

# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

July 08, 2024

Paul Henchan

Fremont Environmental

PO Box 1289

Wellington, CO 80549

RE: Noble - Farr T4N-R64W-S18 L01

Work Order #2407010

Enclosed are the results of analyses for samples received by Summit Scientific on 07/01/24 16:21. 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:**  
07/08/24 09:58

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
N02@12.0'	2407010-01	Soil	07/01/24 00:00	07/01/24 16:21
N03@12.0'	2407010-02	Soil	07/01/24 00:00	07/01/24 16:21

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

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

Lab ID	Page <u>1</u> of <u>1</u>
<b>2407010</b>	

Send Data To:		Send Invoice To:	
Client: <u>Fremont Env</u>	Project Manager: <u>Paul Henchen</u>	Company: <u>Noble</u>	
Address:	E-Mail: <u>Paulh@fremontenv.com</u>	Project Name/Location:	
City/State/Zip:	<u>jeff@fremontenv.com</u> <u>Ethan@fremontenv.com</u>	AFE#:	
Phone:	Project Name: <u>Ferr T4N-R6446-S18 L01</u>	PO/Billing Codes:	
Sampler Name: <u>JG</u>	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)	DRO,ORO,GRD	PAHs(915)	EC-PH,SARs BOD5	Metals(915)	
1	<u>N02012.0'</u>	<u>7/1/24</u>		<u>2</u>			<u>X</u>			<u>X</u>			<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	
2	<u>N03012.0'</u>	<u>7/1/24</u>		<u>2</u>			<u>X</u>			<u>X</u>			<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			

Relinquished by: <u>[Signature]</u> Date/Time: <u>7/1/24</u>	Received by: <u>[Signature]</u> Date/Time: <u>7/1/24 16:21</u>	TAT Business Days	Field DO	Notes:
		Same Day <u>X</u>	Field EC	
Relinquished by:	Received by:	1 Day	Field ORP	
		2 Days	Field pH	
Relinquished by:	Received by:	3 Days	Field Temp.	
		Standard	Field Turb.	
Temperature Upon Receipt: <u>22.2</u>	Corrected Temperature	IR gun #: <u>2</u>	HNO3 lot #:	

S<sub>2</sub>

## Sample Receipt Checklist

S2 Work Order# 2407010Client: Fremont Client Project ID: Nobu - Farr T4N - RW4W - S18 L01Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other ☐ Airbill #: \_\_\_\_\_
☐ ☐ ☐ ☐ ☐

Matrix (Check all that apply)

Air

☐

Soil/Solid

☐

Water

☐

Other

☐

Temp (°C)

22.2

Thermometer #

2

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? <sup>(1)</sup> <b>NOTE:</b> 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? <sup>(1)</sup>	<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 <sup>2+</sup> ), Hexavalent Chromium (Cr <sup>6+</sup> , 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? <sup>(1)</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded? <sup>(1)</sup>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? <b>If yes, contact client and note in narrative.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling)? <sup>(1)</sup> Note the type of preservative in the comments column – HCl, H <sub>2</sub> SO <sub>4</sub> , NaOH, HNO <sub>3</sub> , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2? <sup>(1)</sup> 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):				
<sup>(1)</sup> If NO, then contact the client before proceeding with analysis and note in case narrative.				

AS  
Custodian Printed Name

7:50/1/24  
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:**  
07/08/24 09:58

**N02@12.0'**  
**2407010-01 (Soil)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **07/01/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	BHG0050	07/01/24	07/01/24	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: **07/01/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4	0.0450	112 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0400	100 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0423	106 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **07/01/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	BHG0049	07/01/24	07/01/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **07/01/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl	10.1	81.1 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

Summit Scientific

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Wellington CO, 80549

Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
07/08/24 09:58

**N02@12.0'**  
**2407010-01 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **07/01/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHG0054	07/02/24	07/03/24	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: **07/01/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0204	61.2 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0222	66.6 %	40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **07/01/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHG0062	07/02/24	07/03/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **07/01/24 00:00**

