

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

June 10, 2024

Paul Henchan
Fremont Environmental
PO Box 1289
Wellington, CO 80549
RE: Noble - UPV 5-5H3
Work Order #2404067

Enclosed are the results of analyses for samples received by Summit Scientific on 04/04/24 17:21. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in blue ink that reads "Jacob Wood". The signature is written in a cursive style with a blue background behind it.

Jacob Wood For Paul Shrewsbury
President



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - UPV 5-5H3

Project Number: UWRWE-A3299-ABN

Project Manager: Paul Henchan

Reported:
06/10/24 13:17

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FL01@5.0	2404067-01	Soil	04/03/24 00:00	04/04/24 17:21
FL08@5.0	2404067-02	Soil	04/03/24 00:00	04/04/24 17:21

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

Lab ID	Page 1 of 1
2404067	

Send Data To:		Send Invoice To:	
Client: Fremont Env	Project Manager: Paul Henchen	Company: Noble	
Address:	E-Mail: Paulh@fremontenv.com	Project Name/Location:	
City/State/Zip:	jeff@fremontenv.com Ethan@fremontenv.com	AFE#:	
Phone:	Project Name: UPV 5-5H3	PO/Billing Codes: UWRWE-A3299-ARU	
Sampler Name: JG	Project Number:	Contact:	

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+N	TMSs (915)	DRUGS, ORG	PAHs (915)	EC, PH, SAR, GDP, etc		Metals (915)
1	FLO1@5.0'	4/3/24		2			X			X			X	X	X	X	X	X	
2	FLO8@5.0'	4/2/24		2			X			X			X	X	X	X	X	X	
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			

Relinquished by: <i>JG</i>	Date/Time: 4/4/24	Received by: <i>Carli Falls</i>	Date/Time: 4/4/24 17:21	TAT Business Days	Field DO	Notes:
				Same Day	Field EC	
				1 Day	Field ORP	
				2 Days	Field pH	
				3 Days	Field Temp.	
				Standard	<input checked="" type="checkbox"/> Field Turb.	
Temperature Upon Receipt: 24.4	Corrected Temperature	IR gun #: Z	HNO3 lot #:			

S₂

S2 Work Order# 2404067

Sample Receipt Checklist

Client: Fresmont Client Project ID: Noble - UPV 5-5#3

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

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

Temp (°C) 24.4 Thermometer # 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
If custody seals are present, are they intact? ⁽¹⁾	<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 ²⁺), Hexavalent Chromium (Cr ⁶⁺ , 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? ⁽¹⁾	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded? ⁽¹⁾	<input type="checkbox"/>	<input checked="" 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"/>	
<u>Additional Comments (if any):</u> 				
⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.				

AS

Custodian Printed Name

4/4/24
Date/Time



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Noble - UPV 5-5H3
Project Number: UWRWE-A3299-ABN
Project Manager: Paul Henchan

Reported:
06/10/24 13:17

FL01@5.0
2404067-01 (Soil)

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Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/03/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHD0222	04/08/24	04/09/24	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: **04/03/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0271	67.6 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0462	116 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0420	105 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **04/03/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHD0226	04/08/24	04/09/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **04/03/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	8.77	70.2 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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FL01@5.0
2404067-01 (Soil)

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PAH by EPA Method 8270D SIM

Date Sampled: **04/03/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHD0208	04/08/24	04/09/24	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: **04/03/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0240	72.0 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0264	79.2 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **04/03/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHD0403	04/12/24	04/30/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **04/03/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project Manager: Paul Henchan

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FL01@5.0
2404067-01 (Soil)

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Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Barium	50.3	0.400	mg/kg dry	1	BHD0692	04/19/24	05/08/24	EPA 6020B	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	5.25	0.400	"	"	"	"	"	"	
Lead	3.64	0.200	"	"	"	"	"	"	
Nickel	2.20	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	10.1	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **04/03/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHD0464	04/15/24	04/17/24	EPA 7196A	

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

Date Sampled: **04/03/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	310	0.0500	mg/L dry	1	BHD0705	04/20/24	05/17/24	EPA 6020B	
Magnesium	14.2	0.0500	"	"	"	"	"	"	
Sodium	34.1	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **04/03/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.514	0.00100	units	1	BHE0617	05/20/24	05/20/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **04/03/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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2404067-01 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

