

FREMONT ENVIRONMENTAL INC.

December 22, 2022

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

Subject: **Flowline Closure Data Submittal**
Ava State C 36-22 Flowline
API # 05-123-25677
NWSE Sec. 36, T4N, R64W
Weld County, Colorado
Fremont Project No. C022-126
Remediation #23682

Dear Mr. Peterson:

As requested, Fremont Environmental Inc. (Fremont) personnel conducted flowline abandonment activities at the Noble Energy Inc. (Noble) Ava State C 36-22 flowline. Details of the flowline abandonment activities are documented in the attached Closure Report. Soil sample FL01@4.5' was reported with a low pH of 4.94. It is suspected that the low pH identified at the FL01 location is due to some spilled concrete during flowline AIP activities. Groundwater was not encountered during decommissioning activities.

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

Sincerely,

FREMONT ENVIRONMENTAL INC.

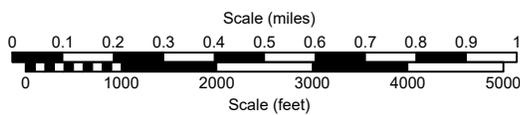
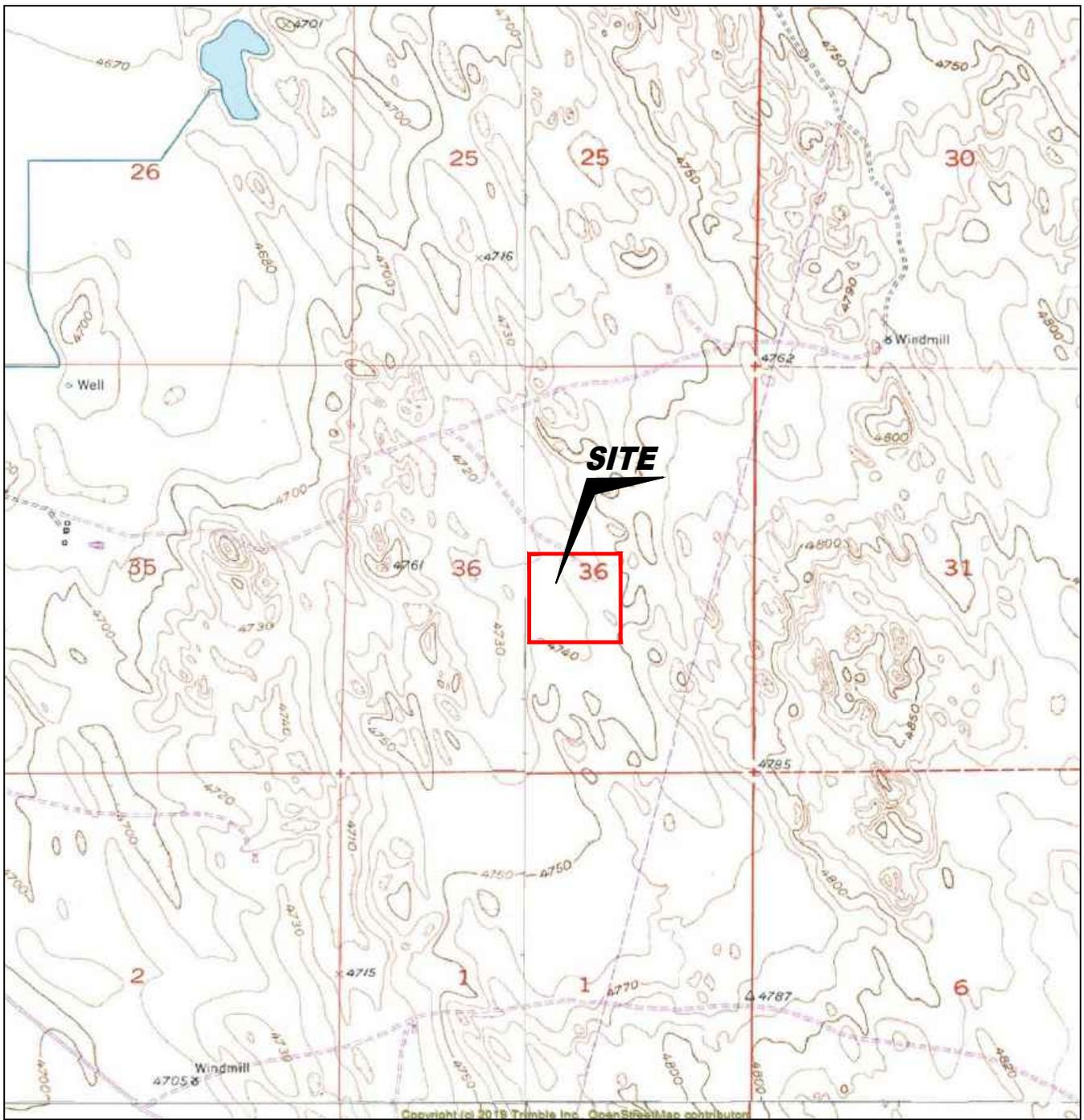


Paul V. Henehan, P.E.
Senior Consultant

Attachments:

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

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



USGS 7.5 MINUTE SERIES (TOPOGRAPHIC)

Figure 1
SITE LOCATION MAP

Noble Energy, Inc. ~ Ava State C 36-22 Flow Line
 NWSE Sec. 36, T4N, R64W, 6th PM
 Weld County, Colorado
 40.269173°, -104.498108°

Project # C022-126	API # 05-123-25677	Drawn By TA
Date 12/23/22	Remediation # 23682	Filename 22126T





