

FREMONT ENVIRONMENTAL INC.

May 10, 2023

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

Subject: **Facility Closure Data Submittal**
WPF III T6N-R64W-S18 L01 Facility
Facility ID: 483054
SWSW Sec. 18, T6N, R64W
Weld County, Colorado
Fremont Project No. C023-007
Remediation # 25398

Dear Mr. Peterson:

As requested, Fremont Environmental Inc. (Fremont) personnel conducted facility abandonment activities at the Noble Energy Inc. (Noble) WPF III T6N-R64W-S18 L01 Facility. Details of the facility abandonment activities are documented in the attached Closure Report. The soil sample collected from beneath the separator (SEP01@5') was reported with elevated concentrations/values of 1-Methylnaphthalene, pH, and Boron. Groundwater was not encountered during decommissioning activities.

Please contact me at (970) 213-7488 if you require any additional information. Fremont appreciates the opportunity to provide this service.

Sincerely,

FREMONT ENVIRONMENTAL INC.

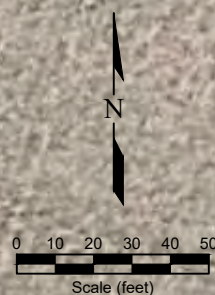
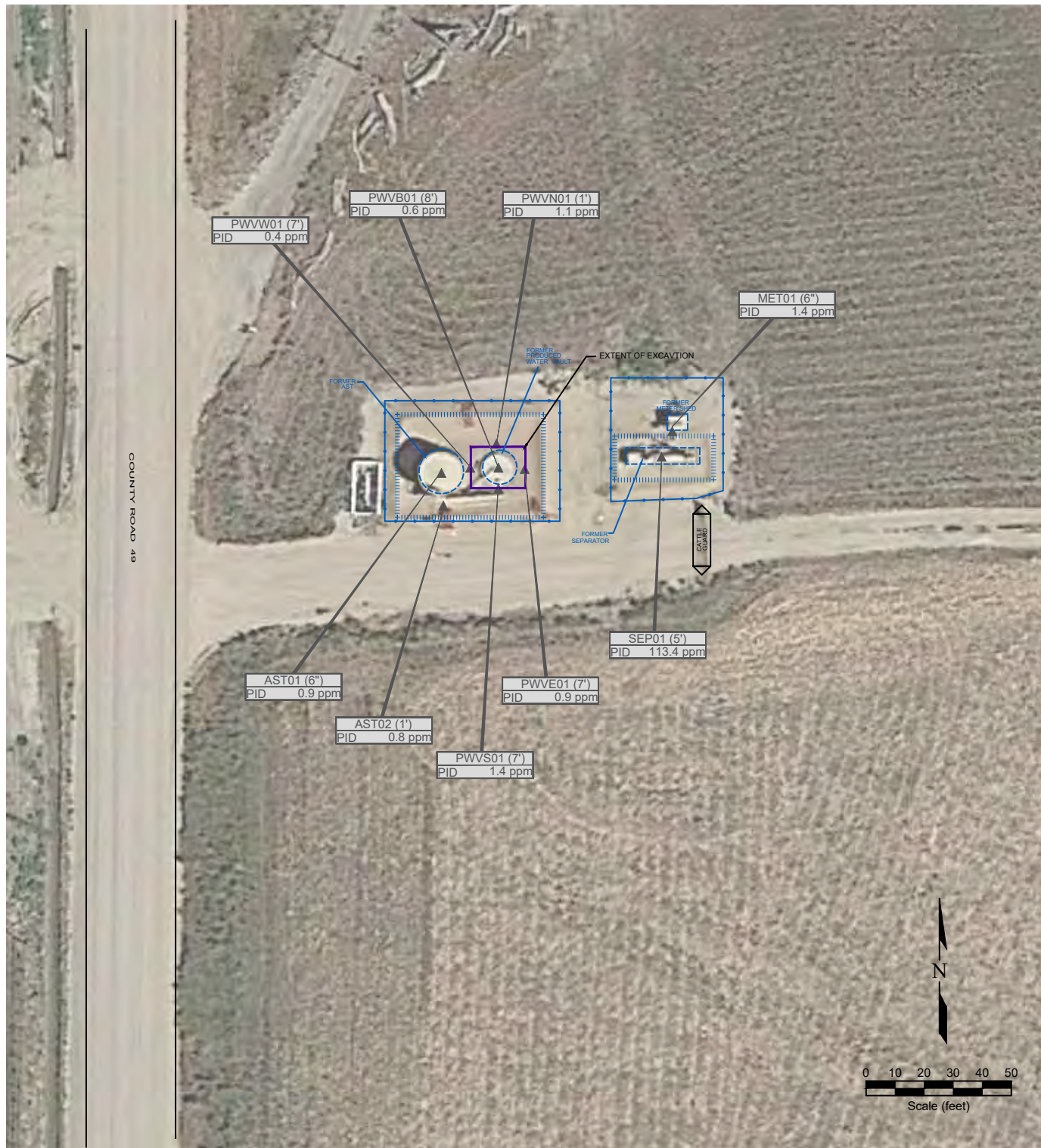


Chris Lattes
Consultant

Attachments:

Figures
Tables
Facility Closure Checklist
Photos
Laboratory Reports

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



LEGEND

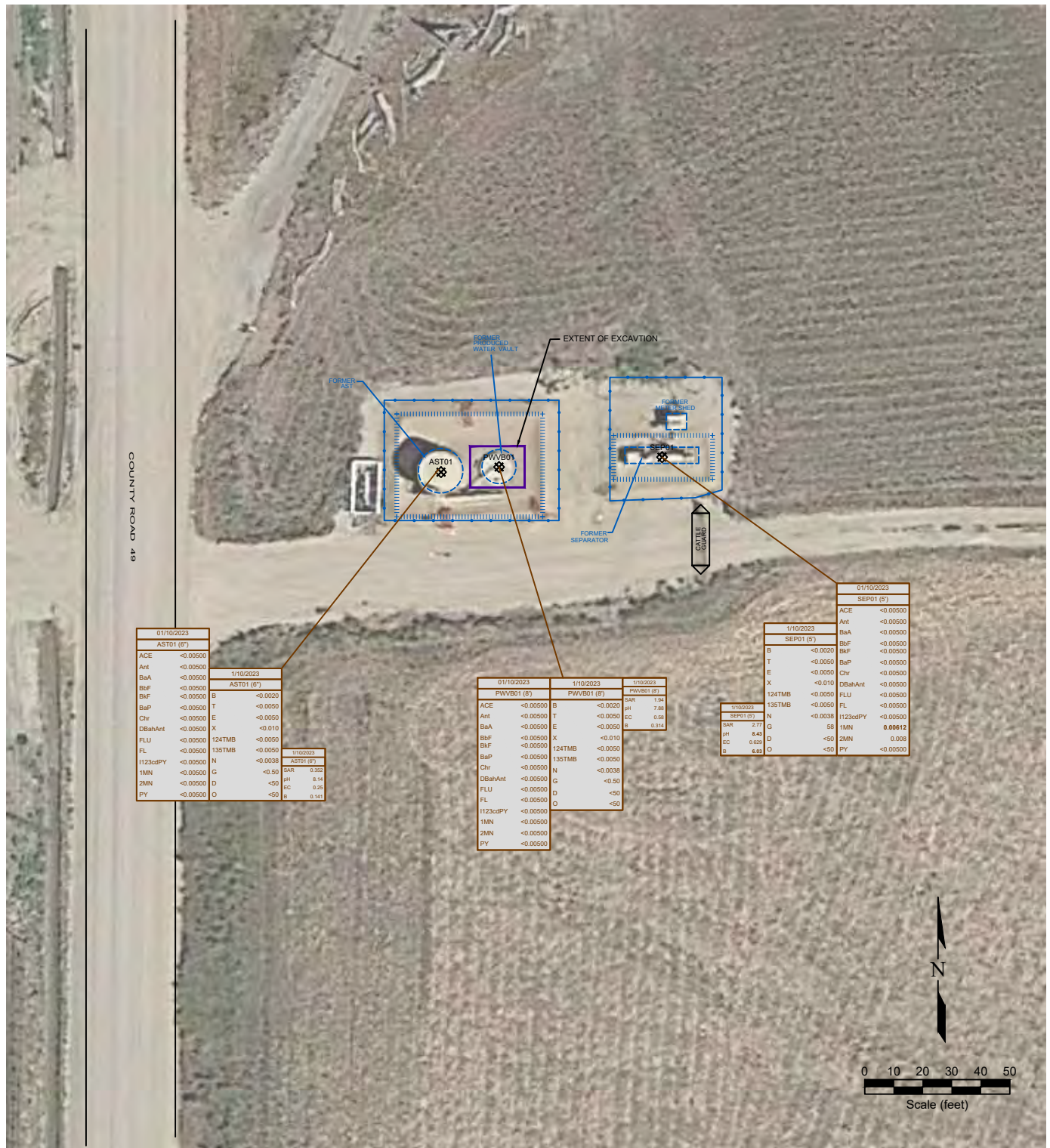
	PID READING LOCATION		ABOVE GROUND STORAGE TANK		FORMER FACILITY		CONTAINMENT BERM		FENCE LINE		EXTENT OF EXCAVATION
	PID READING LOCATION IDENTIFICATION										
	PHOTO IONIZATION DETECTION (ppm)										

