

# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

December 20, 2022

Paul Henchan  
Fremont Environmental  
PO Box 1289  
Wellington, CO 80549

RE: Noble - Farr C18-25

Work Order #2212233

Enclosed are the results of analyses for samples received by Summit Scientific on 12/12/22 16:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott Sheely".

Scott Sheely For Paul Shrewsbury  
President



Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Farr C18-25

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
12/20/22 13:56

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FL01 2ft	2212233-01	Soil	12/08/22 00:00	12/12/22 16:30
PWV Floor 4ft	2212233-02	Soil	12/08/22 00:00	12/12/22 16:30
AST01 Cen. Surf	2212233-03	Soil	12/08/22 00:00	12/12/22 16:30
SEP01 Surf	2212233-04	Soil	12/08/22 00:00	12/12/22 16:30

Summit Scientific

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# Summit Scientific

2212233

S<sub>2</sub>

4653 Table Mountain Drive ♦ Golden, Colorado 80403

303-277-9310 ♦ 303-374-5933 (f)

Page

1 of 1

Client: Fremont Environmental

Project Manager: Paul Henehan

Address:

E-Mail: Fremont Distribution List: PaulH, EthanB, JeffG and ChrisL. @fremontenv.com

City/State/Zip:

Bill to: Dan

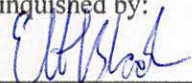

Phone:

Project Name: Noble - Farr C18-25

Sampler Name: EB

Project Number:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested								Special Instructions		
					HCl	HNO <sub>3</sub>	None	Other	Water	Soil	Air-Canister #	Other	BTEX, TMBs, Naph.	TPH	PAH (915)	EC, SAR, pH, Boron	Metals (915)	TDS, Chloride, Sulfate	HOLD				
1	FL 01 ZFT	12/8/22		2						X				X	X	X	X						
2	PWV Floor Lift	I		I						I				I	I	I	I						
3	AST 01 GEN. SURF	I		I						I				I	I	I	I						
4	SEPO1 SURF	I		I						I				I	I	I	I						
5																							
6																							
7																							
8																							
9																							
10																							

Relinquished by: 	Date/Time: 12/12/22 1630	Received by: S2	Date/Time: 12/12/22 1630	<b>Turn Around Time</b> (Check) Same Day — 72 hours 24 hours — Standard <input checked="" type="checkbox"/> 48 hours — <b>Sample Integrity:</b> Temperature Upon Receipt: 7.0 Samples Intact: <input checked="" type="checkbox"/> Yes No	<b>Notes:</b>
Relinquished by: S2	Date/Time: 12/12/22 1630	Received by: 	Date/Time: 12/12/22 1630		
Relinquished by:	Date/Time:	Received by:	Date/Time:		

S<sub>2</sub>

## Sample Receipt Checklist

S2 Work Order# 2212233Client: Noble / Fremont Client Project ID: Farr C18-25Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other ☐ Airbill #: ☐
☐ ☒ ☐ ☐ ☐
Matrix (Check all that apply) Air ☐ Soil/Solid ☒ Water ☐ Other ☐Temp (°C) 7.0Thermometer # 1

	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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>On ice.</u>
If custody seals are present, are they intact? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are samples due within 48 hours present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe <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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input 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.				

Jack Brewer

Custodian Printed Name

12/12/22

Date/Time



Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Farr C18-25

Project Number: [none]  
Project Manager: Paul Henehan

**Reported:**  
12/20/22 13:56

**FL01 2ft**  
**2212233-01 (Soil)**

**Summit Scientific**

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

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BFL0346	12/14/22	12/15/22	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0371	92.8 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0395	98.7 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0409	102 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BFL0349	12/14/22	12/15/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	14.1	112 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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PO Box 1289  
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Project: Noble - Farr C18-25

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
12/20/22 13:56

**FL01 2ft**  
**2212233-01 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFL0345	12/14/22	12/14/22	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
<b>Benzo (a) anthracene</b>	<b>0.0170</b>	0.00500	"	"	"	"	"	"	
<b>Benzo (a) pyrene</b>	<b>0.0118</b>	0.00500	"	"	"	"	"	"	
<b>Benzo (b) fluoranthene</b>	<b>0.0178</b>	0.00500	"	"	"	"	"	"	
<b>Benzo (k) fluoranthene</b>	<b>0.00704</b>	0.00500	"	"	"	"	"	"	
<b>Chrysene</b>	<b>0.0179</b>	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
<b>Fluoranthene</b>	<b>0.0333</b>	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
<b>Indeno (1,2,3-cd) pyrene</b>	<b>0.00898</b>	0.00500	"	"	"	"	"	"	
<b>Pyrene</b>	<b>0.0299</b>	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0315	94.5 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0347	104 %	40-150		"	"	"	"	

