

# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

May 30, 2024

Paul Henchan

Fremont Environmental

PO Box 1289

Wellington, CO 80549

RE: Noble - Sauer G04-28D,29D (FL)

Work Order #2404277

Enclosed are the results of analyses for samples received by Summit Scientific on 04/16/24 16:30. 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 - Sauer G04-28D,29D (FL)

Project Number: UWRWE-A2582-ABN

Project Manager: Paul Henchan

**Reported:**  
05/30/24 15:56

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FL02 Combi 4FT	2404277-01	Soil	04/15/24 00:00	04/16/24 16:30
FL03 Combi 4FT	2404277-02	Soil	04/15/24 00:00	04/16/24 16:30

Summit Scientific

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# SUMMIT SCIENTIFIC

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

Lab ID	Page 1 of 1
2404277	

Send Data To:		Send Invoice To:	
Client: Fremont Environmental, Inc.	Project Manager: Henahan	Company: Chevron	
Address: 8305 6th St.	E-Mail: <del>Chevron Dist. List, FCO Dist. List, Chiles Dist. List</del>	Project Name/Location:	
City/State/Zip: Wellington, CO, 80549	<del>Fremont Dist. List (paulH, ethanB, nickt, mikeG, jeffG, chrisL, stanG, aaronG, ammyP)</del>	AFE#:	
Phone: 603-477-6907	Project Name: Noble-Saver G04-28D,29D (PL)	PO/Billing Codes: UWRWE-A2582-ABN	
Sampler Name: Ethan Black	Project Number:	Contact: Dan P.	

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, Naphthalene, TMBs	TPH (C6-C36)	PAH	SAR, EC, pH, Boron		Metals (Table 915-1)
1	FLO2 Combi 4FT	4/15/24		2			X			X			X	X	X			
2	FLO3 Combi 4FT			2			X			X			X	X	X			
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		

Relinquished by: <i>Ethan Black</i>	Date/Time: 4/16/24 1530	Received by: S2 - North Office	Date/Time: 4/16/24 1530	TAT Business Days	Field DO	Notes:
Relinquished by: S2	Date/Time: 4/16/24 1630	Received by: <i>[Signature]</i>	Date/Time: 4/16/24 1630	Same Day	Field EC	
Relinquished by:	Date/Time:	Received by:	Date/Time:	1 Day	Field ORP	
				2 Days	Field pH	
				3 Days	Field Temp.	
Temperature Upon Receipt: 119	Corrected Temperature: 8	IR gun #:	HNO3 lot #:	Standard	X Field Turb.	

S<sub>2</sub>

Sample Receipt Checklist

S2 Work Order# 2404277

Client: Fremont

Client Project ID: NWR-SAWER G 04-28D, 29D (FL)

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

Airbill #:

Grid of boxes for shipping options

Matrix (Check all that apply)

Air

Box for Air

Sol/Solid

Box for Sol/Solid

Water

Box for Water

Other

Box for Other

Temp (°C)

11.9

Thermometer #

1

Table with columns: Yes, No, N/A, Comments (if any). Rows include: If samples require cooling, is the temperature < 6°C? (1), If custody seals are present, are they intact? (1), Are samples due within 48 hours present?, Are water samples with short hold times present?, Is a chain-of-custody (COC) form present and filled out completely? (1), Is the COC properly relinquished by the client w/ date and time recorded? (1), Were all samples received intact? (1), Was adequate sample volume provided? (1), Does the COC agree with the number and type of sample bottles received? (1), Do the sample IDs on the bottle labels match the COC? (1), For volatiles in water - is there headspace present? If yes, contact client and note in narrative., Are samples preserved that require preservation (excluding cooling)? (1) Note the type of preservative in the comments column - HCl, H2SO4, NaOH, HNO3, etc., If samples are acid preserved for metals, is the pH <= 2? (1) Record the pH in Comments., If dissolved metals are requested, were samples field filtered?, Additional Comments (if any):

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

AS
Custodian Printed Name

4/16/24
Date/Time

8.5



Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Sauer G04-28D,29D (FL)

