

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

August 02, 2024

Paul Henchan

Fremont Environmental

PO Box 1289

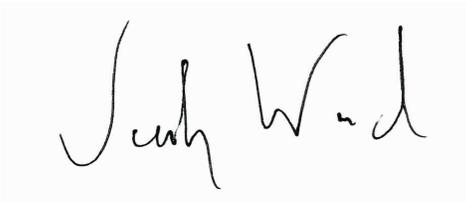
Wellington, CO 80549

RE: Noble - Farr T4N-R64W-S18 L01

Work Order #2407091

Enclosed are the results of analyses for samples received by Summit Scientific on 07/09/24 16:39. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Jacob Wood". The signature is written in a cursive style with a large initial "J" and a distinct "W".

Jacob Wood 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:
08/02/24 14:42

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B05@13.0'	2407091-01	Soil	07/09/24 00:00	07/09/24 16:39
S02@12.0'	2407091-02	Soil	07/09/24 00:00	07/09/24 16:39

Case Narrative

Rerun analyses were performed by client request on 7/24/2024.
The rerun results included in this report are denoted with "RE#."

This is a revision of the report originally sent on 07/15/2024 at 07:52 MT.

Summit Scientific

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

Lab ID 2407091 Page 1 of 1

Client: <u>Fremont Env</u>		Send Data To: Project Manager: <u>Paul Henchen</u>		Send Invoice To: Company: <u>Noble</u>	
Address:		E-Mail: <u>Paulh@fremontenv.com</u>		Project Name/Location:	
City/State/Zip:		<u>jeff@fremontenv.com Ethamb@fremontenv.com</u>		AFE#:	
Phone:		Project Name: <u>Ferr T4N-R64W-S18 L01</u>		PO/Billing Codes:	
Sampler Name: <u>JG</u>		Project Number:		Contact:	

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested						Special Instructions
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	BTEX+N	TMS (915)	DRO,ORO,GRO	PAHs (915)	EC,PH,SAR, BARBA	
1	B05@13.0'	7/9/24		2			X			X			X	X	X	X	X	
2	S02@12.0'	7/9/24		2			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>7/9/24</u>	Received by: <u>[Signature]</u> Date/Time: <u>7/9/24 16:39</u>	TAT Business Days	Field DO	Notes:
		Same Day <input checked="" type="checkbox"/>	Field EC	
Relinquished by: _____ Date/Time: _____	Received by: _____ Date/Time: _____	1 Day	Field ORP	
		2 Days	Field pH	
Relinquished by: _____ Date/Time: _____	Received by: _____ Date/Time: _____	3 Days	Field Temp.	
Temperature Upon Receipt: <u>26.1</u>	Corrected Temperature _____	Standard	Field Turb.	
	IR gun #: <u>2</u>	HNO3 lot #: _____		

S₂

Sample Receipt Checklist

S2 Work Order# 2407091

Client: Fremont - Noble Client Project ID: Farr T4N-R64W-S18 L01

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

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

Temp (°C) 20.1 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 7/9/24
Custodian Printed Name 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:
08/02/24 14:42

B05@13.0'
2407091-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/09/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHG0235	07/09/24	07/09/24	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: **07/09/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0429	107 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0400	100 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0422	106 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **07/09/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHG0238	07/09/24	07/09/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **07/09/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	8.69	69.5 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/02/24 14:42

B05@13.0'
2407091-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **07/09/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHG0245	07/10/24	07/10/24	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: **07/09/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0143	42.9 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0160	48.1 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **07/09/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHG0256	07/10/24	07/11/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **07/09/24 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:
08/02/24 14:42

B05@13.0'
2407091-01 (Soil)

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Total Metals by EPA 6020B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Barium	52.1	0.400	mg/kg dry	1	BHG0242	07/10/24	07/11/24	EPA 6020B	
Cadmium	0.256	0.200	"	"	"	"	"	"	
Copper	6.88	0.400	"	"	"	"	"	"	
Lead	10.9	0.200	"	"	"	"	"	"	
Nickel	5.93	0.400	"	"	"	"	"	"	
Silver	0.0262	0.0200	"	"	"	"	"	"	
Zinc	31.6	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **07/09/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHG0248	07/10/24	07/10/24	EPA 7196A	