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

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
07/08/24 09:58

**N02@12.0'**  
**2407010-01 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Arsenic	0.653	0.200	mg/kg dry	1	BHG0056	07/02/24	07/02/24	EPA 6020B
Barium	8.75	0.400	"	"	"	"	"	"
Cadmium	ND	0.200	"	"	"	"	"	"
Copper	1.94	0.400	"	"	"	"	"	"
Lead	7.66	0.200	"	"	"	"	"	"
Nickel	1.74	0.400	"	"	"	"	"	"
Silver	0.0278	0.0200	"	"	"	"	"	"
Zinc	11.1	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **07/01/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHG0060	07/02/24	07/02/24	EPA 7196A	

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

Date Sampled: **07/01/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	22.2	0.0500	mg/L dry	1	BHG0046	07/01/24	07/03/24	EPA 6020B	
Magnesium	27.9	0.0500	"	"	"	"	"	"	
Sodium	66.6	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **07/01/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.22	0.00100	units	1	BHG0106	07/03/24	07/03/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

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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 Henahan

**Reported:**  
07/08/24 09:58

**N02@12.0'**  
**2407010-01 (Soil)**

**Summit Scientific**

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **07/01/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	84.3		%	1	BHG0059	07/02/24	07/02/24	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **07/01/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.42	0.0100	mmhos/cm	1	BHG0047	07/01/24	07/02/24	EPA 120.1	

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

Date Sampled: **07/01/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.12		pH Units	1	BHG0048	07/01/24	07/02/24	EPA 9045D	

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Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
07/08/24 09:58

**N03@12.0'**  
**2407010-02 (Soil)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **07/01/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BHG0050	07/01/24	07/01/24	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: **07/01/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0407	102 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0410	102 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0414	103 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **07/01/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BHG0049	07/01/24	07/01/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **07/01/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	9.81	78.5 %	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:**  
07/08/24 09:58

**N03@12.0'**  
**2407010-02 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **07/01/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHG0054	07/02/24	07/03/24	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: **07/01/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0193	57.9 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0235	70.6 %	40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **07/01/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHG0062	07/02/24	07/03/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **07/01/24 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:**  
07/08/24 09:58

**N03@12.0'**  
**2407010-02 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Arsenic	0.775	0.200	mg/kg dry	1	BHG0056	07/02/24	07/02/24	EPA 6020B
Barium	21.2	0.400	"	"	"	"	"	"
Cadmium	0.816	0.200	"	"	"	"	"	"
Copper	2.83	0.400	"	"	"	"	"	"
Lead	13.9	0.200	"	"	"	"	"	"
Nickel	3.26	0.400	"	"	"	"	"	"
Silver	0.0477	0.0200	"	"	"	"	"	"
Zinc	13.9	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **07/01/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHG0060	07/02/24	07/02/24	EPA 7196A	

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

Date Sampled: **07/01/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	15.2	0.0500	mg/L dry	1	BHG0046	07/01/24	07/03/24	EPA 6020B	
Magnesium	20.1	0.0500	"	"	"	"	"	"	
Sodium	44.9	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **07/01/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.78	0.00100	units	1	BHG0106	07/03/24	07/03/24	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **07/01/24 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:**  
07/08/24 09:58

**N03@12.0'**  
**2407010-02 (Soil)**

**Summit Scientific**

**Physical Parameters by APHA/ASTM/EPA Methods**

% Solids	83.2	%	1	BHG0059	07/02/24	07/02/24	Calculation
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**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **07/01/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.721	0.0100	mmhos/cm	1	BHG0047	07/01/24	07/02/24	EPA 120.1	

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

Date Sampled: **07/01/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.19		pH Units	1	BHG0048	07/01/24	07/02/24	EPA 9045D	