LEGEND

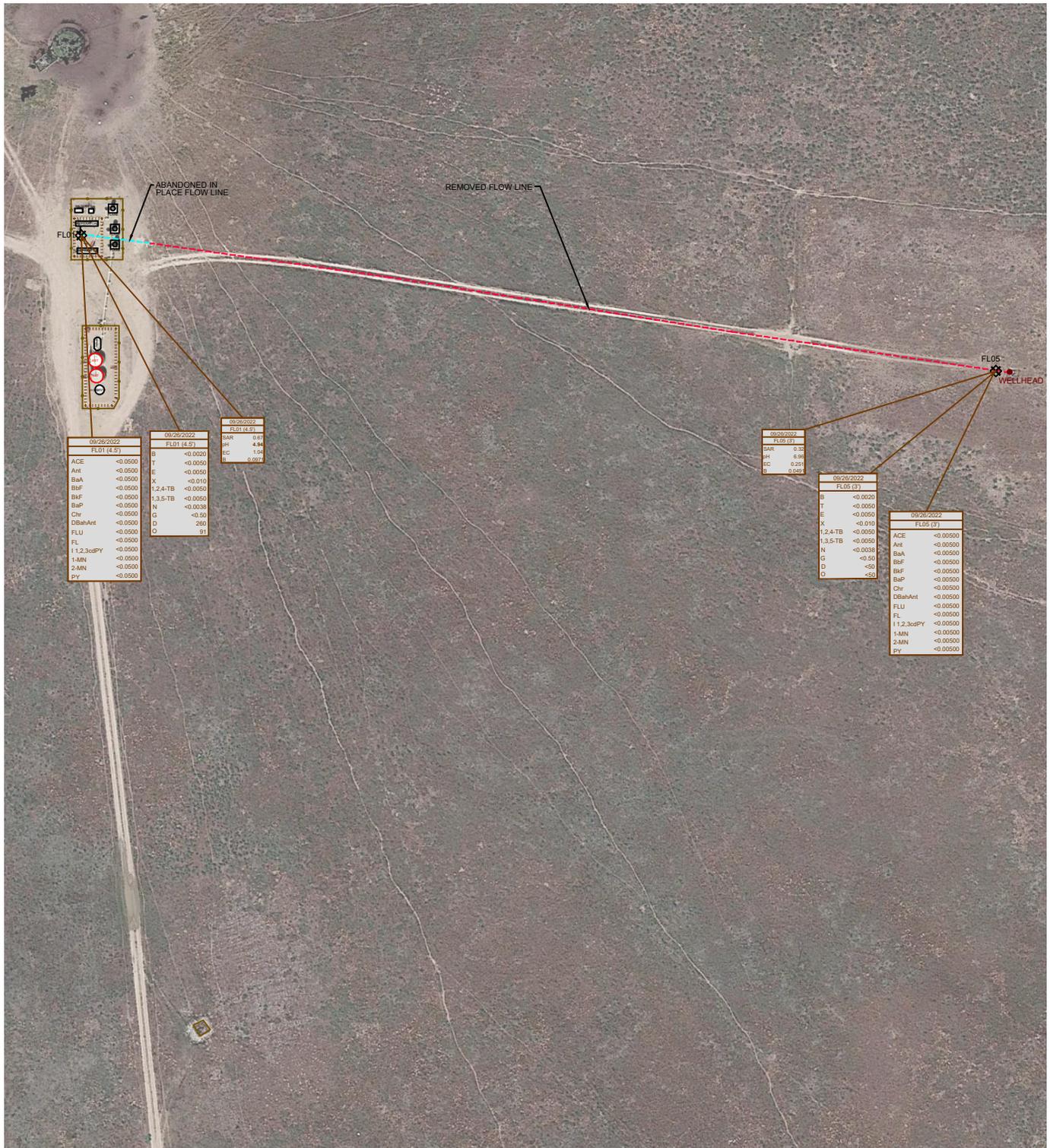
- WELL HEAD LOCATION
 - ▲ PID READING LOCATION
 - ABOVE GROUND STORAGE TANK
 - FORMER FACILITY
 - CONTAINMENT WALL
 - REMOVED FLOW LINE
 - ABANDONED IN PLACE FLOW LINE
 - FENCE LINE
- FL01 (4.5')
PID 14.0 ppm
- PID READING LOCATION IDENTIFICATION
 PHOTO IONIZATION DETECTION (ppm)

Figure 2
SITE MAP

Noble Energy, Inc. ~ Ava State C 36-22 Flow Line
 NWSE Sec. 36, T4N, R64W, 6th PM
 Weld County, Colorado
 40.269173°, -104.498108°

Project No. C022-126	API # 05-123-25677	Drawn By TA
Date 12/23/22	Remediation # 23682	Filename 22126Q





09/26/2022	DATE SAMPLED	09/26/2022	DATE SAMPLED
FL01 (4.5')	SAMPLE ID and DEPTH (ft)	FL01 (4.5')	SAMPLE ID and DEPTH (ft)
ACE	ACENAPHTHENE (mg/kg)	B	BENZENE (mg/kg)
Ant	ANTHRACENE (mg/kg)	T	TOLUENE (mg/kg)
BaA	BENZO (A) ANTHRACENE (mg/kg)	B	ETHYL BENZENE (mg/kg)
BbF	BENZO (B) FLUORANTHENE (mg/kg)	X	TOTAL XYLENES (mg/kg)
BaP	BENZO (K) FLUORANTHENE (mg/kg)	1,2,4-TB	1,2,4-TRIMETHYLBENZENE (mg/kg)
BaP	BENZO (A) PYRENE (mg/kg)	1,3,5-TB	1,3,5-TRIMETHYLBENZENE (mg/kg)
Chr	CHRYSENE (mg/kg)	N	NAPHTHALENE (mg/kg)
DBahAnt	DIBENZ (A,H) ANTHRACENE (mg/kg)	G	TPH-GRO (mg/kg)
FLU	FLUORENE (mg/kg)	D	TPH-DRO (mg/kg)
FL	FLUORENE (mg/kg)	O	TPH-ORO (mg/kg)
1,1,2,3cdPY	INDENO (1,2,3-CD) PYRENE (mg/kg)		
1-MN	1-METHYLNAPHTHALENE (mg/kg)		
2-MN	2-METHYLNAPHTHALENE (mg/kg)		
PY	PYRENE (mg/kg)		

Figure 3
SOIL CHEMISTRY MAP
September 26, 2022
Noble Energy, Inc. ~ Ava State C 36-22 Flow Line
NWSE Sec. 36, T4N, R64W, 6th PM
Weld County, Colorado
40.269173°, -104.498108°

Project No. C022-126	API # 05-123-25677	Drawn By TA
Date 12/23/22	Remediation # 23682	Filename 22126Q

TABLE 1
SUMMARY OF VOLATILE ORGANIC SOIL CHEMISTRY DATA
NOBLE ENERGY INC.
AVA STATE C 36-22, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C022-126

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		
FL01@4.5'	09/26/2022	4.5'	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	260	91
FL05@3'	09/26/2022	3'	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50

Bold faced values exceed the COGCC Table 915-1 concentrations

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

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

TABLE 1
SUMMARY OF POLYCYCLIC AROMATIC HYDROCARBON SOIL CHEMISTRY DATA
NOBLE ENERGY INC.
AVA STATE C 36-22, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C022-126

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
FL01@4.5'	09/26/2022	4.5'	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500
FL05@3'	09/26/2022	3'	<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

Bold faced values exceed the COGCC Table 915-1 concentrations

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

TABLE 1
SUMMARY OF SOIL SUITABILITY FOR RECLAMATION
NOBLE ENERGY INC.
AVA STATE C 36-22, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C022-126