Figure 2
SITE MAP

Noble Energy, Inc. ~ WPF III T6N-R64W-S18 L01
SWSW Sec. 18, T6N, R64W, 6th PM
Weld County, Colorado
40.480550°, -104.601300°

Project No. C023-007	Facility # 483054	API #
Date 5/9/23	Remediation # 25398	Filename 23007Q1





LEGEND			
	SOIL SAMPLE LOCATION		ABOVE GROUND STORAGE TANK
	FORMER FACILITY		CONTAINMENT BERM
	EXTENT OF EXCAVATION		FENCE LINE

DATE SAMPLED	SAMPLE ID and DEPTH (ft)	DATE SAMPLED	SAMPLE ID and DEPTH (ft)
01/10/2023	AST01 (6")	11/02/2023	AST01 (6")
ACE	<0.00500	ACE	<0.00500
Ant	<0.00500	Ant	<0.00500
BaA	<0.00500	BaA	<0.00500
BbF	<0.00500	BbF	<0.00500
BkF	<0.00500	BkF	<0.00500
BaP	<0.00500	BaP	<0.00500
Chr	<0.00500	Chr	<0.00500
DBahAnt	<0.00500	DBahAnt	<0.00500
FLU	<0.00500	FLU	<0.00500
H23cdPY	<0.00500	H23cdPY	<0.00500
1MN	<0.00500	1MN	<0.00500
2MN	<0.00500	2MN	<0.00500
PY	<0.00500	PY	<0.00500

DATE SAMPLED	SAMPLE ID and DEPTH (ft)	DATE SAMPLED	SAMPLE ID and DEPTH (ft)
01/10/2023	PWVB01 (6")	1/10/2023	PWVB01 (6")
ACE	<0.00500	ACE	<0.00500
Ant	<0.00500	Ant	<0.00500
BaA	<0.00500	BaA	<0.00500
BbF	<0.00500	BbF	<0.00500
BkF	<0.00500	BkF	<0.00500
BaP	<0.00500	BaP	<0.00500
Chr	<0.00500	Chr	<0.00500
DBahAnt	<0.00500	DBahAnt	<0.00500
FLU	<0.00500	FLU	<0.00500
H23cdPY	<0.00500	H23cdPY	<0.00500
1MN	<0.00500	1MN	<0.00500
2MN	<0.00500	2MN	<0.00500
PY	<0.00500	PY	<0.00500

DATE SAMPLED	SAMPLE ID and DEPTH (ft)	DATE SAMPLED	SAMPLE ID and DEPTH (ft)
01/10/2023	SEP01 (5")	1/10/2023	SEP01 (5")
ACE	<0.00500	ACE	<0.00500
Ant	<0.00500	Ant	<0.00500
BaA	<0.00500	BaA	<0.00500
BbF	<0.00500	BbF	<0.00500
BkF	<0.00500	BkF	<0.00500
BaP	<0.00500	BaP	<0.00500
Chr	<0.00500	Chr	<0.00500
DBahAnt	<0.00500	DBahAnt	<0.00500
FLU	<0.00500	FLU	<0.00500
H23cdPY	<0.00500	H23cdPY	<0.00500
1MN	<0.00500	1MN	<0.00500
2MN	<0.00500	2MN	<0.00500
PY	<0.00500	PY	<0.00500

Figure 3

SOIL CHEMISTRY MAP

Noble Energy, Inc. ~ WPF III T6N-R64W-S18 L01

SWSW Sec. 18, T6N, R64W, 6th PM

Weld County, Colorado

40.480550°, -104.601300°

Project No.	Facility #	API #
C023-007	483054	
Date	Remediation #	Filename
5/9/23	25398	23007Q1

RE **REMONTE**
ENVIRONMENTAL

TABLE 1
SUMMARY OF VOLATILE ORGANIC SOIL CHEMISTRY DATA
NOBLE ENERGY INC.
WPF III T6N-R64W-S18 L01, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C023-007

Sample ID	Sample Date	Depth (ft)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-Benzene (mg/kg)	Xylenes (mg/kg)	1,2,4- Trimethyl- Benzene (mg/kg)	1,3,5- Trimethyl- Benzene (mg/kg)	Naphthalene (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)
COGCC Table 915-1 Limits (Residential SSL)			1.2	490	5.8	58	30	27	2	500		
COGCC Table 915-1 Limits (Protection of Groundwater SSL)			0.0026	0.69	0.78	9.9	0.0081	0.0087	0.0038	500		
AST01@6"	01/10/2023	6"	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
PWVB01@8'	01/10/2023	8'	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
SEP01@5'	01/10/2023	5'	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	58	<50

Bold faced values exceed the COGCC Table 915-1 concentrations

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

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

TABLE 2
SUMMARY OF POLYCYCLIC AROMATIC HYDROCARBON SOIL CHEMISTRY DATA
NOBLE ENERGY INC.
WPF III T6N-R64W-S18 L01, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C023-007

Sample ID	Sample Date	Depth (ft)	Acenaphthene (mg/kg)	Anthracene (mg/kg)	Benzo (a) Anthracene (mg/kg)	Benzo (a) Pyrene (mg/kg)	Benzo (b) Fluoranthene (mg/kg)	Benzo (k) Fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenzo (a,h) Anthracene (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	Indeno (1,2,3- cd) Pyrene (mg/kg)	Pyrene (mg/kg)	1-Methyl - Naphthalene (mg/kg)	2-Methyl- Naphthalene (mg/kg)
COGCC Table 915-1 Limits (Residential SSL)			360	1800	1.1	0.11	1.1	11	110	0.11	240	240	1.1	180	18	24
COGCC Table 915-1 Limits (Protection of Groundwater SSL)			0.55	5.8	0.011	0.24	0.3	2.9	9	0.096	8.9	0.54	0.98	1.3	0.006	0.019
AST01@6"	01/10/2023	6"	<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
PWVB01@8'	01/10/2023	8'	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
SEP01@5'	01/10/2023	5'	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00612	0.008

Bold faced values exceed the COGCC Table 915-1 concentrations

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

TABLE 3
SUMMARY OF SOIL SUITABILITY FOR RECLAMATION
NOBLE ENERGY INC.
WPF III T6N-R64W-S18 L01, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C023-007

Sample ID	Sample Date	Depth (ft)	pH	EC (mmhos/cm)	SAR	Boron (mg/L)
COGCC Table 915-1 Soil Suitability Limits			6 - 8.3	<4	<6	2
AST01@6"	01/10/2023	6"	8.14	0.25	0.352	0.141
PWVB01@8'	01/10/2023	8'	7.88	0.58	1.94	0.314
SEP01@5'	01/10/2023	5'	8.43	0.629	2.77	6.03