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:**  
07/08/24 09:58

## 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 BHG0050 - EPA 5030 Soil MS

##### Blank (BHG0050-BLK1)

Prepared & Analyzed: 07/01/24

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	0.0401		"	0.0400		100	50-150			
Surrogate: Toluene-d8	0.0397		"	0.0400		99.3	50-150			
Surrogate: 4-Bromofluorobenzene	0.0400		"	0.0400		100	50-150			

##### LCS (BHG0050-BS1)

Prepared & Analyzed: 07/01/24

Benzene	0.0883	0.0020	mg/kg	0.100		88.3	70-130			
Toluene	0.101	0.0050	"	0.100		101	70-130			
Ethylbenzene	0.0955	0.0050	"	0.100		95.5	70-130			
m,p-Xylene	0.189	0.010	"	0.200		94.6	70-130			
o-Xylene	0.0940	0.0050	"	0.100		94.0	70-130			
1,2,4-Trimethylbenzene	0.0891	0.0050	"	0.100		89.1	70-130			
1,3,5-Trimethylbenzene	0.0894	0.0050	"	0.100		89.4	70-130			
Naphthalene	0.0851	0.0038	"	0.100		85.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0366		"	0.0400		91.4	50-150			
Surrogate: Toluene-d8	0.0422		"	0.0400		105	50-150			
Surrogate: 4-Bromofluorobenzene	0.0386		"	0.0400		96.4	50-150			

##### Matrix Spike (BHG0050-MS1)

Source: 2407010-01

Prepared & Analyzed: 07/01/24

Benzene	0.0792	0.0020	mg/kg	0.100	ND	79.2	70-130			
Toluene	0.0925	0.0050	"	0.100	ND	92.5	70-130			
Ethylbenzene	0.0896	0.0050	"	0.100	ND	89.6	70-130			
m,p-Xylene	0.178	0.010	"	0.200	ND	88.9	70-130			
o-Xylene	0.0863	0.0050	"	0.100	ND	86.3	70-130			
1,2,4-Trimethylbenzene	0.0841	0.0050	"	0.100	ND	84.1	70-130			
1,3,5-Trimethylbenzene	0.0841	0.0050	"	0.100	ND	84.1	70-130			
Naphthalene	0.0856	0.0038	"	0.100	ND	85.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0413		"	0.0400		103	50-150			
Surrogate: Toluene-d8	0.0412		"	0.0400		103	50-150			
Surrogate: 4-Bromofluorobenzene	0.0407		"	0.0400		102	50-150			

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PO Box 1289  
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Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
07/08/24 09:58

## 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 BHG0050 - EPA 5030 Soil MS

Matrix Spike Dup (BHG0050-MSD1)	Source: 2407010-01			Prepared & Analyzed: 07/01/24						
Benzene	0.0828	0.0020	mg/kg	0.100	ND	82.8	70-130	4.48	30	
Toluene	0.0970	0.0050	"	0.100	ND	97.0	70-130	4.84	30	
Ethylbenzene	0.0907	0.0050	"	0.100	ND	90.7	70-130	1.26	30	
m,p-Xylene	0.179	0.010	"	0.200	ND	89.7	70-130	0.874	30	
o-Xylene	0.0888	0.0050	"	0.100	ND	88.8	70-130	2.78	30	
1,2,4-Trimethylbenzene	0.0852	0.0050	"	0.100	ND	85.2	70-130	1.28	30	
1,3,5-Trimethylbenzene	0.0855	0.0050	"	0.100	ND	85.5	70-130	1.66	30	
Naphthalene	0.0850	0.0038	"	0.100	ND	85.0	70-130	0.738	30	
Surrogate: 1,2-Dichloroethane-d4	0.0420		"	0.0400		105	50-150			
Surrogate: Toluene-d8	0.0411		"	0.0400		103	50-150			
Surrogate: 4-Bromofluorobenzene	0.0420		"	0.0400		105	50-150			

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Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
07/08/24 09:58

**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 BHG0049 - EPA 3550A**

**Blank (BHG0049-BLK1)**

Prepared & Analyzed: 07/01/24

C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
Surrogate: o-Terphenyl	15.0		"	12.5		120	30-150			

