorobenzene	*0.0412*		*"*	*0.0400*		*103*	*50-150*			

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S2

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 Project Number: [none] Project Manager: Paul Henehan	**Reported:** 04/26/22 13:27

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFD0345 - EPA 5030 Soil MS										
Matrix Spike Dup (BFD0345-MSD1)		**Source: 2204214-01**		Prepared: 04/18/22 Analyzed: 04/19/22						
Benzene	0.0629	0.0020	mg/kg	0.0750	ND	83.8	70-130	1.20	30	
Toluene	0.0691	0.0050	"	0.0750	ND	92.1	70-130	1.34	30	
Ethylbenzene	0.0643	0.0050	"	0.0750	ND	85.7	70-130	1.57	30	
m,p-Xylene	0.136	0.010	"	0.150	ND	90.9	70-130	1.59	30	
o-Xylene	0.0668	0.0050	"	0.0750	ND	89.1	70-130	0.582	30	
1,2,4-Trimethylbenzene	0.0710	0.0050	"	0.0750	ND	94.6	70-130	1.15	30	
1,3,5-Trimethylbenzene	0.0671	0.0050	"	0.0750	ND	89.5	70-130	1.16	30	
Naphthalene	0.0769	0.0038	"	0.0750	ND	103	70-130	0.509	30	
Surrogate: 1,2-Dichloroethane-d4	*0.0404*		*"*	*0.0400*		*101*	*50-150*			
Surrogate: Toluene-d8	*0.0421*		*"*	*0.0400*		*105*	*50-150*			
Surrogate: 4-Bromofluorobenzene	*0.0417*		*"*	*0.0400*		*104*	*50-150*			

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S2

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 Project Number: [none] Project Manager: Paul Henehan	**Reported:** 04/26/22 13:27

Extractable Petroleum Hydrocarbons by 8015 - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFD0346 - EPA 3550A										
Blank (BFD0346-BLK1)				Prepared: 04/18/22 Analyzed: 04/19/22						
C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
LCS (BFD0346-BS1)				Prepared: 04/18/22 Analyzed: 04/19/22						
C10-C28 (DRO)	524	50	mg/kg	500		105	70-130			
Matrix Spike (BFD0346-MS1)	**Source: 2204214-01**			Prepared: 04/18/22 Analyzed: 04/19/22						
C10-C28 (DRO)	482	50	mg/kg	500	26.0	91.3	70-130			
Matrix Spike Dup (BFD0346-MSD1)	**Source: 2204214-01**			Prepared: 04/18/22 Analyzed: 04/19/22						
C10-C28 (DRO)	493	50	mg/kg	500	26.0	93.3	70-130	2.10	20	

S2

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 Project Number: [none] Project Manager: Paul Henehan	**Reported:** 04/26/22 13:27

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFD0364 - EPA 5030 Soil MS										
Blank (BFD0364-BLK1)				Prepared & Analyzed: 04/19/22						
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	*0.0189*		*"*	*0.0333*		*56.8*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0230*		*"*	*0.0333*		*69.0*	*40-150*			
LCS (BFD0364-BS1)				Prepared & Analyzed: 04/19/22						
Acenaphthene	0.0242	0.00500	mg/kg	0.0333		72.5	31-137			
Anthracene	0.0248	0.00500	"	0.0333		74.4	30-120			
Benzo (a) anthracene	0.0246	0.00500	"	0.0333		73.8	30-120			
Benzo (a) pyrene	0.0255	0.00500	"	0.0333		76.4	30-120			
Benzo (b) fluoranthene	0.0252	0.00500	"	0.0333		75.5	30-120			
Benzo (k) fluoranthene	0.0257	0.00500	"	0.0333		77.2	30-120			
Chrysene	0.0248	0.00500	"	0.0333		74.5	30-120			
Dibenz (a,h) anthracene	0.0281	0.00500	"	0.0333		84.2	30-120			
Fluoranthene	0.0246	0.00500	"	0.0333		73.7	30-120			
Fluorene	0.0247	0.00500	"	0.0333		74.2	30-120			
Indeno (1,2,3-cd) pyrene	0.0273	0.00500	"	0.0333		81.8	30-120			
Pyrene	0.0255	0.00500	"	0.0333		76.6	35-142			
1-Methylnaphthalene	0.0226	0.00500	"	0.0333		67.7	35-142			
2-Methylnaphthalene	0.0226	0.00500	"	0.0333		67.9	35-142			
Surrogate: 2-Methylnaphthalene-d10	*0.0215*		*"*	*0.0333*		*64.6*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0259*		*"*	*0.0333*		*77.7*	*40-150*			

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Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 Project Number: [none] Project Manager: Paul Henehan	**Reported:** 04/26/22 13:27