Sample ID	Sample Date	Depth (ft)	EC (mmhos/cm)	pH	SAR	Boron (mg/L)
COGCC Table 915-1 Soil Suitability Limits			<4	6 - 8.3	<6	2
FL01@4.5'	09/26/2022	4.5'	1.04	4.94	0.67	0.0971
FL05@3'	09/26/2022	3'	0.251	6.96	0.32	0.0491

Bold faced values exceed the COGCC Table 915-1 concentrations

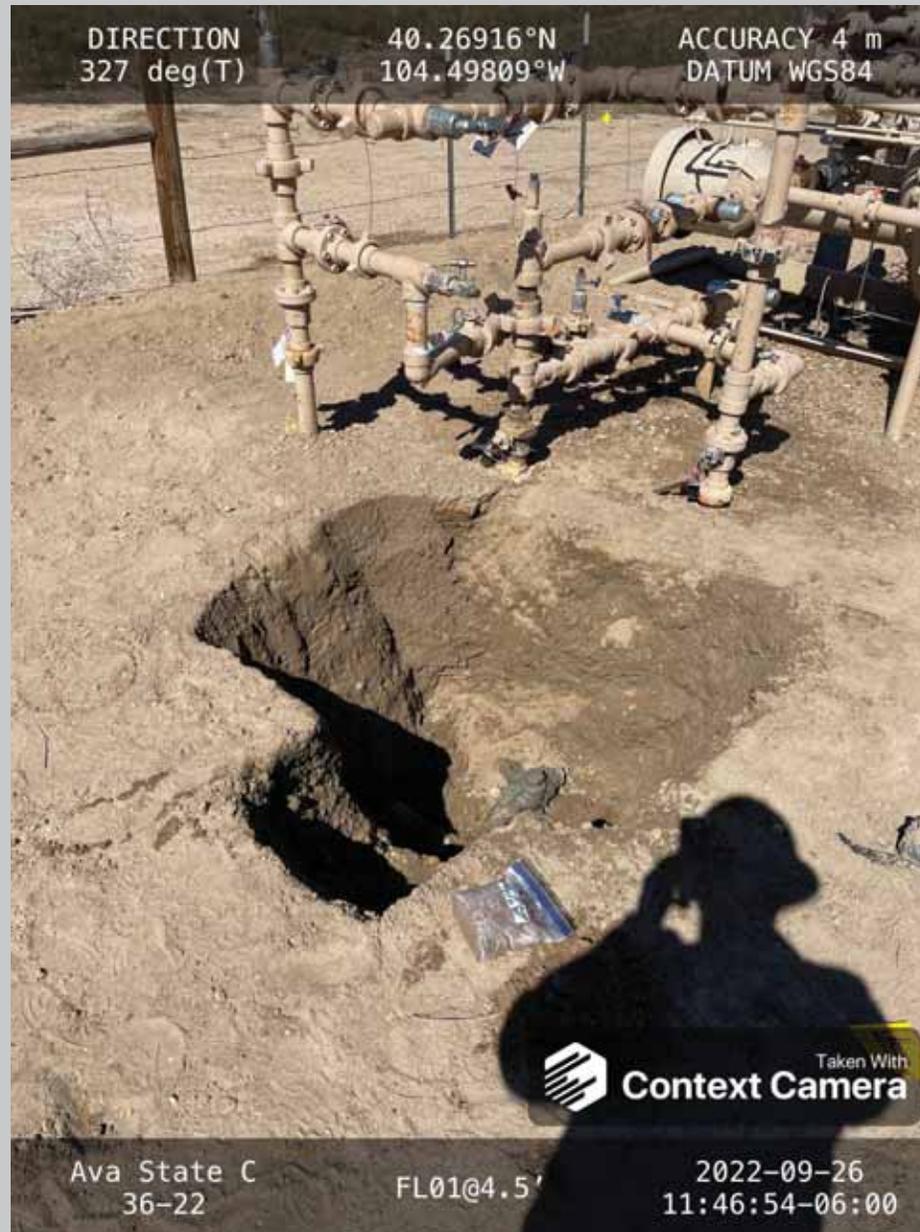
Yellow highlighted 915-1 Limits indicate the referenced soil screening level (SSL)

Flowline Closure Checklist

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

<i>Additional Attachments:</i>		Tank Battery Closure		Wellhead Closure		Pit Closure		Partially Buried Vault Closure
<i>Site Name & COGCC Facility Number:</i> Ava State C 36-32		<i>Date:</i> 9/26/2022				<i>Remediation Project #:</i> 23682		
<i>Associated Wells:</i> 05-123-25677		<i>Age of Site:</i> Unknown				<i>Number of Photos Attached:</i> See attached		
<i>Starting point: (GPS coordinates and descriptions)</i> 40.269173, -104.498108								
<i>End point: (GPS coordinates and descriptions)</i> 40.268812, -104.494981								
<i>USCS Soil Type:</i> Fine Grain Poorly Graded Sand (SP)				<i>Estimated Depth to Groundwater:</i>				
<i>Hydrocarbon Impacted Soils / Spills: (Note estimated size and if impact appears to be surficial or extends to an unknown depth)</i> No observed hydrocarbon impacted soil.								
<i>Salt Crusted Soils or Impacted Vegetation: (Note estimated size and if impact appears to be surficial or extends to an unknown depth)</i> No observed salt crusted soil or impacted vegetation.								
Flowlines								
<i>Flowline type</i>	Wellhead Line							
<i>Depth</i>	3-4.5 feet							
<i>Age</i>	Unknown							
<i>Length</i>	881 feet							
<i>Construction Material</i>	steel							
<i>Were flowlines pulled?</i>	Yes, see below							
<i>Visual Integrity of lines</i>	Good condition							
<i>Visual impacts if trenched</i>	No observed impacts.							
<i>PID Readings if trenched</i>	0.7 to 14 ppm							
<i>Sample taken? Location/Sample ID#</i>	See attached							
<i>Photo Number(s)</i>	See attached							
<i>Other observations regarding on location flowlines:</i> 66 feet of flowline starting at separator (FL01@4.5') abandoned in place.								
Summary								
<i>Was impacted soil identified?</i> No Yes - less than 10 cubic yards Yes - more than 10 cubic yards								
<i>Total number of samples field screened:</i> 5				<i>Total number of samples collected:</i> 2				
<i>Highest PID Reading:</i> 14 ppm				<i>Total number of samples submitted to lab for analysis:</i> 2				
<i>If more than 10 cubic yards of impacted soil were observed:</i> N/A								
<i>Vertical extent:</i>				<i>Estimated spill volume:</i>				
<i>Lateral extent:</i>				<i>Volume of soil removed:</i>				
<i>Is additional investigation required?</i>								
<i>Was groundwater encountered during the investigation?</i> N/A No Yes - not impacted or in contact with impacted soils Yes - groundwater impacted and/or in contact with impacted soils								
<i>Measured depth to groundwater:</i>				<i>Was remedial groundwater removal conducted?</i> Yes No				
<i>Date Groundwater was encountered:</i>				<i>Commencement date of removal:</i>				
<i>Sheen on groundwater?</i>		Yes No		<i>Volume of groundwater removed prior to sampling:</i>				
<i>Free product observed?</i>		Yes No		<i>Volume of groundwater removed post sampling:</i>				
<i>Total number of samples collected:</i>				<i>Total Volume of groundwater removed:</i>				
<i>Total number of samples submitted to lab for analysis:</i>								

