

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

May 09, 2023

Paul Henchan
Fremont Environmental
PO Box 1289
Wellington, CO 80549
RE: Noble - Oster 27-11G
Work Order #2304618

Enclosed are the results of analyses for samples received by Summit Scientific on 04/27/23 15:16. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Scott Sheely For Paul Shrewsbury
President



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Oster 27-11G

Project Number: [none]
Project Manager: Paul Henchan

Reported:
05/09/23 10:49

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FL01@5.0'	2304618-01	Soil	04/27/23 00:00	04/27/23 15:16
FL03@5.0'	2304618-02	Soil	04/27/23 00:00	04/27/23 15:16

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.

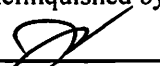
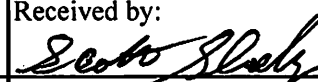
SUMMIT SCIENTIFIC

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

Lab ID	Page <u>1</u> of <u>1</u>
2304618	

Send Data To:		Send Invoice To:	
Client: Fremont Env	Project Manager: Paul Henchar	Company: Noble	
Address:	E-Mail: Paulh@fremontenv.com	Project Name/Location:	
City/State/Zip:	jeffg@fremontenv.com Ethanh@fremontenv.com	AFE#:	
Phone:	Project Name: Oster 27-116	PO/Billing Codes:	
Sampler Name: J6	Project Number:	Contact:	

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix		Air-Canister #	Other	Analysis Requested						Special Instructions
					HCl	HNO3	None	Other	Water	Soil			BTEX+N	TMS (915)	DRO,ORO,6RO	PAHS (915)	EC,PH,SAR,ROMS	Metals (915)	
1	FL01@5.0'	4/27/23		2			X			X		X	X	X	X	X			
2	FL03@5.0'	4/27/23		2			X			X		X	X	X	X	X			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			

Relinquished by: 	Date/Time: 4/27/23 1515	Received by: 	Date/Time: 4/27/23 1516	TAT Business Days	Field DO	Notes: Bill to Noble
				Same Day	Field EC	
Relinquished by:	Date/Time:	Received by:	Date/Time:	1 Day	Field ORP	
				2 Days	Field pH	
Relinquished by:	Date/Time:	Received by:	Date/Time:	3 Days	Field Temp.	
				Standard	X Field Turb.	
Temperature Upon Receipt: 21.2	Corrected Temperature: -	IR gun #: 02	HNO3 lot #:			

S₂

Sample Receipt Checklist

S2 Work Order# 2304618

Client: Fremont Environmental Client Project ID: Oster 27-116

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

[x] [] [] [] []

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

Temp (°C) 21.2

Thermometer # 02

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? (1) NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	[x]	[]	[]	
If custody seals are present, are they intact? (1)	[]	[]	[x]	
Are samples due within 48 hours present?	[]	[x]	[]	
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe ²⁺), Hexavalent Chromium (Cr ⁶⁺ , Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen	[]	[]	[x]	
Is a chain-of-custody (COC) form present and filled out Completely? (1)	[x]	[]	[]	
Is the COC properly relinquished by the client w/ date and time recorded? (1)	[x]	[]	[]	
Were all samples received intact? (1)	[x]	[]	[]	
Was adequate sample volume provided? (1)	[x]	[]	[]	
Does the COC agree with the number and type of sample bottles received? (1)	[x]	[]	[]	
Do the sample IDs on the bottle labels match the COC? (1)	[x]	[]	[]	
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	[]	[]	[x]	
Are samples preserved that require preservation (excluding cooling)? (1) Note the type of preservative in the comments column – HCl, H ₂ SO ₄ , NaOH, HNO ₃ , etc.	[]	[]	[x]	
If samples are acid preserved for metals, is the pH ≤ 2? (1) Record the pH in Comments.	[]	[]	[x]	
If dissolved metals are requested, were samples field filtered?	[]	[]	[x]	

Additional Comments (if any):

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

JF

Custodian Printed Name

4/27/23 1516

Date/Time



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Oster 27-11G

Project Number: [none]
Project Manager: Paul Henchan

Reported:
05/09/23 10:49

FL01@5.0'
2304618-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/27/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BGE0073	05/02/23	05/03/23	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: **04/27/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0428	107 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0411	103 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0393	98.2 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **04/27/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BGE0074	05/02/23	05/03/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **04/27/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	18.3	146 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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 - Oster 27-11G