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFD0364 - EPA 5030 Soil MS										
Matrix Spike (BFD0364-MS1)	**Source: 2204207-01**			Prepared & Analyzed: 04/19/22						
Acenaphthene	0.0175	0.00500	mg/kg	0.0333	ND	52.5	31-137			
Anthracene	0.0181	0.00500	"	0.0333	ND	54.2	30-120			
Benzo (a) anthracene	0.0229	0.00500	"	0.0333	ND	68.7	30-120			
Benzo (a) pyrene	0.0186	0.00500	"	0.0333	ND	55.8	30-120			
Benzo (b) fluoranthene	0.0153	0.00500	"	0.0333	ND	45.8	30-120			
Benzo (k) fluoranthene	0.0185	0.00500	"	0.0333	ND	55.5	30-120			
Chrysene	0.0185	0.00500	"	0.0333	ND	55.5	30-120			
Dibenz (a,h) anthracene	0.0185	0.00500	"	0.0333	ND	55.4	30-120			
Fluoranthene	0.0189	0.00500	"	0.0333	ND	56.7	30-120			
Fluorene	0.0149	0.00500	"	0.0333	ND	44.8	30-120			
Indeno (1,2,3-cd) pyrene	0.0199	0.00500	"	0.0333	ND	59.7	30-120			
Pyrene	0.0159	0.00500	"	0.0333	ND	47.8	35-142			
1-Methylnaphthalene	0.00979	0.00500	"	0.0333	ND	29.4	15-130			
2-Methylnaphthalene	0.00977	0.00500	"	0.0333	ND	29.3	15-130			
Surrogate: 2-Methylnaphthalene-d10	*0.0198*		*"*	*0.0333*		*59.3*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0136*		*"*	*0.0333*		*40.9*	*40-150*			
Matrix Spike Dup (BFD0364-MSD1)	**Source: 2204207-01**			Prepared & Analyzed: 04/19/22						
Acenaphthene	0.0192	0.00500	mg/kg	0.0333	ND	57.5	31-137	9.09	30	
Anthracene	0.0203	0.00500	"	0.0333	ND	60.9	30-120	11.7	30	
Benzo (a) anthracene	0.0187	0.00500	"	0.0333	ND	56.1	30-120	20.1	30	
Benzo (a) pyrene	0.0174	0.00500	"	0.0333	ND	52.3	30-120	6.51	30	
Benzo (b) fluoranthene	0.0175	0.00500	"	0.0333	ND	52.5	30-120	13.7	30	
Benzo (k) fluoranthene	0.0165	0.00500	"	0.0333	ND	49.6	30-120	11.3	30	
Chrysene	0.0163	0.00500	"	0.0333	ND	48.9	30-120	12.6	30	
Dibenz (a,h) anthracene	0.0163	0.00500	"	0.0333	ND	48.8	30-120	12.6	30	
Fluoranthene	0.0168	0.00500	"	0.0333	ND	50.4	30-120	11.7	30	
Fluorene	0.0169	0.00500	"	0.0333	ND	50.8	30-120	12.4	30	
Indeno (1,2,3-cd) pyrene	0.0166	0.00500	"	0.0333	ND	49.7	30-120	18.3	30	
Pyrene	0.0180	0.00500	"	0.0333	ND	54.1	35-142	12.3	30	
1-Methylnaphthalene	0.0160	0.00500	"	0.0333	ND	48.1	15-130	48.3	50	
2-Methylnaphthalene	0.0160	0.00500	"	0.0333	ND	48.1	15-130	48.6	50	
Surrogate: 2-Methylnaphthalene-d10	*0.0155*		*"*	*0.0333*		*46.6*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0187*		*"*	*0.0333*		*56.1*	*40-150*			

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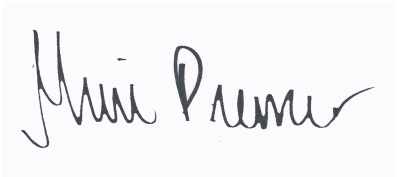
S2

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 Project Number: [none] Project Manager: Paul Henehan	**Reported:** 04/26/22 13:27

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

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFD0380 - EPA 3050B										
Blank (BFD0380-BLK1)				Prepared: 04/19/22 Analyzed: 04/23/22						
Boron	ND	0.0100	mg/L							
LCS (BFD0380-BS1)				Prepared: 04/19/22 Analyzed: 04/23/22						
Boron	4.74	0.0100	mg/L	5.00		94.9	80-120			
Duplicate (BFD0380-DUP1)		**Source: 2204197-11**		Prepared: 04/19/22 Analyzed: 04/23/22						
Boron	0.347	0.0100	mg/L		0.358			3.00	20	
Matrix Spike (BFD0380-MS1)		**Source: 2204197-11**		Prepared: 04/19/22 Analyzed: 04/23/22						
Boron	4.85	0.0100	mg/L	5.00	0.358	89.9	75-125			
Matrix Spike Dup (BFD0380-MSD1)		**Source: 2204197-11**		Prepared: 04/19/22 Analyzed: 04/23/22						
Boron	5.00	0.0100	mg/L	5.00	0.358	92.9	75-125	3.05	25	