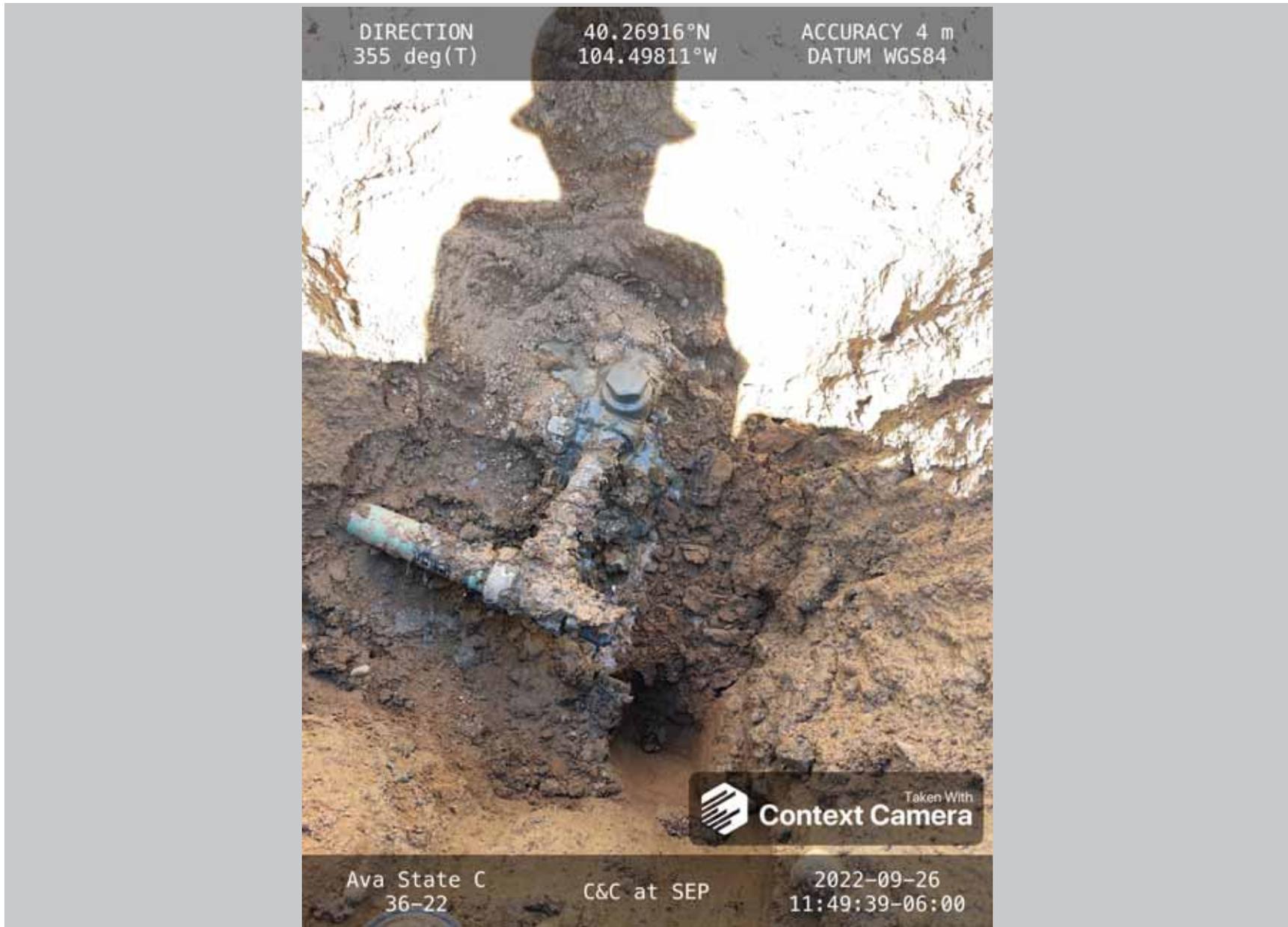
Photo Log



Description:

FL01@4.5'

Photo Log



Description:

FL01@4.5', Cut and Capped, Plugged With Concrete

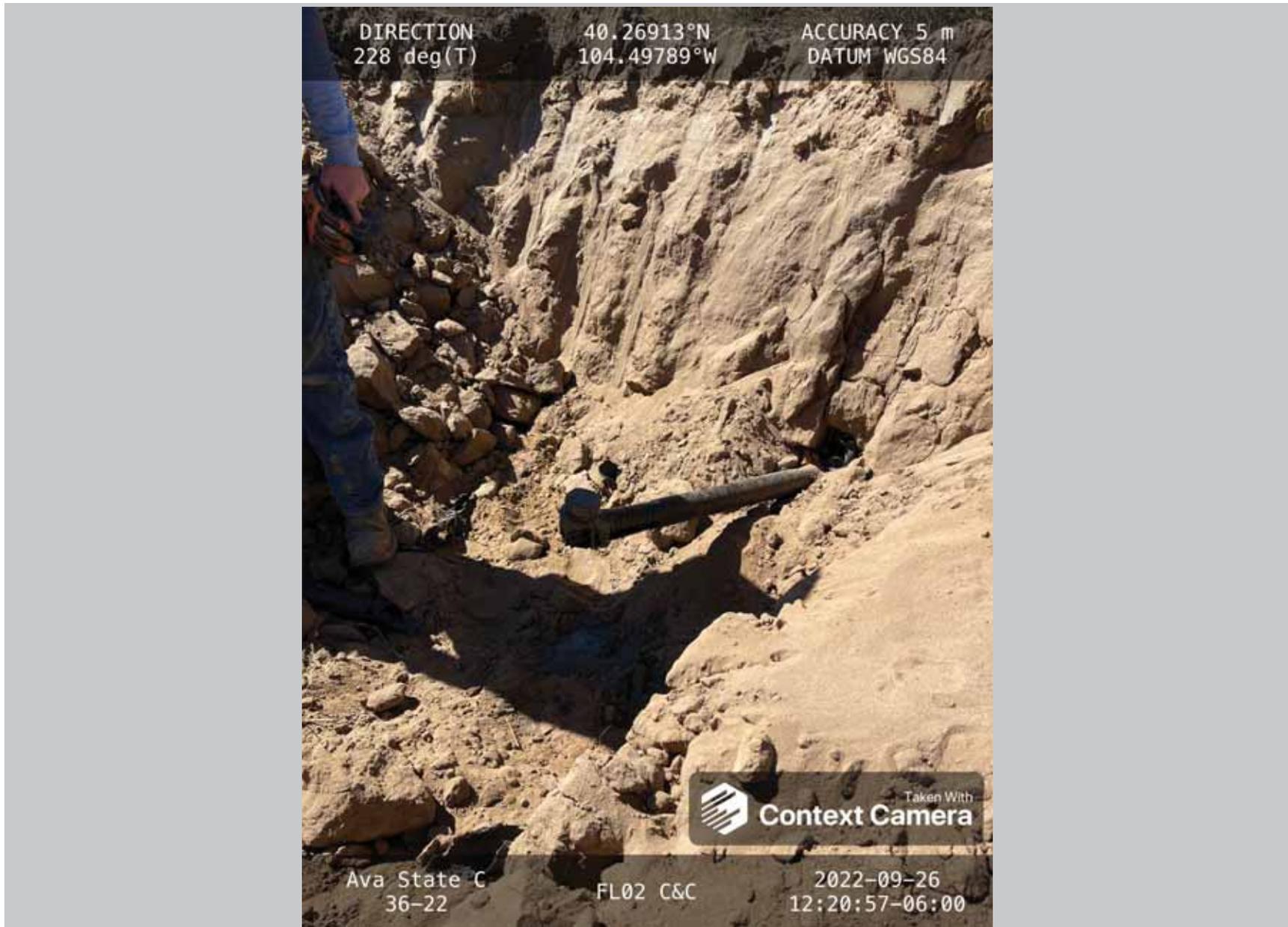
Photo Log



Description:

FL02@4.5'

Photo Log



Description:

FL02@4.5', Cut and Capped, Plugged With Concrete

Photo Log



Description:

FL03@4'

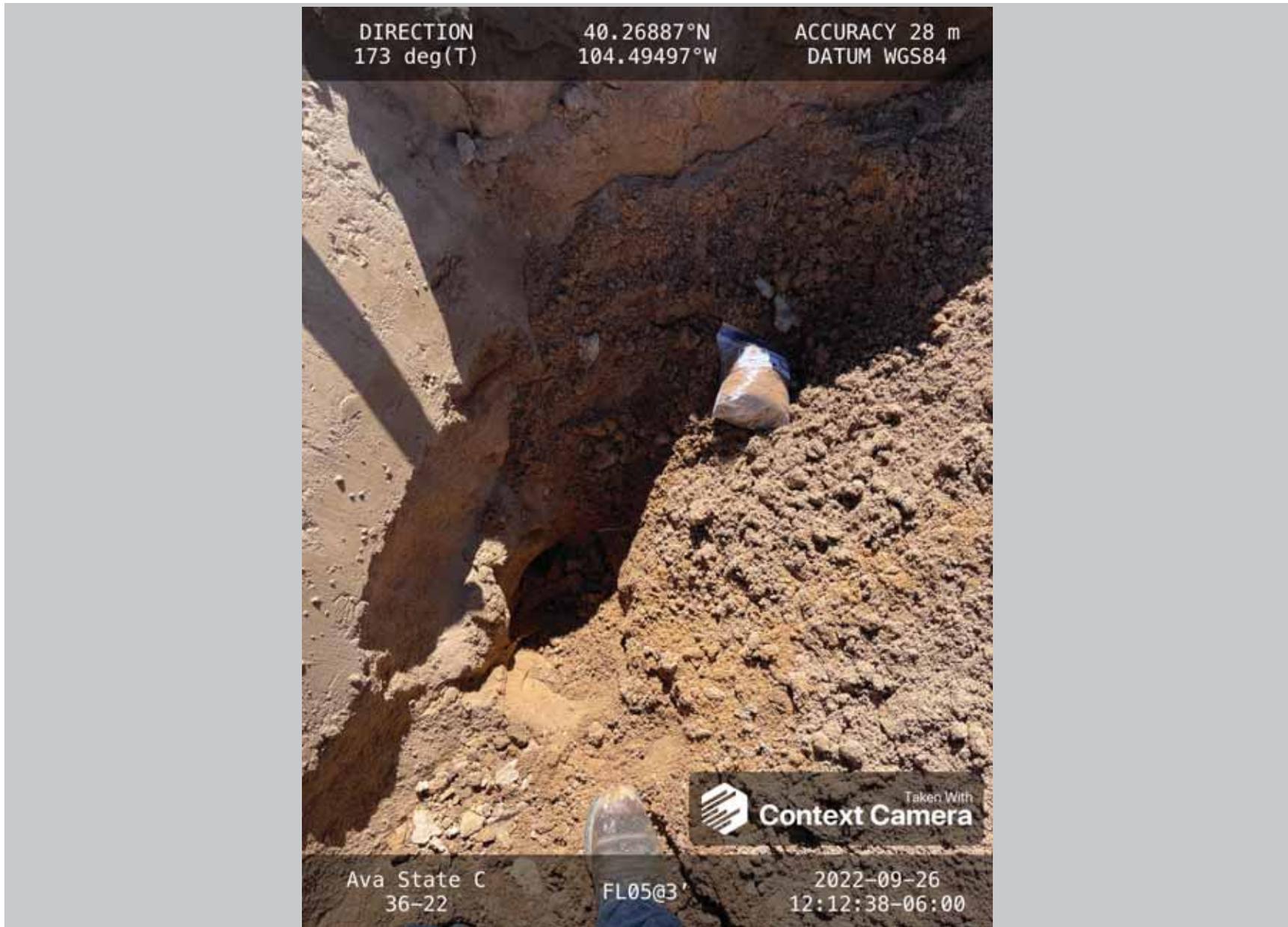
Photo Log



Description:

FL04@3'

Photo Log



Description:

FL05@3'

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

October 06, 2022

Paul Henchan
Fremont Environmental
PO Box 1289
Wellington, CO 80549
RE: Ava State C 36-22
Work Order #2209516

Enclosed are the results of analyses for samples received by Summit Scientific on 09/26/22 14:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Mikayla Axtell For Paul Shrewsbury
President