Project Number: [none]
Project Manager: Paul Henchan

Reported:
05/09/23 10:49

FL01@5.0'
2304618-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **04/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGE0002	05/01/23	05/02/23	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: **04/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0226	67.7 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0208	62.3 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **04/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.241	0.0100	mg/L	1	BGE0091	05/03/23	05/08/23	EPA 6020B	

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

Date Sampled: **04/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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 - Oster 27-11G

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 05/09/23 10:49

FL01@5.0'
2304618-01 (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	97.0	0.0539	mg/L dry	1	BGE0123	05/03/23	05/07/23	EPA 6020B	
Magnesium	15.6	0.0539	"	"	"	"	"	"	
Sodium	15.3	0.0539	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **04/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.380	0.00100	units	1	BGE0217	05/07/23	05/07/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **04/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	92.7		%	1	BGE0070	05/02/23	05/02/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **04/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.162	0.0100	mmhos/cm	1	BGE0155	05/04/23	05/04/23	EPA 120.1	

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

Date Sampled: **04/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.43		pH Units	1	BGE0156	05/04/23	05/04/23	EPA 9045D	

Summit Scientific

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



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Oster 27-11G

Project Number: [none]
Project Manager: Paul Henchan

Reported:
05/09/23 10:49

FL03@5.0'
2304618-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/27/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BGE0073	05/02/23	05/03/23	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: **04/27/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0391	97.7 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0400	100 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0402	100 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **04/27/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BGE0074	05/02/23	05/03/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **04/27/23 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	17.8	142 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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 - Oster 27-11G

Project Number: [none]
Project Manager: Paul Henchan

Reported:
05/09/23 10:49

FL03@5.0'
2304618-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **04/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGE0002	05/01/23	05/02/23	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: **04/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0211	63.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0187	56.2 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **04/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.236	0.0100	mg/L	1	BGE0091	05/03/23	05/08/23	EPA 6020B	

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

Date Sampled: **04/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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 - Oster 27-11G

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 05/09/23 10:49

FL03@5.0'
2304618-02 (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	22.1	0.0558	mg/L dry	1	BGE0123	05/03/23	05/07/23	EPA 6020B	
Magnesium	6.28	0.0558	"	"	"	"	"	"	
Sodium	3.41	0.0558	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **04/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.165	0.00100	units	1	BGE0217	05/07/23	05/07/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **04/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.6		%	1	BGE0070	05/02/23	05/02/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **04/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.187	0.0100	mmhos/cm	1	BGE0155	05/04/23	05/04/23	EPA 120.1	

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

Date Sampled: **04/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.54		pH Units	1	BGE0156	05/04/23	05/04/23	EPA 9045D	

Summit Scientific

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



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Oster 27-11G

Project Number: [none]
Project Manager: Paul Henchan

Reported:
05/09/23 10:49

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 BGE0073 - EPA 5030 Soil MS

Blank (BGE0073-BLK1)

Prepared & Analyzed: 05/02/23

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	0.0416		"	0.0400		104	50-150			
Surrogate: Toluene-d8	0.0395		"	0.0400		98.8	50-150			
Surrogate: 4-Bromofluorobenzene	0.0418		"	0.0400		104	50-150			

LCS (BGE0073-BS1)

Prepared & Analyzed: 05/02/23

Benzene	0.0836	0.0020	mg/kg	0.100		83.6	70-130			
Toluene	0.0944	0.0050	"	0.100		94.4	70-130			
Ethylbenzene	0.110	0.0050	"	0.100		110	70-130			
m,p-Xylene	0.219	0.010	"	0.200		109	70-130			
o-Xylene	0.101	0.0050	"	0.100		101	70-130			
1,2,4-Trimethylbenzene	0.112	0.0050	"	0.100		112	70-130			
1,3,5-Trimethylbenzene	0.115	0.0050	"	0.100		115	70-130			
Naphthalene	0.0916	0.0038	"	0.100		91.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0323		"	0.0400		80.8	50-150			
Surrogate: Toluene-d8	0.0392		"	0.0400		98.1	50-150			
Surrogate: 4-Bromofluorobenzene	0.0389		"	0.0400		97.3	50-150			

Matrix Spike (BGE0073-MS1)