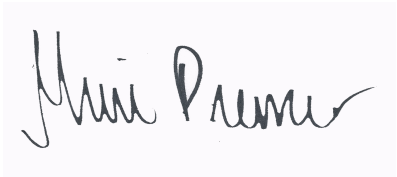
S2

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 Project Number: [none] Project Manager: Paul Henehan	**Reported:** 04/26/22 13:27

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

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFD0456 - General Preparation										
Blank (BFD0456-BLK1)				Prepared: 04/21/22 Analyzed: 04/25/22						
Calcium	ND	0.0500	mg/L wet							
Magnesium	ND	0.0500	"							
Sodium	ND	0.0500	"							
LCS (BFD0456-BS1)				Prepared: 04/21/22 Analyzed: 04/25/22						
Calcium	5.33	0.0500	mg/L wet	5.00		107	70-130			
Magnesium	5.71	0.0500	"	5.00		114	70-130			
Sodium	5.44	0.0500	"	5.00		109	70-130			



S2

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 Project Number: [none] Project Manager: Paul Henehan	**Reported:** 04/26/22 13:27

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

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFD0428 - General Preparation										
Duplicate (BFD0428-DUP1)		**Source: 2204206-01**		Prepared & Analyzed: 04/20/22						
% Solids	80.4		%		82.4			2.44	20	

S2

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 Project Number: [none] Project Manager: Paul Henehan	**Reported:** 04/26/22 13:27

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

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFD0487 - General Preparation										
Blank (BFD0487-BLK1)				Prepared & Analyzed: 04/22/22						
Specific Conductance (EC)	ND	0.0100	mmhos/cm							
LCS (BFD0487-BS1)				Prepared & Analyzed: 04/22/22						
Specific Conductance (EC)	0.152	0.0100	mmhos/cm	0.150		102	95-105			
Duplicate (BFD0487-DUP1)		**Source: 2204048-05**		Prepared & Analyzed: 04/22/22						
Specific Conductance (EC)	0.917	0.0100	mmhos/cm		0.944			2.94	20	

Summit Scientific

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

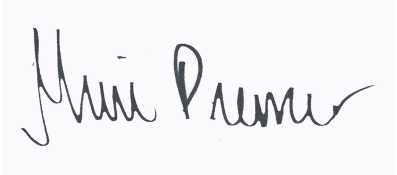
S2

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 Project Number: [none] Project Manager: Paul Henehan	**Reported:** 04/26/22 13:27

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

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFD0486 - General Preparation										
LCS (BFD0486-BS1)				Prepared & Analyzed: 04/22/22						
pH	9.02		pH Units	9.18		98.3	95-105			
Duplicate (BFD0486-DUP1)		**Source: 2204048-05**		Prepared & Analyzed: 04/22/22						
pH	6.85		pH Units		6.70			2.21	20	



Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 Project Number: [none] Project Manager: Paul Henehan	**Reported:** 04/26/22 13:27

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

July 15, 2022

Paul Henehan
Fremont Environmental
PO Box 1289
Wellington, CO 80549

RE: Noble - Howard A27-01 (Wellhead)
Work Order #2206241

Enclosed are the results of analyses for samples received by Summit Scientific on 06/15/22 15:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Paul Shrewsbury
President

S2

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 (Wellhead) Project Number: [none] Project Manager: Paul Henehan	**Reported:** 07/15/22 13:58

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1 4ft	2206241-01	Soil	06/14/22 00:00	06/15/22 15:00
MW-1 10ft	2206241-02	Soil	06/14/22 00:00	06/15/22 15:00
SB-2 5ft	2206241-03	Soil	06/14/22 00:00	06/15/22 15:00
SB-3 5ft	2206241-04	Soil	06/14/22 00:00	06/15/22 15:00
SB-4 5ft	2206241-05	Soil	06/14/22 00:00	06/15/22 15:00
SB-5 5ft	2206241-06	Soil	06/14/22 00:00	06/15/22 15:00
MW-1	2206241-07	Water	06/14/22 00:00	06/15/22 15:00