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Ava State C 36-22

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/06/22 16:02

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FL01@4.5'	2209516-01	Soil	09/26/22 00:00	09/26/22 14:10
FL05@3'	2209516-02	Soil	09/26/22 00:00	09/26/22 14:10

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

2209516

S₂

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

Page 1 of 1

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:

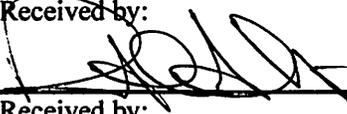
Phone:

Project Name: Ava State E 36-22

Sampler Name: Chris Carter

Project Number:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested						Special Instructions		
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	TPH, BTEX, TMBs, Napth.	PAH (915)	EC, SAR, pH, Boron	Metals (915)	TDS, Chloride, Sulfate	HOLD			
1	FLD 1 @ 4.5'	9/26/22		3			X			X			X	X	X						
2	FLD 5 @ 3'	9/26/22		3			X			X			X	X	X						
3	BK 6 @ 6"	9/26/22		1			X			X											X
4																					
5																					
6																					
7																					
8																					
9																					
10																					

Relinquished by: <u>Chris Carter</u>	Date/Time: <u>9/26/22 14:10</u>	Received by: 	Date/Time: <u>9/26/22 1400</u>	Turn Around Time (Check) Same Day <input type="checkbox"/> 72 hours 24 hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/> 48 hours <input type="checkbox"/>	Notes: <u>Flowline</u>
Relinquished by:	Date/Time:	Received by:	Date/Time:	Sample Integrity:	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Temperature Upon Receipt: <u>7.7</u> Samples Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

S₂

Sample Receipt Checklist

S2 Work Order# 2209516

Client: Fremont Client Project ID: Ava State C 36-22

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

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

Temp (°C) 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>on ICE</i>
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling)? ⁽¹⁾ Note the type of preservative in the comments column – HCl, H ₂ SO ₄ , NaOH, HNO ₃ , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2? ⁽¹⁾ Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Comments (if any):				

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

[Signature]
Custodian Printed Name

9.26.22
Date/Time

18:25



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Ava State C 36-22

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/06/22 16:02

FL01@4.5'
2209516-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/26/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BF10735	09/28/22	09/29/22	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: **09/26/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		112 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		93.5 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.9 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/26/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	260	50	mg/kg	1	BF10738	09/28/22	09/29/22	EPA 8015M	
C28-C36 (ORO)	91	50	"	"	"	"	"	"	

Date Sampled: **09/26/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		79.2 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Ava State C 36-22

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/06/22 16:02

FL01@4.5'
2209516-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/26/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.0500	mg/kg	10	BF10690	09/27/22	09/28/22	EPA 8270D SIM	
Anthracene	ND	0.0500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.0500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.0500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.0500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.0500	"	"	"	"	"	"	
Chrysene	ND	0.0500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.0500	"	"	"	"	"	"	
Fluoranthene	ND	0.0500	"	"	"	"	"	"	
Fluorene	ND	0.0500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.0500	"	"	"	"	"	"	
Pyrene	ND	0.0500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.0500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.0500	"	"	"	"	"	"	

Date Sampled: **09/26/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		%	40-150		"	"	"	"	S-01
Surrogate: Fluoranthene-d10	7.18	%	40-150		"	"	"	"	S-01

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/26/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.0971	0.0100	mg/L	1	BF10758	09/29/22	10/04/22	EPA 6020B	

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

Date Sampled: **09/26/22 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: Ava State C 36-22

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/06/22 16:02

FL01@4.5'
2209516-01 (Soil)

Summit Scientific

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	69.9	0.0546	mg/L dry	1	BF10770	09/29/22	10/06/22	EPA 6020B	
Magnesium	26.9	0.0546	"	"	"	"	"	"	
Sodium	26.0	0.0546	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/26/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.670	0.00100	units	1	BFJ0137	10/06/22	10/06/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/26/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	91.6		%	1	BF10792	09/30/22	09/30/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/26/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.04	0.0100	mmhos/cm	1	BF10774	09/29/22	09/30/22	EPA 120.1	

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

Date Sampled: **09/26/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	4.94		pH Units	1	BF10773	09/29/22	09/30/22	EPA 9045D	

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PO Box 1289
Wellington CO, 80549

Project: Ava State C 36-22

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/06/22 16:02

FL05@3'
2209516-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/26/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFI0735	09/28/22	09/29/22	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: **09/26/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		110 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		93.8 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		105 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/26/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFI0738	09/28/22	09/29/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **09/26/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		76.4 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Ava State C 36-22

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/06/22 16:02

FL05@3'
2209516-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/26/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BF10690	09/27/22	09/28/22	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: **09/26/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		71.8 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		65.3 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/26/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.0491	0.0100	mg/L	1	BF10758	09/29/22	10/04/22	EPA 6020B	

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

Date Sampled: **09/26/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Fremont Environmental
 PO Box 1289
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Project: Ava State C 36-22

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 10/06/22 16:02

FL05@3'
2209516-02 (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	17.1	0.0525	mg/L dry	1	BF10770	09/29/22	10/06/22	EPA 6020B	
Magnesium	5.39	0.0525	"	"	"	"	"	"	
Sodium	5.93	0.0525	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/26/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.320	0.00100	units	1	BFJ0137	10/06/22	10/06/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/26/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	95.3		%	1	BF10792	09/30/22	09/30/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/26/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.251	0.0100	mmhos/cm	1	BF10774	09/29/22	09/30/22	EPA 120.1	

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

Date Sampled: **09/26/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	6.96		pH Units	1	BF10773	09/29/22	09/30/22	EPA 9045D	

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PO Box 1289
Wellington CO, 80549

Project: Ava State C 36-22

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/06/22 16:02

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BF10735 - EPA 5030 Soil MS

Blank (BF10735-BLK1)

Prepared: 09/28/22 Analyzed: 09/29/22

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	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0436		"	0.0400		109	50-150			
<i>Surrogate: Toluene-d8</i>	0.0374		"	0.0400		93.4	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0385		"	0.0400		96.3	50-150			

LCS (BF10735-BS1)

Prepared: 09/28/22 Analyzed: 09/29/22

Benzene	0.0553	0.0020	mg/kg	0.0750		73.7	70-130			
Toluene	0.0601	0.0050	"	0.0750		80.2	70-130			
Ethylbenzene	0.0555	0.0050	"	0.0750		74.0	70-130			
m,p-Xylene	0.111	0.010	"	0.150		74.2	70-130			
o-Xylene	0.0582	0.0050	"	0.0750		77.6	70-130			
1,2,4-Trimethylbenzene	0.0552	0.0050	"	0.0750		73.6	70-130			
1,3,5-Trimethylbenzene	0.0548	0.0050	"	0.0750		73.0	70-130			
Naphthalene	0.0577	0.0038	"	0.0750		76.9	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0326		"	0.0400		81.6	50-150			
<i>Surrogate: Toluene-d8</i>	0.0405		"	0.0400		101	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0358		"	0.0400		89.5	50-150			