**LCS (BHG0049-BS1)**

Prepared & Analyzed: 07/01/24

C10-C28 (DRO)	547	50	mg/kg	500		109	70-130			
Surrogate: o-Terphenyl	13.0		"	12.5		104	30-150			

**Matrix Spike (BHG0049-MS1)**

Source: 2407010-01

Prepared & Analyzed: 07/01/24

C10-C28 (DRO)	515	50	mg/kg	500	23.2	98.3	70-130			
Surrogate: o-Terphenyl	10.9		"	12.5		86.9	30-150			

**Matrix Spike Dup (BHG0049-MSD1)**

Source: 2407010-01

Prepared & Analyzed: 07/01/24

C10-C28 (DRO)	500	50	mg/kg	500	23.2	95.4	70-130	2.85	20	
Surrogate: o-Terphenyl	11.0		"	12.5		87.7	30-150			

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PO Box 1289  
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Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
07/08/24 09:58

### PAH by EPA Method 8270D SIM - Quality Control

#### Summit Scientific

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

#### Batch BHG0054 - EPA 5030 Soil MS

##### Blank (BHG0054-BLK1)

Prepared & Analyzed: 07/02/24

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	0.0281		"	0.0333		84.3	40-150			
Surrogate: Fluoranthene-d10	0.0275		"	0.0333		82.6	40-150			

##### LCS (BHG0054-BS1)

Prepared & Analyzed: 07/02/24

Acenaphthene	0.0242	0.00500	mg/kg	0.0333		72.5	31-137			
Anthracene	0.0244	0.00500	"	0.0333		73.2	30-120			
Benzo (a) anthracene	0.0258	0.00500	"	0.0333		77.4	30-120			
Benzo (a) pyrene	0.0251	0.00500	"	0.0333		75.3	30-120			
Benzo (b) fluoranthene	0.0255	0.00500	"	0.0333		76.6	30-120			
Benzo (k) fluoranthene	0.0258	0.00500	"	0.0333		77.5	30-120			
Chrysene	0.0250	0.00500	"	0.0333		75.0	30-120			
Dibenz (a,h) anthracene	0.0246	0.00500	"	0.0333		73.7	30-120			
Fluoranthene	0.0264	0.00500	"	0.0333		79.2	30-120			
Fluorene	0.0235	0.00500	"	0.0333		70.6	30-120			
Indeno (1,2,3-cd) pyrene	0.0254	0.00500	"	0.0333		76.2	30-120			
Pyrene	0.0255	0.00500	"	0.0333		76.5	35-142			
1-Methylnaphthalene	0.0259	0.00500	"	0.0333		77.8	35-142			
2-Methylnaphthalene	0.0264	0.00500	"	0.0333		79.3	35-142			
Surrogate: 2-Methylnaphthalene-d10	0.0269		"	0.0333		80.8	40-150			
Surrogate: Fluoranthene-d10	0.0274		"	0.0333		82.0	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:**  
07/08/24 09:58