Source: 2304612-01

Prepared & Analyzed: 05/02/23

Benzene	0.0825	0.0020	mg/kg	0.100	ND	82.5	70-130			
Toluene	0.0935	0.0050	"	0.100	ND	93.5	70-130			
Ethylbenzene	0.108	0.0050	"	0.100	ND	108	70-130			
m,p-Xylene	0.213	0.010	"	0.200	ND	107	70-130			
o-Xylene	0.102	0.0050	"	0.100	ND	102	70-130			
1,2,4-Trimethylbenzene	0.112	0.0050	"	0.100	ND	112	70-130			
1,3,5-Trimethylbenzene	0.115	0.0050	"	0.100	ND	115	70-130			
Naphthalene	0.0900	0.0038	"	0.100	ND	90.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0360		"	0.0400		89.9	50-150			
Surrogate: Toluene-d8	0.0405		"	0.0400		101	50-150			
Surrogate: 4-Bromofluorobenzene	0.0398		"	0.0400		99.5	50-150			

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 - Oster 27-11G

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 05/09/23 10:49

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 BGE0073 - EPA 5030 Soil MS

Matrix Spike Dup (BGE0073-MSD1)	Source: 2304612-01			Prepared & Analyzed: 05/02/23						
Benzene	0.0812	0.0020	mg/kg	0.100	ND	81.2	70-130	1.58	30	
Toluene	0.0914	0.0050	"	0.100	ND	91.4	70-130	2.24	30	
Ethylbenzene	0.109	0.0050	"	0.100	ND	109	70-130	0.941	30	
m,p-Xylene	0.217	0.010	"	0.200	ND	109	70-130	1.74	30	
o-Xylene	0.101	0.0050	"	0.100	ND	101	70-130	0.592	30	
1,2,4-Trimethylbenzene	0.112	0.0050	"	0.100	ND	112	70-130	0.187	30	
1,3,5-Trimethylbenzene	0.114	0.0050	"	0.100	ND	114	70-130	0.445	30	
Naphthalene	0.0931	0.0038	"	0.100	ND	93.1	70-130	3.38	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0337</i>		<i>"</i>	<i>0.0400</i>		<i>84.2</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>0.0388</i>		<i>"</i>	<i>0.0400</i>		<i>97.0</i>	<i>50-150</i>			

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 - Oster 27-11G

Project Number: [none]
Project Manager: Paul Henchan

Reported:
05/09/23 10:49

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 BGE0074 - EPA 3550A

Blank (BGE0074-BLK1)

Prepared & Analyzed: 05/02/23

C10-C28 (DRO)	ND	50	mg/kg								
C28-C36 (ORO)	ND	50	"								
Surrogate: <i>o</i> -Terphenyl	14.4		"	12.5		115		30-150			

LCS (BGE0074-BS1)

Prepared & Analyzed: 05/02/23

C10-C28 (DRO)	636	50	mg/kg	500		127		70-130			
Surrogate: <i>o</i> -Terphenyl	17.1		"	12.5		137		30-150			

Matrix Spike (BGE0074-MS1)

Source: 2304612-01

Prepared & Analyzed: 05/02/23

C10-C28 (DRO)	554	50	mg/kg	500	32.7	104		70-130			
Surrogate: <i>o</i> -Terphenyl	12.0		"	12.5		96.1		30-150			

Matrix Spike Dup (BGE0074-MSD1)

Source: 2304612-01

Prepared & Analyzed: 05/02/23

C10-C28 (DRO)	502	50	mg/kg	500	32.7	93.8		70-130	9.93	20	
Surrogate: <i>o</i> -Terphenyl	12.9		"	12.5		103		30-150			

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 - Oster 27-11G

Project Number: [none]
Project Manager: Paul Henchan

Reported:
05/09/23 10:49

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 BGE0002 - EPA 5030 Soil MS

Blank (BGE0002-BLK1)

Prepared & Analyzed: 05/01/23

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	0.0298		"	0.0333		89.3	40-150			
Surrogate: Fluoranthene-d10	0.0246		"	0.0333		73.7	40-150			

LCS (BGE0002-BS1)