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

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Boron</b>	<b>0.999</b>	0.0100	mg/L	1	BFL0338	12/13/22	12/14/22	EPA 6020B	

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

Date Sampled: **12/08/22 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 C18-25

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
12/20/22 13:56

**FL01 2ft**  
**2212233-01 (Soil)**

**Summit Scientific**

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

Calcium	43.4	0.0551	mg/L dry	1	BFL0443	12/17/22	12/18/22	EPA 6020B
Magnesium	19.0	0.0551	"	"	"	"	"	"
Sodium	23.9	0.0551	"	"	"	"	"	"

**Calculated Analysis**

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.761	0.00100	units	1	BFL0474	12/19/22	12/19/22	Calculation	

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

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	90.7		%	1	BFL0432	12/16/22	12/16/22	Calculation	

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

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.575	0.0100	mmhos/cm	1	BFL0448	12/17/22	12/18/22	EPA 120.1	

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

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.07		pH Units	1	BFL0447	12/17/22	12/17/22	EPA 9045D	

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Wellington CO, 80549

Project: Noble - Farr C18-25

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
12/20/22 13:56

**PWV Floor 4ft**  
**2212233-02 (Soil)**

**Summit Scientific**

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

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BFL0346	12/14/22	12/15/22	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0386	96.5 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0392	98.0 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0444	111 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	56	50	mg/kg	1	BFL0349	12/14/22	12/15/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	15.2	122 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Farr C18-25

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
12/20/22 13:56

**PWV Floor 4ft  
2212233-02 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFL0345	12/14/22	12/14/22	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
<b>Fluorene</b>	<b>0.0304</b>	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
<b>1-Methylnaphthalene</b>	<b>0.237</b>	0.00500	"	"	"	"	"	"	E
<b>2-Methylnaphthalene</b>	<b>0.612</b>	0.00500	"	"	"	"	"	"	E

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0172	51.7 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0428	128 %	40-150		"	"	"	"	

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

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Boron</b>	<b>1.93</b>	0.0100	mg/L	1	BFL0338	12/13/22	12/14/22	EPA 6020B	

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

Date Sampled: **12/08/22 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 C18-25

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
12/20/22 13:56

**PWV Floor 4ft  
2212233-02 (Soil)**

**Summit Scientific**

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

Calcium	145	0.0558	mg/L dry	1	BFL0443	12/17/22	12/18/22	EPA 6020B
Magnesium	34.9	0.0558	"	"	"	"	"	"
Sodium	86.7	0.0558	"	"	"	"	"	"

**Calculated Analysis**

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.68	0.00100	units	1	BFL0474	12/19/22	12/19/22	Calculation	

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

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.6		%	1	BFL0432	12/16/22	12/16/22	Calculation	

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

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.662	0.0100	mmhos/cm	1	BFL0448	12/17/22	12/18/22	EPA 120.1	

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

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.14		pH Units	1	BFL0447	12/17/22	12/17/22	EPA 9045D	

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PO Box 1289  
Wellington CO, 80549

Project: Noble - Farr C18-25

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
12/20/22 13:56

**AST01 Cen. Surf**  
**2212233-03 (Soil)**

**Summit Scientific**

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

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BFL0346	12/14/22	12/15/22	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0385	96.2 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0400	100 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0413	103 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BFL0349	12/14/22	12/15/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	12.6	101 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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PO Box 1289  
Wellington CO, 80549

Project: Noble - Farr C18-25

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
12/20/22 13:56

**AST01 Cen. Surf**  
**2212233-03 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	0.00551	0.00500	mg/kg	1	BFL0345	12/14/22	12/14/22	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	0.0798	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	0.156	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	0.222	0.00500	"	"	"	"	"	"	E
Benzo (k) fluoranthene	0.0905	0.00500	"	"	"	"	"	"	
Chrysene	0.111	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	0.146	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	0.180	0.00500	"	"	"	"	"	"	
Pyrene	0.134	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0239	71.7 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0266	79.7 %	40-150		"	"	"	"	

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

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.387	0.0100	mg/L	1	BFL0338	12/13/22	12/14/22	EPA 6020B	

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

Date Sampled: **12/08/22 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 C18-25

