

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

August 01, 2024

Paul Henchan

Fremont Environmental

PO Box 1289

Wellington, CO 80549

RE: Noble - Farr T4N-R64W-S18 L01

Work Order #2406403

Enclosed are the results of analyses for samples received by Summit Scientific on 06/26/24 16:41. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Natalie Tessier". The signature is fluid and cursive, with the first name being more prominent.

Natalie Tessier For Paul Shrewsbury
President



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/01/24 13:23

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B01@10.0'	2406403-01	Soil	06/26/24 00:00	06/26/24 16:41
W01@9.0'	2406403-02	Soil	06/26/24 00:00	06/26/24 16:41

Case Narrative

Rerun analyses were performed by client request on 7/24/24.
The rerun results included in this report are denoted with "RE#."

This is a revision of the report originally sent on 7/2/24 at 10:56 MT.

SUMMIT SCIENTIFIC

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

Lab ID	Page <u>1</u> of <u>1</u>
<u>2406403</u>	

Client: <u>Fremont Env</u>		Send Data To:		Send Invoice To:	
Address:		Project Manager: <u>Paul Henehan</u>		Company: <u>Noble</u>	
City/State/Zip:		E-Mail: <u>Paulh@Fremontenv.com</u>		Project Name/Location:	
Phone:		<u>jeff@Fremontenv.com</u> <u>Ethanb@Fremontenv.com</u>		AFE#:	
Sampler Name: <u>JTG</u>		Project Name: <u>Furr TYN-R64W-SIS L01</u>		PO/Billing Codes:	
		Project Number:		Contact:	

					Preservative				Matrix				Analysis Requested						Special Instructions		
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other _____	Water	Soil	Air-Canister #	Other _____	BTEX+N	TMBs (915)	DR,ORO,GR0	PAHs (915)	EC,PH,SAR,Baron	Metals (915)			
1	Bole 10.0'	6/26/24		2			X			X			X	X	X	X	X	X			
2	Wole 9.0'	6/26/24		2			X			X			X	X	X	X	X	X			
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					

Relinquished by: <u>[Signature]</u>	Date/Time: <u>6/26/24</u>	Received by: <u>[Signature]</u>	Date/Time: <u>6/20/24 16:41</u>	TAT Business Days	Field DO	Notes:
Relinquished by:	Date/Time:	Received by:	Date/Time:	Same Day <input checked="" type="checkbox"/>	Field EC	
				1 Day	Field ORP	
				2 Days	Field pH	
				3 Days	Field Temp.	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Standard	Field Turb.	
Temperature Upon Receipt: <u>26.8</u>		Corrected Temperature		IR gun #: <u>2</u>	HNO3 lot #:	

S₂

Sample Receipt Checklist

S2 Work Order# 2406403Client: FremontClient Project ID: Farr T4N-R64W-S18 L01Shipped Via H.D./P.U./FedEx/UPS/USPS/Other

Airbill #:

☐ ☐ ☐ ☐ ☐

Matrix (Check all that apply)

Air

☐

Soil/Solid

☒

Water

☐

Other

☐

Temp (°C)

26.8

Thermometer #

2

	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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
If custody seals are present, are they intact? ⁽¹⁾	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples due within 48 hours present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Same day</u>
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 checked="" type="checkbox"/>	<input 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"/>	
Is the COC properly relinquished by the client w/ date and time recorded? ⁽¹⁾	<input type="checkbox"/>	<input checked="" 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.
AS
Custodian Printed Name

6/26/24
Date/Time



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/01/24 13:23

B01@10.0'
2406403-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHF0887	06/26/24	06/26/24	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	1.7	0.50		"	"	"	"	"	"	

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0450	113 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0414	103 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0442	111 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHF0890	06/26/24	06/26/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	8.81	70.4 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Project Number: [none]
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B01@10.0'
2406403-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHF0898	06/27/24	06/28/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0262	78.5 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0220	65.9 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHF0896	06/27/24	06/28/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **06/26/24 00:00**