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

Date Sampled: **07/09/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	29.1	0.0500	mg/L dry	1	BHG0239	07/09/24	07/10/24	EPA 6020B	
Magnesium	41.6	0.0500	"	"	"	"	"	"	
Sodium	98.7	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **07/09/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.75	0.00100	units	1	BHG0294	07/11/24	07/11/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **07/09/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	84.7		%	1	BHG0243	07/10/24	07/10/24	Calculation	

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 Wellington CO, 80549

Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 08/02/24 14:42

B05@13.0'
2407091-01 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **07/09/24 00:00**

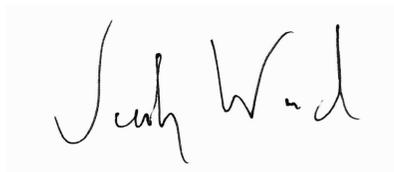
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.12	0.0100	mmhos/cm	1	BHG0241	07/09/24	07/10/24	EPA 120.1	

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

Date Sampled: **07/09/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.33		pH Units	1	BHG0240	07/09/24	07/10/24	EPA 9045D	

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Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 08/02/24 14:42

B05@13.0'
2407091-01RE1 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Date Sampled: **07/09/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	2.13	0.200	mg/kg dry	1	BHG0875	07/10/24	08/02/24	EPA 6020B	

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Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]
Project Manager: Paul Henchan

Reported:
08/02/24 14:42

S02@12.0'
2407091-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/09/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHG0235	07/09/24	07/09/24	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: **07/09/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0449	112 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0405	101 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0429	107 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **07/09/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHG0238	07/09/24	07/09/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **07/09/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	8.48	67.8 %		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:
08/02/24 14:42

S02@12.0'
2407091-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **07/09/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHG0245	07/10/24	07/10/24	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: **07/09/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0151	45.4 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0154	46.1 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **07/09/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHG0256	07/10/24	07/11/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **07/09/24 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:
08/02/24 14:42

S02@12.0'
2407091-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	15.7	0.200	mg/kg dry	1	BHG0242	07/10/24	07/11/24	EPA 6020B	
Barium	210	0.400	"	"	"	"	"	"	
Copper	8.94	0.400	"	"	"	"	"	"	
Nickel	7.37	0.400	"	"	"	"	"	"	
Silver	0.0287	0.0200	"	"	"	"	"	"	
Zinc	26.3	0.400	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **07/09/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHG0248	07/10/24	07/10/24	EPA 7196A	

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

Date Sampled: **07/09/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	12.7	0.0500	mg/L dry	1	BHG0239	07/09/24	07/10/24	EPA 6020B	
Magnesium	36.6	0.0500	"	"	"	"	"	"	
Sodium	117	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **07/09/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.77	0.00100	units	1	BHG0294	07/11/24	07/11/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **07/09/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	87.2		%	1	BHG0243	07/10/24	07/10/24	Calculation	

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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:
 08/02/24 14:42

S02@12.0'
2407091-02 (Soil)

Summit Scientific

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **07/09/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Specific Conductance (EC)	1.02	0.0100		mmhos/cm	1	BHG0241	07/09/24	07/10/24	EPA 120.1	

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

Date Sampled: **07/09/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	8.43			pH Units	1	BHG0240	07/09/24	07/10/24	EPA 9045D	

Summit Scientific



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



Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 08/02/24 14:42

S02@12.0'
2407091-02RE1 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Date Sampled: **07/09/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Cadmium	0.503	0.200	mg/kg dry	1	BHG0875	07/10/24	08/02/24	EPA 6020B	
Lead	11.4	0.200	"	"	"	"	"	"	
Selenium	0.338	0.260	"	"	"	"	"	"	

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:
08/02/24 14:42

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 BHG0235 - EPA 5030 Soil MS

Blank (BHG0235-BLK1)

Prepared: 07/09/24 Analyzed: 07/10/24

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	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0429		"	0.0400		107	50-150			
<i>Surrogate: Toluene-d8</i>	0.0405		"	0.0400		101	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0408		"	0.0400		102	50-150			

LCS (BHG0235-BS1)