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
12/20/22 13:56

**AST01 Cen. Surf**  
**2212233-03 (Soil)**

**Summit Scientific**

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

Calcium	39.4	0.0558	mg/L dry	1	BFL0443	12/17/22	12/18/22	EPA 6020B
Magnesium	7.43	0.0558	"	"	"	"	"	"
Sodium	3.59	0.0558	"	"	"	"	"	"

**Calculated Analysis**

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.138	0.00100	units	1	BFL0474	12/19/22	12/19/22	Calculation	

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

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.6		%	1	BFL0432	12/16/22	12/16/22	Calculation	

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

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.149	0.0100	mmhos/cm	1	BFL0448	12/17/22	12/18/22	EPA 120.1	

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

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.37		pH Units	1	BFL0447	12/17/22	12/17/22	EPA 9045D	

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Project: Noble - Farr C18-25

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
12/20/22 13:56

**SEP01 Surf**  
**2212233-04 (Soil)**

**Summit Scientific**

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

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BFL0346	12/14/22	12/15/22	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0379	94.8 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0395	98.7 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0411	103 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BFL0349	12/14/22	12/15/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	10.7	85.5 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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Wellington CO, 80549

Project: Noble - Farr C18-25

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
12/20/22 13:56

**SEP01 Surf**  
**2212233-04 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFL0345	12/14/22	12/14/22	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0258	77.5 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0359	108 %	40-150		"	"	"	"	

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

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Boron</b>	<b>1.13</b>	0.0100	mg/L	1	BFL0338	12/13/22	12/14/22	EPA 6020B	

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

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project: Noble - Farr C18-25

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
12/20/22 13:56

**SEP01 Surf**  
**2212233-04 (Soil)**

**Summit Scientific**

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

Calcium	45.2	0.0522	mg/L dry	1	BFL0443	12/17/22	12/18/22	EPA 6020B
Magnesium	10.4	0.0522	"	"	"	"	"	"
Sodium	30.4	0.0522	"	"	"	"	"	"

**Calculated Analysis**

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.06	0.00100	units	1	BFL0474	12/19/22	12/19/22	Calculation	

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

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	95.7		%	1	BFL0432	12/16/22	12/16/22	Calculation	

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

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.554	0.0100	mmhos/cm	1	BFL0448	12/17/22	12/18/22	EPA 120.1	

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

Date Sampled: **12/08/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.65		pH Units	1	BFL0447	12/17/22	12/17/22	EPA 9045D	

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Farr C18-25

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
12/20/22 13:56

## 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 BFL0346 - EPA 5030 Soil MS

##### Blank (BFL0346-BLK1)

Prepared & Analyzed: 12/14/22

Benzene	ND	0.0020	mg/kg								
Toluene	ND	0.0050	"								
Ethylbenzene	ND	0.0050	"								
Xylenes (total)	ND	0.010	"								
1,2,4-Trimethylbenzene	ND	0.0050	"								
1,3,5-Trimethylbenzene	ND	0.0050	"								
Naphthalene	ND	0.0038	"								
Gasoline Range Hydrocarbons	ND	0.50	"								
Surrogate: 1,2-Dichloroethane-d4	0.0382		"	0.0400		95.6		50-150			
Surrogate: Toluene-d8	0.0392		"	0.0400		97.9		50-150			
Surrogate: 4-Bromofluorobenzene	0.0401		"	0.0400		100		50-150			

##### LCS (BFL0346-BS1)

Prepared & Analyzed: 12/14/22

Benzene	0.124	0.0020	mg/kg	0.125		99.3		70-130			
Toluene	0.141	0.0050	"	0.125		113		70-130			
Ethylbenzene	0.162	0.0050	"	0.125		130		70-130			
m,p-Xylene	0.314	0.010	"	0.250		126		70-130			
o-Xylene	0.146	0.0050	"	0.125		117		70-130			
1,2,4-Trimethylbenzene	0.153	0.0050	"	0.125		123		70-130			
1,3,5-Trimethylbenzene	0.163	0.0050	"	0.125		130		70-130			
Naphthalene	0.115	0.0038	"	0.125		91.8		70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0357		"	0.0400		89.2		50-150			
Surrogate: Toluene-d8	0.0396		"	0.0400		99.0		50-150			
Surrogate: 4-Bromofluorobenzene	0.0375		"	0.0400		93.8		50-150			