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

Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/01/24 13:23

B01@10.0'
2406403-01 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	3.69	0.200	mg/kg dry	1	BHF0913	06/27/24	06/28/24	EPA 6020B
Barium	146	0.400	"	"	"	"	"	"
Cadmium	0.400	0.200	"	"	"	"	"	"
Copper	11.4	0.400	"	"	"	"	"	"
Lead	10.3	0.200	"	"	"	"	"	"
Nickel	8.99	0.400	"	"	"	"	"	"
Silver	0.0259	0.0200	"	"	"	"	"	"
Zinc	48.7	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHF0902	06/27/24	06/27/24	EPA 7196A	

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

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	2340	0.0500	mg/L dry	1	BHF0889	06/26/24	06/28/24	EPA 6020B	
Magnesium	18.0	0.0500	"	"	"	"	"	"	
Sodium	33.4	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.189	0.00100	units	1	BHF0955	06/28/24	06/28/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/01/24 13:23

B01@10.0'
2406403-01 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	83.3	%	1	BHF0920	06/27/24	06/28/24	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.554	0.0100	mmhos/cm	1	BHF0891	06/26/24	06/27/24	EPA 120.1	

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

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.55		pH Units	1	BHF0892	06/26/24	06/27/24	EPA 9045D	

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Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/01/24 13:23

W01@9.0'
2406403-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BHF0887	06/26/24	06/27/24	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0487	122 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0412	103 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0413	103 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BHF0890	06/26/24	06/26/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	7.94	63.5 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/01/24 13:23

W01@9.0'
2406403-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHF0898	06/27/24	06/28/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0254	76.1 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0186	55.9 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHF0896	06/27/24	06/28/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/01/24 13:23

W01@9.0'
2406403-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Cadmium	0.250	0.181	mg/kg dry	1	BHF0913	06/27/24	06/28/24	EPA 6020B
Copper	8.14	0.362	"	"	"	"	"	"
Lead	7.33	0.181	"	"	"	"	"	"
Nickel	9.63	0.362	"	"	"	"	"	"
Silver	0.0202	0.0181	"	"	"	"	"	"
Zinc	31.6	0.362	"	"	"	"	"	"
Selenium	ND	0.236	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHF0902	06/27/24	06/27/24	EPA 7196A	

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

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	51.4	0.0500	mg/L dry	1	BHF0889	06/26/24	06/28/24	EPA 6020B	
Magnesium	36.0	0.0500	"	"	"	"	"	"	
Sodium	88.9	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.33	0.00100	units	1	BHF0955	06/28/24	06/28/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	86.0		%	1	BHF0920	06/27/24	06/28/24	Calculation	

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Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/01/24 13:23

W01@9.0'
2406403-02 (Soil)

Summit Scientific

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Specific Conductance (EC)	0.813	0.0100		mmhos/cm	1	BHF0891	06/26/24	06/27/24	EPA 120.1	

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

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	7.97			pH Units	1	BHF0892	06/26/24	06/27/24	EPA 9045D	

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Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/01/24 13:23

W01@9.0'
2406403-02RE1 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Date Sampled: **06/26/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Arsenic	2.40	0.200		mg/kg dry	1	BHG0785	07/26/24	08/01/24	EPA 6020B	
Barium	135	0.400		"	"	"	"	"	"	

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 - Farr T4N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/01/24 13:23

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 BHF0887 - EPA 5030 Soil MS

Blank (BHF0887-BLK1)

Prepared & Analyzed: 06/26/24

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	0.0527		"	0.0400		132	50-150			
Surrogate: Toluene-d8	0.0391		"	0.0400		97.6	50-150			
Surrogate: 4-Bromofluorobenzene	0.0428		"	0.0400		107	50-150			

LCS (BHF0887-BS1)

Prepared & Analyzed: 06/26/24

Benzene	0.109	0.0020	mg/kg	0.100		109	70-130			
Toluene	0.119	0.0050	"	0.100		119	70-130			
Ethylbenzene	0.114	0.0050	"	0.100		114	70-130			
m,p-Xylene	0.233	0.010	"	0.200		116	70-130			
o-Xylene	0.112	0.0050	"	0.100		112	70-130			
1,2,4-Trimethylbenzene	0.113	0.0050	"	0.100		113	70-130			
1,3,5-Trimethylbenzene	0.110	0.0050	"	0.100		110	70-130			
Naphthalene	0.101	0.0038	"	0.100		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0495		"	0.0400		124	50-150			
Surrogate: Toluene-d8	0.0417		"	0.0400		104	50-150			
Surrogate: 4-Bromofluorobenzene	0.0410		"	0.0400		102	50-150			

Matrix Spike (BHF0887-MS1)

Source: 2406403-01

Prepared: 06/26/24 Analyzed: 06/27/24

Benzene	0.0948	0.0020	mg/kg	0.100	ND	94.8	70-130			
Toluene	0.0950	0.0050	"	0.100	ND	95.0	70-130			
Ethylbenzene	0.100	0.0050	"	0.100	ND	100	70-130			
m,p-Xylene	0.196	0.010	"	0.200	ND	97.9	70-130			
o-Xylene	0.0957	0.0050	"	0.100	ND	95.7	70-130			
1,2,4-Trimethylbenzene	0.0970	0.0050	"	0.100	ND	97.0	70-130			
1,3,5-Trimethylbenzene	0.0946	0.0050	"	0.100	ND	94.6	70-130			
Naphthalene	0.103	0.0038	"	0.100	ND	103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0455		"	0.0400		114	50-150			
Surrogate: Toluene-d8	0.0399		"	0.0400		99.8	50-150			
Surrogate: 4-Bromofluorobenzene	0.0441		"	0.0400		110	50-150			

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/01/24 13:23

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 BHF0887 - EPA 5030 Soil MS

Matrix Spike Dup (BHF0887-MSD1)	Source: 2406403-01			Prepared: 06/26/24 Analyzed: 06/27/24						
Benzene	0.0996	0.0020	mg/kg	0.100	ND	99.6	70-130	4.97	30	
Toluene	0.100	0.0050	"	0.100	ND	100	70-130	5.20	30	
Ethylbenzene	0.102	0.0050	"	0.100	ND	102	70-130	1.55	30	
m,p-Xylene	0.202	0.010	"	0.200	ND	101	70-130	3.09	30	
o-Xylene	0.0963	0.0050	"	0.100	ND	96.3	70-130	0.594	30	
1,2,4-Trimethylbenzene	0.0970	0.0050	"	0.100	ND	97.0	70-130	0.0619	30	
1,3,5-Trimethylbenzene	0.0955	0.0050	"	0.100	ND	95.5	70-130	0.884	30	
Naphthalene	0.106	0.0038	"	0.100	ND	106	70-130	2.93	30	
Surrogate: 1,2-Dichloroethane-d4	0.0448		"	0.0400		112	50-150			
Surrogate: Toluene-d8	0.0385		"	0.0400		96.2	50-150			
Surrogate: 4-Bromofluorobenzene	0.0424		"	0.0400		106	50-150			

Summit Scientific

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Wellington CO, 80549

Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/01/24 13:23

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 BHF0890 - EPA 3550A

Blank (BHF0890-BLK1)

Prepared & Analyzed: 06/26/24

C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
Surrogate: o-Terphenyl	13.5		"	12.5		108	30-150			

LCS (BHF0890-BS1)

Prepared: 06/26/24 Analyzed: 06/27/24

C10-C28 (DRO)	540	50	mg/kg	500		108	70-130			
Surrogate: o-Terphenyl	12.8		"	12.5		103	30-150			

Matrix Spike (BHF0890-MS1)

Source: 2406403-01

Prepared: 06/26/24 Analyzed: 06/27/24

C10-C28 (DRO)	519	50	mg/kg	500	ND	104	70-130			
Surrogate: o-Terphenyl	10.2		"	12.5		81.4	30-150			

Matrix Spike Dup (BHF0890-MSD1)

Source: 2406403-01

Prepared: 06/26/24 Analyzed: 06/27/24

C10-C28 (DRO)	411	50	mg/kg	500	ND	82.2	70-130	23.1	20	QR-02
Surrogate: o-Terphenyl	8.32		"	12.5		66.5	30-150			

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/01/24 13:23

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BHF0898 - EPA 5030 Soil MS

Blank (BHF0898-BLK1)

Prepared & Analyzed: 06/27/24

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	0.0308	"	0.0333	92.4	40-150
Surrogate: Fluoranthene-d10	0.0283	"	0.0333	84.8	40-150

LCS (BHF0898-BS1)

Prepared & Analyzed: 06/27/24

Acenaphthene	0.0264	0.00500	mg/kg	0.0333	79.3	31-137
Anthracene	0.0261	0.00500	"	0.0333	78.4	30-120
Benzo (a) anthracene	0.0263	0.00500	"	0.0333	78.8	30-120
Benzo (a) pyrene	0.0236	0.00500	"	0.0333	70.7	30-120
Benzo (b) fluoranthene	0.0242	0.00500	"	0.0333	72.7	30-120
Benzo (k) fluoranthene	0.0257	0.00500	"	0.0333	77.0	30-120
Chrysene	0.0257	0.00500	"	0.0333	77.1	30-120
Dibenz (a,h) anthracene	0.0219	0.00500	"	0.0333	65.8	30-120
Fluoranthene	0.0263	0.00500	"	0.0333	79.0	30-120
Fluorene	0.0254	0.00500	"	0.0333	76.3	30-120
Indeno (1,2,3-cd) pyrene	0.0228	0.00500	"	0.0333	68.5	30-120
Pyrene	0.0301	0.00500	"	0.0333	90.3	35-142
1-Methylnaphthalene	0.0278	0.00500	"	0.0333	83.3	35-142
2-Methylnaphthalene	0.0277	0.00500	"	0.0333	83.0	35-142

Surrogate: 2-Methylnaphthalene-d10	0.0294	"	0.0333	88.1	40-150
Surrogate: Fluoranthene-d10	0.0273	"	0.0333	81.9	40-150

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/01/24 13:23

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BHF0898 - EPA 5030 Soil MS

Matrix Spike (BHF0898-MS1)

Source: 2406385-01

Prepared & Analyzed: 06/27/24

Acenaphthene	0.0220	0.00500	mg/kg	0.0333	ND	65.9	31-137		
Anthracene	0.0220	0.00500	"	0.0333	ND	66.0	30-120		
Benzo (a) anthracene	0.0222	0.00500	"	0.0333	ND	66.6	30-120		
Benzo (a) pyrene	0.0190	0.00500	"	0.0333	ND	57.1	30-120		
Benzo (b) fluoranthene	0.0182	0.00500	"	0.0333	ND	54.7	30-120		
Benzo (k) fluoranthene	0.0189	0.00500	"	0.0333	ND	56.7	30-120		
Chrysene	0.0214	0.00500	"	0.0333	ND	64.2	30-120		
Dibenz (a,h) anthracene	0.0171	0.00500	"	0.0333	ND	51.4	30-120		
Fluoranthene	0.0220	0.00500	"	0.0333	ND	66.1	30-120		
Fluorene	0.0220	0.00500	"	0.0333	ND	66.1	30-120		
Indeno (1,2,3-cd) pyrene	0.0209	0.00500	"	0.0333	ND	62.7	30-120		
Pyrene	0.0218	0.00500	"	0.0333	ND	65.4	35-142		
1-Methylnaphthalene	0.0267	0.00500	"	0.0333	ND	80.1	15-130		
2-Methylnaphthalene	0.0269	0.00500	"	0.0333	ND	80.8	15-130		
Surrogate: 2-Methylnaphthalene-d10	0.0284		"	0.0333		85.1	40-150		
Surrogate: Fluoranthene-d10	0.0228		"	0.0333		68.3	40-150		