Prepared: 07/09/24 Analyzed: 07/10/24

Benzene	0.0873	0.0020	mg/kg	0.100		87.3	70-130			
Toluene	0.105	0.0050	"	0.100		105	70-130			
Ethylbenzene	0.0996	0.0050	"	0.100		99.6	70-130			
m,p-Xylene	0.198	0.010	"	0.200		99.1	70-130			
o-Xylene	0.0986	0.0050	"	0.100		98.6	70-130			
1,2,4-Trimethylbenzene	0.0937	0.0050	"	0.100		93.7	70-130			
1,3,5-Trimethylbenzene	0.0941	0.0050	"	0.100		94.1	70-130			
Naphthalene	0.0771	0.0038	"	0.100		77.1	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0340		"	0.0400		85.1	50-150			
<i>Surrogate: Toluene-d8</i>	0.0417		"	0.0400		104	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0392		"	0.0400		98.0	50-150			

Matrix Spike (BHG0235-MS1)

Source: 2407091-01

Prepared: 07/09/24 Analyzed: 07/10/24

Benzene	0.0942	0.0020	mg/kg	0.100	ND	94.2	70-130			
Toluene	0.111	0.0050	"	0.100	ND	111	70-130			
Ethylbenzene	0.103	0.0050	"	0.100	ND	103	70-130			
m,p-Xylene	0.203	0.010	"	0.200	ND	102	70-130			
o-Xylene	0.101	0.0050	"	0.100	ND	101	70-130			
1,2,4-Trimethylbenzene	0.0975	0.0050	"	0.100	ND	97.5	70-130			
1,3,5-Trimethylbenzene	0.0984	0.0050	"	0.100	ND	98.4	70-130			
Naphthalene	0.0793	0.0038	"	0.100	ND	79.3	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0428		"	0.0400		107	50-150			
<i>Surrogate: Toluene-d8</i>	0.0410		"	0.0400		102	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0401		"	0.0400		100	50-150			

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:
 08/02/24 14:42

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 BHG0235 - EPA 5030 Soil MS

Matrix Spike Dup (BHG0235-MSD1)	Source: 2407091-01			Prepared: 07/09/24 Analyzed: 07/10/24						
Benzene	0.0874	0.0020	mg/kg	0.100	ND	87.4	70-130	7.50	30	
Toluene	0.104	0.0050	"	0.100	ND	104	70-130	6.32	30	
Ethylbenzene	0.100	0.0050	"	0.100	ND	100	70-130	2.21	30	
m,p-Xylene	0.196	0.010	"	0.200	ND	97.8	70-130	3.73	30	
o-Xylene	0.100	0.0050	"	0.100	ND	100	70-130	1.40	30	
1,2,4-Trimethylbenzene	0.0942	0.0050	"	0.100	ND	94.2	70-130	3.51	30	
1,3,5-Trimethylbenzene	0.0950	0.0050	"	0.100	ND	95.0	70-130	3.51	30	
Naphthalene	0.0797	0.0038	"	0.100	ND	79.7	70-130	0.528	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0396</i>		<i>"</i>	<i>0.0400</i>		<i>98.9</i>	<i>50-150</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0413</i>		<i>"</i>	<i>0.0400</i>		<i>103</i>	<i>50-150</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0394</i>		<i>"</i>	<i>0.0400</i>		<i>98.6</i>	<i>50-150</i>			

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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:
 08/02/24 14:42

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 BHG0238 - EPA 3550A

Blank (BHG0238-BLK1)

Prepared: 07/09/24 Analyzed: 07/10/24

C10-C28 (DRO)	ND	50	mg/kg								
C28-C36 (ORO)	ND	50	"								
Surrogate: <i>o</i> -Terphenyl	13.3		"	12.5		106	30-150				

LCS (BHG0238-BS1)

Prepared: 07/09/24 Analyzed: 07/10/24

C10-C28 (DRO)	530	50	mg/kg	500		106	70-130				
Surrogate: <i>o</i> -Terphenyl	11.8		"	12.5		94.4	30-150				

Matrix Spike (BHG0238-MS1)

Source: 2407091-01

Prepared: 07/09/24 Analyzed: 07/10/24

C10-C28 (DRO)	518	50	mg/kg	500	9.81	102	70-130				
Surrogate: <i>o</i> -Terphenyl	9.64		"	12.5		77.1	30-150				

Matrix Spike Dup (BHG0238-MSD1)

Source: 2407091-01

Prepared: 07/09/24 Analyzed: 07/10/24

C10-C28 (DRO)	540	50	mg/kg	500	9.81	106	70-130	4.05	20		
Surrogate: <i>o</i> -Terphenyl	10.7		"	12.5		85.5	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:
08/02/24 14:42