Project Number: UWRWE-A2582-ABN  
Project Manager: Paul Henchan

**Reported:**  
05/30/24 15:56

**FL02 Combi 4FT**  
**2404277-01 (Soil)**

**Summit Scientific**

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

Date Sampled: **04/15/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHD0628	04/18/24	04/19/24	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: **04/15/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0543	136 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0357	89.2 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0386	96.6 %		50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **04/15/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHD0632	04/18/24	04/20/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **04/15/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	7.40	59.2 %		30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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Wellington CO, 80549

Project: Noble - Sauer G04-28D,29D (FL)

Project Number: UWRWE-A2582-ABN  
Project Manager: Paul Henchan

**Reported:**  
05/30/24 15:56

**FL02 Combi 4FT**  
**2404277-01 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **04/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHD0529	04/17/24	04/18/24	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: **04/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0176	52.9 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0148	44.4 %	40-150		"	"	"	"	

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

Date Sampled: **04/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHD0744	04/22/24	05/30/24	EPA 6020B	

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

Date Sampled: **04/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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 Wellington CO, 80549

Project: Noble - Sauer G04-28D,29D (FL)  
 Project Number: UWRWE-A2582-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 05/30/24 15:56

**FL02 Combi 4FT**  
**2404277-01 (Soil)**

**Summit Scientific**

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	29.8	0.0500	mg/L dry	1	BHE0028	05/01/24	05/09/24	EPA 6020B	
Magnesium	9.33	0.0500	"	"	"	"	"	"	
Sodium	36.6	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **04/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.50	0.00100	units	1	BHE0343	05/10/24	05/10/24	Calculation	

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

Date Sampled: **04/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	85.5		%	1	BHD0762	04/22/24	04/24/24	Calculation	

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

Date Sampled: **04/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.428	0.0100	mmhos/cm	1	BHE0031	05/01/24	05/03/24	EPA 120.1	

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

Date Sampled: **04/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.50		pH Units	1	BHE0029	05/01/24	05/03/24	EPA 9045D	

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Project: Noble - Sauer G04-28D,29D (FL)

Project Number: UWRWE-A2582-ABN  
Project Manager: Paul Henchan

**Reported:**  
05/30/24 15:56

**FL03 Combi 4FT**  
**2404277-02 (Soil)**

**Summit Scientific**

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

Date Sampled: **04/15/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHD0628	04/18/24	04/19/24	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: **04/15/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0509	127 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0370	92.6 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0399	99.8 %		50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **04/15/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHD0632	04/18/24	04/20/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **04/15/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	6.71	53.7 %		30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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Project: Noble - Sauer G04-28D,29D (FL)

Project Number: UWRWE-A2582-ABN  
Project Manager: Paul Henchan

**Reported:**  
05/30/24 15:56

**FL03 Combi 4FT**  
**2404277-02 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **04/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHD0529	04/17/24	04/18/24	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: **04/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0168	50.4 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0166	49.8 %	40-150		"	"	"	"	

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

Date Sampled: **04/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHD0744	04/22/24	05/30/24	EPA 6020B	

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

Date Sampled: **04/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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 Wellington CO, 80549

Project: Noble - Sauer G04-28D,29D (FL)  
 Project Number: UWRWE-A2582-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 05/30/24 15:56

**FL03 Combi 4FT**  
**2404277-02 (Soil)**

**Summit Scientific**

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	22.0	0.0500	mg/L dry	1	BHE0028	05/01/24	05/09/24	EPA 6020B	
Magnesium	12.1	0.0500	"	"	"	"	"	"	
Sodium	19.5	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **04/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.829	0.00100	units	1	BHE0343	05/10/24	05/10/24	Calculation	

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

Date Sampled: **04/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	85.7		%	1	BHD0762	04/22/24	04/24/24	Calculation	

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

Date Sampled: **04/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.271	0.0100	mmhos/cm	1	BHE0031	05/01/24	05/03/24	EPA 120.1	

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

Date Sampled: **04/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.74		pH Units	1	BHE0029	05/01/24	05/03/24	EPA 9045D	