Matrix Spike (BF10735-MS1)

Source: 2209507-04

Prepared: 09/28/22 Analyzed: 09/29/22

Benzene	0.0536	0.0020	mg/kg	0.0750	ND	71.4	70-130			
Toluene	0.0589	0.0050	"	0.0750	ND	78.6	70-130			
Ethylbenzene	0.0550	0.0050	"	0.0750	ND	73.3	70-130			
m,p-Xylene	0.110	0.010	"	0.150	ND	73.1	70-130			
o-Xylene	0.0576	0.0050	"	0.0750	ND	76.8	70-130			
1,2,4-Trimethylbenzene	0.0548	0.0050	"	0.0750	ND	73.0	70-130			
1,3,5-Trimethylbenzene	0.0544	0.0050	"	0.0750	ND	72.5	70-130			
Naphthalene	0.0550	0.0038	"	0.0750	ND	73.3	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0370		"	0.0400		92.4	50-150			
<i>Surrogate: Toluene-d8</i>	0.0398		"	0.0400		99.4	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0358		"	0.0400		89.6	50-150			

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Fremont Environmental
 PO Box 1289
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Project: Ava State C 36-22

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 10/06/22 16:02

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BFI0735 - EPA 5030 Soil MS

Matrix Spike Dup (BFI0735-MSD1)	Source: 2209507-04			Prepared: 09/28/22 Analyzed: 09/29/22						
Benzene	0.0525	0.0020	mg/kg	0.0750	ND	70.0	70-130	1.92	30	
Toluene	0.0601	0.0050	"	0.0750	ND	80.1	70-130	1.97	30	
Ethylbenzene	0.0566	0.0050	"	0.0750	ND	75.4	70-130	2.85	30	
m,p-Xylene	0.114	0.010	"	0.150	ND	75.7	70-130	3.55	30	
o-Xylene	0.0588	0.0050	"	0.0750	ND	78.4	70-130	2.01	30	
1,2,4-Trimethylbenzene	0.0556	0.0050	"	0.0750	ND	74.1	70-130	1.41	30	
1,3,5-Trimethylbenzene	0.0559	0.0050	"	0.0750	ND	74.5	70-130	2.78	30	
Naphthalene	0.0574	0.0038	"	0.0750	ND	76.6	70-130	4.38	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0368</i>		<i>"</i>	<i>0.0400</i>		<i>91.9</i>	<i>50-150</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0408</i>		<i>"</i>	<i>0.0400</i>		<i>102</i>	<i>50-150</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0355</i>		<i>"</i>	<i>0.0400</i>		<i>88.8</i>	<i>50-150</i>			

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Ava State C 36-22

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 10/06/22 16:02

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BFI0738 - EPA 3550A

Blank (BFI0738-BLK1)

Prepared: 09/28/22 Analyzed: 09/29/22

C10-C28 (DRO)	ND	50	mg/kg								
C28-C36 (ORO)	ND	50	"								
Surrogate: <i>o</i> -Terphenyl	11.6		"	12.5		92.4	30-150				

LCS (BFI0738-BS1)

Prepared: 09/28/22 Analyzed: 09/29/22

C10-C28 (DRO)	591	50	mg/kg	500		118	70-130				
Surrogate: <i>o</i> -Terphenyl	11.1		"	12.5		88.6	30-150				

Matrix Spike (BFI0738-MS1)

Source: 2209507-04

Prepared: 09/28/22 Analyzed: 09/29/22

C10-C28 (DRO)	629	50	mg/kg	500	15.7	123	70-130				
Surrogate: <i>o</i> -Terphenyl	10.9		"	12.5		87.2	30-150				

Matrix Spike Dup (BFI0738-MSD1)

Source: 2209507-04

Prepared: 09/28/22 Analyzed: 09/29/22

C10-C28 (DRO)	558	50	mg/kg	500	15.7	108	70-130	12.0	20		
Surrogate: <i>o</i> -Terphenyl	9.91		"	12.5		79.3	30-150				

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Ava State C 36-22

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/06/22 16:02

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BFI0690 - EPA 5030 Soil MS

Blank (BFI0690-BLK1)

Prepared & Analyzed: 09/27/22

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	"							
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0357</i>		"	<i>0.0333</i>		<i>107</i>		<i>40-150</i>		
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0324</i>		"	<i>0.0333</i>		<i>97.1</i>		<i>40-150</i>		

LCS (BFI0690-BS1)

Prepared & Analyzed: 09/27/22

Acenaphthene	0.0316	0.00500	mg/kg	0.0333	94.9	31-137
Anthracene	0.0331	0.00500	"	0.0333	99.2	30-120
Benzo (a) anthracene	0.0322	0.00500	"	0.0333	96.5	30-120
Benzo (a) pyrene	0.0307	0.00500	"	0.0333	92.2	30-120
Benzo (b) fluoranthene	0.0321	0.00500	"	0.0333	96.4	30-120
Benzo (k) fluoranthene	0.0319	0.00500	"	0.0333	95.8	30-120
Chrysene	0.0327	0.00500	"	0.0333	98.0	30-120
Dibenz (a,h) anthracene	0.0288	0.00500	"	0.0333	86.3	30-120
Fluoranthene	0.0299	0.00500	"	0.0333	89.8	30-120
Fluorene	0.0322	0.00500	"	0.0333	96.6	30-120
Indeno (1,2,3-cd) pyrene	0.0226	0.00500	"	0.0333	67.9	30-120
Pyrene	0.0261	0.00500	"	0.0333	78.2	35-142
1-Methylnaphthalene	0.0369	0.00500	"	0.0333	111	35-142
2-Methylnaphthalene	0.0331	0.00500	"	0.0333	99.3	35-142
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0287</i>		"	<i>0.0333</i>	<i>86.0</i>	<i>40-150</i>
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0335</i>		"	<i>0.0333</i>	<i>100</i>	<i>40-150</i>

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Ava State C 36-22

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/06/22 16:02

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BFI0690 - EPA 5030 Soil MS

Matrix Spike (BFI0690-MS1)	Source: 2209452-01			Prepared & Analyzed: 09/27/22							
Acenaphthene	0.0235	0.00500	mg/kg	0.0333	ND	70.5	31-137				
Anthracene	0.0231	0.00500	"	0.0333	ND	69.4	30-120				
Benzo (a) anthracene	0.0237	0.00500	"	0.0333	ND	71.1	30-120				
Benzo (a) pyrene	0.0226	0.00500	"	0.0333	ND	67.7	30-120				
Benzo (b) fluoranthene	0.0234	0.00500	"	0.0333	ND	70.3	30-120				
Benzo (k) fluoranthene	0.0237	0.00500	"	0.0333	ND	71.1	30-120				
Chrysene	0.0237	0.00500	"	0.0333	ND	71.2	30-120				
Dibenz (a,h) anthracene	0.0205	0.00500	"	0.0333	ND	61.6	30-120				
Fluoranthene	0.0201	0.00500	"	0.0333	ND	60.3	30-120				
Fluorene	0.0237	0.00500	"	0.0333	ND	71.0	30-120				
Indeno (1,2,3-cd) pyrene	0.0165	0.00500	"	0.0333	ND	49.5	30-120				
Pyrene	0.0167	0.00500	"	0.0333	ND	50.2	35-142				
1-Methylnaphthalene	0.0250	0.00500	"	0.0333	ND	74.9	15-130				
2-Methylnaphthalene	0.0242	0.00500	"	0.0333	ND	72.6	15-130				
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0228</i>		<i>"</i>	<i>0.0333</i>		<i>68.3</i>	<i>40-150</i>				
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0231</i>		<i>"</i>	<i>0.0333</i>		<i>69.4</i>	<i>40-150</i>				

Matrix Spike Dup (BFI0690-MSD1)	Source: 2209452-01			Prepared & Analyzed: 09/27/22							
Acenaphthene	0.0224	0.00500	mg/kg	0.0333	ND	67.1	31-137	4.94	30		
Anthracene	0.0219	0.00500	"	0.0333	ND	65.6	30-120	5.56	30		
Benzo (a) anthracene	0.0218	0.00500	"	0.0333	ND	65.3	30-120	8.47	30		
Benzo (a) pyrene	0.0205	0.00500	"	0.0333	ND	61.6	30-120	9.47	30		
Benzo (b) fluoranthene	0.0208	0.00500	"	0.0333	ND	62.3	30-120	12.1	30		
Benzo (k) fluoranthene	0.0207	0.00500	"	0.0333	ND	62.0	30-120	13.7	30		
Chrysene	0.0220	0.00500	"	0.0333	ND	65.9	30-120	7.64	30		
Dibenz (a,h) anthracene	0.0180	0.00500	"	0.0333	ND	54.1	30-120	13.0	30		
Fluoranthene	0.0177	0.00500	"	0.0333	ND	53.1	30-120	12.8	30		
Fluorene	0.0222	0.00500	"	0.0333	ND	66.6	30-120	6.34	30		
Indeno (1,2,3-cd) pyrene	0.0149	0.00500	"	0.0333	ND	44.6	30-120	10.5	30		
Pyrene	0.0144	0.00500	"	0.0333	ND	43.3	35-142	14.8	30		
1-Methylnaphthalene	0.0241	0.00500	"	0.0333	ND	72.4	15-130	3.38	50		
2-Methylnaphthalene	0.0228	0.00500	"	0.0333	ND	68.5	15-130	5.93	50		
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0215</i>		<i>"</i>	<i>0.0333</i>		<i>64.4</i>	<i>40-150</i>				
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0216</i>		<i>"</i>	<i>0.0333</i>		<i>64.9</i>	<i>40-150</i>				

Summit Scientific

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Ava State C 36-22

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 10/06/22 16:02

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

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

Batch BFI0758 - EPA 3050B

Blank (BFI0758-BLK1)

Prepared: 09/29/22 Analyzed: 10/04/22

Boron ND 0.0100 mg/L

LCS (BFI0758-BS1)

Prepared: 09/29/22 Analyzed: 10/04/22

Boron 5.47 0.0100 mg/L 5.00 109 80-120

Duplicate (BFI0758-DUP1)

Source: 2209323-01

Prepared: 09/29/22 Analyzed: 10/04/22

Boron 0.0962 0.0100 mg/L 0.101 5.26 20

Matrix Spike (BFI0758-MS1)

Source: 2209323-01

Prepared: 09/29/22 Analyzed: 10/04/22

Boron 5.54 0.0100 mg/L 5.00 0.101 109 75-125

Matrix Spike Dup (BFI0758-MSD1)

Source: 2209323-01

Prepared: 09/29/22 Analyzed: 10/04/22

Boron 5.53 0.0100 mg/L 5.00 0.101 109 75-125 0.108 25

Summit Scientific

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Ava State C 36-22

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 10/06/22 16:02

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

Summit Scientific

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

Batch BFI0770 - General Preparation

Blank (BFI0770-BLK1)

Prepared: 09/29/22 Analyzed: 10/06/22

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

LCS (BFI0770-BS1)

Prepared: 09/29/22 Analyzed: 10/06/22

Calcium	5.96	0.0500	mg/L wet	5.00		119	70-130			
Magnesium	5.92	0.0500	"	5.00		118	70-130			
Sodium	5.39	0.0500	"	5.00		108	70-130			

Summit Scientific

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Ava State C 36-22

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 10/06/22 16:02

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

Summit Scientific

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

Batch BFI0792 - General Preparation

Duplicate (BFI0792-DUP1)

Source: 2209506-01

Prepared & Analyzed: 09/30/22

% Solids	89.9	%		90.6		0.834	20
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Summit Scientific

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Ava State C 36-22

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 10/06/22 16:02

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

Summit Scientific

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

Batch BFI0774 - General Preparation

Blank (BFI0774-BLK1)

Prepared: 09/29/22 Analyzed: 09/30/22

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BFI0774-BS1)

Prepared: 09/29/22 Analyzed: 09/30/22

Specific Conductance (EC) 0.153 0.0100 mmhos/cm 0.150 102 95-105

Duplicate (BFI0774-DUP1)

Source: 2209471-01

Prepared: 09/29/22 Analyzed: 09/30/22

Specific Conductance (EC) 1.02 0.0100 mmhos/cm 1.03 0.585 20

Summit Scientific

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Ava State C 36-22

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 10/06/22 16:02

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

Summit Scientific

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

Batch BFI0773 - General Preparation

LCS (BFI0773-BS1)

Prepared: 09/29/22 Analyzed: 09/30/22

pH	9.14	pH Units	9.18	99.6	95-105
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Duplicate (BFI0773-DUP1)

Source: 2209471-01

Prepared: 09/29/22 Analyzed: 09/30/22

pH	7.90	pH Units	7.90	0.00	20
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Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Ava State C 36-22

Project Number: [none]
Project Manager: Paul Henchan

Reported:
10/06/22 16:02

Notes and Definitions

- S-01 The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference's.
- 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