% Solids	93.0	%	1	BHD0260	04/09/24	04/09/24	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **04/03/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.172	0.0100	mmhos/cm	1	BHD0710	04/20/24	04/22/24	EPA 120.1	

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

Date Sampled: **04/03/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	9.42		pH Units	1	BHD0709	04/20/24	04/22/24	EPA 9045D	

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 06/10/24 13:17

FL01@5.0
2404067-01 (Soil)


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Total Metals by EPA 6020B

Date Sampled: **04/03/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	2.16	0.200	mg/kg dry	1	BHE0699	05/22/24	06/03/24	EPA 6020B	

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FL08@5.0
2404067-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/03/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BHD0222	04/08/24	04/09/24	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: **04/03/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0282	70.4 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0454	113 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0436	109 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **04/03/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BHD0226	04/08/24	04/09/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **04/03/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	10.4	82.9 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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06/10/24 13:17

FL08@5.0
2404067-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **04/03/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHD0208	04/08/24	04/09/24	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: **04/03/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0238	71.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0257	77.1 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **04/03/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHD0403	04/12/24	04/30/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **04/03/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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06/10/24 13:17

FL08@5.0
2404067-02 (Soil)

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Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	3.45	0.200	mg/kg dry	1	BHD0692	04/19/24	05/08/24	EPA 6020B	
Barium	58.5	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.66	0.400	"	"	"	"	"	"	
Lead	2.67	0.200	"	"	"	"	"	"	
Nickel	2.04	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	8.08	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **04/03/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHD0464	04/15/24	04/17/24	EPA 7196A	

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

Date Sampled: **04/03/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	136	0.0500	mg/L dry	1	BHD0705	04/20/24	05/17/24	EPA 6020B	
Magnesium	22.2	0.0500	"	"	"	"	"	"	
Sodium	4.33	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **04/03/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0908	0.00100	units	1	BHE0617	05/20/24	05/20/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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 Project Number: UWRWE-A3299-ABN
 Project Manager: Paul Henchan

Reported:
 06/10/24 13:17

FL08@5.0
2404067-02 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **04/03/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	94.8		%	1	BHD0260	04/09/24	04/09/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **04/03/24 00:00**

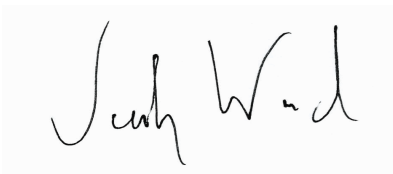
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.101	0.0100	mmhos/cm	1	BHD0710	04/20/24	04/22/24	EPA 120.1	

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

Date Sampled: **04/03/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.86		pH Units	1	BHD0709	04/20/24	04/22/24	EPA 9045D	

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Project Manager: Paul Henchan

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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 BHD0222 - EPA 5030 Soil MS

Blank (BHD0222-BLK1)

Prepared: 04/08/24 Analyzed: 04/09/24

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>	0.0336		"	0.0400		84.0	50-150			
<i>Surrogate: Toluene-d8</i>	0.0431		"	0.0400		108	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0418		"	0.0400		105	50-150			

LCS (BHD0222-BS1)

Prepared: 04/08/24 Analyzed: 04/09/24

Benzene	0.0919	0.0020	mg/kg	0.100		91.9	70-130			
Toluene	0.130	0.0050	"	0.100		130	70-130			
Ethylbenzene	0.125	0.0050	"	0.100		125	70-130			
m,p-Xylene	0.253	0.010	"	0.200		126	70-130			
o-Xylene	0.124	0.0050	"	0.100		124	70-130			
1,2,4-Trimethylbenzene	0.114	0.0050	"	0.100		114	70-130			
1,3,5-Trimethylbenzene	0.119	0.0050	"	0.100		119	70-130			
Naphthalene	0.0802	0.0038	"	0.100		80.2	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0276		"	0.0400		69.0	50-150			
<i>Surrogate: Toluene-d8</i>	0.0447		"	0.0400		112	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0431		"	0.0400		108	50-150			

Matrix Spike (BHD0222-MS1)