Prepared & Analyzed: 05/01/23

Acenaphthene	0.0290	0.00500	mg/kg	0.0333		87.1	31-137			
Anthracene	0.0286	0.00500	"	0.0333		85.9	30-120			
Benzo (a) anthracene	0.0277	0.00500	"	0.0333		83.1	30-120			
Benzo (a) pyrene	0.0276	0.00500	"	0.0333		82.7	30-120			
Benzo (b) fluoranthene	0.0293	0.00500	"	0.0333		87.8	30-120			
Benzo (k) fluoranthene	0.0298	0.00500	"	0.0333		89.5	30-120			
Chrysene	0.0267	0.00500	"	0.0333		80.1	30-120			
Dibenz (a,h) anthracene	0.0268	0.00500	"	0.0333		80.3	30-120			
Fluoranthene	0.0278	0.00500	"	0.0333		83.3	30-120			
Fluorene	0.0277	0.00500	"	0.0333		83.2	30-120			
Indeno (1,2,3-cd) pyrene	0.0170	0.00500	"	0.0333		50.9	30-120			
Pyrene	0.0281	0.00500	"	0.0333		84.4	35-142			
1-Methylnaphthalene	0.0262	0.00500	"	0.0333		78.5	35-142			
2-Methylnaphthalene	0.0277	0.00500	"	0.0333		83.0	35-142			
Surrogate: 2-Methylnaphthalene-d10	0.0290		"	0.0333		86.9	40-150			
Surrogate: Fluoranthene-d10	0.0309		"	0.0333		92.7	40-150			

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 - Oster 27-11G

Project Number: [none]
Project Manager: Paul Henchan

Reported:
05/09/23 10:49

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 BGE0002 - EPA 5030 Soil MS

Matrix Spike (BGE0002-MS1)	Source: 2304590-01			Prepared & Analyzed: 05/01/23							
Acenaphthene	0.132	0.00500	mg/kg	0.0333	0.175	NR	31-137				QM-01
Anthracene	0.188	0.00500	"	0.0333	0.232	NR	30-120				QM-01
Benzo (a) anthracene	0.263	0.00500	"	0.0333	0.326	NR	30-120				QM-01
Benzo (a) pyrene	0.173	0.00500	"	0.0333	0.213	NR	30-120				QM-01
Benzo (b) fluoranthene	0.236	0.00500	"	0.0333	0.302	NR	30-120				QM-01
Benzo (k) fluoranthene	0.110	0.00500	"	0.0333	0.129	NR	30-120				QM-01
Chrysene	0.299	0.00500	"	0.0333	0.373	NR	30-120				QM-01
Dibenz (a,h) anthracene	0.0327	0.00500	"	0.0333	0.0273	16.0	30-120				QM-01
Fluoranthene	0.518	0.00500	"	0.0333	0.599	NR	30-120				QM-01
Fluorene	0.130	0.00500	"	0.0333	0.156	NR	30-120				QM-01
Indeno (1,2,3-cd) pyrene	0.118	0.00500	"	0.0333	0.124	NR	30-120				QM-01
Pyrene	0.441	0.00500	"	0.0333	0.554	NR	35-142				QM-01
1-Methylnaphthalene	0.0299	0.00500	"	0.0333	0.0182	34.9	15-130				
2-Methylnaphthalene	0.0448	0.00500	"	0.0333	0.0429	5.68	15-130				QM-01
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0175</i>		<i>"</i>	<i>0.0333</i>		<i>52.6</i>	<i>40-150</i>				
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0145</i>		<i>"</i>	<i>0.0333</i>		<i>43.6</i>	<i>40-150</i>				