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

S_2

2206241

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

Client: Fremont Env.
Address:
City/State/Zip:
Phone:
Sampler Name: Black

Project Manager: Horehan
E-Mail: Fremont Noble Dist List
Bill To: Erica/Dan
Project Name: Noble - Howard A27-7 (Wellhead)
Project Number:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative: HCl	HNO3	None	Other	Matrix: Water	Soil	Air-Canister #	Other	Analysis Requested: BTEX, N, TMBs	TPH(G,D,O)	PAH	TDS, Cl-, SO_4^{2-}					Special Instructions
1	MW-1 4FT	6/14/22		2			X			X			X	X	X						
2	MW-1 10FT	"		"			"			"			"	"	"						
3	SB-2 5FT	"		"			"			"			"	"	"						
4	SB-3 5FT	"		"			"			"			"	"	"						
5	SB-4 5FT	"		"			"			"			"	"	"						
6	SB-5 5FT	"		1			"			1			"	"	"						
7	MW-1	"		4			"		X				"			X					
8																					
9																					
10																					

Relinquished by: Ethan Black Date/Time: 6/15/22 1220
Received by: Date/Time: 6/15/22 1500

Relinquished by: Date/Time:
Received by: Date/Time:

Temperature Upon Receipt: 5.9
IR gun correction: 0
Corrected Temperature 5.9
IR gun #: 1
HNO3 lot #

Turn Around Time (Check)
Same Day ___ 72 hours ___
24 hours ___ Standard X
48 hours ___

Sample Integrity:
Samples Intact: (Yes) No

Notes:

S2

2206241

S2 Work Order#_____

Sample Receipt Checklist

Client: Fremont Client Project ID: Noble/Howard A27-3 (wellhead)

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

	–			

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

Temp (°C) [5.9] 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_2SO_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

6/15/22
Date/Time

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 (Wellhead) Project Number: [none] Project Manager: Paul Henehan	**Reported:** 07/15/22 13:58

MW-1 4ft

2206241-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFF0443	06/16/22	06/17/22	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: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0426	*106 %*	*50-150*		"	"	"	"	
Surrogate: Toluene-d8	0.0393	*98.2 %*	*50-150*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0392	*98.0 %*	*50-150*		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFF0445	06/16/22	06/17/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	13.5	*108 %*	*30-150*		"	"	"	"	

PAH by EPA Method 8270D SIM

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 (Wellhead) Project Number: [none] Project Manager: Paul Henehan	**Reported:** 07/15/22 13:58

MW-1 4ft

2206241-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFF0457	06/16/22	06/18/22	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: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0225	*67.6 %*	*40-150*		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0213	*63.8 %*	*40-150*		"	"	"	"	

S2

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 (Wellhead) Project Number: [none] Project Manager: Paul Henehan	**Reported:** 07/15/22 13:58

MW-1 10ft

2206241-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFF0443	06/16/22	06/17/22	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: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0395	*98.8 %*	*50-150*		"	"	"	"	
Surrogate: Toluene-d8	0.0389	*97.2 %*	*50-150*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0385	*96.3 %*	*50-150*		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFF0445	06/16/22	06/17/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	13.7	*110 %*	*30-150*		"	"	"	"	

PAH by EPA Method 8270D SIM

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 (Wellhead) Project Number: [none] Project Manager: Paul Henehan	**Reported:** 07/15/22 13:58

MW-1 10ft

2206241-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFF0457	06/16/22	06/18/22	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: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0172	*51.6 %*	*40-150*		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0160	*48.1 %*	*40-150*		"	"	"	"	

S2

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 (Wellhead) Project Number: [none] Project Manager: Paul Henehan	**Reported:** 07/15/22 13:58

SB-2 5ft

2206241-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFF0443	06/16/22	06/17/22	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: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0274	*68.4 %*	*50-150*		"	"	"	"	
Surrogate: Toluene-d8	0.0388	*97.0 %*	*50-150*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0382	*95.6 %*	*50-150*		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFF0445	06/16/22	06/17/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	13.9	*111 %*	*30-150*		"	"	"	"	

PAH by EPA Method 8270D SIM

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 (Wellhead) Project Number: [none] Project Manager: Paul Henehan	**Reported:** 07/15/22 13:58

SB-2 5ft

2206241-03 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFF0457	06/16/22	06/18/22	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: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0247	*74.2 %*	*40-150*		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0213	*63.9 %*	*40-150*		"	"	"	"	

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 (Wellhead) Project Number: [none] Project Manager: Paul Henehan	**Reported:** 07/15/22 13:58

SB-3 5ft

2206241-04 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFF0443	06/16/22	06/17/22	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: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0377	*94.3 %*	*50-150*		"	"	"	"	
Surrogate: Toluene-d8	0.0393	*98.2 %*	*50-150*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0389	*97.2 %*	*50-150*		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFF0445	06/16/22	06/17/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	14.5	*116 %*	*30-150*		"	"	"	"	

PAH by EPA Method 8270D SIM

S2

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 (Wellhead) Project Number: [none] Project Manager: Paul Henehan	**Reported:** 07/15/22 13:58