##### Matrix Spike (BFL0346-MS1)

Source: 2212212-01

Prepared & Analyzed: 12/14/22

Benzene	0.124	0.0020	mg/kg	0.125	ND	99.0		70-130			
Toluene	0.143	0.0050	"	0.125	ND	114		70-130			
Ethylbenzene	0.162	0.0050	"	0.125	ND	130		70-130			
m,p-Xylene	0.318	0.010	"	0.250	ND	127		70-130			
o-Xylene	0.147	0.0050	"	0.125	ND	117		70-130			
1,2,4-Trimethylbenzene	0.160	0.0050	"	0.125	ND	128		70-130			
1,3,5-Trimethylbenzene	0.156	0.0050	"	0.125	ND	124		70-130			
Naphthalene	0.149	0.0038	"	0.125	ND	119		70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0391		"	0.0400		97.6		50-150			
Surrogate: Toluene-d8	0.0394		"	0.0400		98.5		50-150			
Surrogate: 4-Bromofluorobenzene	0.0385		"	0.0400		96.2		50-150			

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Farr C18-25

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
12/20/22 13:56

## Volatile Organic Compounds by EPA Method 8260B - Quality Control

### Summit Scientific

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

#### Batch BFL0346 - EPA 5030 Soil MS

##### Matrix Spike Dup (BFL0346-MSD1)

Source: 2212212-01

Prepared & Analyzed: 12/14/22

Benzene	0.120	0.0020	mg/kg	0.125	ND	96.0	70-130	3.08	30	
Toluene	0.140	0.0050	"	0.125	ND	112	70-130	2.15	30	
Ethylbenzene	0.154	0.0050	"	0.125	ND	123	70-130	4.86	30	
m,p-Xylene	0.304	0.010	"	0.250	ND	122	70-130	4.58	30	
o-Xylene	0.143	0.0050	"	0.125	ND	115	70-130	2.38	30	
1,2,4-Trimethylbenzene	0.152	0.0050	"	0.125	ND	122	70-130	4.68	30	
1,3,5-Trimethylbenzene	0.156	0.0050	"	0.125	ND	125	70-130	0.289	30	
Naphthalene	0.144	0.0038	"	0.125	ND	115	70-130	3.99	30	
Surrogate: 1,2-Dichloroethane-d4	0.0406		"	0.0400		101	50-150			
Surrogate: Toluene-d8	0.0403		"	0.0400		101	50-150			
Surrogate: 4-Bromofluorobenzene	0.0379		"	0.0400		94.6	50-150			

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Wellington CO, 80549

Project: Noble - Farr C18-25

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
12/20/22 13:56

**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 BFL0349 - EPA 3550A**

**Blank (BFL0349-BLK1)**

Prepared & Analyzed: 12/14/22

C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
Surrogate: o-Terphenyl	17.4		"	12.5		139	30-150			

**LCS (BFL0349-BS1)**

Prepared & Analyzed: 12/14/22

C10-C28 (DRO)	501	50	mg/kg	500		100	70-130			
Surrogate: o-Terphenyl	16.2		"	12.5		130	30-150			

**Matrix Spike (BFL0349-MS1)**

Source: 2212212-01

Prepared & Analyzed: 12/14/22

C10-C28 (DRO)	479	50	mg/kg	500	15.2	92.7	70-130			
Surrogate: o-Terphenyl	9.76		"	12.5		78.0	30-150			

**Matrix Spike Dup (BFL0349-MSD1)**

Source: 2212212-01

Prepared & Analyzed: 12/14/22

C10-C28 (DRO)	452	50	mg/kg	500	15.2	87.3	70-130	5.89	20	
Surrogate: o-Terphenyl	8.40		"	12.5		67.2	30-150			

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Farr C18-25

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
12/20/22 13:56

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

### Summit Scientific

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

#### Batch BFL0345 - EPA 5030 Soil MS

##### Blank (BFL0345-BLK1)

Prepared & Analyzed: 12/14/22

Acenaphthene	ND	0.00500	mg/kg
Anthracene	ND	0.00500	"
Benzo (a) anthracene	ND	0.00500	"
Benzo (a) pyrene	ND	0.00500	"
Benzo (b) fluoranthene	ND	0.00500	"
Benzo (k) fluoranthene	ND	0.00500	"
Chrysene	ND	0.00500	"
Dibenz (a,h) anthracene	ND	0.00500	"
Fluoranthene	ND	0.00500	"
Fluorene	ND	0.00500	"
Indeno (1,2,3-cd) pyrene	ND	0.00500	"
Pyrene	ND	0.00500	"
1-Methylnaphthalene	ND	0.00500	"
2-Methylnaphthalene	ND	0.00500	"