Source: 2404059-01

Prepared: 04/08/24 Analyzed: 04/09/24

Benzene	0.0856	0.0020	mg/kg	0.100	ND	85.6	70-130			
Toluene	0.119	0.0050	"	0.100	ND	119	70-130			
Ethylbenzene	0.114	0.0050	"	0.100	ND	114	70-130			
m,p-Xylene	0.231	0.010	"	0.200	ND	115	70-130			
o-Xylene	0.115	0.0050	"	0.100	ND	115	70-130			
1,2,4-Trimethylbenzene	0.104	0.0050	"	0.100	ND	104	70-130			
1,3,5-Trimethylbenzene	0.108	0.0050	"	0.100	ND	108	70-130			
Naphthalene	0.0770	0.0038	"	0.100	ND	77.0	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0247		"	0.0400		61.7	50-150			
<i>Surrogate: Toluene-d8</i>	0.0442		"	0.0400		110	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0417		"	0.0400		104	50-150			

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - UPV 5-5H3
 Project Number: UWRWE-A3299-ABN
 Project Manager: Paul Henchan

Reported:
 06/10/24 13:17

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 BHD0222 - EPA 5030 Soil MS

Matrix Spike Dup (BHD0222-MSD1)	Source: 2404059-01			Prepared: 04/08/24 Analyzed: 04/09/24						
Benzene	0.0874	0.0020	mg/kg	0.100	ND	87.4	70-130	2.05	30	
Toluene	0.126	0.0050	"	0.100	ND	126	70-130	5.57	30	
Ethylbenzene	0.112	0.0050	"	0.100	ND	112	70-130	2.25	30	
m,p-Xylene	0.223	0.010	"	0.200	ND	112	70-130	3.32	30	
o-Xylene	0.110	0.0050	"	0.100	ND	110	70-130	4.18	30	
1,2,4-Trimethylbenzene	0.100	0.0050	"	0.100	ND	100	70-130	4.35	30	
1,3,5-Trimethylbenzene	0.105	0.0050	"	0.100	ND	105	70-130	3.01	30	
Naphthalene	0.0760	0.0038	"	0.100	ND	76.0	70-130	1.22	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0282</i>		<i>"</i>	<i>0.0400</i>		<i>70.6</i>	<i>50-150</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0461</i>		<i>"</i>	<i>0.0400</i>		<i>115</i>	<i>50-150</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0421</i>		<i>"</i>	<i>0.0400</i>		<i>105</i>	<i>50-150</i>			

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Project: Noble - UPV 5-5H3
 Project Number: UWRWE-A3299-ABN
 Project Manager: Paul Henchan

Reported:
 06/10/24 13:17

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BHD0226 - EPA 3550A

Blank (BHD0226-BLK1)

Prepared: 04/08/24 Analyzed: 04/09/24

C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
Surrogate: <i>o</i> -Terphenyl	12.7		"	12.5		102		30-150		

LCS (BHD0226-BS1)

Prepared: 04/08/24 Analyzed: 04/09/24

C10-C28 (DRO)	550	50	mg/kg	500		110		70-130		
Surrogate: <i>o</i> -Terphenyl	12.2		"	12.5		97.4		30-150		

Matrix Spike (BHD0226-MS1)

Source: 2404059-01

Prepared: 04/08/24 Analyzed: 04/09/24

C10-C28 (DRO)	529	50	mg/kg	500	14.2	103		70-130		
Surrogate: <i>o</i> -Terphenyl	11.1		"	12.5		89.1		30-150		

Matrix Spike Dup (BHD0226-MSD1)

Source: 2404059-01

Prepared: 04/08/24 Analyzed: 04/09/24

C10-C28 (DRO)	473	50	mg/kg	500	14.2	91.8		70-130	11.0	20
Surrogate: <i>o</i> -Terphenyl	10.1		"	12.5		80.5		30-150		

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PO Box 1289
Wellington CO, 80549

Project: Noble - UPV 5-5H3
Project Number: UWRWE-A3299-ABN
Project Manager: Paul Henchan

Reported:
06/10/24 13:17

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 BHD0208 - EPA 5030 Soil MS

Blank (BHD0208-BLK1)