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Project: Noble - Sauer G04-28D,29D (FL)

Project Number: UWRWE-A2582-ABN  
Project Manager: Paul Henchan

**Reported:**  
05/30/24 15:56

### 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 BHD0628 - EPA 5030 Soil MS

##### Blank (BHD0628-BLK1)

Prepared: 04/18/24 Analyzed: 04/19/24

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>	<i>0.0515</i>		<i>"</i>	<i>0.0400</i>		<i>129</i>	<i>50-150</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0381</i>		<i>"</i>	<i>0.0400</i>		<i>95.2</i>	<i>50-150</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0403</i>		<i>"</i>	<i>0.0400</i>		<i>101</i>	<i>50-150</i>			

##### LCS (BHD0628-BS1)

Prepared: 04/18/24 Analyzed: 04/19/24

Benzene	0.0590	0.0020	mg/kg	0.0500		118	70-130			
Toluene	0.0636	0.0050	"	0.0500		127	70-130			
Ethylbenzene	0.0604	0.0050	"	0.0500		121	70-130			
m,p-Xylene	0.126	0.010	"	0.100		126	70-130			
o-Xylene	0.0646	0.0050	"	0.0500		129	70-130			
1,2,4-Trimethylbenzene	0.0651	0.0050	"	0.0500		130	70-130			
1,3,5-Trimethylbenzene	0.0604	0.0050	"	0.0500		121	70-130			
Naphthalene	0.0628	0.0038	"	0.0500		126	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0564</i>		<i>"</i>	<i>0.0400</i>		<i>141</i>	<i>50-150</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0391</i>		<i>"</i>	<i>0.0400</i>		<i>97.6</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>			

##### Matrix Spike (BHD0628-MS1)

Source: 2404260-01

Prepared: 04/18/24 Analyzed: 04/19/24

Benzene	0.0394	0.0020	mg/kg	0.0500	ND	78.8	70-130			
Toluene	0.0400	0.0050	"	0.0500	ND	80.0	70-130			
Ethylbenzene	0.0412	0.0050	"	0.0500	ND	82.5	70-130			
m,p-Xylene	0.0781	0.010	"	0.100	ND	78.1	70-130			
o-Xylene	0.0391	0.0050	"	0.0500	ND	78.2	70-130			
1,2,4-Trimethylbenzene	0.0375	0.0050	"	0.0500	ND	74.9	70-130			
1,3,5-Trimethylbenzene	0.0374	0.0050	"	0.0500	ND	74.9	70-130			
Naphthalene	0.0466	0.0038	"	0.0500	ND	93.1	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0478</i>		<i>"</i>	<i>0.0400</i>		<i>120</i>	<i>50-150</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0385</i>		<i>"</i>	<i>0.0400</i>		<i>96.2</i>	<i>50-150</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0391</i>		<i>"</i>	<i>0.0400</i>		<i>97.7</i>	<i>50-150</i>			

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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: Noble - Sauer G04-28D,29D (FL)

Project Number: UWRWE-A2582-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 05/30/24 15:56

**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		

**Batch BHD0628 - EPA 5030 Soil MS**

Matrix Spike Dup (BHD0628-MSD1)	Source: 2404260-01			Prepared: 04/18/24 Analyzed: 04/19/24						
Benzene	0.0451	0.0020	mg/kg	0.0500	ND	90.2	70-130	13.6	30	
Toluene	0.0473	0.0050	"	0.0500	ND	94.7	70-130	16.8	30	
Ethylbenzene	0.0484	0.0050	"	0.0500	ND	96.8	70-130	15.9	30	
m,p-Xylene	0.0930	0.010	"	0.100	ND	93.0	70-130	17.4	30	
o-Xylene	0.0469	0.0050	"	0.0500	ND	93.7	70-130	18.1	30	
1,2,4-Trimethylbenzene	0.0450	0.0050	"	0.0500	ND	89.9	70-130	18.2	30	
1,3,5-Trimethylbenzene	0.0456	0.0050	"	0.0500	ND	91.1	70-130	19.6	30	
Naphthalene	0.0524	0.0038	"	0.0500	ND	105	70-130	11.9	30	
Surrogate: 1,2-Dichloroethane-d4	0.0511		"	0.0400		128	50-150			
Surrogate: Toluene-d8	0.0371		"	0.0400		92.8	50-150			
Surrogate: 4-Bromofluorobenzene	0.0404		"	0.0400		101	50-150			

