

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

December 04, 2024

Paul Henchan

Fremont Environmental

PO Box 1289

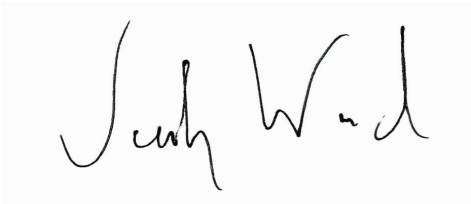
Wellington, CO 80549

RE: Noble - Booth CC 31-17D Tank

Work Order #2410159

Enclosed are the results of analyses for samples received by Summit Scientific on 10/10/24 16:33. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Jacob Wood". The signature is written in a cursive, flowing style.

Jacob Wood For Paul Shrewsbury

President



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Booth CC 31-17D Tank
Project Number: UWRWE-A2250-ABN
Project Manager: Paul Henchan

Reported:
12/04/24 12:30

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-Cent 7FT (Resample)	2410159-01	Soil	10/10/24 00:00	10/10/24 16:33
B01@7.0' (Resample)	2410159-02	Soil	10/10/24 00:00	10/10/24 16:33
B02@7.0' (Resample)	2410159-03	Soil	10/10/24 00:00	10/10/24 16:33

Case Narrative

Client requested Boron be added to B01@7.0' (Resample) on 10/15/2024.
Client requested Arsenic be added to B01@7.0' (Resample) and B02@7.0' (Resample) on 10/15/2024.
Client requested pH be added to B01@7.0' on 10/22/2024.
This report includes those results.

Project has been renamed per client request on 12/4/2024.

This is a revision of the report originally sent on 10/15/2024 at 09:29 MT.

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>
2410159	

		Send Data To:	Send Invoice To:
Client: <u>Fremont Env</u>	Project Manager: <u>Paul Henahan</u>		Company: <u>Noble</u>
Address:	E-Mail: <u>Paulh@fremontenv.com</u>		Project Name/Location:
City/State/Zip:	<u>jeff@fremontenv.com</u> <u>ethenb@fremontenv.com</u>		AFE#:
Phone:	Project Name: <u>Booth CC 31-71D Tank</u>		PO/Billing Codes: <u>UWRWE-A2250-ABN</u>
Sampler Name: <u>JG</u>	Project Number:		Contact:

					Preservative				Matrix				Analysis Requested								Special Instructions	
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	HOLD!!!	As								
1	SB-Cent 7F+ (Resample)	10/10/24		1			X			X				X								
2	Bo1@7.0' (Resample)	↓		↓			↓			↓			XX									
3	Bo2@7.0' (Resample)	↓		↓			↓			↓			XX									
4																						
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						
13																						
14																						
15																						

Relinquished by: <u>[Signature]</u>	Date/Time: <u>10/10/24 1633</u>	Received by: <u>V-H V-d</u>	Date/Time: <u>10/10/24 16:33</u>	TAT Business Days	Field DO	Notes:
Relinquished by:	Date/Time:	Received by:	Date/Time:	Same Day	Field EC	
				1 Day	Field ORP	
				2 Days	Field pH	
				3 Days	Field Temp.	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Standard	<input checked="" type="checkbox"/> Field Turb.	
Temperature Upon Receipt: <u>1.3</u>	Corrected Temperature	IR gun #: <u>2</u>	HNO3 lot #:			

S₂

Sample Receipt Checklist

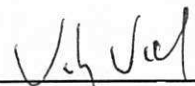
S2 Work Order# 2410159Client: Noble Fremont Client Project ID: Book CC 31-710 TankShipped Via: H.D./P.U./FedEx/UPS/USPS/Other ☐ Airbill #: ☐

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------	--------------------------	--------------------------

Matrix (Check all that apply) Air ☐ Soil/Solid ☒ Water ☐ Other ☐Temp (°C) 1.3Thermometer # 2

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

Control Form #: SRC-001


 Custodian Printed Name

12/10/24 16:33
 Date/Time



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Booth CC 31-17D Tank
Project Number: UWRWE-A2250-ABN
Project Manager: Paul Henchan

Reported:
12/04/24 12:30

SB-Cent 7FT (Resample)
2410159-01 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Date Sampled: **10/10/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Arsenic	1.37	0.200		mg/kg dry	1	BHJ0477	10/14/24	10/15/24	EPA 6020B	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/10/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
% Solids	93.3			%	1	BHJ0422	10/11/24	10/15/24	Calculation	

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 - Booth CC 31-17D Tank
Project Number: UWRWE-A2250-ABN
Project Manager: Paul Henchan

Reported:
12/04/24 12:30

B01@7.0' (Resample)
2410159-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/10/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BHJ0637	10/16/24	10/19/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/10/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	5.14	0.200	mg/kg dry	1	BHJ0652	10/16/24	10/18/24	EPA 6020B	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/10/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
% Solids	86.9		%	1	BHJ0627	10/16/24	10/17/24	Calculation	

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

Date Sampled: **10/10/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
pH	10.5		pH Units	1	BHJ1165	10/28/24	10/28/24	EPA 9045D	

Summit Scientific

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



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - Booth CC 31-17D Tank
Project Number: UWRWE-A2250-ABN
Project Manager: Paul Henchan

Reported:
12/04/24 12:30

B02@7.0' (Resample)
2410159-03 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Date Sampled: **10/10/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Arsenic	1.87	0.200		mg/kg dry	1	BHJ0652	10/16/24	10/18/24	EPA 6020B	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/10/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
% Solids	93.9			%	1	BHJ0627	10/16/24	10/17/24	Calculation	

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 - Booth CC 31-17D Tank
Project Number: UWRWE-A2250-ABN
Project Manager: Paul Henchan

Reported:
12/04/24 12:30

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 BHJ0637 - EPA 3050B

Blank (BHJ0637-BLK1)

Prepared: 10/16/24 Analyzed: 10/19/24

Boron ND 2.00 mg/L

LCS (BHJ0637-BS1)

Prepared: 10/16/24 Analyzed: 10/19/24

Boron 5.19 2.00 mg/L 5.00 104 80-120

Duplicate (BHJ0637-DUP1)

Source: 2410159-02

Prepared: 10/16/24 Analyzed: 10/19/24

Boron 1.58 2.00 mg/L 1.50 5.21 20

Matrix Spike (BHJ0637-MS1)

Source: 2410159-02

Prepared: 10/16/24 Analyzed: 10/19/24

Boron 5.98 2.00 mg/L 4.99 1.50 89.8 75-125

Matrix Spike Dup (BHJ0637-MSD1)

Source: 2410159-02

Prepared: 10/16/24 Analyzed: 10/19/24

Boron 6.28 2.00 mg/L 4.99 1.50 95.8 75-125 4.90 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 - Booth CC 31-17D Tank
Project Number: UWRWE-A2250-ABN
Project Manager: Paul Henchan

Reported:
12/04/24 12:30

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BHJ0477 - EPA 3050B

Blank (BHJ0477-BLK1)

Prepared & Analyzed: 10/14/24

Arsenic ND 0.200 mg/kg wet

LCS (BHJ0477-BS1)

Prepared & Analyzed: 10/14/24

Arsenic 41.7 0.200 mg/kg wet 41.0 102 80-120

Duplicate (BHJ0477-DUP1)

Source: 2410158-01

Prepared & Analyzed: 10/14/24

Arsenic 1.59 0.200 mg/kg dry 1.67 4.91 20

Matrix Spike (BHJ0477-MS1)

Source: 2410158-01

Prepared & Analyzed: 10/14/24

Arsenic 30.5 0.200 mg/kg dry 43.1 1.67 66.9 75-125 QM-05

Matrix Spike Dup (BHJ0477-MSD1)

Source: 2410158-01

Prepared & Analyzed: 10/14/24

Arsenic 33.2 0.200 mg/kg dry 45.5 1.67 69.3 75-125 8.57 25 QM-05

Batch BHJ0652 - EPA 3050B

Blank (BHJ0652-BLK1)

Prepared: 10/16/24 Analyzed: 10/18/24

Arsenic ND 0.200 mg/kg wet

LCS (BHJ0652-BS1)

Prepared: 10/16/24 Analyzed: 10/18/24

Arsenic 41.9 0.200 mg/kg wet 41.7 101 80-120

Duplicate (BHJ0652-DUP1)

Source: 2410159-02

Prepared: 10/16/24 Analyzed: 10/18/24

Arsenic 2.80 0.200 mg/kg dry 5.14 58.8 20 QR-04

Matrix Spike (BHJ0652-MS1)

Source: 2410159-02

Prepared: 10/16/24 Analyzed: 10/18/24

Arsenic 49.7 0.200 mg/kg dry 46.8 5.14 95.4 75-125

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 - Booth CC 31-17D Tank Project Number: UWRWE-A2250-ABN Project Manager: Paul Henchan	Reported: 12/04/24 12:30
--	---	-----------------------------

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BHJ0652 - EPA 3050B

Matrix Spike Dup (BHJ0652-MSD1)			Source: 2410159-02		Prepared: 10/16/24 Analyzed: 10/18/24				
Arsenic	49.3	0.200	mg/kg dry	46.8	5.14	94.4	75-125	0.875	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 - Booth CC 31-17D Tank

Project Number: UWRWE-A2250-ABN

Project Manager: Paul Henchan

Reported:
12/04/24 12:30

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

Summit Scientific

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

Batch BHJ0422 - General Preparation

Duplicate (BHJ0422-DUP1)

Source: 2410159-01

Prepared: 10/11/24 Analyzed: 10/15/24

% Solids	93.1	%		93.3		0.121	20
----------	------	---	--	------	--	-------	----

Batch BHJ0627 - General Preparation

Duplicate (BHJ0627-DUP1)

Source: 2410159-02

Prepared: 10/16/24 Analyzed: 10/17/24

% Solids	89.3	%		86.9		2.72	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 - Booth CC 31-17D Tank

Project Number: UWRWE-A2250-ABN
Project Manager: Paul Henchan

Reported:
12/04/24 12:30

Notes and Definitions

QR-04	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits. Sample results were accepted based on LCS and/or LCSD recoveries and/or RPD values.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. Sample results were accepted based on LCS and/or LCSD recoveries and/or RPD values.
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