SB-3 5ft

2206241-04 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFF0457	06/16/22	06/18/22	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: **06/14/22 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	0.0204	*61.1 %*	*40-150*		"	"	"	"	

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 (Wellhead) Project Number: [none] Project Manager: Paul Henehan	**Reported:** 07/15/22 13:58

SB-4 5ft

2206241-05 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFF0443	06/16/22	06/17/22	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: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0291	*72.7 %*	*50-150*		"	"	"	"	
Surrogate: Toluene-d8	0.0388	*97.0 %*	*50-150*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0381	*95.2 %*	*50-150*		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFF0445	06/16/22	06/17/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	13.6	*109 %*	*30-150*		"	"	"	"	

PAH by EPA Method 8270D SIM

S2

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 (Wellhead) Project Number: [none] Project Manager: Paul Henehan	**Reported:** 07/15/22 13:58

SB-4 5ft

2206241-05 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFF0457	06/16/22	06/18/22	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: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0209	*62.8 %*	*40-150*		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0199	*59.6 %*	*40-150*		"	"	"	"	

S2

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 (Wellhead) Project Number: [none] Project Manager: Paul Henehan	**Reported:** 07/15/22 13:58

SB-5 5ft

2206241-06 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFF0443	06/16/22	06/17/22	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: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0308	*76.9 %*	*50-150*		"	"	"	"	
Surrogate: Toluene-d8	0.0388	*97.0 %*	*50-150*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0378	*94.6 %*	*50-150*		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFF0445	06/16/22	06/17/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	14.2	*114 %*	*30-150*		"	"	"	"	

PAH by EPA Method 8270D SIM

S2

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 (Wellhead) Project Number: [none] Project Manager: Paul Henehan	**Reported:** 07/15/22 13:58

SB-5 5ft

2206241-06 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFF0457	06/16/22	06/18/22	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: **06/14/22 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	0.0208	*62.4 %*	*40-150*		"	"	"	"	

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 (Wellhead) Project Number: [none] Project Manager: Paul Henehan	**Reported:** 07/15/22 13:58

MW-1

2206241-07 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	BFF0466	06/16/22	06/18/22	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: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	7.15	*53.6 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8	11.7	*87.5 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	11.4	*85.7 %*	*21-167*		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	**25.0**	12.0	mg/L	200	BFF0557	06/21/22	06/21/22	EPA 300.0	
Sulfate	**44.0**	6.00	"	20	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **06/14/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	**574**	10.0	mg/L	1	BFF0472	06/16/22	06/16/22	SM2540C	

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 (Wellhead) Project Number: [none] Project Manager: Paul Henehan	**Reported:** 07/15/22 13:58

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFF0443 - EPA 5030 Soil MS										
Blank (BFF0443-BLK1)				Prepared & Analyzed: 06/16/22						
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	*0.0427*		*"*	*0.0400*		*107*	*50-150*			
Surrogate: Toluene-d8	*0.0387*		*"*	*0.0400*		*96.8*	*50-150*			
Surrogate: 4-Bromofluorobenzene	*0.0379*		*"*	*0.0400*		*94.8*	*50-150*			
LCS (BFF0443-BS1)				Prepared & Analyzed: 06/16/22						
Benzene	0.0908	0.0020	mg/kg	0.125		72.6	70-130			
Toluene	0.0946	0.0050	"	0.125		75.7	70-130			
Ethylbenzene	0.146	0.0050	"	0.125		117	70-130			
m,p-Xylene	0.260	0.010	"	0.250		104	70-130			
o-Xylene	0.127	0.0050	"	0.125		102	70-130			
1,2,4-Trimethylbenzene	0.150	0.0050	"	0.125		120	70-130			
1,3,5-Trimethylbenzene	0.149	0.0050	"	0.125		119	70-130			
Naphthalene	0.141	0.0038	"	0.125		113	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.0428*		*"*	*0.0400*		*107*	*50-150*			
Surrogate: Toluene-d8	*0.0393*		*"*	*0.0400*		*98.3*	*50-150*			
Surrogate: 4-Bromofluorobenzene	*0.0380*		*"*	*0.0400*		*95.1*	*50-150*			
Matrix Spike (BFF0443-MS1)		**Source: 2206240-01**		Prepared & Analyzed: 06/16/22						
Benzene	0.0905	0.0020	mg/kg	0.125	ND	72.4	70-130			
Toluene	0.0954	0.0050	"	0.125	ND	76.3	70-130			
Ethylbenzene	0.143	0.0050	"	0.125	ND	115	70-130			
m,p-Xylene	0.255	0.010	"	0.250	ND	102	70-130			
o-Xylene	0.126	0.0050	"	0.125	ND	101	70-130			
1,2,4-Trimethylbenzene	0.150	0.0050	"	0.125	ND	120	70-130			
1,3,5-Trimethylbenzene	0.149	0.0050	"	0.125	ND	119	70-130			
Naphthalene	0.154	0.0038	"	0.125	ND	124	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.0435*		*"*	*0.0400*		*109*	*50-150*			
Surrogate: Toluene-d8	*0.0394*		*"*	*0.0400*		*98.5*	*50-150*			
Surrogate: 4-Bromofluorobenzene	*0.0377*		*"*	*0.0400*		*94.4*	*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 - Howard A27-01 (Wellhead) Project Number: [none] Project Manager: Paul Henehan	**Reported:** 07/15/22 13:58

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFF0443 - EPA 5030 Soil MS										
Matrix Spike Dup (BFF0443-MSD1)	**Source: 2206240-01**			Prepared & Analyzed: 06/16/22						
Benzene	0.0918	0.0020	mg/kg	0.125	ND	73.5	70-130	1.48	30	
Toluene	0.0972	0.0050	"	0.125	ND	77.8	70-130	1.90	30	
Ethylbenzene	0.151	0.0050	"	0.125	ND	121	70-130	5.02	30	
m,p-Xylene	0.268	0.010	"	0.250	ND	107	70-130	5.12	30	
o-Xylene	0.131	0.0050	"	0.125	ND	105	70-130	3.77	30	
1,2,4-Trimethylbenzene	0.156	0.0050	"	0.125	ND	125	70-130	4.34	30	
1,3,5-Trimethylbenzene	0.157	0.0050	"	0.125	ND	125	70-130	5.30	30	
Naphthalene	0.159	0.0038	"	0.125	ND	127	70-130	2.76	30	
Surrogate: 1,2-Dichloroethane-d4	*0.0426*		*"*	*0.0400*		*107*	*50-150*			
Surrogate: Toluene-d8	*0.0393*		*"*	*0.0400*		*98.2*	*50-150*			
Surrogate: 4-Bromofluorobenzene	*0.0376*		*"*	*0.0400*		*94.0*	*50-150*			
Batch BFF0466 - EPA 5030 Water MS										
Blank (BFF0466-BLK1)				Prepared: 06/16/22 Analyzed: 06/17/22						
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	*6.92*		*"*	*13.3*		*51.9*	*23-173*			
Surrogate: Toluene-d8	*11.8*		*"*	*13.3*		*88.1*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*11.2*		*"*	*13.3*		*83.9*	*21-167*			
LCS (BFF0466-BS1)				Prepared: 06/16/22 Analyzed: 06/17/22						
Benzene	18.8	1.0	ug/l	33.3		56.4	51-132			
Toluene	28.3	1.0	"	33.3		84.9	51-138			
Ethylbenzene	32.7	1.0	"	33.3		98.1	58-146			
m,p-Xylene	71.1	2.0	"	66.7		107	57-144			
o-Xylene	35.9	1.0	"	33.3		108	53-146			
Naphthalene	25.6	1.0	"	33.3		76.9	70-130			
1,2,4-Trimethylbenzene	39.2	1.0	"	33.3		118	70-130			
1,3,5-Trimethylbenzene	38.4	1.0	"	33.3		115	70-130			
Surrogate: 1,2-Dichloroethane-d4	*8.09*		*"*	*13.3*		*60.7*	*23-173*			
Surrogate: Toluene-d8	*12.2*		*"*	*13.3*		*91.6*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*11.8*		*"*	*13.3*		*88.6*	*21-167*			

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 - Howard A27-01 (Wellhead) Project Number: [none] Project Manager: Paul Henehan	**Reported:** 07/15/22 13:58