Surrogate: 2-Methylnaphthalene-d10	0.0254	"	0.0333	76.2	40-150
Surrogate: Fluoranthene-d10	0.0304	"	0.0333	91.1	40-150

##### LCS (BFL0345-BS1)

Prepared & Analyzed: 12/14/22

Acenaphthene	0.0385	0.00500	mg/kg	0.0333	116	31-137
Anthracene	0.0385	0.00500	"	0.0333	115	30-120
Benzo (a) anthracene	0.0393	0.00500	"	0.0333	118	30-120
Benzo (a) pyrene	0.0380	0.00500	"	0.0333	114	30-120
Benzo (b) fluoranthene	0.0382	0.00500	"	0.0333	115	30-120
Benzo (k) fluoranthene	0.0380	0.00500	"	0.0333	114	30-120
Chrysene	0.0372	0.00500	"	0.0333	112	30-120
Dibenz (a,h) anthracene	0.0354	0.00500	"	0.0333	106	30-120
Fluoranthene	0.0397	0.00500	"	0.0333	119	30-120
Fluorene	0.0386	0.00500	"	0.0333	116	30-120
Indeno (1,2,3-cd) pyrene	0.0368	0.00500	"	0.0333	110	30-120
Pyrene	0.0325	0.00500	"	0.0333	97.5	35-142
1-Methylnaphthalene	0.0364	0.00500	"	0.0333	109	35-142
2-Methylnaphthalene	0.0350	0.00500	"	0.0333	105	35-142

Surrogate: 2-Methylnaphthalene-d10	0.0351	"	0.0333	105	40-150
Surrogate: Fluoranthene-d10	0.0373	"	0.0333	112	40-150

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Farr C18-25

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
12/20/22 13:56

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

### Summit Scientific

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

#### Batch BFL0345 - EPA 5030 Soil MS

##### Matrix Spike (BFL0345-MS1)

Source: 2212230-01

Prepared & Analyzed: 12/14/22

Acenaphthene	0.0251	0.00500	mg/kg	0.0333	ND	75.2	31-137		
Anthracene	0.0275	0.00500	"	0.0333	ND	82.5	30-120		
Benzo (a) anthracene	0.0263	0.00500	"	0.0333	ND	79.0	30-120		
Benzo (a) pyrene	0.0226	0.00500	"	0.0333	ND	67.8	30-120		
Benzo (b) fluoranthene	0.0278	0.00500	"	0.0333	ND	83.5	30-120		
Benzo (k) fluoranthene	0.0237	0.00500	"	0.0333	ND	71.2	30-120		
Chrysene	0.0347	0.00500	"	0.0333	0.000319	103	30-120		
Dibenz (a,h) anthracene	0.0211	0.00500	"	0.0333	ND	63.4	30-120		
Fluoranthene	0.0291	0.00500	"	0.0333	ND	87.4	30-120		
Fluorene	0.0257	0.00500	"	0.0333	ND	77.2	30-120		
Indeno (1,2,3-cd) pyrene	0.0247	0.00500	"	0.0333	ND	74.2	30-120		
Pyrene	0.0312	0.00500	"	0.0333	ND	93.5	35-142		
1-Methylnaphthalene	0.0296	0.00500	"	0.0333	ND	88.8	15-130		
2-Methylnaphthalene	0.0267	0.00500	"	0.0333	ND	80.2	15-130		
Surrogate: 2-Methylnaphthalene-d10	0.0267		"	0.0333		80.0	40-150		
Surrogate: Fluoranthene-d10	0.0281		"	0.0333		84.3	40-150		