Bold faced values exceed the COGCC Table 915-1 concentrations

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

Tank Battery Closure Checklist

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

Additional attachments (optional):		Pit Closure		Wellhead Closure		Flowline Closure	X	Partially Buried Vault Closure
Site Name & COGCC Facility Number: WPF III T6N-R64W-S18 L01, 483054		Date: 1/10/2023						Remediation Project #: 25398
Associated Wells: WPF A18-13		Age of Site: Unknown						Number of Photos Attached: See attached
Location: (GPS coordinates of southeaster berm) 40.480550, -104.601300								Estimated Facility Size (acres):
General Condition of Site: (General observations regarding housekeeping, corrosion, waste management, etc.) Good condition, no observed issues.								
USCS Soil Type: CL/ML					Estimated Depth to Groundwater: 11 feet			
Hydrocarbon Impacted Soils / Spills: (Note estimated size and if impact appears to be surficial or extends to an unknown depth) Elevated PID measurements at separator sample location.								
Salt Crusted Soils or Impacted Vegetation: (Note estimated size and if impact appears to be surficial or extends to an unknown depth) No observed salt crusted soils or impacted vegetation.								
Tanks								
Tank Contents	Crude							
Size (barrels)	300							
Age	Unknown							
Construction Material	Steel							
Tank type (AST/DRU, etc.)	AST							
Visual Integrity of Tank	Good Condition							
Condition of tank footprint	Good Condition							
PID Readings	0.9 ppm							
Soil impacts present at valves or hatches?	No							
PID Readings	0.8 ppm							
Sample taken? Location/ Sample ID#	See attached figure							
Photo Number(s)	See attached							
Other observations regarding tanks:								
Separators								
Separator size	Unknown							
Vertical or Horizontal	Horizontal							
Age	Unknown							
Soil impacts observed? If yes,	Elevated PID							
PID Readings	113.4 ppm							
Sample taken? Location/ Sample ID#	See attached figure							
Photo Number(s)	See attached							
Other observations regarding separators								
Third Party Equipment								
Type	Meter Shed							
Age	Unknown							

Third Party <i>Owner</i>	Unknown													
Removal Date	Not removed													
Sample taken? <i>Location/Container</i>	See attached figure													
PID Readings	1.4 ppm													
Photo Number(s)	See attached													
Other Facility Equipment														
Equipment type														
Equipment <i>Condition</i>														
Age														
Soil impacts <i>Observed during</i>														
PID Readings														
Sample taken? <i>Location/Container</i>														
Photo Number(s)														
Other observations regarding other facility or third party equipment:														
Summary														
Was impacted soil identified? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes - less than 10 cubic yards <input type="checkbox"/> Yes - more than 10 cubic yards														
Total number of samples field screened: 5					Total number of samples collected: 5									
Highest PID Reading: 113.4 ppm					Total number of samples submitted to lab for analysis: 3									
If more than 10 cubic yards of impacted soil were observed:														
Vertical extent:					Estimated spill volume:									
Lateral extent:					Volume of soil removed:									
Is additional investigation required?														
Was groundwater encountered during the investigation? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes - not impacted or in contact with impacted soils <input type="checkbox"/> Yes - groundwater impacted and/or in contact with impacted soils														
Measured depth to groundwater:					Was remedial groundwater removal conducted? <input type="checkbox"/> Yes <input type="checkbox"/> No									
Date Groundwater was encountered:					Commencement date of removal:									
Sheen on groundwater? <input type="checkbox"/> Yes <input type="checkbox"/> No					Volume of groundwater removed prior to sampling:									
Free product observed? <input type="checkbox"/> Yes <input type="checkbox"/> No					Volume of groundwater removed post sampling:									
Total number of samples collected:					Total Volume of groundwater removed:									
Total number of samples submitted to lab for analysis:														

Buried or Partially Buried Vessel Closure Checklist

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

Additional attachments (optional):		Pit Closure		Wellhead Closure		Flowline Closure		Tank Battery Closure
Site Name & COGCC Facility Number: WPF III T6N-R64W-S18 L01, 483054		Date: 1/10/2023						Remediation Project #: 25398
Associated Wells: WPF A18-13		Age of Site: Unknown						Number of Photos Attached: See attached
Location: (GPS coordinates of vault or southeastern tank berm for multiple) 40.480550, -104.601300							Estimated Facility Size (acres):	
General Condition of Site: (General observations regarding housekeeping, corrosion, waste management, etc.) Good condition, no observed issues.								
USCS Soil Type: CL					Estimated Depth to Groundwater: 11 feet			
Hydrocarbon Impacted Soils / Spills: (Note estimated size and if impact appears to be surficial or extends to an unknown depth) No observed hydrocarbon impacted soil or spills.								
Salt Crusted Soils or Impacted Vegetation: (Note estimated size and if impact appears to be surficial or extends to an unknown depth) No observed salt crusted soil or impacted vegetation.								
Buried or Partially Buried Vessels								
Tank Contents	Produced Water							
Size (barrels)	50							
Age	Unknown							
Construction Material	Concrete							
Visual Integrity of Tank	Crushed on arrival							
Condition of tank	Good condition							
PID Readings	0.6 ppm							
Condition of dump line	Good Condition							
PID Readings	0.4 to 1.4 ppm							
Sample taken? Location/Sample ID#	See attached figure							
Photo Number(s)	See attached.							
Other observations regarding partially buried vessels: PWV crushed upon arrival								
Summary								
Was impacted soil identified? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes - less than 10 cubic yards <input type="checkbox"/> Yes - more than 10 cubic yards								
Total number of samples field screened: 5					Total number of samples collected: 5			
Highest PID Reading: 1.4 ppm					Total number of samples submitted to lab for analysis: 1			
If more than 10 cubic yards of impacted soil were observed:								
Vertical extent:					Estimated spill volume:			
Lateral extent:					Volume of soil removed:			
Is additional investigation required?								
Was groundwater encountered during the investigation? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes - not impacted or in contact with impacted soils <input type="checkbox"/> Yes - groundwater impacted and/or in contact with impacted soils								
Measured depth to groundwater:					Was remedial groundwater removal conducted? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Date Groundwater was encountered:					Commencement date of removal:			
Sheen on groundwater? <input type="checkbox"/> Yes <input type="checkbox"/> No					Volume of groundwater removed prior to sampling:			
Free product observed? <input type="checkbox"/> Yes <input type="checkbox"/> No					Volume of groundwater removed post sampling:			
Total number of samples collected:					Total Volume of groundwater removed:			
Total number of samples submitted to lab for analysis:								