Prepared: 04/08/24 Analyzed: 04/09/24

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>0.0376</i>		<i>"</i>	<i>0.0333</i>		<i>113</i>		<i>40-150</i>		
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0408</i>		<i>"</i>	<i>0.0333</i>		<i>122</i>		<i>40-150</i>		

LCS (BHD0208-BS1)

Prepared: 04/08/24 Analyzed: 04/09/24

Acenaphthene	0.0335	0.00500	mg/kg	0.0333	100	31-137
Anthracene	0.0360	0.00500	"	0.0333	108	30-120
Benzo (a) anthracene	0.0342	0.00500	"	0.0333	103	30-120
Benzo (a) pyrene	0.0290	0.00500	"	0.0333	86.9	30-120
Benzo (b) fluoranthene	0.0365	0.00500	"	0.0333	110	30-120
Benzo (k) fluoranthene	0.0354	0.00500	"	0.0333	106	30-120
Chrysene	0.0336	0.00500	"	0.0333	101	30-120
Dibenz (a,h) anthracene	0.0137	0.00500	"	0.0333	41.0	30-120
Fluoranthene	0.0351	0.00500	"	0.0333	105	30-120
Fluorene	0.0281	0.00500	"	0.0333	84.4	30-120
Indeno (1,2,3-cd) pyrene	0.0159	0.00500	"	0.0333	47.7	30-120
Pyrene	0.0331	0.00500	"	0.0333	99.3	35-142
1-Methylnaphthalene	0.0305	0.00500	"	0.0333	91.5	35-142
2-Methylnaphthalene	0.0390	0.00500	"	0.0333	117	35-142
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0347</i>		<i>"</i>	<i>0.0333</i>	<i>104</i>	<i>40-150</i>
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0346</i>		<i>"</i>	<i>0.0333</i>	<i>104</i>	<i>40-150</i>

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Wellington CO, 80549

Project: Noble - UPV 5-5H3
Project Number: UWRWE-A3299-ABN
Project Manager: Paul Henchan

Reported:
06/10/24 13:17

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 BHD0208 - EPA 5030 Soil MS

Matrix Spike (BHD0208-MS1)	Source: 2404066-01			Prepared: 04/08/24 Analyzed: 04/09/24						
Acenaphthene	0.0171	0.00500	mg/kg	0.0333	ND	51.4	31-137			
Anthracene	0.0205	0.00500	"	0.0333	ND	61.6	30-120			
Benzo (a) anthracene	0.0174	0.00500	"	0.0333	ND	52.3	30-120			
Benzo (a) pyrene	0.0143	0.00500	"	0.0333	ND	42.9	30-120			
Benzo (b) fluoranthene	0.0176	0.00500	"	0.0333	ND	52.9	30-120			
Benzo (k) fluoranthene	0.0174	0.00500	"	0.0333	ND	52.1	30-120			
Chrysene	0.0159	0.00500	"	0.0333	ND	47.6	30-120			
Dibenz (a,h) anthracene	0.0135	0.00500	"	0.0333	ND	40.4	30-120			
Fluoranthene	0.0200	0.00500	"	0.0333	ND	59.9	30-120			
Fluorene	0.0139	0.00500	"	0.0333	ND	41.8	30-120			
Indeno (1,2,3-cd) pyrene	0.0159	0.00500	"	0.0333	ND	47.7	30-120			
Pyrene	0.0171	0.00500	"	0.0333	ND	51.4	35-142			
1-Methylnaphthalene	0.0164	0.00500	"	0.0333	ND	49.3	15-130			
2-Methylnaphthalene	0.0146	0.00500	"	0.0333	ND	43.8	15-130			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0177</i>		<i>"</i>	<i>0.0333</i>		<i>53.0</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0208</i>		<i>"</i>	<i>0.0333</i>		<i>62.4</i>	<i>40-150</i>			

Matrix Spike Dup (BHD0208-MSD1)	Source: 2404066-01			Prepared: 04/08/24 Analyzed: 04/09/24						
Acenaphthene	0.0153	0.00500	mg/kg	0.0333	ND	45.9	31-137	11.3	30	
Anthracene	0.0155	0.00500	"	0.0333	ND	46.6	30-120	27.7	30	
Benzo (a) anthracene	0.0153	0.00500	"	0.0333	ND	45.8	30-120	13.2	30	
Benzo (a) pyrene	0.0161	0.00500	"	0.0333	ND	48.2	30-120	11.6	30	
Benzo (b) fluoranthene	0.0201	0.00500	"	0.0333	ND	60.2	30-120	13.0	30	
Benzo (k) fluoranthene	0.0195	0.00500	"	0.0333	ND	58.6	30-120	11.9	30	
Chrysene	0.0134	0.00500	"	0.0333	ND	40.1	30-120	17.0	30	
Dibenz (a,h) anthracene	0.0138	0.00500	"	0.0333	ND	41.4	30-120	2.34	30	
Fluoranthene	0.0155	0.00500	"	0.0333	ND	46.5	30-120	25.2	30	
Fluorene	0.0138	0.00500	"	0.0333	ND	41.5	30-120	0.667	30	
Indeno (1,2,3-cd) pyrene	0.0197	0.00500	"	0.0333	ND	59.1	30-120	21.4	30	
Pyrene	0.0147	0.00500	"	0.0333	ND	44.2	35-142	15.1	30	
1-Methylnaphthalene	0.0165	0.00500	"	0.0333	ND	49.5	15-130	0.512	50	
2-Methylnaphthalene	0.0228	0.00500	"	0.0333	ND	68.3	15-130	43.7	50	
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0186</i>		<i>"</i>	<i>0.0333</i>		<i>55.9</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0161</i>		<i>"</i>	<i>0.0333</i>		<i>48.4</i>	<i>40-150</i>			

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - UPV 5-5H3
 Project Number: UWRWE-A3299-ABN
 Project Manager: Paul Henchan

Reported:
 06/10/24 13:17

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 BHD0403 - EPA 3050B

Blank (BHD0403-BLK1)

Prepared: 04/12/24 Analyzed: 04/30/24

Boron ND 2.00 mg/L

LCS (BHD0403-BS1)

Prepared: 04/12/24 Analyzed: 04/30/24

Boron 4.45 2.00 mg/L 5.00 89.1 80-120

Duplicate (BHD0403-DUP1)

Source: 2404065-01

Prepared: 04/12/24 Analyzed: 04/30/24

Boron 0.182 2.00 mg/L 0.213 15.7 20

Matrix Spike (BHD0403-MS1)

Source: 2404065-01

Prepared: 04/12/24 Analyzed: 04/30/24

Boron 4.91 2.00 mg/L 4.98 0.213 94.3 75-125

Matrix Spike Dup (BHD0403-MSD1)

Source: 2404065-01

Prepared: 04/12/24 Analyzed: 04/30/24

Boron 5.13 2.00 mg/L 4.98 0.213 98.6 75-125 4.32 25

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PO Box 1289
Wellington CO, 80549

Project: Noble - UPV 5-5H3
Project Number: UWRWE-A3299-ABN
Project Manager: Paul Henchan

Reported:
06/10/24 13:17

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BHD0692 - EPA 3050B

Blank (BHD0692-BLK1)

Prepared: 04/19/24 Analyzed: 05/08/24

Arsenic	ND	0.200	mg/kg wet							
Barium	ND	0.400	"							
Cadmium	ND	0.200	"							
Copper	ND	0.400	"							
Lead	ND	0.200	"							
Nickel	ND	0.400	"							
Silver	ND	0.0200	"							
Zinc	ND	0.400	"							
Selenium	ND	0.260	"							

LCS (BHD0692-BS1)

Prepared: 04/19/24 Analyzed: 05/08/24

Arsenic	38.3	0.200	mg/kg wet	40.0	95.9	80-120
Barium	39.0	0.400	"	40.0	97.5	80-120
Cadmium	1.93	0.200	"	2.00	96.3	80-120
Copper	42.1	0.400	"	40.0	105	80-120
Lead	18.9	0.200	"	20.0	94.5	80-120
Nickel	41.3	0.400	"	40.0	103	80-120
Silver	1.92	0.0200	"	2.00	96.2	80-120
Zinc	41.8	0.400	"	40.0	104	80-120
Selenium	4.11	0.260	"	4.00	103	80-120

Duplicate (BHD0692-DUP1)

Source: 2404052-01

Prepared: 04/19/24 Analyzed: 05/08/24

Arsenic	4.55	0.200	mg/kg dry	7.67	51.0	20	QR-04
Barium	95.0	0.400	"	96.6	1.65	20	
Cadmium	0.356	0.200	"	0.619	54.1	20	QR-01
Copper	6.22	0.400	"	6.19	0.440	20	
Lead	9.39	0.200	"	10.5	11.3	20	
Nickel	5.19	0.400	"	5.47	5.28	20	
Silver	0.0440	0.0200	"	0.0432	1.89	20	
Zinc	22.8	0.400	"	24.6	7.55	20	
Selenium	0.279	0.260	"	0.514	59.3	20	QR-01

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PO Box 1289
Wellington CO, 80549

Project: Noble - UPV 5-5H3
Project Number: UWRWE-A3299-ABN
Project Manager: Paul Henchan

Reported:
06/10/24 13:17

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BHD0692 - EPA 3050B

Matrix Spike (BHD0692-MS1)

Source: 2404052-01

Prepared: 04/19/24 Analyzed: 05/08/24

Arsenic	45.8	0.180	mg/kg dry	41.0	7.67	92.8	75-125			
Barium	128	0.360	"	41.0	96.6	76.9	75-125			
Cadmium	2.44	0.180	"	2.05	0.619	88.7	75-125			
Copper	27.7	0.360	"	41.0	6.19	52.5	75-125			QM-05
Lead	28.9	0.180	"	20.5	10.5	89.8	75-125			
Nickel	27.0	0.360	"	41.0	5.47	52.5	75-125			QM-05
Silver	2.04	0.0180	"	2.05	0.0432	97.5	75-125			
Zinc	44.1	0.360	"	41.0	24.6	47.5	75-125			QM-05
Selenium	4.30	0.234	"	4.10	0.514	92.3	75-125			

Matrix Spike Dup (BHD0692-MSD1)

Source: 2404052-01

Prepared: 04/19/24 Analyzed: 05/08/24

Arsenic	45.2	0.180	mg/kg dry	41.0	7.67	91.5	75-125	1.22	25	
Barium	128	0.360	"	41.0	96.6	76.1	75-125	0.239	25	
Cadmium	2.46	0.180	"	2.05	0.619	89.9	75-125	1.00	25	
Copper	28.5	0.360	"	41.0	6.19	54.4	75-125	2.78	25	QM-05
Lead	29.3	0.180	"	20.5	10.5	91.3	75-125	1.05	25	
Nickel	27.8	0.360	"	41.0	5.47	54.3	75-125	2.69	25	QM-05
Silver	2.06	0.0180	"	2.05	0.0432	98.1	75-125	0.641	25	
Zinc	45.8	0.360	"	41.0	24.6	51.7	75-125	3.75	25	QM-05
Selenium	4.34	0.234	"	4.10	0.514	93.3	75-125	0.949	25	

Batch BHE0699 - EPA 3050B

Blank (BHE0699-BLK1)

Prepared: 05/22/24 Analyzed: 06/03/24

Arsenic	ND	0.200	mg/kg wet							
Barium	ND	0.400	"							
Cadmium	ND	0.200	"							
Copper	ND	0.400	"							
Lead	ND	0.200	"							
Nickel	ND	0.400	"							
Silver	ND	0.0200	"							
Zinc	ND	0.400	"							
Selenium	ND	0.260	"							

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Fremont Environmental
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Wellington CO, 80549

Project: Noble - UPV 5-5H3
Project Number: UWRWE-A3299-ABN
Project Manager: Paul Henchan

Reported:
06/10/24 13:17

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BHE0699 - EPA 3050B

LCS (BHE0699-BS1)

Prepared: 05/22/24 Analyzed: 06/03/24

Arsenic	37.7	0.200	mg/kg wet	37.0		102	80-120			
Barium	38.0	0.400	"	37.0		103	80-120			
Cadmium	1.85	0.200	"	1.85		99.6	80-120			
Copper	37.6	0.400	"	37.0		102	80-120			
Lead	18.3	0.200	"	18.5		99.1	80-120			
Nickel	37.6	0.400	"	37.0		101	80-120			
Silver	1.85	0.0200	"	1.85		99.7	80-120			
Zinc	36.8	0.400	"	37.0		99.2	80-120			
Selenium	3.54	0.260	"	3.70		95.4	80-120			

Duplicate (BHE0699-DUP1)

Source: 2403362-01RE1

Prepared: 05/22/24 Analyzed: 06/03/24

Arsenic	4.41	0.181	mg/kg wet		4.43			0.286	20	
Barium	143	0.362	"		144			0.274	20	
Cadmium	0.460	0.181	"		0.458			0.388	20	
Copper	18.0	0.362	"		18.7			3.70	20	
Lead	13.0	0.181	"		12.8			1.73	20	
Nickel	12.1	0.362	"		11.8			2.90	20	
Silver	0.0609	0.0181	"		0.0608			0.114	20	
Zinc	966	0.362	"		1090			11.9	20	
Selenium	0.349	0.236	"		0.390			11.2	20	

Matrix Spike (BHE0699-MS1)

Source: 2403362-01RE1

Prepared: 05/22/24 Analyzed: 06/03/24

Arsenic	38.6	0.200	mg/kg wet	37.0	4.43	92.3	75-125			
Barium	172	0.400	"	37.0	144	77.4	75-125			
Cadmium	2.25	0.200	"	1.85	0.458	96.6	75-125			
Copper	53.2	0.400	"	37.0	18.7	93.4	75-125			
Lead	29.7	0.200	"	18.5	12.8	91.4	75-125			
Nickel	47.9	0.400	"	37.0	11.8	97.6	75-125			
Silver	1.79	0.0200	"	1.85	0.0608	93.6	75-125			
Zinc	1040	0.400	"	37.0	1090	NR	75-125			QM-07
Selenium	2.79	0.260	"	3.70	0.390	64.7	75-125			QM-07

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Fremont Environmental
 PO Box 1289
 Wellington CO, 80549

Project: Noble - UPV 5-5H3
 Project Number: UWRWE-A3299-ABN
 Project Manager: Paul Henchan

Reported:
 06/10/24 13:17

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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


Batch BHE0699 - EPA 3050B

Matrix Spike Dup (BHE0699-MSD1)

Source: 2403362-01RE1 Prepared: 05/22/24 Analyzed: 06/03/24

Analyte	Result	Limit	Units	Spike Level	Source Result	%REC	Limits	RPD	Limit	Notes
Arsenic	39.8	0.200	mg/kg wet	37.0	4.43	95.5	75-125	3.06	25	
Barium	178	0.400	"	37.0	144	91.7	75-125	3.03	25	
Cadmium	2.32	0.200	"	1.85	0.458	101	75-125	3.29	25	
Copper	55.4	0.400	"	37.0	18.7	99.1	75-125	3.90	25	
Lead	30.7	0.200	"	18.5	12.8	96.4	75-125	3.10	25	
Nickel	49.7	0.400	"	37.0	11.8	103	75-125	3.74	25	
Silver	1.85	0.0200	"	1.85	0.0608	96.5	75-125	3.01	25	
Zinc	1080	0.400	"	37.0	1090	NR	75-125	3.71	25	QM-07
Selenium	2.88	0.260	"	3.70	0.390	67.3	75-125	3.45	25	QM-07

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 Wellington CO, 80549

Project: Noble - UPV 5-5H3
 Project Number: UWRWE-A3299-ABN
 Project Manager: Paul Henchan

Reported:
 06/10/24 13:17

Hexavalent Chromium by EPA Method 7196 - Quality Control
Summit Scientific

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

Batch BHD0464 - 3060A Mod

Blank (BHD0464-BLK1)

Prepared: 04/15/24 Analyzed: 04/17/24

Chromium, Hexavalent ND 0.30 mg/kg wet

LCS (BHD0464-BS1)

Prepared: 04/15/24 Analyzed: 04/17/24

Chromium, Hexavalent 25.4 0.30 mg/kg wet 25.0 101 80-120

Duplicate (BHD0464-DUP1)

Source: 2404055-01

Prepared: 04/15/24 Analyzed: 04/17/24

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

Matrix Spike (BHD0464-MS1)

Source: 2404055-01

Prepared: 04/15/24 Analyzed: 04/17/24

Chromium, Hexavalent 27.4 0.30 mg/kg dry 28.2 ND 97.4 75-125

Matrix Spike Dup (BHD0464-MSD1)

Source: 2404055-01

Prepared: 04/15/24 Analyzed: 04/17/24

Chromium, Hexavalent 27.4 0.30 mg/kg dry 28.2 ND 97.4 75-125 0.00 20

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 Wellington CO, 80549

Project: Noble - UPV 5-5H3
 Project Number: UWRWE-A3299-ABN
 Project Manager: Paul Henchan

Reported:
 06/10/24 13:17

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 BHD0705 - General Preparation

Blank (BHD0705-BLK1)

Prepared: 04/20/24 Analyzed: 05/17/24

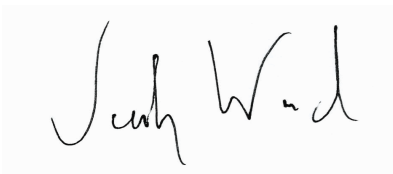
Calcium	ND	0.0500	mg/L wet							
Magnesium	ND	0.0500	"							
Sodium	ND	0.0500	"							

LCS (BHD0705-BS1)

Prepared: 04/20/24 Analyzed: 05/17/24

Calcium	5.33	0.0500	mg/L wet	5.00	107	70-130				
Magnesium	5.43	0.0500	"	5.00	109	70-130				
Sodium	5.54	0.0500	"	5.00	111	70-130				

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Project: Noble - UPV 5-5H3

Project Number: UWRWE-A3299-ABN
 Project Manager: Paul Henchan

Reported:
 06/10/24 13:17

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

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

Batch BHD0260 - General Preparation


Duplicate (BHD0260-DUP1)

Source: 2404066-04

Prepared & Analyzed: 04/09/24

% Solids	94.2		%		94.3			0.138		20	
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Project: Noble - UPV 5-5H3
 Project Number: UWRWE-A3299-ABN
 Project Manager: Paul Henchan

Reported:
 06/10/24 13:17

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 BHD0710 - General Preparation

Blank (BHD0710-BLK1)

Prepared: 04/20/24 Analyzed: 04/22/24

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BHD0710-BS1)

Prepared: 04/20/24 Analyzed: 04/22/24

Specific Conductance (EC) 0.154 0.0100 mmhos/cm 0.150 103 95-105


Duplicate (BHD0710-DUP1)

Source: 2404065-01

Prepared: 04/20/24 Analyzed: 04/22/24

Specific Conductance (EC) 0.157 0.0100 mmhos/cm 0.160 1.58 20

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Project: Noble - UPV 5-5H3
 Project Number: UWRWE-A3299-ABN
 Project Manager: Paul Henchan

Reported:
 06/10/24 13:17

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction - Quality Control
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Analyte	Reporting			Spike	Source	%REC		RPD		Notes
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	


Batch BHD0709 - General Preparation

LCS (BHD0709-BS1)										
					Prepared: 04/20/24 Analyzed: 04/22/24					
pH	9.11		pH Units	9.18	99.2	95-105				
Duplicate (BHD0709-DUP1)										
					Source: 2404065-01 Prepared: 04/20/24 Analyzed: 04/22/24					
pH	6.66		pH Units	6.71	0.748	20				

Batch BHE0694 - General Preparation

LCS (BHE0694-BS1)										
					Prepared: 05/22/24 Analyzed: 05/23/24					
pH	9.24		pH Units	9.18	101	95-105				
Duplicate (BHE0694-DUP1)										
					Source: 2404067-01RE1 Prepared: 05/22/24 Analyzed: 05/23/24					
pH	9.53		pH Units	9.54	0.105	20				

Summit Scientific



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PO Box 1289
Wellington CO, 80549

Project: Noble - UPV 5-5H3

Project Number: UWRWE-A3299-ABN
Project Manager: Paul Henchan

Reported:
06/10/24 13:17

Notes and Definitions

- QR-04 The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
- QR-01 Analyses are not controlled on RPD values from sample concentrations less than 10 times the reporting limit. QC batch accepted based on LCS and/or LCSD QC results.
- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS/LCSD recovery.
- QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The associated LCS and/or LCSD were within acceptance limits, therefore the data are considered valid.
- 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