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFF0466 - EPA 5030 Water MS										
Matrix Spike (BFF0466-MS1)	**Source: 2206196-01**			Prepared: 06/16/22 Analyzed: 06/17/22						
Benzene	19.0	1.0	ug/l	33.3	ND	57.0	34-141			
Toluene	28.4	1.0	"	33.3	ND	85.3	27-151			
Ethylbenzene	33.6	1.0	"	33.3	ND	101	29-160			
m,p-Xylene	73.3	2.0	"	66.7	ND	110	20-166			
o-Xylene	36.3	1.0	"	33.3	ND	109	33-159			
Naphthalene	31.5	1.0	"	33.3	ND	94.5	70-130			
1,2,4-Trimethylbenzene	39.8	1.0	"	33.3	ND	119	70-130			
1,3,5-Trimethylbenzene	38.8	1.0	"	33.3	ND	116	70-130			
Surrogate: 1,2-Dichloroethane-d4	*8.16*		"	*13.3*		*61.2*	*23-173*			
Surrogate: Toluene-d8	*12.0*		"	*13.3*		*89.8*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*11.7*		"	*13.3*		*87.8*	*21-167*			
Matrix Spike Dup (BFF0466-MSD1)	**Source: 2206196-01**			Prepared: 06/16/22 Analyzed: 06/17/22						
Benzene	18.9	1.0	ug/l	33.3	ND	56.7	34-141	0.528	30	
Toluene	28.6	1.0	"	33.3	ND	85.9	27-151	0.701	30	
Ethylbenzene	33.0	1.0	"	33.3	ND	98.9	29-160	1.89	30	
m,p-Xylene	72.3	2.0	"	66.7	ND	108	20-166	1.37	30	
o-Xylene	36.2	1.0	"	33.3	ND	109	33-159	0.414	30	
Naphthalene	32.5	1.0	"	33.3	ND	97.4	70-130	3.10	30	
1,2,4-Trimethylbenzene	39.6	1.0	"	33.3	ND	119	70-130	0.680	30	
1,3,5-Trimethylbenzene	38.2	1.0	"	33.3	ND	115	70-130	1.46	30	
Surrogate: 1,2-Dichloroethane-d4	*8.35*		"	*13.3*		*62.6*	*23-173*			
Surrogate: Toluene-d8	*12.3*		"	*13.3*		*92.2*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*11.7*		"	*13.3*		*88.1*	*21-167*			

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Howard A27-01 (Wellhead) Project Number: [none] Project Manager: Paul Henehan	**Reported:** 07/15/22 13:58

Extractable Petroleum Hydrocarbons by 8015 - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFF0445 - EPA 3550A										
Blank (BFF0445-BLK1)				Prepared & Analyzed: 06/16/22						
C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
LCS (BFF0445-BS1)				Prepared & Analyzed: 06/16/22						
C10-C28 (DRO)	449	50	mg/kg	500		89.8	70-130			
Matrix Spike (BFF0445-MS1)	**Source: 2206240-01**			Prepared & Analyzed: 06/16/22						
C10-C28 (DRO)	415	50	mg/kg	500	29.5	77.2	70-130			
Matrix Spike Dup (BFF0445-MSD1)	**Source: 2206240-01**			Prepared & Analyzed: 06/16/22						
C10-C28 (DRO)	416	50	mg/kg	500	29.5	77.2	70-130	0.0862	20	

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PAH by EPA Method 8270D SIM - Quality Control

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFF0457 - EPA 5030 Soil MS										
Blank (BFF0457-BLK1)				Prepared: 06/16/22 Analyzed: 06/17/22						
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	*0.0282*		*"*	*0.0333*		*84.7*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0289*		*"*	*0.0333*		*86.7*	*40-150*			
LCS (BFF0457-BS1)				Prepared: 06/16/22 Analyzed: 06/17/22						
Acenaphthene	0.0284	0.00500	mg/kg	0.0333		85.2	31-137			
Anthracene	0.0277	0.00500	"	0.0333		83.1	30-120			
Benzo (a) anthracene	0.0247	0.00500	"	0.0333		74.1	30-120			
Benzo (a) pyrene	0.0243	0.00500	"	0.0333		72.9	30-120			
Benzo (b) fluoranthene	0.0255	0.00500	"	0.0333		76.4	30-120			
Benzo (k) fluoranthene	0.0263	0.00500	"	0.0333		78.8	30-120			
Chrysene	0.0286	0.00500	"	0.0333		85.7	30-120			
Dibenz (a,h) anthracene	0.0338	0.00500	"	0.0333		101	30-120			
Fluoranthene	0.0275	0.00500	"	0.0333		82.4	30-120			
Fluorene	0.0282	0.00500	"	0.0333		84.6	30-120			
Indeno (1,2,3-cd) pyrene	0.0269	0.00500	"	0.0333		80.6	30-120			
Pyrene	0.0281	0.00500	"	0.0333		84.4	35-142			
1-Methylnaphthalene	0.0399	0.00500	"	0.0333		120	35-142			
2-Methylnaphthalene	0.0281	0.00500	"	0.0333		84.2	35-142			
Surrogate: 2-Methylnaphthalene-d10	*0.0405*		*"*	*0.0333*		*122*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0264*		*"*	*0.0333*		*79.1*	*40-150*			

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Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFF0457 - EPA 5030 Soil MS										
Matrix Spike (BFF0457-MS1)	**Source: 2206231-01**			Prepared: 06/16/22 Analyzed: 06/17/22						
Acenaphthene	0.0178	0.00500	mg/kg	0.0333	ND	53.3	31-137			
Anthracene	0.0163	0.00500	"	0.0333	ND	48.9	30-120			
Benzo (a) anthracene	0.0186	0.00500	"	0.0333	ND	55.8	30-120			
Benzo (a) pyrene	0.0149	0.00500	"	0.0333	ND	44.8	30-120			
Benzo (b) fluoranthene	0.0134	0.00500	"	0.0333	ND	40.3	30-120			
Benzo (k) fluoranthene	0.0129	0.00500	"	0.0333	ND	38.7	30-120			
Chrysene	0.0159	0.00500	"	0.0333	ND	47.7	30-120			
Dibenz (a,h) anthracene	0.0181	0.00500	"	0.0333	ND	54.4	30-120			
Fluoranthene	0.0164	0.00500	"	0.0333	ND	49.1	30-120			
Fluorene	0.0176	0.00500	"	0.0333	ND	52.8	30-120			
Indeno (1,2,3-cd) pyrene	0.0132	0.00500	"	0.0333	ND	39.6	30-120			
Pyrene	0.0158	0.00500	"	0.0333	ND	47.3	35-142			
1-Methylnaphthalene	0.0240	0.00500	"	0.0333	ND	72.0	15-130			
2-Methylnaphthalene	0.0162	0.00500	"	0.0333	ND	48.7	15-130			
Surrogate: 2-Methylnaphthalene-d10	*0.0234*		*"*	*0.0333*		*70.3*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0168*		*"*	*0.0333*		*50.5*	*40-150*			
Matrix Spike Dup (BFF0457-MSD1)	**Source: 2206231-01**			Prepared: 06/16/22 Analyzed: 06/17/22						
Acenaphthene	0.0207	0.00500	mg/kg	0.0333	ND	62.2	31-137	15.4	30	
Anthracene	0.0200	0.00500	"	0.0333	ND	60.0	30-120	20.4	30	
Benzo (a) anthracene	0.0235	0.00500	"	0.0333	ND	70.4	30-120	23.0	30	
Benzo (a) pyrene	0.0182	0.00500	"	0.0333	ND	54.6	30-120	19.7	30	
Benzo (b) fluoranthene	0.0172	0.00500	"	0.0333	ND	51.6	30-120	24.6	30	
Benzo (k) fluoranthene	0.0159	0.00500	"	0.0333	ND	47.6	30-120	20.7	30	
Chrysene	0.0201	0.00500	"	0.0333	ND	60.2	30-120	23.2	30	
Dibenz (a,h) anthracene	0.0240	0.00500	"	0.0333	ND	72.1	30-120	28.0	30	
Fluoranthene	0.0205	0.00500	"	0.0333	ND	61.4	30-120	22.4	30	
Fluorene	0.0208	0.00500	"	0.0333	ND	62.5	30-120	16.8	30	
Indeno (1,2,3-cd) pyrene	0.0135	0.00500	"	0.0333	ND	40.5	30-120	2.31	30	
Pyrene	0.0193	0.00500	"	0.0333	ND	57.9	35-142	20.3	30	
1-Methylnaphthalene	0.0276	0.00500	"	0.0333	ND	82.9	15-130	14.1	50	
2-Methylnaphthalene	0.0184	0.00500	"	0.0333	ND	55.3	15-130	12.6	50	
Surrogate: 2-Methylnaphthalene-d10	*0.0268*		*"*	*0.0333*		*80.4*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0210*		*"*	*0.0333*		*63.1*	*40-150*			

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Anions by EPA Method 300.0 - Quality Control

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFF0557 - General Preparation										
Blank (BFF0557-BLK1)				Prepared & Analyzed: 06/21/22						
Chloride	ND	0.0600	mg/L							
Sulfate	ND	0.300	"							
LCS (BFF0557-BS1)				Prepared & Analyzed: 06/21/22						
Chloride	3.26	0.0600	mg/L	3.00		109	90-110			
Sulfate	14.9	0.300	"	15.0		99.6	90-110			
Duplicate (BFF0557-DUP1)	**Source: 2206241-07**			Prepared & Analyzed: 06/21/22						
Chloride	26.6	12.0	mg/L		25.0			6.20	20	
Sulfate	43.2	6.00	"		44.0			1.83	20	
Matrix Spike (BFF0557-MS1)	**Source: 2206241-07**			Prepared & Analyzed: 06/21/22						
Chloride	677	12.0	mg/L	600	25.0	109	80-120			
Sulfate	3270	60.0	"	3000	44.0	108	80-120			

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Total Dissolved Solids by SM2540C - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFF0472 - General Preparation										
Blank (BFF0472-BLK1)				Prepared & Analyzed: 06/16/22						
Total Dissolved Solids	ND	10.0	mg/L							
Duplicate (BFF0472-DUP1)		**Source: 2206228-01**		Prepared & Analyzed: 06/16/22						
Total Dissolved Solids	1740	10.0	mg/L		1680			3.86	20	

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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