**PAH by EPA Method 8270D SIM - Quality Control**

**Summit Scientific**

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

**Batch BHG0054 - EPA 5030 Soil MS**

**Matrix Spike (BHG0054-MS1)**

Source: 2406464-01

Prepared & Analyzed: 07/02/24

Acenaphthene	0.0262	0.00500	mg/kg	0.0333	ND	78.6	31-137		
Anthracene	0.0271	0.00500	"	0.0333	ND	81.4	30-120		
Benzo (a) anthracene	0.0276	0.00500	"	0.0333	ND	82.9	30-120		
Benzo (a) pyrene	0.0268	0.00500	"	0.0333	ND	80.5	30-120		
Benzo (b) fluoranthene	0.0277	0.00500	"	0.0333	ND	83.1	30-120		
Benzo (k) fluoranthene	0.0275	0.00500	"	0.0333	ND	82.5	30-120		
Chrysene	0.0267	0.00500	"	0.0333	ND	80.2	30-120		
Dibenz (a,h) anthracene	0.0257	0.00500	"	0.0333	ND	77.1	30-120		
Fluoranthene	0.0295	0.00500	"	0.0333	ND	88.5	30-120		
Fluorene	0.0259	0.00500	"	0.0333	ND	77.8	30-120		
Indeno (1,2,3-cd) pyrene	0.0266	0.00500	"	0.0333	ND	79.8	30-120		
Pyrene	0.0279	0.00500	"	0.0333	ND	83.6	35-142		
1-Methylnaphthalene	0.0276	0.00500	"	0.0333	ND	82.7	15-130		
2-Methylnaphthalene	0.0269	0.00500	"	0.0333	ND	80.7	15-130		
Surrogate: 2-Methylnaphthalene-d10	0.0270		"	0.0333		81.0	40-150		
Surrogate: Fluoranthene-d10	0.0310		"	0.0333		93.0	40-150		

**Matrix Spike Dup (BHG0054-MSD1)**

Source: 2406464-01

Prepared & Analyzed: 07/02/24

Acenaphthene	0.0284	0.00500	mg/kg	0.0333	ND	85.2	31-137	8.04	30
Anthracene	0.0286	0.00500	"	0.0333	ND	85.9	30-120	5.40	30
Benzo (a) anthracene	0.0296	0.00500	"	0.0333	ND	88.9	30-120	6.92	30
Benzo (a) pyrene	0.0289	0.00500	"	0.0333	ND	86.6	30-120	7.28	30
Benzo (b) fluoranthene	0.0299	0.00500	"	0.0333	ND	89.8	30-120	7.79	30
Benzo (k) fluoranthene	0.0296	0.00500	"	0.0333	ND	88.9	30-120	7.49	30
Chrysene	0.0286	0.00500	"	0.0333	ND	85.8	30-120	6.68	30
Dibenz (a,h) anthracene	0.0286	0.00500	"	0.0333	ND	85.7	30-120	10.6	30
Fluoranthene	0.0303	0.00500	"	0.0333	ND	90.9	30-120	2.68	30
Fluorene	0.0278	0.00500	"	0.0333	ND	83.4	30-120	6.90	30
Indeno (1,2,3-cd) pyrene	0.0293	0.00500	"	0.0333	ND	87.9	30-120	9.69	30
Pyrene	0.0294	0.00500	"	0.0333	ND	88.3	35-142	5.56	30
1-Methylnaphthalene	0.0272	0.00500	"	0.0333	ND	81.7	15-130	1.13	50
2-Methylnaphthalene	0.0283	0.00500	"	0.0333	ND	85.0	15-130	5.12	50
Surrogate: 2-Methylnaphthalene-d10	0.0272		"	0.0333		81.7	40-150		
Surrogate: Fluoranthene-d10	0.0315		"	0.0333		94.6	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:**  
07/08/24 09:58

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

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

**Batch BHG0062 - EPA 3050B**

**Blank (BHG0062-BLK1)**

Prepared: 07/02/24 Analyzed: 07/03/24

Boron ND 2.00 mg/L

**LCS (BHG0062-BS1)**

Prepared: 07/02/24 Analyzed: 07/03/24

Boron 5.22 2.00 mg/L 5.00 104 80-120

**Duplicate (BHG0062-DUP1)**

Source: 2406114-01

Prepared: 07/02/24 Analyzed: 07/03/24

Boron 0.106 2.00 mg/L 0.127 18.4 20

**Matrix Spike (BHG0062-MS1)**

Source: 2406114-01

Prepared: 07/02/24 Analyzed: 07/03/24

Boron 5.25 2.00 mg/L 5.05 0.127 102 75-125

**Matrix Spike Dup (BHG0062-MSD1)**

Source: 2406114-01

Prepared: 07/02/24 Analyzed: 07/03/24

Boron 5.44 2.00 mg/L 5.05 0.127 105 75-125 3.56 25

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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:**  
07/08/24 09:58

## Total Metals by EPA 6020B - Quality Control

### Summit Scientific

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

#### Batch BHG0056 - EPA 3050B

##### Blank (BHG0056-BLK1)

Prepared & Analyzed: 07/02/24

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	"

##### LCS (BHG0056-BS1)

Prepared & Analyzed: 07/02/24

Arsenic	40.6	0.200	mg/kg wet	40.0	102	80-120
Barium	41.0	0.400	"	40.0	103	80-120
Cadmium	2.01	0.200	"	2.00	101	80-120
Copper	41.0	0.400	"	40.0	102	80-120
Lead	20.7	0.200	"	20.0	104	80-120
Nickel	40.7	0.400	"	40.0	102	80-120
Silver	2.05	0.0200	"	2.00	103	80-120
Zinc	40.0	0.400	"	40.0	100	80-120
Selenium	4.57	0.260	"	4.00	114	80-120

##### Duplicate (BHG0056-DUP1)

Source: 2406408-01

Prepared & Analyzed: 07/02/24

Arsenic	1.01	0.200	mg/kg dry	1.13	11.0	20	QR-04
Barium	25.9	0.400	"	33.0	24.0	20	
Cadmium	0.235	0.200	"	0.239	1.48	20	
Copper	2.55	0.400	"	2.58	1.13	20	
Lead	11.4	0.200	"	10.9	4.65	20	
Nickel	1.99	0.400	"	2.23	11.6	20	
Silver	0.0523	0.0200	"	0.0527	0.837	20	
Zinc	8.66	0.400	"	8.82	1.89	20	
Selenium	0.393	0.260	"	0.449	13.2	20	

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Wellington CO, 80549

Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
07/08/24 09:58

### 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 BHG0056 - EPA 3050B

##### Matrix Spike (BHG0056-MS1)

Source: 2406408-01

Prepared & Analyzed: 07/02/24

Arsenic	9.93	0.200	mg/kg dry	44.3	1.13	19.9	75-125			QM-05
Barium	35.6	0.400	"	44.3	33.0	5.96	75-125			QM-05
Cadmium	2.58	0.200	"	2.21	0.239	106	75-125			
Copper	11.5	0.400	"	44.3	2.58	20.2	75-125			QM-05
Lead	31.6	0.200	"	22.1	10.9	93.2	75-125			
Nickel	11.0	0.400	"	44.3	2.23	19.9	75-125			QM-05
Silver	2.44	0.0200	"	2.21	0.0527	108	75-125			
Zinc	17.8	0.400	"	44.3	8.82	20.2	75-125			QM-05
Selenium	5.37	0.260	"	4.43	0.449	111	75-125			

##### Matrix Spike Dup (BHG0056-MSD1)

Source: 2406408-01

Prepared & Analyzed: 07/02/24

Arsenic	9.36	0.200	mg/kg dry	43.9	1.13	18.7	75-125	5.98	25	QM-05
Barium	34.9	0.400	"	43.9	33.0	4.41	75-125	2.00	25	QM-05
Cadmium	2.62	0.200	"	2.20	0.239	108	75-125	1.29	25	
Copper	11.4	0.400	"	43.9	2.58	20.1	75-125	0.946	25	QM-05
Lead	31.2	0.200	"	22.0	10.9	92.4	75-125	1.08	25	
Nickel	10.8	0.400	"	43.9	2.23	19.6	75-125	1.84	25	QM-05
Silver	2.46	0.0200	"	2.20	0.0527	110	75-125	0.710	25	
Zinc	17.1	0.400	"	43.9	8.82	18.8	75-125	3.81	25	QM-05
Selenium	5.23	0.260	"	4.39	0.449	109	75-125	2.57	25	

##### Post Spike (BHG0056-PS1)

Source: 2406408-01

Prepared & Analyzed: 07/02/24

Arsenic	21.7		ug/l	100	2.51	19.2	75-125			QM-01
Barium	96.7		"	100	73.2	23.5	75-125			QM-01
Cadmium	5.34		"	5.00	0.530	96.1	75-125			
Copper	24.7		"	100	5.72	18.9	75-125			QM-01
Lead	66.1		"	50.0	24.3	83.7	75-125			
Nickel	23.8		"	100	4.95	18.9	75-125			QM-01
Silver	4.85		"	5.00	0.117	94.7	75-125			
Zinc	38.6		"	100	19.6	19.0	75-125			QM-01
Selenium	11.0		"	10.0	0.998	100	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:**  
07/08/24 09:58

**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 BHG0060 - 3060A Mod**

**Blank (BHG0060-BLK1)**

Prepared & Analyzed: 07/02/24

Chromium, Hexavalent ND 0.30 mg/kg wet

**LCS (BHG0060-BS1)**

Prepared & Analyzed: 07/02/24

Chromium, Hexavalent 24.1 0.30 mg/kg wet 25.0 96.4 80-120

**Duplicate (BHG0060-DUP1)**

Source: 2406447-01

Prepared & Analyzed: 07/02/24

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

**Matrix Spike (BHG0060-MS1)**

Source: 2406447-01

Prepared & Analyzed: 07/02/24

Chromium, Hexavalent 27.5 0.30 mg/kg dry 27.3 ND 101 75-125

**Matrix Spike Dup (BHG0060-MSD1)**

Source: 2406447-01

Prepared & Analyzed: 07/02/24

Chromium, Hexavalent 26.3 0.30 mg/kg dry 27.3 ND 96.2 75-125 4.47 20

Summit Scientific

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



Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
07/08/24 09:58

**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 BHG0046 - General Preparation**

**Blank (BHG0046-BLK1)**

Prepared: 07/01/24 Analyzed: 07/02/24

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

**LCS (BHG0046-BS1)**

Prepared: 07/01/24 Analyzed: 07/02/24

Calcium	5.27	0.0500	mg/L wet	5.00	105	70-130
Magnesium	4.86	0.0500	"	5.00	97.2	70-130
Sodium	4.94	0.0500	"	5.00	98.8	70-130

Summit Scientific

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Fremont Environmental	Project: Noble - Farr T4N-R64W-S18 L01	
PO Box 1289	Project Number: [none]	Reported:
Wellington CO, 80549	Project Manager: Paul Henchan	07/08/24 09:58

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

Summit Scientific

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

Batch BHG0059 - General Preparation

Duplicate (BHG0059-DUP1)	Source: 2407010-01			Prepared & Analyzed: 07/02/24						
% Solids	85.4		%		84.3			1.29	20	

Summit Scientific

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*Atalio Bessin*



Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Farr T4N-R64W-S18 L01

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
07/08/24 09:58

**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 BHG0047 - General Preparation**

**Blank (BHG0047-BLK1)**

Prepared: 07/01/24 Analyzed: 07/02/24

Specific Conductance (EC) ND 0.0100 mmhos/cm

**LCS (BHG0047-BS1)**

Prepared: 07/01/24 Analyzed: 07/02/24

Specific Conductance (EC) 0.155 0.0100 mmhos/cm 0.150 103 95-105

**Duplicate (BHG0047-DUP1)**

**Source: 2406419-01**

Prepared: 07/01/24 Analyzed: 07/02/24

Specific Conductance (EC) 0.0118 0.0100 mmhos/cm 0.0118 0.169 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:**  
07/08/24 09:58

**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 BHG0048 - General Preparation**

**LCS (BHG0048-BS1)**

Prepared: 07/01/24 Analyzed: 07/02/24

pH	9.15	pH Units	9.18	99.7	95-105
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**Duplicate (BHG0048-DUP1)**

**Source: 2406419-01**

Prepared: 07/01/24 Analyzed: 07/02/24

pH	8.25	pH Units	8.25	0.00	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:**  
07/08/24 09:58

### 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.
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.
QM-01	The spike recovery for this QC sample is outside of established control limits due to sample matrix interference.
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