##### Matrix Spike Dup (BFL0345-MSD1)

Source: 2212230-01

Prepared & Analyzed: 12/14/22

Acenaphthene	0.0310	0.00500	mg/kg	0.0333	ND	93.0	31-137	21.1	30
Anthracene	0.0313	0.00500	"	0.0333	ND	94.0	30-120	13.0	30
Benzo (a) anthracene	0.0328	0.00500	"	0.0333	ND	98.5	30-120	21.9	30
Benzo (a) pyrene	0.0277	0.00500	"	0.0333	ND	83.0	30-120	20.2	30
Benzo (b) fluoranthene	0.0293	0.00500	"	0.0333	ND	87.8	30-120	5.05	30
Benzo (k) fluoranthene	0.0283	0.00500	"	0.0333	ND	84.8	30-120	17.4	30
Chrysene	0.0314	0.00500	"	0.0333	0.000319	93.1	30-120	10.0	30
Dibenz (a,h) anthracene	0.0268	0.00500	"	0.0333	ND	80.5	30-120	23.9	30
Fluoranthene	0.0335	0.00500	"	0.0333	ND	100	30-120	14.0	30
Fluorene	0.0315	0.00500	"	0.0333	ND	94.6	30-120	20.3	30
Indeno (1,2,3-cd) pyrene	0.0289	0.00500	"	0.0333	ND	86.7	30-120	15.6	30
Pyrene	0.0314	0.00500	"	0.0333	ND	94.3	35-142	0.871	30
1-Methylnaphthalene	0.0316	0.00500	"	0.0333	ND	94.7	15-130	6.46	50
2-Methylnaphthalene	0.0259	0.00500	"	0.0333	ND	77.7	15-130	3.17	50
Surrogate: 2-Methylnaphthalene-d10	0.0300		"	0.0333		90.0	40-150		
Surrogate: Fluoranthene-d10	0.0353		"	0.0333		106	40-150		

Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Farr C18-25

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
12/20/22 13:56

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

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

**Batch BFL0338 - EPA 3050B**

**Blank (BFL0338-BLK1)**

Prepared: 12/13/22 Analyzed: 12/14/22

Boron ND 0.0100 mg/L

**LCS (BFL0338-BS1)**

Prepared: 12/13/22 Analyzed: 12/14/22

Boron 5.38 0.0100 mg/L 5.00 108 80-120

**Duplicate (BFL0338-DUP1)**

Source: 2212212-01

Prepared: 12/13/22 Analyzed: 12/14/22

Boron 0.318 0.0100 mg/L 0.286 10.6 20

**Matrix Spike (BFL0338-MS1)**

Source: 2212212-01

Prepared: 12/13/22 Analyzed: 12/14/22

Boron 5.28 0.0100 mg/L 5.00 0.286 99.8 75-125

**Matrix Spike Dup (BFL0338-MSD1)**

Source: 2212212-01

Prepared: 12/13/22 Analyzed: 12/14/22

Boron 5.52 0.0100 mg/L 5.00 0.286 105 75-125 4.53 25

Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Farr C18-25

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
12/20/22 13:56

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

**Summit Scientific**

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

**Batch BFL0443 - General Preparation**

**Blank (BFL0443-BLK1)**

Prepared: 12/17/22 Analyzed: 12/18/22

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

**LCS (BFL0443-BS1)**

Prepared: 12/17/22 Analyzed: 12/18/22

Calcium	4.89	0.0500	mg/L wet	5.00	97.8	70-130
Magnesium	4.52	0.0500	"	5.00	90.5	70-130
Sodium	4.70	0.0500	"	5.00	94.1	70-130

Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Farr C18-25

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
12/20/22 13:56

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

**Summit Scientific**

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

**Batch BFL0432 - General Preparation**

**Duplicate (BFL0432-DUP1)**

**Source: 2212228-13**

**Prepared & Analyzed: 12/16/22**

% Solids	91.4	%	91.2	0.171	20
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Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Farr C18-25

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
12/20/22 13:56

**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 BFL0448 - General Preparation**

**Blank (BFL0448-BLK1)**

Prepared: 12/17/22 Analyzed: 12/18/22

Specific Conductance (EC) ND 0.0100 mmhos/cm

**LCS (BFL0448-BS1)**

Prepared: 12/17/22 Analyzed: 12/18/22

Specific Conductance (EC) 0.146 0.0100 mmhos/cm 0.150 97.5 95-105

**Duplicate (BFL0448-DUP1)**

**Source: 2212233-01**

Prepared: 12/17/22 Analyzed: 12/18/22

Specific Conductance (EC) 0.562 0.0100 mmhos/cm 0.575 2.31 20

Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Farr C18-25

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
12/20/22 13:56

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

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

**Batch BFL0447 - General Preparation**

**LCS (BFL0447-BS1)**

Prepared & Analyzed: 12/17/22

pH	9.00	pH Units	9.18	98.0	95-105
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**Duplicate (BFL0447-DUP1)**

Source: 2212153-08

Prepared & Analyzed: 12/17/22

pH	8.27	pH Units	8.23	0.485	20
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Summit Scientific

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Farr C18-25

Project Number: [none]  
Project Manager: Paul Henchan

**Reported:**  
12/20/22 13:56

### Notes and Definitions

E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument.
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