Summit Scientific

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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: Noble - Sauer G04-28D,29D (FL)

Project Number: UWRWE-A2582-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 05/30/24 15:56

**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 BHD0632 - EPA 3550A**

**Blank (BHD0632-BLK1)**

Prepared: 04/18/24 Analyzed: 04/19/24

C10-C28 (DRO)	ND	50	mg/kg								
C28-C36 (ORO)	ND	50	"								
Surrogate: <i>o</i> -Terphenyl	13.8		"	12.5		110		30-150			

**LCS (BHD0632-BS1)**

Prepared: 04/18/24 Analyzed: 04/19/24

C10-C28 (DRO)	385	50	mg/kg	500		76.9		70-130			
Surrogate: <i>o</i> -Terphenyl	12.0		"	12.5		95.9		30-150			

**Matrix Spike (BHD0632-MS1)**

Source: 2404260-01

Prepared: 04/18/24 Analyzed: 04/19/24

C10-C28 (DRO)	411	50	mg/kg	500	15.1	79.1		70-130			
Surrogate: <i>o</i> -Terphenyl	12.2		"	12.5		97.3		30-150			

**Matrix Spike Dup (BHD0632-MSD1)**

Source: 2404260-01

Prepared: 04/18/24 Analyzed: 04/19/24

C10-C28 (DRO)	378	50	mg/kg	500	15.1	72.6		70-130	8.23	20	
Surrogate: <i>o</i> -Terphenyl	12.2		"	12.5		97.6		30-150			

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Sauer G04-28D,29D (FL)

Project Number: UWRWE-A2582-ABN  
Project Manager: Paul Henchan

**Reported:**  
05/30/24 15:56

**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 BHD0529 - EPA 5030 Soil MS**

**Blank (BHD0529-BLK1)**

Prepared & Analyzed: 04/17/24

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>0.0315</i>		"	<i>0.0333</i>		<i>94.6</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0228</i>		"	<i>0.0333</i>		<i>68.3</i>	<i>40-150</i>			

**LCS (BHD0529-BS1)**

Prepared & Analyzed: 04/17/24

Acenaphthene	0.0250	0.00500	mg/kg	0.0333		74.9	31-137			
Anthracene	0.0253	0.00500	"	0.0333		75.8	30-120			
Benzo (a) anthracene	0.0255	0.00500	"	0.0333		76.5	30-120			
Benzo (a) pyrene	0.0210	0.00500	"	0.0333		63.0	30-120			
Benzo (b) fluoranthene	0.0234	0.00500	"	0.0333		70.3	30-120			
Benzo (k) fluoranthene	0.0231	0.00500	"	0.0333		69.3	30-120			
Chrysene	0.0251	0.00500	"	0.0333		75.2	30-120			
Dibenz (a,h) anthracene	0.0163	0.00500	"	0.0333		48.9	30-120			
Fluoranthene	0.0245	0.00500	"	0.0333		73.4	30-120			
Fluorene	0.0216	0.00500	"	0.0333		64.9	30-120			
Indeno (1,2,3-cd) pyrene	0.0222	0.00500	"	0.0333		66.5	30-120			
Pyrene	0.0295	0.00500	"	0.0333		88.5	35-142			
1-Methylnaphthalene	0.0255	0.00500	"	0.0333		76.6	35-142			
2-Methylnaphthalene	0.0312	0.00500	"	0.0333		93.7	35-142			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0225</i>		"	<i>0.0333</i>		<i>67.5</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0150</i>		"	<i>0.0333</i>		<i>45.0</i>	<i>40-150</i>			

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Sauer G04-28D,29D (FL)