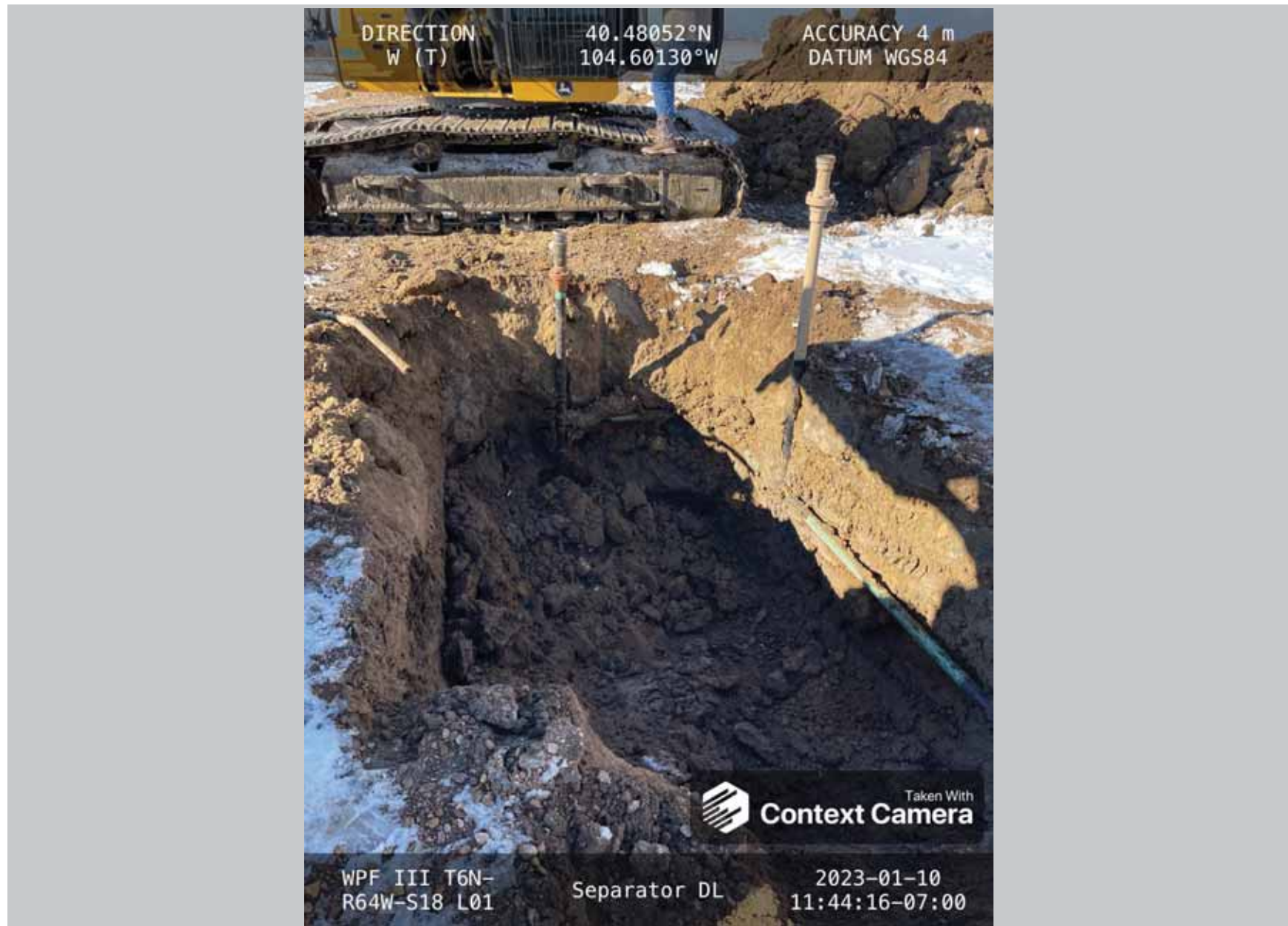
Photo Log



Description:

Facility Placard

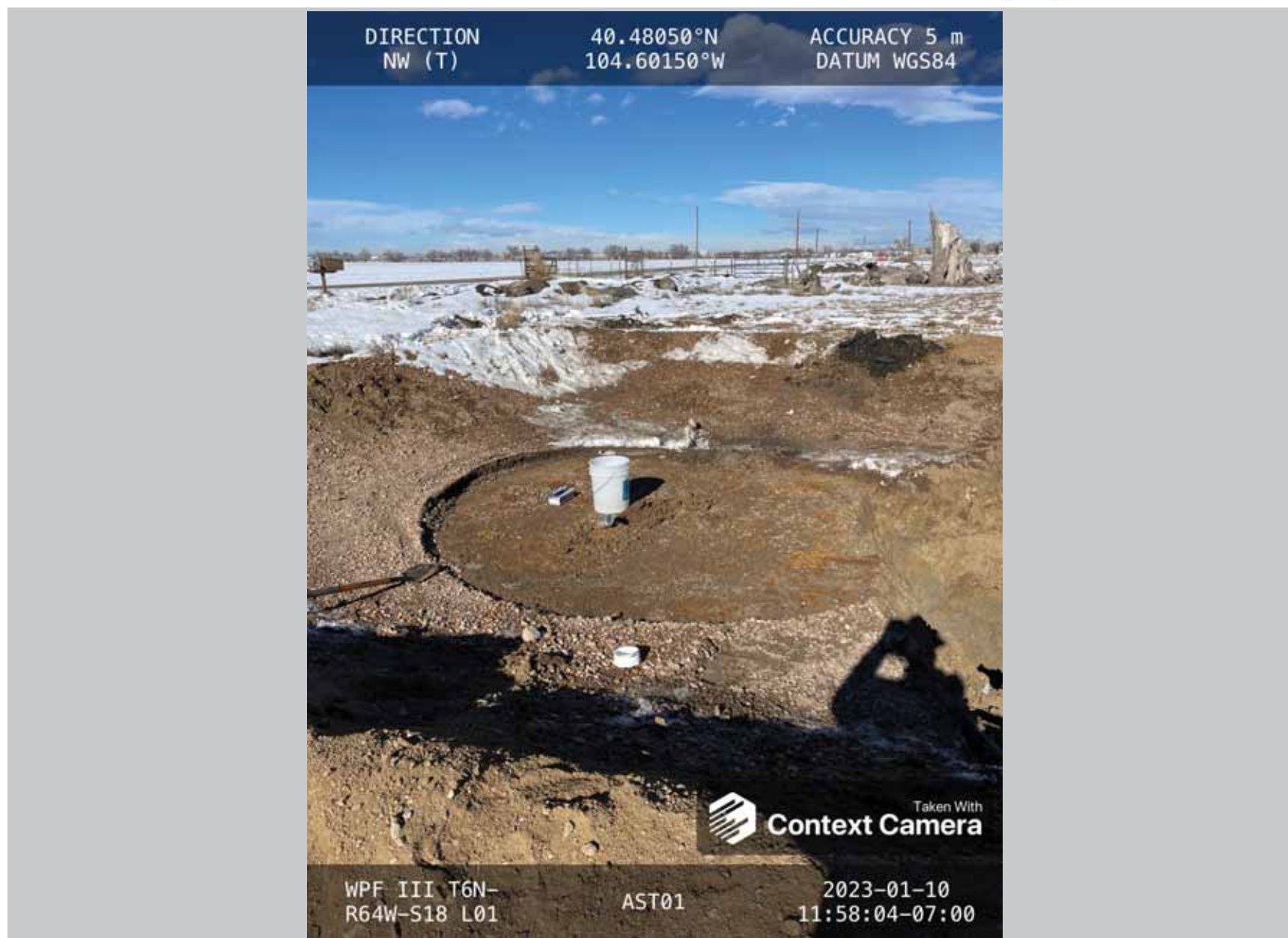
Photo Log



Description:

Separator Excavation

Photo Log



Description:

AST01@6"

Photo Log



Description:

AST02@1'

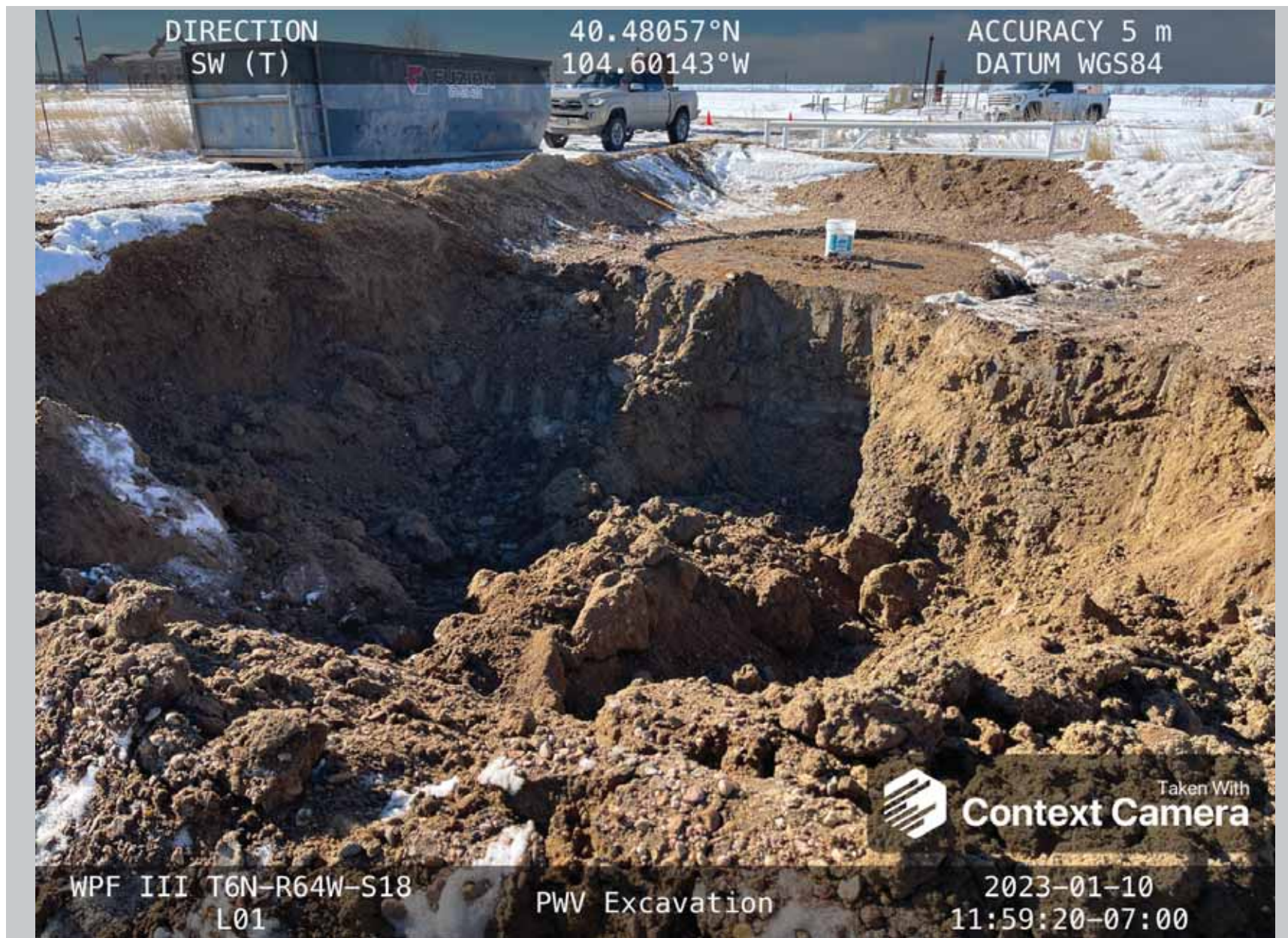
Photo Log



Description:

PWV Excavation Facing NW

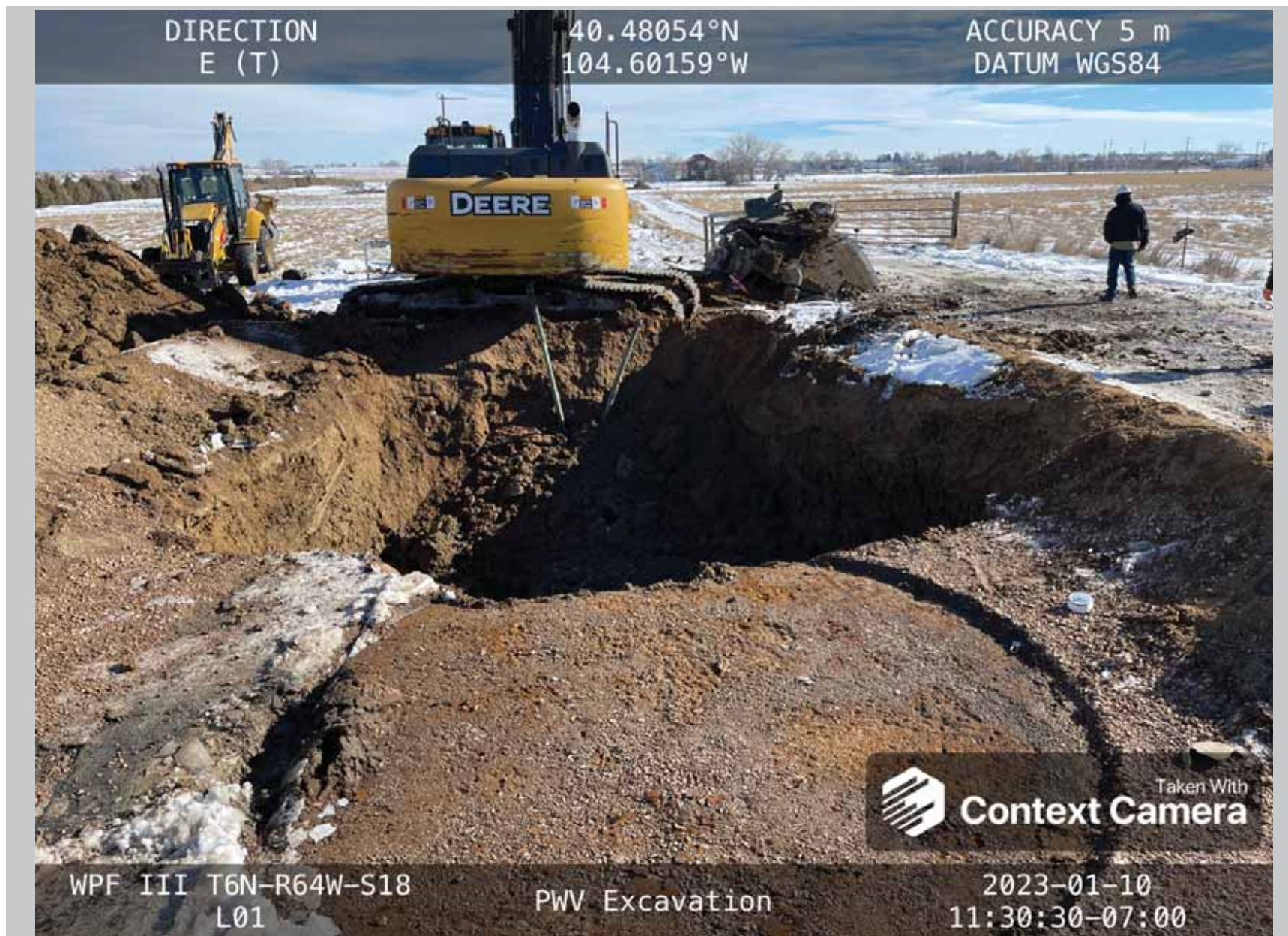
Photo Log



Description:

PWV Excavation Facing SW

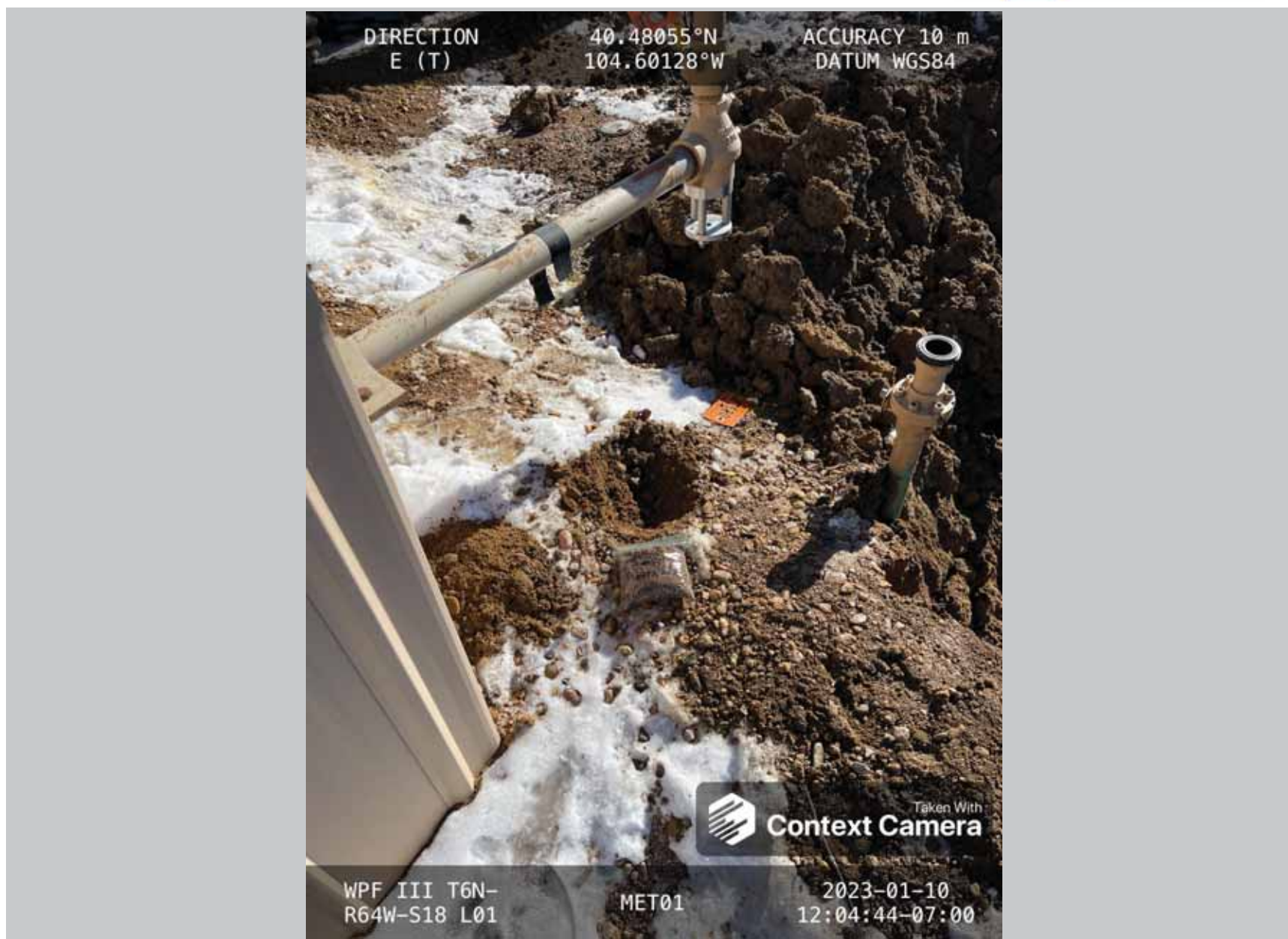
Photo Log



Description:

PWV Excavation Facing NE

Photo Log



Description:

MET01@6"

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

January 24, 2023

Paul Henehan

Fremont Environmental

PO Box 1289

Wellington, CO 80549

RE: Noble - WPF III T6N-R64W-S18 L01

Work Order #2301183

Enclosed are the results of analyses for samples received by Summit Scientific on 01/10/23 16:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott Sheely".

Scott Sheely For Paul Shrewsbury
President



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - WPF III T6N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/24/23 12:20

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
AST01@6"	2301183-01	Soil	01/10/23 00:00	01/10/23 16:30
SEP01@5'	2301183-02	Soil	01/10/23 00:00	01/10/23 16:30
PWVB01@8'	2301183-04	Soil	01/10/23 00:00	01/10/23 16:30
FL03@4'	2301183-06	Soil	01/10/23 00:00	01/10/23 16:30

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

2301183

S₂

4653 Table Mountain Drive ♦ Golden, Colorado 80403

303-277-9310 ♦ 303-374-5933 (f)

Page of

Client: Fremont Environmental

Project Manager: Paul Henehan

Address:

E-Mail: Fremont Distribution List: PaulH, EthanB, JeffG and ChrisL. @fremontenv.com

City/State/Zip:

Bill to Noble

Phone:

Project Name: WPF III T6N-R64W-S18 L01

Sampler Name: Chris Lattes

Project Number:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested								Special Instructions		
					HCl	HNO ₃	None	Other	Water	Soil	Air-Canister #	Other	TPH, BTEX, TMBS, Naph.	PAH (915)	EC, SAR, pH, Boron	Metals (915)	TDS, Chloride, Sulfate	HOLD					
1	AST01 @ 6"	1/10/23		2			X			X				X	X	X							
2	SEPP1 @ 5'			2			X			X				X	X	X							
3	PWUS01 @ 7'			2			X			X				X	X	X						X	
4	PWVB01 @ 8'			2			X			X				X	X	X						X	
5	BK601 @ 1'			2			X			X				X	X	X						X	Hold
6	FL03 @ 4'	1/10/23		2			X			X				X	X	X							
7																							
8																							
9																							
10																							

Relinquished by:	Date/Time:	Received by:	Date/Time:	Turn Around Time	(Check)	Notes: WPF A 12-13 Facility & FL
Chris Lattes	1/10/23 15:30	S2	1/10/23 15:30	Same Day	72 hours	
				24 hours	Standard	
				48 hours		
Relinquished by:	Date/Time:	Received by:	Date/Time:	Sample Integrity:		
S2	1/10/23 1630	[Signature]	1/10/23 1630	Temperature Upon Receipt:	76	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Samples Intact:	Yes No	

S₂

Sample Receipt Checklist

S2 Work Order# 2301183Client: Fremont Client Project ID: WPF III TON-RAW-S18181Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other ☐ Airbill #: ☐
☐ ☐ ☐ ☐ ☐
Matrix (Check all that apply) Air ☐ Soil/Solid ☒ Water ☐ Other ☐Temp (°C) 7.6 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	on ICE
If custody seals are present, are they intact? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are samples due within 48 hours present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe ²⁺), Hexavalent Chromium (Cr ⁶⁺ , Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out Completely? ⁽¹⁾	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Page - of - ... not complete
Is the COC properly relinquished by the client w/ date and time recorded? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact? ⁽¹⁾	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Missing sample 1
Was adequate sample volume provided? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received? ⁽¹⁾	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	i
Do the sample IDs on the bottle labels match the COC? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling)? ⁽¹⁾ Note the type of preservative in the comments column – HCl, H ₂ SO ₄ , NaOH, HNO ₃ , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2? ⁽¹⁾ Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Comments (if any):				

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

Custodian Printed Name

Date/Time

1-10-23 1630



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - WPF III T6N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/24/23 12:20

AST01@6"
2301183-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BGA0226	01/19/23	01/19/23	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0459	115 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0380	95.1 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0414	104 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BGA0228	"	01/19/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	7.80	62.4 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - WPF III T6N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/24/23 12:20

AST01@6"
2301183-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGA0295	01/13/23	01/14/23	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0135	40.5 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0235	70.6 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.141	0.0100	mg/L	1	BGA0330	01/15/23	01/16/23	EPA 6020B	

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

Date Sampled: **01/10/23 00:00**

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

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



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - WPF III T6N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/24/23 12:20

AST01@6"
2301183-01 (Soil)

Summit Scientific

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

Calcium	33.7	0.0617	mg/L dry	1	BGA0367	01/16/23	01/19/23	EPA 6020B
Magnesium	6.29	0.0617	"	"	"	"	"	"
Sodium	8.49	0.0617	"	"	"	"	"	"

Calculated Analysis

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.352	0.00100	units	1	BGA0477	01/19/23	01/19/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	81.1		%	1	BGA0364	01/16/23	01/17/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.250	0.0100	mmhos/cm	1	BGA0397	01/17/23	01/17/23	EPA 120.1	

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

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.14		pH Units	1	BGA0396	01/17/23	01/17/23	EPA 9045D	

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - WPF III T6N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/24/23 12:20

SEP01@5'
2301183-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BGA0226	01/11/23	01/13/23	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0380	95.0 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0442	110 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0340	85.0 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	58	50	mg/kg	1	BGA0228	01/11/23	01/13/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	15.4	123 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - WPF III T6N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/24/23 12:20

SEP01@5'
2301183-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGA0295	01/13/23	01/14/23	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	0.00612	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	0.00800	0.00500	"	"	"	"	"	"	

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0136	40.8 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0183	54.8 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	6.03	0.0100	mg/L	1	BGA0330	01/15/23	01/16/23	EPA 6020B	

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

Date Sampled: **01/10/23 00:00**

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

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



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - WPF III T6N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/24/23 12:20

SEP01@5'
2301183-02 (Soil)

Summit Scientific

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

Calcium	106	0.0690	mg/L dry	1	BGA0367	01/16/23	01/19/23	EPA 6020B
Magnesium	8.15	0.0690	"	"	"	"	"	"
Sodium	110	0.0690	"	"	"	"	"	"

Calculated Analysis

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.77	0.00100	units	1	BGA0477	01/19/23	01/19/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	72.5		%	1	BGA0364	01/16/23	01/17/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.629	0.0100	mmhos/cm	1	BGA0397	01/17/23	01/17/23	EPA 120.1	

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

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.43		pH Units	1	BGA0396	01/17/23	01/17/23	EPA 9045D	

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - WPF III T6N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/24/23 12:20

PWVB01@8'
2301183-04 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BGA0226	01/11/23	01/13/23	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0312	78.0 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0418	104 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0389	97.2 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BGA0228	01/11/23	01/13/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	15.6	125 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - WPF III T6N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/24/23 12:20

PWVB01@8'
2301183-04 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGA0295	01/13/23	01/14/23	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0161	48.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0243	72.9 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.314	0.0100	mg/L	1	BGA0330	01/15/23	01/17/23	EPA 6020B	

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

Date Sampled: **01/10/23 00:00**

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

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



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - WPF III T6N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/24/23 12:20

PWVB01@8'
2301183-04 (Soil)

Summit Scientific

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

Calcium	52.6	0.0658	mg/L dry	1	BGA0367	01/16/23	01/19/23	EPA 6020B
Magnesium	12.1	0.0658	"	"	"	"	"	"
Sodium	60.0	0.0658	"	"	"	"	"	"

Calculated Analysis

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.94	0.00100	units	1	BGA0477	01/19/23	01/19/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	75.9		%	1	BGA0364	01/16/23	01/17/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.580	0.0100	mmhos/cm	1	BGA0397	01/17/23	01/17/23	EPA 120.1	

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

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.88		pH Units	1	BGA0396	01/17/23	01/17/23	EPA 9045D	

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - WPF III T6N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/24/23 12:20

FL03@4'
2301183-06 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BGA0226	01/11/23	01/13/23	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0306	76.4 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0418	104 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0374	93.4 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	81	50	mg/kg	1	BGA0228	01/11/23	01/13/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	16.0	128 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - WPF III T6N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/24/23 12:20

FL03@4'
2301183-06 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGA0295	01/13/23	01/14/23	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0143	42.8 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0184	55.3 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.340	0.0100	mg/L	1	BGA0330	01/15/23	01/16/23	EPA 6020B	

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

Date Sampled: **01/10/23 00:00**

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

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - WPF III T6N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/24/23 12:20

FL03@4'
2301183-06 (Soil)

Summit Scientific

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

Calcium	179	0.0599	mg/L dry	1	BGA0367	01/16/23	01/19/23	EPA 6020B
Magnesium	37.2	0.0599	"	"	"	"	"	"
Sodium	180	0.0599	"	"	"	"	"	"

Calculated Analysis

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.20	0.00100	units	1	BGA0477	01/19/23	01/19/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	83.5		%	1	BGA0364	01/16/23	01/17/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	3.00	0.0100	mmhos/cm	1	BGA0397	01/17/23	01/17/23	EPA 120.1	

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

Date Sampled: **01/10/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.93		pH Units	1	BGA0396	01/17/23	01/17/23	EPA 9045D	

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - WPF III T6N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/24/23 12:20

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BGA0226 - EPA 5030 Soil MS

Blank (BGA0226-BLK1)

Prepared: 01/11/23 Analyzed: 01/13/23

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0353		"	0.0400		88.4	50-150			
Surrogate: Toluene-d8	0.0380		"	0.0400		95.0	50-150			
Surrogate: 4-Bromofluorobenzene	0.0315		"	0.0400		78.8	50-150			

LCS (BGA0226-BS1)

Prepared: 01/11/23 Analyzed: 01/13/23

Benzene	0.0653	0.0020	mg/kg	0.0750		87.0	70-130			
Toluene	0.0699	0.0050	"	0.0750		93.2	70-130			
Ethylbenzene	0.0866	0.0050	"	0.0750		116	70-130			
m,p-Xylene	0.179	0.010	"	0.150		119	70-130			
o-Xylene	0.0852	0.0050	"	0.0750		114	70-130			
1,2,4-Trimethylbenzene	0.0916	0.0050	"	0.0750		122	70-130			
1,3,5-Trimethylbenzene	0.0973	0.0050	"	0.0750		130	70-130			
Naphthalene	0.0599	0.0038	"	0.0750		79.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0308		"	0.0400		76.9	50-150			
Surrogate: Toluene-d8	0.0368		"	0.0400		92.0	50-150			
Surrogate: 4-Bromofluorobenzene	0.0310		"	0.0400		77.4	50-150			

Matrix Spike (BGA0226-MS1)

Source: 2301179-01

Prepared: 01/11/23 Analyzed: 01/13/23

Benzene	0.0648	0.0020	mg/kg	0.0750	ND	86.4	70-130			
Toluene	0.0675	0.0050	"	0.0750	ND	90.0	70-130			
Ethylbenzene	0.0870	0.0050	"	0.0750	ND	116	70-130			
m,p-Xylene	0.182	0.010	"	0.150	ND	121	70-130			
o-Xylene	0.0856	0.0050	"	0.0750	ND	114	70-130			
1,2,4-Trimethylbenzene	0.0954	0.0050	"	0.0750	ND	127	70-130			
1,3,5-Trimethylbenzene	0.0968	0.0050	"	0.0750	ND	129	70-130			
Naphthalene	0.0688	0.0038	"	0.0750	ND	91.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0371		"	0.0400		92.7	50-150			
Surrogate: Toluene-d8	0.0381		"	0.0400		95.3	50-150			
Surrogate: 4-Bromofluorobenzene	0.0327		"	0.0400		81.8	50-150			

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - WPF III T6N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/24/23 12:20

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

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

Batch BGA0226 - EPA 5030 Soil MS

Matrix Spike Dup (BGA0226-MSD1)	Source: 2301179-01			Prepared: 01/11/23 Analyzed: 01/13/23						
Benzene	0.0670	0.0020	mg/kg	0.0750	ND	89.3	70-130	3.23	30	
Toluene	0.0711	0.0050	"	0.0750	ND	94.8	70-130	5.19	30	
Ethylbenzene	0.0894	0.0050	"	0.0750	ND	119	70-130	2.72	30	
m,p-Xylene	0.188	0.010	"	0.150	ND	125	70-130	2.94	30	
o-Xylene	0.0898	0.0050	"	0.0750	ND	120	70-130	4.79	30	
1,2,4-Trimethylbenzene	0.0950	0.0050	"	0.0750	ND	127	70-130	0.347	30	
1,3,5-Trimethylbenzene	0.0937	0.0050	"	0.0750	ND	125	70-130	3.28	30	
Naphthalene	0.0695	0.0038	"	0.0750	ND	92.6	70-130	0.954	30	
Surrogate: 1,2-Dichloroethane-d4	0.0356		"	0.0400		89.1	50-150			
Surrogate: Toluene-d8	0.0360		"	0.0400		90.1	50-150			
Surrogate: 4-Bromofluorobenzene	0.0322		"	0.0400		80.6	50-150			

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - WPF III T6N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/24/23 12:20

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BGA0228 - EPA 3550A

Blank (BGA0228-BLK1)

Prepared: 01/11/23 Analyzed: 01/12/23

C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
Surrogate: o-Terphenyl	15.1		"	12.5		121	30-150			

LCS (BGA0228-BS1)

Prepared: 01/11/23 Analyzed: 01/12/23

C10-C28 (DRO)	392	50	mg/kg	500		78.5	70-130			
Surrogate: o-Terphenyl	14.5		"	12.5		116	30-150			

Matrix Spike (BGA0228-MS1)

Source: 2301179-01

Prepared: 01/11/23 Analyzed: 01/12/23

C10-C28 (DRO)	398	50	mg/kg	500	11.8	77.2	70-130			
Surrogate: o-Terphenyl	14.1		"	12.5		113	30-150			

Matrix Spike Dup (BGA0228-MSD1)

Source: 2301179-01

Prepared: 01/11/23 Analyzed: 01/12/23

C10-C28 (DRO)	416	50	mg/kg	500	11.8	80.8	70-130	4.40	20	
Surrogate: o-Terphenyl	13.4		"	12.5		107	30-150			

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - WPF III T6N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/24/23 12:20

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BGA0295 - EPA 5030 Soil MS

Blank (BGA0295-BLK1)

Prepared & Analyzed: 01/13/23

Acenaphthene	ND	0.00500	mg/kg								
Anthracene	ND	0.00500	"								
Benzo (a) anthracene	ND	0.00500	"								
Benzo (a) pyrene	ND	0.00500	"								
Benzo (b) fluoranthene	ND	0.00500	"								
Benzo (k) fluoranthene	ND	0.00500	"								
Chrysene	ND	0.00500	"								
Dibenz (a,h) anthracene	ND	0.00500	"								
Fluoranthene	ND	0.00500	"								
Fluorene	ND	0.00500	"								
Indeno (1,2,3-cd) pyrene	ND	0.00500	"								
Pyrene	ND	0.00500	"								
1-Methylnaphthalene	ND	0.00500	"								
2-Methylnaphthalene	ND	0.00500	"								
Surrogate: 2-Methylnaphthalene-d10	0.0245		"	0.0333		73.6		40-150			
Surrogate: Fluoranthene-d10	0.0357		"	0.0333		107		40-150			

LCS (BGA0295-BS1)

Prepared & Analyzed: 01/13/23

Acenaphthene	0.0344	0.00500	mg/kg	0.0333		103		31-137			
Anthracene	0.0320	0.00500	"	0.0333		95.9		30-120			
Benzo (a) anthracene	0.0324	0.00500	"	0.0333		97.2		30-120			
Benzo (a) pyrene	0.0358	0.00500	"	0.0333		108		30-120			
Benzo (b) fluoranthene	0.0299	0.00500	"	0.0333		89.8		30-120			
Benzo (k) fluoranthene	0.0335	0.00500	"	0.0333		101		30-120			
Chrysene	0.0363	0.00500	"	0.0333		109		30-120			
Dibenz (a,h) anthracene	0.0206	0.00500	"	0.0333		61.7		30-120			
Fluoranthene	0.0336	0.00500	"	0.0333		101		30-120			
Fluorene	0.0342	0.00500	"	0.0333		103		30-120			
Indeno (1,2,3-cd) pyrene	0.0262	0.00500	"	0.0333		78.5		30-120			
Pyrene	0.0363	0.00500	"	0.0333		109		35-142			
1-Methylnaphthalene	0.0271	0.00500	"	0.0333		81.3		35-142			
2-Methylnaphthalene	0.0264	0.00500	"	0.0333		79.1		35-142			
Surrogate: 2-Methylnaphthalene-d10	0.0281		"	0.0333		84.4		40-150			
Surrogate: Fluoranthene-d10	0.0359		"	0.0333		108		40-150			

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - WPF III T6N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/24/23 12:20

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BGA0295 - EPA 5030 Soil MS

Matrix Spike (BGA0295-MS1)

Source: 2301137-01

Prepared & Analyzed: 01/13/23

Acenaphthene	0.0241	0.00500	mg/kg	0.0333	ND	72.2	31-137				
Anthracene	0.0227	0.00500	"	0.0333	ND	68.1	30-120				
Benzo (a) anthracene	0.0257	0.00500	"	0.0333	ND	77.0	30-120				
Benzo (a) pyrene	0.0242	0.00500	"	0.0333	ND	72.5	30-120				
Benzo (b) fluoranthene	0.0205	0.00500	"	0.0333	ND	61.6	30-120				
Benzo (k) fluoranthene	0.0212	0.00500	"	0.0333	ND	63.6	30-120				
Chrysene	0.0247	0.00500	"	0.0333	ND	74.1	30-120				
Dibenz (a,h) anthracene	0.0197	0.00500	"	0.0333	ND	59.1	30-120				
Fluoranthene	0.0256	0.00500	"	0.0333	ND	76.9	30-120				
Fluorene	0.0242	0.00500	"	0.0333	ND	72.7	30-120				
Indeno (1,2,3-cd) pyrene	0.0236	0.00500	"	0.0333	ND	70.9	30-120				
Pyrene	0.0263	0.00500	"	0.0333	ND	79.0	35-142				
1-Methylnaphthalene	0.0212	0.00500	"	0.0333	ND	63.6	15-130				
2-Methylnaphthalene	0.0210	0.00500	"	0.0333	ND	63.0	15-130				
Surrogate: 2-Methylnaphthalene-d10	0.0209		"	0.0333		62.8	40-150				
Surrogate: Fluoranthene-d10	0.0261		"	0.0333		78.3	40-150				

Matrix Spike Dup (BGA0295-MSD1)

Source: 2301137-01

Prepared & Analyzed: 01/13/23

Acenaphthene	0.0213	0.00500	mg/kg	0.0333	ND	63.8	31-137	12.3	30
Anthracene	0.0205	0.00500	"	0.0333	ND	61.4	30-120	10.4	30
Benzo (a) anthracene	0.0231	0.00500	"	0.0333	ND	69.2	30-120	10.6	30
Benzo (a) pyrene	0.0226	0.00500	"	0.0333	ND	67.9	30-120	6.68	30
Benzo (b) fluoranthene	0.0182	0.00500	"	0.0333	ND	54.7	30-120	11.8	30
Benzo (k) fluoranthene	0.0181	0.00500	"	0.0333	ND	54.3	30-120	15.9	30
Chrysene	0.0217	0.00500	"	0.0333	ND	65.1	30-120	12.9	30
Dibenz (a,h) anthracene	0.0186	0.00500	"	0.0333	ND	55.8	30-120	5.73	30
Fluoranthene	0.0218	0.00500	"	0.0333	ND	65.5	30-120	15.9	30
Fluorene	0.0217	0.00500	"	0.0333	ND	65.1	30-120	11.1	30
Indeno (1,2,3-cd) pyrene	0.0223	0.00500	"	0.0333	ND	66.8	30-120	6.01	30
Pyrene	0.0231	0.00500	"	0.0333	ND	69.3	35-142	13.1	30
1-Methylnaphthalene	0.0199	0.00500	"	0.0333	ND	59.6	15-130	6.37	50
2-Methylnaphthalene	0.0210	0.00500	"	0.0333	ND	62.9	15-130	0.245	50
Surrogate: 2-Methylnaphthalene-d10	0.0195		"	0.0333		58.4	40-150		
Surrogate: Fluoranthene-d10	0.0226		"	0.0333		67.8	40-150		

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - WPF III T6N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/24/23 12:20

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

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

Batch BGA0330 - EPA 3050B

Blank (BGA0330-BLK1)

Prepared: 01/15/23 Analyzed: 01/16/23

Boron ND 0.0100 mg/L

LCS (BGA0330-BS1)

Prepared: 01/15/23 Analyzed: 01/16/23

Boron 5.16 0.0100 mg/L 5.00 103 80-120

Duplicate (BGA0330-DUP1)

Source: 2301180-03

Prepared: 01/15/23 Analyzed: 01/16/23

Boron 0.208 0.0100 mg/L 0.206 0.774 20

Matrix Spike (BGA0330-MS1)

Source: 2301180-03

Prepared: 01/15/23 Analyzed: 01/16/23

Boron 5.91 0.0100 mg/L 5.00 0.206 114 75-125

Matrix Spike Dup (BGA0330-MSD1)

Source: 2301180-03

Prepared: 01/15/23 Analyzed: 01/16/23

Boron 6.47 0.0100 mg/L 5.00 0.206 125 75-125 9.08 25

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - WPF III T6N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/24/23 12:20

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

Summit Scientific

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

Batch BGA0367 - General Preparation

Blank (BGA0367-BLK1)

Prepared: 01/16/23 Analyzed: 01/18/23

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

LCS (BGA0367-BS1)

Prepared: 01/16/23 Analyzed: 01/18/23

Calcium	5.15	0.0500	mg/L wet	5.00	103	70-130
Magnesium	5.30	0.0500	"	5.00	106	70-130
Sodium	5.42	0.0500	"	5.00	108	70-130

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - WPF III T6N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/24/23 12:20

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

Summit Scientific

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

Batch BGA0364 - General Preparation

Duplicate (BGA0364-DUP1)		Source: 2301172-01		Prepared: 01/16/23 Analyzed: 01/17/23	
% Solids	93.1		%	91.9	1.27 20

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - WPF III T6N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/24/23 12:20

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

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

Batch BGA0397 - General Preparation

Blank (BGA0397-BLK1)

Prepared & Analyzed: 01/17/23

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BGA0397-BS1)

Prepared & Analyzed: 01/17/23

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

Duplicate (BGA0397-DUP1)

Source: 2301161-02

Prepared & Analyzed: 01/17/23

Specific Conductance (EC) 0.383 0.0100 mmhos/cm 0.379 0.866 20

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - WPF III T6N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/24/23 12:20

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

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

Batch BGA0396 - General Preparation

LCS (BGA0396-BS1)

Prepared & Analyzed: 01/17/23

pH	9.07	pH Units	9.18	98.8	95-105
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Duplicate (BGA0396-DUP1)

Source: 2301161-02

Prepared & Analyzed: 01/17/23

pH	7.77	pH Units	7.85	1.02	20
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Summit Scientific

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



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - WPF III T6N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
01/24/23 12:20

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