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BHG0245 - EPA 5030 Soil MS

Blank (BHG0245-BLK1)

Prepared & Analyzed: 07/10/24

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	"							
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0152</i>		"	<i>0.0333</i>		<i>45.6</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0189</i>		"	<i>0.0333</i>		<i>56.6</i>	<i>40-150</i>			

LCS (BHG0245-BS1)

Prepared & Analyzed: 07/10/24

Acenaphthene	0.0185	0.00500	mg/kg	0.0333		55.6	31-137			
Anthracene	0.0177	0.00500	"	0.0333		53.2	30-120			
Benzo (a) anthracene	0.0190	0.00500	"	0.0333		57.0	30-120			
Benzo (a) pyrene	0.0174	0.00500	"	0.0333		52.3	30-120			
Benzo (b) fluoranthene	0.0175	0.00500	"	0.0333		52.4	30-120			
Benzo (k) fluoranthene	0.0182	0.00500	"	0.0333		54.7	30-120			
Chrysene	0.0189	0.00500	"	0.0333		56.7	30-120			
Dibenz (a,h) anthracene	0.0152	0.00500	"	0.0333		45.7	30-120			
Fluoranthene	0.0190	0.00500	"	0.0333		56.9	30-120			
Fluorene	0.0186	0.00500	"	0.0333		55.9	30-120			
Indeno (1,2,3-cd) pyrene	0.0157	0.00500	"	0.0333		47.1	30-120			
Pyrene	0.0213	0.00500	"	0.0333		63.8	35-142			
1-Methylnaphthalene	0.0193	0.00500	"	0.0333		57.8	35-142			
2-Methylnaphthalene	0.0172	0.00500	"	0.0333		51.6	35-142			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0184</i>		"	<i>0.0333</i>		<i>55.1</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0205</i>		"	<i>0.0333</i>		<i>61.6</i>	<i>40-150</i>			

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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:
08/02/24 14:42

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 BHG0245 - EPA 5030 Soil MS

Matrix Spike (BHG0245-MS1)

Source: 2407091-01

Prepared & Analyzed: 07/10/24

Acenaphthene	0.0154	0.00500	mg/kg	0.0333	ND	46.1	31-137			
Anthracene	0.0147	0.00500	"	0.0333	ND	44.0	30-120			
Benzo (a) anthracene	0.0157	0.00500	"	0.0333	ND	47.2	30-120			
Benzo (a) pyrene	0.0165	0.00500	"	0.0333	ND	49.5	30-120			
Benzo (b) fluoranthene	0.0168	0.00500	"	0.0333	ND	50.5	30-120			
Benzo (k) fluoranthene	0.0181	0.00500	"	0.0333	ND	54.2	30-120			
Chrysene	0.0156	0.00500	"	0.0333	ND	46.8	30-120			
Dibenz (a,h) anthracene	0.0135	0.00500	"	0.0333	ND	40.4	30-120			
Fluoranthene	0.0147	0.00500	"	0.0333	ND	44.1	30-120			
Fluorene	0.0158	0.00500	"	0.0333	ND	47.4	30-120			
Indeno (1,2,3-cd) pyrene	0.0151	0.00500	"	0.0333	ND	45.3	30-120			
Pyrene	0.0172	0.00500	"	0.0333	ND	51.5	35-142			
1-Methylnaphthalene	0.0158	0.00500	"	0.0333	ND	47.5	15-130			
2-Methylnaphthalene	0.0151	0.00500	"	0.0333	ND	45.3	15-130			
Surrogate: 2-Methylnaphthalene-d10	0.0155		"	0.0333		46.6	40-150			
Surrogate: Fluoranthene-d10	0.0157		"	0.0333		47.1	40-150			

Matrix Spike Dup (BHG0245-MSD1)