Project Number: UWRWE-A2582-ABN  
Project Manager: Paul Henchan

**Reported:**  
05/30/24 15:56

**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 BHD0529 - EPA 5030 Soil MS**

<b>Matrix Spike (BHD0529-MS1)</b>	<b>Source: 2404260-01</b>			<b>Prepared &amp; Analyzed: 04/17/24</b>						
Acenaphthene	0.0232	0.00500	mg/kg	0.0333	ND	69.6	31-137			
Anthracene	0.0241	0.00500	"	0.0333	ND	72.4	30-120			
Benzo (a) anthracene	0.0264	0.00500	"	0.0333	ND	79.2	30-120			
Benzo (a) pyrene	0.0209	0.00500	"	0.0333	ND	62.8	30-120			
Benzo (b) fluoranthene	0.0223	0.00500	"	0.0333	ND	66.8	30-120			
Benzo (k) fluoranthene	0.0213	0.00500	"	0.0333	ND	63.9	30-120			
Chrysene	0.0228	0.00500	"	0.0333	ND	68.4	30-120			
Dibenz (a,h) anthracene	0.0135	0.00500	"	0.0333	ND	40.6	30-120			
Fluoranthene	0.0244	0.00500	"	0.0333	ND	73.1	30-120			
Fluorene	0.0185	0.00500	"	0.0333	ND	55.6	30-120			
Indeno (1,2,3-cd) pyrene	0.0171	0.00500	"	0.0333	ND	51.3	30-120			
Pyrene	0.0272	0.00500	"	0.0333	ND	81.5	35-142			
1-Methylnaphthalene	0.0234	0.00500	"	0.0333	ND	70.1	15-130			
2-Methylnaphthalene	0.0250	0.00500	"	0.0333	ND	75.1	15-130			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0217</i>		<i>"</i>	<i>0.0333</i>		<i>65.1</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0158</i>		<i>"</i>	<i>0.0333</i>		<i>47.3</i>	<i>40-150</i>			

<b>Matrix Spike Dup (BHD0529-MSD1)</b>	<b>Source: 2404260-01</b>			<b>Prepared: 04/17/24 Analyzed: 04/18/24</b>						
Acenaphthene	0.0253	0.00500	mg/kg	0.0333	ND	75.8	31-137	8.51	30	
Anthracene	0.0278	0.00500	"	0.0333	ND	83.3	30-120	14.0	30	
Benzo (a) anthracene	0.0285	0.00500	"	0.0333	ND	85.5	30-120	7.65	30	
Benzo (a) pyrene	0.0224	0.00500	"	0.0333	ND	67.2	30-120	6.78	30	
Benzo (b) fluoranthene	0.0241	0.00500	"	0.0333	ND	72.3	30-120	7.89	30	
Benzo (k) fluoranthene	0.0234	0.00500	"	0.0333	ND	70.1	30-120	9.18	30	
Chrysene	0.0255	0.00500	"	0.0333	ND	76.4	30-120	11.0	30	
Dibenz (a,h) anthracene	0.0179	0.00500	"	0.0333	ND	53.8	30-120	28.0	30	
Fluoranthene	0.0273	0.00500	"	0.0333	ND	82.0	30-120	11.5	30	
Fluorene	0.0219	0.00500	"	0.0333	ND	65.6	30-120	16.5	30	
Indeno (1,2,3-cd) pyrene	0.0168	0.00500	"	0.0333	ND	50.4	30-120	1.78	30	
Pyrene	0.0302	0.00500	"	0.0333	ND	90.5	35-142	10.5	30	
1-Methylnaphthalene	0.0293	0.00500	"	0.0333	ND	87.9	15-130	22.5	50	
2-Methylnaphthalene	0.0312	0.00500	"	0.0333	ND	93.7	15-130	22.0	50	
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0247</i>		<i>"</i>	<i>0.0333</i>		<i>74.2</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0188</i>		<i>"</i>	<i>0.0333</i>		<i>56.5</i>	<i>40-150</i>			

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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: Noble - Sauer G04-28D,29D (FL)

Project Number: UWRWE-A2582-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 05/30/24 15:56