Matrix Spike Dup (BHF0898-MSD1)

Source: 2406385-01

Prepared & Analyzed: 06/27/24

Acenaphthene	0.0245	0.00500	mg/kg	0.0333	ND	73.5	31-137	10.9	30
Anthracene	0.0246	0.00500	"	0.0333	ND	73.7	30-120	11.0	30
Benzo (a) anthracene	0.0250	0.00500	"	0.0333	ND	75.0	30-120	11.8	30
Benzo (a) pyrene	0.0224	0.00500	"	0.0333	ND	67.2	30-120	16.2	30
Benzo (b) fluoranthene	0.0215	0.00500	"	0.0333	ND	64.4	30-120	16.4	30
Benzo (k) fluoranthene	0.0215	0.00500	"	0.0333	ND	64.5	30-120	13.0	30
Chrysene	0.0240	0.00500	"	0.0333	ND	72.1	30-120	11.6	30
Dibenz (a,h) anthracene	0.0214	0.00500	"	0.0333	ND	64.3	30-120	22.2	30
Fluoranthene	0.0246	0.00500	"	0.0333	ND	73.9	30-120	11.1	30
Fluorene	0.0247	0.00500	"	0.0333	ND	74.0	30-120	11.3	30
Indeno (1,2,3-cd) pyrene	0.0243	0.00500	"	0.0333	ND	73.0	30-120	15.2	30
Pyrene	0.0278	0.00500	"	0.0333	ND	83.4	35-142	24.2	30
1-Methylnaphthalene	0.0289	0.00500	"	0.0333	ND	86.8	15-130	8.08	50
2-Methylnaphthalene	0.0285	0.00500	"	0.0333	ND	85.4	15-130	5.54	50
Surrogate: 2-Methylnaphthalene-d10	0.0293		"	0.0333		88.0	40-150		
Surrogate: Fluoranthene-d10	0.0253		"	0.0333		76.0	40-150		

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/01/24 13:23

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 BHF0896 - EPA 3050B

Blank (BHF0896-BLK1)

Prepared: 06/27/24 Analyzed: 06/28/24

Boron ND 2.00 mg/L

LCS (BHF0896-BS1)

Prepared: 06/27/24 Analyzed: 06/29/24

Boron 4.48 2.00 mg/L 5.00 89.7 80-120

Duplicate (BHF0896-DUP1)

Source: 2406368-01

Prepared: 06/27/24 Analyzed: 06/28/24

Boron 0.302 2.00 mg/L 0.333 9.67 20

Matrix Spike (BHF0896-MS1)

Source: 2406368-01

Prepared: 06/27/24 Analyzed: 06/29/24

Boron 6.05 2.00 mg/L 4.99 0.333 115 75-125

Matrix Spike Dup (BHF0896-MSD1)

Source: 2406368-01

Prepared: 06/27/24 Analyzed: 06/29/24

Boron 6.54 2.00 mg/L 4.99 0.333 124 75-125 7.82 25

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/01/24 13:23

Total Metals by EPA 6020B - Quality Control

Summit Scientific

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

Batch BHF0913 - EPA 3050B

Blank (BHF0913-BLK1)

Prepared: 06/27/24 Analyzed: 06/28/24

Arsenic	ND	0.200	mg/kg wet
Barium	ND	0.400	"
Cadmium	ND	0.200	"
Copper	ND	0.400	"
Lead	ND	0.200	"
Nickel	ND	0.400	"
Silver	ND	0.0200	"
Zinc	ND	0.400	"
Selenium	ND	0.260	"

LCS (BHF0913-BS1)

Prepared: 06/27/24 Analyzed: 06/28/24

Arsenic	36.8	0.200	mg/kg wet	40.0	92.1	80-120
Barium	37.1	0.400	"	40.0	92.7	80-120
Cadmium	1.91	0.200	"	2.00	95.3	80-120
Copper	37.4	0.400	"	40.0	93.6	80-120
Lead	18.7	0.200	"	20.0	93.7	80-120
Nickel	37.1	0.400	"	40.0	92.8	80-120
Silver	1.89	0.0200	"	2.00	94.6	80-120
Zinc	36.9	0.400	"	40.0	92.3	80-120
Selenium	4.00	0.260	"	4.00	100	80-120

Duplicate (BHF0913-DUP1)

Source: 2404185-02RE1

Prepared: 06/27/24 Analyzed: 06/28/24

Arsenic	3.02	0.179	mg/kg wet	2.95	2.40	20
Barium	73.4	0.357	"	73.9	0.571	20
Cadmium	0.286	0.179	"	0.302	5.50	20
Copper	10.7	0.357	"	10.4	2.81	20
Lead	7.49	0.179	"	7.50	0.115	20
Nickel	8.52	0.357	"	8.07	5.46	20
Silver	0.0486	0.0179	"	0.0436	10.8	20
Zinc	42.0	0.357	"	39.3	6.62	20
Selenium	4.83	0.232	"	3.81	23.6	20

QR-04

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/01/24 13:23

Total Metals by EPA 6020B - Quality Control

Summit Scientific

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

Batch BHF0913 - EPA 3050B

Matrix Spike (BHF0913-MS1)

Source: 2404185-02RE1

Prepared: 06/27/24 Analyzed: 06/28/24

Arsenic	38.2	0.200	mg/kg wet	37.3	2.95	94.6	75-125			
Barium	99.8	0.400	"	37.3	73.9	69.6	75-125			QM-07
Cadmium	2.12	0.200	"	1.87	0.302	97.3	75-125			
Copper	44.8	0.400	"	37.3	10.4	92.3	75-125			
Lead	24.2	0.200	"	18.7	7.50	89.5	75-125			
Nickel	42.6	0.400	"	37.3	8.07	92.5	75-125			
Silver	1.84	0.0200	"	1.87	0.0436	96.3	75-125			
Zinc	76.2	0.400	"	37.3	39.3	98.7	75-125			
Selenium	10.2	0.260	"	3.73	3.81	171	75-125			QM-07

Matrix Spike Dup (BHF0913-MSD1)

Source: 2404185-02RE1

Prepared: 06/27/24 Analyzed: 06/28/24

Arsenic	38.9	0.200	mg/kg wet	37.6	2.95	95.5	75-125	1.58	25	
Barium	99.9	0.400	"	37.6	73.9	69.2	75-125	0.0334	25	QM-07
Cadmium	2.17	0.200	"	1.88	0.302	99.2	75-125	2.29	25	
Copper	45.0	0.400	"	37.6	10.4	92.1	75-125	0.375	25	
Lead	24.5	0.200	"	18.8	7.50	90.5	75-125	1.30	25	
Nickel	49.0	0.400	"	37.6	8.07	109	75-125	13.9	25	
Silver	1.88	0.0200	"	1.88	0.0436	97.7	75-125	2.14	25	
Zinc	76.2	0.400	"	37.6	39.3	98.0	75-125	0.0279	25	
Selenium	10.3	0.260	"	3.76	3.81	173	75-125	1.20	25	QM-07

Post Spike (BHF0913-PS1)

Source: 2404185-02RE1

Prepared: 06/27/24 Analyzed: 06/28/24

Arsenic	108		ug/l	100	7.38	101	75-125			
Barium	286		"	100	185	101	75-125			
Cadmium	6.03		"	5.00	0.756	106	75-125			
Copper	122		"	100	25.9	96.2	75-125			
Lead	67.9		"	50.0	18.8	98.3	75-125			
Nickel	116		"	100	20.2	96.1	75-125			
Silver	5.18		"	5.00	0.109	102	75-125			
Zinc	200		"	100	98.3	102	75-125			
Selenium	21.8		"	10.0	9.52	122	75-125			

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/01/24 13:23

Total Metals by EPA 6020B - Quality Control

Summit Scientific

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

Batch BHG0785 - EPA 3050B

Blank (BHG0785-BLK1)

Prepared: 07/26/24 Analyzed: 08/01/24

Arsenic	ND	0.200	mg/kg wet
Barium	ND	0.400	"
Cadmium	ND	0.200	"
Copper	ND	0.400	"
Lead	ND	0.200	"
Nickel	ND	0.400	"
Silver	ND	0.0200	"
Zinc	ND	0.400	"
Selenium	ND	0.260	"

LCS (BHG0785-BS1)

Prepared: 07/26/24 Analyzed: 08/01/24

Arsenic	40.0	0.200	mg/kg wet	39.1	102	80-120	QM-07
Barium	55.7	0.400	"	39.1	143	80-120	
Cadmium	1.91	0.200	"	1.95	97.7	80-120	
Copper	40.4	0.400	"	39.1	103	80-120	
Lead	19.2	0.200	"	19.5	98.3	80-120	
Nickel	40.5	0.400	"	39.1	104	80-120	
Silver	1.93	0.0200	"	1.95	98.9	80-120	
Zinc	40.3	0.400	"	39.1	103	80-120	
Selenium	3.76	0.260	"	3.91	96.3	80-120	

Duplicate (BHG0785-DUP1)

Source: 2406373-01RE1

Prepared: 07/26/24 Analyzed: 08/01/24

Arsenic	2.43	0.200	mg/kg wet	2.35	3.36	20
Barium	104	0.400	"	109	4.94	20
Cadmium	0.257	0.200	"	0.259	0.732	20
Copper	4.85	0.400	"	4.61	5.02	20
Lead	5.77	0.200	"	6.59	13.3	20
Nickel	5.30	0.400	"	5.11	3.58	20
Silver	0.0234	0.0200	"	0.0248	5.84	20
Zinc	17.3	0.400	"	16.4	5.24	20
Selenium	ND	0.260	"	ND		20

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/01/24 13:23

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BHG0785 - EPA 3050B

Matrix Spike (BHG0785-MS1)

Source: 2406373-01RE1

Prepared: 07/26/24 Analyzed: 08/01/24

Arsenic	24.7	0.200	mg/kg wet	37.0	2.35	60.5	75-125			QM-05
Barium	129	0.400	"	37.0	109	55.5	75-125			QM-07
Cadmium	2.09	0.200	"	1.85	0.259	99.2	75-125			
Copper	27.4	0.400	"	37.0	4.61	61.7	75-125			QM-05
Lead	21.8	0.200	"	18.5	6.59	82.0	75-125			
Nickel	28.3	0.400	"	37.0	5.11	62.6	75-125			QM-05
Silver	1.82	0.0200	"	1.85	0.0248	96.8	75-125			
Zinc	39.4	0.400	"	37.0	16.4	62.0	75-125			QM-05
Selenium	3.56	0.260	"	3.70	ND	96.0	75-125			

Matrix Spike Dup (BHG0785-MSD1)

Source: 2406373-01RE1

Prepared: 07/26/24 Analyzed: 08/01/24

Arsenic	27.5	0.200	mg/kg wet	39.4	2.35	64.0	75-125	10.7	25	QM-05
Barium	133	0.400	"	39.4	109	61.9	75-125	2.91	25	QM-07
Cadmium	2.22	0.200	"	1.97	0.259	99.8	75-125	5.98	25	
Copper	29.8	0.400	"	39.4	4.61	63.9	75-125	8.15	25	QM-05
Lead	24.4	0.200	"	19.7	6.59	90.5	75-125	11.4	25	
Nickel	30.7	0.400	"	39.4	5.11	65.1	75-125	8.17	25	QM-05
Silver	1.96	0.0200	"	1.97	0.0248	98.3	75-125	7.50	25	
Zinc	42.2	0.400	"	39.4	16.4	65.4	75-125	6.86	25	QM-05
Selenium	3.92	0.260	"	3.94	ND	99.5	75-125	9.65	25	

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/01/24 13:23

Hexavalent Chromium by EPA Method 7196 - Quality Control
Summit Scientific

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

Batch BHF0902 - 3060A Mod

Blank (BHF0902-BLK1)

Prepared & Analyzed: 06/27/24

Chromium, Hexavalent ND 0.30 mg/kg wet

LCS (BHF0902-BS1)

Prepared & Analyzed: 06/27/24

Chromium, Hexavalent 21.2 0.30 mg/kg wet 25.0 85.0 80-120

Duplicate (BHF0902-DUP1)

Source: 2406379-01

Prepared & Analyzed: 06/27/24

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

Matrix Spike (BHF0902-MS1)

Source: 2406379-01

Prepared & Analyzed: 06/27/24

Chromium, Hexavalent 30.9 0.30 mg/kg dry 30.6 ND 101 75-125

Matrix Spike Dup (BHF0902-MSD1)

Source: 2406379-01

Prepared & Analyzed: 06/27/24

Chromium, Hexavalent 29.8 0.30 mg/kg dry 30.6 ND 97.4 75-125 3.83 20

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Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/01/24 13:23

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 BHF0889 - General Preparation

Blank (BHF0889-BLK1)

Prepared: 06/26/24 Analyzed: 06/28/24

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

LCS (BHF0889-BS1)

Prepared: 06/26/24 Analyzed: 06/28/24

Calcium	5.07	0.0500	mg/L wet	5.00	101	70-130
Magnesium	5.10	0.0500	"	5.00	102	70-130
Sodium	4.51	0.0500	"	5.00	90.2	70-130

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Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Farr T4N-R64W-S18 L01 Project Number: [none] Project Manager: Paul Henchan	Reported: 08/01/24 13:23
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Physical Parameters by APHA/ASTM/EPA Methods - Quality Control

Summit Scientific

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

Batch BHF0920 - General Preparation

Duplicate (BHF0920-DUP1)	Source: 2404449-21			Prepared: 06/27/24 Analyzed: 06/28/24							
% Solids	77.9		%		79.6			2.22		20	

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PO Box 1289
Wellington CO, 80549

Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/01/24 13:23

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 BHF0891 - General Preparation

Blank (BHF0891-BLK1)

Prepared: 06/26/24 Analyzed: 06/27/24

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BHF0891-BS1)

Prepared: 06/26/24 Analyzed: 06/27/24

Specific Conductance (EC) 0.148 0.0100 mmhos/cm 0.150 98.7 95-105

Duplicate (BHF0891-DUP1)

Source: 2406363-01

Prepared: 06/26/24 Analyzed: 06/27/24

Specific Conductance (EC) 0.402 0.0100 mmhos/cm 0.414 2.97 20

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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 - Farr T4N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/01/24 13:23

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 BHF0892 - General Preparation

LCS (BHF0892-BS1)

Prepared: 06/26/24 Analyzed: 06/27/24

pH	9.12	pH Units	9.18	99.3	95-105
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Duplicate (BHF0892-DUP1)

Source: 2406363-01

Prepared: 06/26/24 Analyzed: 06/27/24

pH	8.37	pH Units	8.39	0.239	20
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Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/01/24 13:23

Notes and Definitions

QR-04	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS/LCSD recovery.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The associated LCS and/or LCSD were within acceptance limits, therefore the data are considered valid.
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