Source: 2407091-01

Prepared & Analyzed: 07/10/24

Acenaphthene	0.0164	0.00500	mg/kg	0.0333	ND	49.1	31-137	6.26	30	
Anthracene	0.0162	0.00500	"	0.0333	ND	48.5	30-120	9.65	30	
Benzo (a) anthracene	0.0163	0.00500	"	0.0333	ND	48.8	30-120	3.25	30	
Benzo (a) pyrene	0.0171	0.00500	"	0.0333	ND	51.2	30-120	3.37	30	
Benzo (b) fluoranthene	0.0175	0.00500	"	0.0333	ND	52.4	30-120	3.73	30	
Benzo (k) fluoranthene	0.0184	0.00500	"	0.0333	ND	55.1	30-120	1.71	30	
Chrysene	0.0157	0.00500	"	0.0333	ND	47.2	30-120	0.943	30	
Dibenz (a,h) anthracene	0.0143	0.00500	"	0.0333	ND	42.9	30-120	6.07	30	
Fluoranthene	0.0164	0.00500	"	0.0333	ND	49.3	30-120	11.1	30	
Fluorene	0.0169	0.00500	"	0.0333	ND	50.8	30-120	6.99	30	
Indeno (1,2,3-cd) pyrene	0.0155	0.00500	"	0.0333	ND	46.6	30-120	2.65	30	
Pyrene	0.0174	0.00500	"	0.0333	ND	52.1	35-142	1.11	30	
1-Methylnaphthalene	0.0177	0.00500	"	0.0333	ND	53.2	15-130	11.4	50	
2-Methylnaphthalene	0.0165	0.00500	"	0.0333	ND	49.5	15-130	8.79	50	
Surrogate: 2-Methylnaphthalene-d10	0.0171		"	0.0333		51.2	40-150			
Surrogate: Fluoranthene-d10	0.0175		"	0.0333		52.4	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:
 08/02/24 14:42

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 BHG0256 - EPA 3050B

Blank (BHG0256-BLK1)				Prepared: 07/10/24 Analyzed: 07/11/24							
Boron	ND	2.00	mg/L								
LCS (BHG0256-BS1)				Prepared: 07/10/24 Analyzed: 07/11/24							
Boron	5.19	2.00	mg/L	5.00	104	80-120					
Duplicate (BHG0256-DUP1)				Source: 2407091-01		Prepared: 07/10/24 Analyzed: 07/11/24					
Boron	0.125	2.00	mg/L		0.149				17.8	20	
Matrix Spike (BHG0256-MS1)				Source: 2407091-01		Prepared: 07/10/24 Analyzed: 07/11/24					
Boron	7.23	2.00	mg/L	5.02	0.149	141	75-125				QM-07
Matrix Spike Dup (BHG0256-MSD1)				Source: 2407091-01		Prepared: 07/10/24 Analyzed: 07/11/24					
Boron	5.39	2.00	mg/L	5.02	0.149	104	75-125	29.1	25		QM-07

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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:
08/02/24 14:42

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BHG0242 - EPA 3050B

Blank (BHG0242-BLK1)

Prepared: 07/10/24 Analyzed: 07/11/24

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 (BHG0242-BS1)

Prepared: 07/10/24 Analyzed: 07/11/24

Arsenic	35.0	0.200	mg/kg wet	40.0	87.5	80-120
Barium	37.2	0.400	"	40.0	92.9	80-120
Cadmium	1.88	0.200	"	2.00	93.8	80-120
Copper	37.5	0.400	"	40.0	93.8	80-120
Lead	18.6	0.200	"	20.0	93.2	80-120
Nickel	37.2	0.400	"	40.0	93.0	80-120
Silver	1.86	0.0200	"	2.00	93.1	80-120
Zinc	36.6	0.400	"	40.0	91.5	80-120
Selenium	3.99	0.260	"	4.00	99.8	80-120

Duplicate (BHG0242-DUP1)

Source: 2405469-13RE1

Prepared: 07/10/24 Analyzed: 07/11/24

Arsenic	5.41	0.200	mg/kg wet	5.48	1.36	20
Barium	113	0.400	"	92.4	19.9	20
Cadmium	0.211	0.200	"	0.235	10.7	20
Copper	5.47	0.400	"	5.65	3.25	20
Lead	9.70	0.200	"	9.52	1.86	20
Nickel	4.64	0.400	"	4.55	2.13	20
Silver	0.0742	0.0200	"	0.0770	3.62	20
Zinc	16.1	0.400	"	16.3	1.17	20
Selenium	ND	0.260	"	0.189	200	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:
 08/02/24 14:42

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BHG0242 - EPA 3050B

Matrix Spike (BHG0242-MS1)

Source: 2405469-13RE1 Prepared: 07/10/24 Analyzed: 07/11/24

Arsenic	41.8	0.200	mg/kg wet	39.4	5.48	92.2	75-125			
Barium	124	0.400	"	39.4	92.4	81.2	75-125			
Cadmium	2.19	0.200	"	1.97	0.235	99.2	75-125			
Copper	24.9	0.400	"	39.4	5.65	48.9	75-125			QM-05
Lead	28.9	0.200	"	19.7	9.52	98.5	75-125			
Nickel	24.2	0.400	"	39.4	4.55	49.8	75-125			QM-05
Silver	1.94	0.0200	"	1.97	0.0770	94.7	75-125			
Zinc	36.3	0.400	"	39.4	16.3	51.0	75-125			QM-05
Selenium	3.99	0.260	"	3.94	0.189	96.4	75-125			

Matrix Spike Dup (BHG0242-MSD1)

Source: 2405469-13RE1 Prepared: 07/10/24 Analyzed: 07/11/24

Arsenic	42.3	0.200	mg/kg wet	39.4	5.48	93.6	75-125	1.28	25	
Barium	125	0.400	"	39.4	92.4	81.6	75-125	0.117	25	
Cadmium	2.19	0.200	"	1.97	0.235	99.5	75-125	0.270	25	
Copper	25.1	0.400	"	39.4	5.65	49.4	75-125	0.696	25	QM-05
Lead	28.8	0.200	"	19.7	9.52	98.1	75-125	0.264	25	
Nickel	24.4	0.400	"	39.4	4.55	50.3	75-125	0.862	25	QM-05
Silver	1.96	0.0200	"	1.97	0.0770	95.5	75-125	0.849	25	
Zinc	36.4	0.400	"	39.4	16.3	51.2	75-125	0.223	25	QM-05
Selenium	3.97	0.260	"	3.94	0.189	96.1	75-125	0.356	25	

Batch BHG0875 - EPA 3050B

Blank (BHG0875-BLK1)

Prepared: 07/30/24 Analyzed: 08/02/24

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	"							

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:
08/02/24 14:42

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BHG0875 - EPA 3050B

LCS (BHG0875-BS1)

Prepared: 07/30/24 Analyzed: 08/02/24

Arsenic	36.7	0.200	mg/kg wet	37.3		98.3	80-120			
Barium	35.3	0.400	"	37.3		94.5	80-120			
Cadmium	1.79	0.200	"	1.87		95.8	80-120			
Copper	37.2	0.400	"	37.3		99.7	80-120			
Lead	17.2	0.200	"	18.7		92.4	80-120			
Nickel	37.7	0.400	"	37.3		101	80-120			
Silver	1.79	0.0200	"	1.87		95.9	80-120			
Zinc	37.2	0.400	"	37.3		99.7	80-120			
Selenium	3.76	0.260	"	3.73		101	80-120			

Duplicate (BHG0875-DUP1)

Source: 2407031-01RE1

Prepared: 07/30/24 Analyzed: 08/02/24

Arsenic	2.94	0.200	mg/kg wet		3.08			4.67	20	
Barium	47.2	0.400	"		72.6			42.4	20	QR-02
Cadmium	0.158	0.200	"		0.165			4.32	20	
Copper	3.55	0.400	"		3.52			0.938	20	
Lead	7.00	0.200	"		7.11			1.60	20	
Nickel	4.17	0.400	"		4.15			0.461	20	
Silver	0.0109	0.0200	"		0.0103			5.63	20	
Zinc	16.6	0.400	"		16.5			0.526	20	
Selenium	ND	0.260	"		ND				20	

Matrix Spike (BHG0875-MS1)

Source: 2407031-01RE1

Prepared: 07/30/24 Analyzed: 08/02/24

Arsenic	37.2	0.200	mg/kg wet	36.8	3.08	92.8	75-125			
Barium	76.7	0.400	"	36.8	72.6	11.2	75-125			QM-07
Cadmium	1.69	0.200	"	1.84	0.165	82.7	75-125			
Copper	21.0	0.400	"	36.8	3.52	47.6	75-125			QM-05
Lead	23.8	0.200	"	18.4	7.11	91.0	75-125			
Nickel	21.9	0.400	"	36.8	4.15	48.2	75-125			QM-05
Silver	1.49	0.0200	"	1.84	0.0103	80.6	75-125			
Zinc	33.8	0.400	"	36.8	16.5	47.2	75-125			QM-05
Selenium	3.66	0.260	"	3.68	ND	99.5	75-125			

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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:
 08/02/24 14:42

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BHG0875 - EPA 3050B

Matrix Spike Dup (BHG0875-MSD1)	Source: 2407031-01RE1			Prepared: 07/30/24		Analyzed: 08/02/24					
Arsenic	36.2	0.180	mg/kg wet	36.0	3.08	92.0	75-125	2.76	25		
Barium	73.7	0.360	"	36.0	72.6	3.10	75-125	3.97	25	QM-07	
Cadmium	1.63	0.180	"	1.80	0.165	81.4	75-125	3.41	25		
Copper	20.9	0.360	"	36.0	3.52	48.2	75-125	0.873	25	QM-05	
Lead	22.8	0.180	"	18.0	7.11	87.1	75-125	4.57	25		
Nickel	21.7	0.360	"	36.0	4.15	48.7	75-125	0.881	25	QM-05	
Silver	1.48	0.0180	"	1.80	0.0103	81.4	75-125	1.15	25		
Zinc	33.4	0.360	"	36.0	16.5	47.1	75-125	1.24	25	QM-05	
Selenium	3.50	0.234	"	3.60	ND	97.4	75-125	4.29	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:
 08/02/24 14:42

Hexavalent Chromium by EPA Method 7196 - Quality Control
Summit Scientific

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

Batch BHG0248 - 3060A Mod

Blank (BHG0248-BLK1)

Prepared & Analyzed: 07/10/24

Chromium, Hexavalent ND 0.30 mg/kg wet

LCS (BHG0248-BS1)

Prepared & Analyzed: 07/10/24

Chromium, Hexavalent 25.2 0.30 mg/kg wet 25.0 101 80-120

Duplicate (BHG0248-DUP1)

Source: 2407091-01

Prepared & Analyzed: 07/10/24

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

Matrix Spike (BHG0248-MS1)

Source: 2407091-01

Prepared & Analyzed: 07/10/24

Chromium, Hexavalent 30.3 0.30 mg/kg dry 29.5 ND 103 75-125

Matrix Spike Dup (BHG0248-MSD1)

Source: 2407091-01

Prepared & Analyzed: 07/10/24

Chromium, Hexavalent 29.5 0.30 mg/kg dry 29.5 ND 100 75-125 2.57 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:
 08/02/24 14:42

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 BHG0239 - General Preparation

Blank (BHG0239-BLK1)

Prepared: 07/09/24 Analyzed: 07/10/24

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

LCS (BHG0239-BS1)

Prepared: 07/09/24 Analyzed: 07/10/24

Calcium	5.44	0.0500	mg/L wet	5.00		109	70-130			
Magnesium	5.19	0.0500	"	5.00		104	70-130			
Sodium	5.18	0.0500	"	5.00		104	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:
 08/02/24 14:42

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

Summit Scientific

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

Batch BHG0243 - General Preparation

Duplicate (BHG0243-DUP1)

Source: 2407091-01

Prepared & Analyzed: 07/10/24

% Solids	84.7		%		84.7			0.0176	20	
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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:
 08/02/24 14:42

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 BHG0241 - General Preparation

Blank (BHG0241-BLK1)

Prepared: 07/09/24 Analyzed: 07/10/24

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BHG0241-BS1)

Prepared: 07/09/24 Analyzed: 07/10/24

Specific Conductance (EC) 0.156 0.0100 mmhos/cm 0.150 104 95-105

Duplicate (BHG0241-DUP1)

Source: 2407091-01

Prepared: 07/09/24 Analyzed: 07/10/24

Specific Conductance (EC) 1.12 0.0100 mmhos/cm 1.12 0.358 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:
 08/02/24 14:42

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

Summit Scientific

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

Batch BHG0240 - General Preparation

LCS (BHG0240-BS1)										
					Prepared: 07/09/24 Analyzed: 07/10/24					
pH	9.13		pH Units	9.18		99.5	95-105			
Duplicate (BHG0240-DUP1)										
					Source: 2407091-01 Prepared: 07/09/24 Analyzed: 07/10/24					
pH	8.34		pH Units	8.33		0.120	20			

Batch BHG0786 - General Preparation

LCS (BHG0786-BS1)										
					Prepared & Analyzed: 07/26/24					
pH	9.08		pH Units	9.18		98.9	95-105			
Duplicate (BHG0786-DUP1)										
					Source: 2407343-01 Prepared & Analyzed: 07/26/24					
pH	8.05		pH Units	8.06		0.124	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:
08/02/24 14:42

Notes and Definitions

- 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