Matrix Spike Dup (BGE0002-MSD1)	Source: 2304590-01			Prepared & Analyzed: 05/01/23							
Acenaphthene	0.163	0.00500	mg/kg	0.0333	0.175	NR	31-137	20.7	30		QM-01
Anthracene	0.224	0.00500	"	0.0333	0.232	NR	30-120	17.3	30		QM-01
Benzo (a) anthracene	0.431	0.00500	"	0.0333	0.326	314	30-120	48.2	30		QM-01
Benzo (a) pyrene	0.291	0.00500	"	0.0333	0.213	233	30-120	50.9	30		QM-01
Benzo (b) fluoranthene	0.413	0.00500	"	0.0333	0.302	331	30-120	54.6	30		QM-01
Benzo (k) fluoranthene	0.187	0.00500	"	0.0333	0.129	173	30-120	51.7	30		QM-01
Chrysene	0.483	0.00500	"	0.0333	0.373	329	30-120	47.1	30		QM-01
Dibenz (a,h) anthracene	0.0440	0.00500	"	0.0333	0.0273	49.9	30-120	29.5	30		QM-01
Fluoranthene	0.784	0.00500	"	0.0333	0.599	554	30-120	40.9	30		QM-01
Fluorene	0.153	0.00500	"	0.0333	0.156	NR	30-120	16.6	30		QM-01
Indeno (1,2,3-cd) pyrene	0.166	0.00500	"	0.0333	0.124	124	30-120	33.3	30		QM-01
Pyrene	0.690	0.00500	"	0.0333	0.554	409	35-142	43.9	30		QM-01
1-Methylnaphthalene	0.0330	0.00500	"	0.0333	0.0182	44.3	15-130	9.98	50		
2-Methylnaphthalene	0.0512	0.00500	"	0.0333	0.0429	25.0	15-130	13.4	50		
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0175</i>		<i>"</i>	<i>0.0333</i>		<i>52.6</i>	<i>40-150</i>				
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0148</i>		<i>"</i>	<i>0.0333</i>		<i>44.3</i>	<i>40-150</i>				

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 - Oster 27-11G

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 05/09/23 10:49

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

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

Batch BGE0091 - EPA 3050B

Blank (BGE0091-BLK1)

Prepared: 05/03/23 Analyzed: 05/08/23

Boron ND 0.0100 mg/L

LCS (BGE0091-BS1)

Prepared: 05/03/23 Analyzed: 05/08/23

Boron 5.43 0.0100 mg/L 5.00 109 80-120

Duplicate (BGE0091-DUP1)

Source: 2304616-01

Prepared: 05/03/23 Analyzed: 05/08/23

Boron 0.278 0.0100 mg/L 0.284 2.40 20

Matrix Spike (BGE0091-MS1)

Source: 2304616-01

Prepared: 05/03/23 Analyzed: 05/08/23

Boron 5.40 0.0100 mg/L 5.00 0.284 102 75-125

Matrix Spike Dup (BGE0091-MSD1)

Source: 2304616-01

Prepared: 05/03/23 Analyzed: 05/08/23

Boron 5.71 0.0100 mg/L 5.00 0.284 109 75-125 5.58 25

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 - Oster 27-11G

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 05/09/23 10:49

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 BGE0123 - General Preparation

Blank (BGE0123-BLK1)

Prepared: 05/03/23 Analyzed: 05/07/23

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

LCS (BGE0123-BS1)

Prepared: 05/03/23 Analyzed: 05/07/23

Calcium	4.11	0.0500	mg/L wet	5.00	82.3	70-130				
Magnesium	4.89	0.0500	"	5.00	97.8	70-130				
Sodium	4.95	0.0500	"	5.00	98.9	70-130				

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 - Oster 27-11G

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 05/09/23 10:49

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

Summit Scientific

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

Batch BGE0070 - General Preparation

Duplicate (BGE0070-DUP1)		Source: 2304593-03			Prepared & Analyzed: 05/02/23		
% Solids	92.1	%		90.8	1.38	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 - Oster 27-11G

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 05/09/23 10:49

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction - Quality Control

Summit Scientific

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

Batch BGE0155 - General Preparation

Blank (BGE0155-BLK1)

Prepared & Analyzed: 05/04/23

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BGE0155-BS1)

Prepared & Analyzed: 05/04/23

Specific Conductance (EC) 0.153 0.0100 mmhos/cm 0.150 102 95-105

Duplicate (BGE0155-DUP1)

Source: 2304610-01

Prepared & Analyzed: 05/04/23

Specific Conductance (EC) 1.75 0.0100 mmhos/cm 1.77 1.14 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 - Oster 27-11G

Project Number: [none]
 Project Manager: Paul Henchan

Reported:
 05/09/23 10:49

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 BGE0156 - General Preparation

LCS (BGE0156-BS1)

Prepared & Analyzed: 05/04/23

pH 9.19 pH Units 9.18 100 95-105

Duplicate (BGE0156-DUP1)

Source: 2304610-01

Prepared & Analyzed: 05/04/23

pH 8.03 pH Units 8.02 0.125 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 - Oster 27-11G

Project Number: [none]
Project Manager: Paul Henchan

Reported:
05/09/23 10:49

Notes and Definitions

- 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