**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 BHD0744 - EPA 3050B**

**Blank (BHD0744-BLK1)**

Prepared: 04/22/24 Analyzed: 05/30/24

Boron ND 2.00 mg/L

**LCS (BHD0744-BS1)**

Prepared: 04/22/24 Analyzed: 05/30/24

Boron 5.07 2.00 mg/L 5.00 101 80-120

**Duplicate (BHD0744-DUP1)**

Source: 2404276-01

Prepared: 04/22/24 Analyzed: 05/30/24

Boron 0.178 2.00 mg/L 0.202 12.6 20

**Matrix Spike (BHD0744-MS1)**

Source: 2404276-01

Prepared: 04/22/24 Analyzed: 05/30/24

Boron 4.63 2.00 mg/L 4.99 0.202 88.7 75-125

**Matrix Spike Dup (BHD0744-MSD1)**

Source: 2404276-01

Prepared: 04/22/24 Analyzed: 05/30/24

Boron 4.59 2.00 mg/L 4.99 0.202 87.9 75-125 0.888 25

Summit Scientific

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 PO Box 1289  
 Wellington CO, 80549

Project: Noble - Sauer G04-28D,29D (FL)

Project Number: UWRWE-A2582-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 05/30/24 15:56

**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 BHE0028 - General Preparation**

**Blank (BHE0028-BLK1)**

Prepared: 05/01/24 Analyzed: 05/09/24

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

**LCS (BHE0028-BS1)**

Prepared: 05/01/24 Analyzed: 05/09/24

Calcium	4.61	0.0500	mg/L wet	5.00	92.3	70-130				
Magnesium	4.62	0.0500	"	5.00	92.4	70-130				
Sodium	4.79	0.0500	"	5.00	95.8	70-130				

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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: Noble - Sauer G04-28D,29D (FL)

Project Number: UWRWE-A2582-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 05/30/24 15:56

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

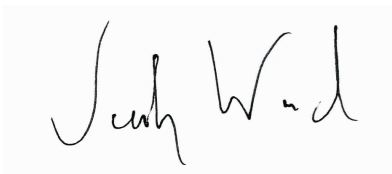
**Summit Scientific**

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

**Batch BHD0762 - General Preparation**

Duplicate (BHD0762-DUP2)	Source: 2404258-01		Prepared: 04/22/24 Analyzed: 04/24/24	
% Solids	89.7	%	90.2	0.471 20

Summit Scientific



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 PO Box 1289  
 Wellington CO, 80549

Project: Noble - Sauer G04-28D,29D (FL)

Project Number: UWRWE-A2582-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 05/30/24 15:56

**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 BHE0031 - General Preparation**

**Blank (BHE0031-BLK1)**

Prepared: 05/01/24 Analyzed: 05/03/24

Specific Conductance (EC) ND 0.0100 mmhos/cm

**LCS (BHE0031-BS1)**

Prepared: 05/01/24 Analyzed: 05/03/24

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

**Duplicate (BHE0031-DUP1)**

Source: 2404262-01

Prepared: 05/01/24 Analyzed: 05/03/24

Specific Conductance (EC) 0.137 0.0100 mmhos/cm 0.138 0.436 20

Summit Scientific

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Fremont Environmental  
 PO Box 1289  
 Wellington CO, 80549

Project: Noble - Sauer G04-28D,29D (FL)

Project Number: UWRWE-A2582-ABN  
 Project Manager: Paul Henchan

**Reported:**  
 05/30/24 15:56

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

**Summit Scientific**

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

**Batch BHE0029 - General Preparation**

**LCS (BHE0029-BS1)**

Prepared: 05/01/24 Analyzed: 05/03/24

pH	9.14	pH Units	9.18	99.6	95-105
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**Duplicate (BHE0029-DUP1)**

Source: 2404262-01

Prepared: 05/01/24 Analyzed: 05/03/24

pH	9.24	pH Units	9.35	1.18	20
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Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Sauer G04-28D,29D (FL)

Project Number: UWRWE-A2582-ABN  
Project Manager: Paul Henchan

**Reported:**  
05/30/24 15:56

### Notes and Definitions

DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference