

# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

July 18, 2024

Paul Henchan

Fremont Environmental

PO Box 1289

Wellington, CO 80549

RE: Noble - Gollner 027-07

Work Order #2407142

Enclosed are the results of analyses for samples received by Summit Scientific on 07/11/24 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 "Natalie Tessier". The signature is fluid and cursive, with the first name being more prominent.

Natalie Tessier For Paul Shrewsbury

President



Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Gollner 027-07

Project Number: UWRWE-A3585-ABN

Project Manager: Paul Henchan

**Reported:**  
07/18/24 09:19

### ANALYTICAL REPORT FOR SAMPLES

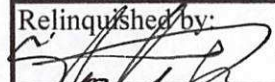
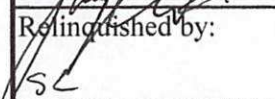
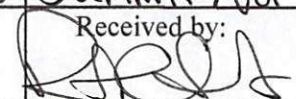
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FL01 SEP-5FT	2407142-01	Soil	07/10/24 15:15	07/11/24 16:30
FL02 WH-04FT	2407142-02	Soil	07/10/24 15:20	07/11/24 16:30

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.*

<b>Send Data To:</b>		<b>Send Invoice To:</b>
Client: Fremont Enviornmental	Project Manager: Paul Henehan	Company: Noble
Address:	E-Mail: Fremont Distribution List	Project Name/Location:
City/State/Zip:		AFE#:
Phone: 303-261-6246	Project Name: Gollner 027-07	PO/Billing Codes: UWRWF-A3585-ABW
Sampler Name: Stanley Gilbert	Project Number:	Contact: Mike Montoya

					Preservative				Matrix				Analysis Requested								Special Instructions
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	BTEX, TMBs, Naph.	TPH	PAH (915)	EC, SAR, Ph, Boron	Metals (915)	TDS, Chloride, Sulfate		HOLD	
1	FLO1 SEP-5ft	7/10/24	15:15	2			X			X			X	X	X	X	X				
2	FLO2 WH-4ft	7/10/24	15:20	2			X			X			X	X	X	X	X				
3																					
4																					
5																					
6																					
7																					
8																					
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10																					
11																					
12																					
13																					
14																					
15																					

Relinquished by: 	Date/Time: 7/10/24 17:20	Received by: Summit North	Date/Time: 7/10/24 17:20	TAT Business Days	Field DO	Notes:
Relinquished by: 	Date/Time: 7/11/24 16:30	Received by: 	Date/Time: 7/11/24 16:30	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	X Field Turb.	
Temperature Upon Receipt: 7.9	Corrected Temperature: 6	IR gun #:		HNO3 lot #:		

S<sub>2</sub>

## Sample Receipt Checklist

S2 Work Order# 2407142Client: Fremont Client Project ID: Gollner 027-07Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other ☐ Airbill #: ☐

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Matrix (Check all that apply) Air ☐ Soil/Solid ☒ Water ☐ Other ☐Temp (°C) 7.9 Thermometer # 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>once</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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>no times</u>
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)? <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.
AS  
Custodian Printed Name

7/11/24  
Date/Time



Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Gollner 027-07  
Project Number: UWRWE-A3585-ABN  
Project Manager: Paul Henchan

**Reported:**  
07/18/24 09:19

**FL01 SEP-5FT**  
**2407142-01 (Soil)**

**Summit Scientific**

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

Date Sampled: **07/10/24 15:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BHG0341	07/12/24	07/13/24	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: **07/10/24 15:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0384	96.1 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0386	96.4 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0416	104 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **07/10/24 15:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BHG0344	07/12/24	07/13/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **07/10/24 15:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	9.39	75.1 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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**2407142-01 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **07/10/24 15:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Acenaphthene	ND	0.00500	mg/kg	1	BHG0332	07/12/24	07/13/24	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: **07/10/24 15:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 2-Methylnaphthalene-d10	0.0160	48.1 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0169	50.8 %	40-150		"	"	"	"	

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

Date Sampled: **07/10/24 15:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BHG0340	07/12/24	07/13/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **07/10/24 15:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							

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Project Manager: Paul Henchan

**Reported:**  
07/18/24 09:19

**FL01 SEP-5FT**  
**2407142-01 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Arsenic	1.24	0.200	mg/kg dry	1	BHG0385	07/15/24	07/16/24	EPA 6020B
Barium	215	0.400	"	"	"	"	"	"
Cadmium	0.221	0.200	"	"	"	"	"	"
Copper	6.15	0.400	"	"	"	"	"	"
Lead	9.06	0.200	"	"	"	"	"	"
Nickel	3.73	0.400	"	"	"	"	"	"
Silver	0.0463	0.0200	"	"	"	"	"	"
Zinc	11.3	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **07/10/24 15:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHG0347	07/12/24	07/12/24	EPA 7196A	

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

Date Sampled: **07/10/24 15:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	15.9	0.0500	mg/L dry	1	BHG0339	07/12/24	07/16/24	EPA 6020B	
Magnesium	7.77	0.0500	"	"	"	"	"	"	
Sodium	18.0	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **07/10/24 15:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.925	0.00100	units	1	BHG0421	07/16/24	07/16/24	Calculation	

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

Date Sampled: **07/10/24 15:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Reported:**  
07/18/24 09:19

**FL01 SEP-5FT**  
**2407142-01 (Soil)**

**Summit Scientific**

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

% Solids	84.2	%	1	BHG0337	07/12/24	07/12/24	Calculation
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**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **07/10/24 15:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.204	0.0100	mmhos/cm	1	BHG0357	07/12/24	07/15/24	EPA 120.1	

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

Date Sampled: **07/10/24 15:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.62		pH Units	1	BHG0358	07/12/24	07/15/24	EPA 9045D	

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**Reported:**  
07/18/24 09:19

**FL02 WH-04FT**  
**2407142-02 (Soil)**

**Summit Scientific**

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

Date Sampled: **07/10/24 15:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BHG0341	07/12/24	07/13/24	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: **07/10/24 15:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0416	104 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0470	118 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0427	107 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **07/10/24 15:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BHG0344	07/12/24	07/13/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **07/10/24 15:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	10.7	85.6 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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07/18/24 09:19

**FL02 WH-04FT**  
**2407142-02 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **07/10/24 15:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHG0332	07/12/24	07/13/24	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: **07/10/24 15:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0157	47.0 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0196	58.8 %	40-150		"	"	"	"	

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

Date Sampled: **07/10/24 15:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHG0340	07/12/24	07/13/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **07/10/24 15:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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07/18/24 09:19

**FL02 WH-04FT**  
**2407142-02 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Arsenic	5.41	0.180	mg/kg dry	1	BHG0346	07/12/24	07/17/24	EPA 6020B
Barium	140	0.360	"	"	"	"	"	"
Cadmium	0.288	0.180	"	"	"	"	"	"
Copper	6.82	0.360	"	"	"	"	"	"
Lead	11.0	0.180	"	"	"	"	"	"
Nickel	7.57	0.360	"	"	"	"	"	"
Silver	0.0475	0.0180	"	"	"	"	"	"
Zinc	24.9	0.360	"	"	"	"	"	"
Selenium	ND	0.234	"	"	"	"	"	"

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **07/10/24 15:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHG0347	07/12/24	07/12/24	EPA 7196A	

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

Date Sampled: **07/10/24 15:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	36.0	0.0500	mg/L dry	1	BHG0339	07/12/24	07/16/24	EPA 6020B	
Magnesium	6.77	0.0500	"	"	"	"	"	"	
Sodium	4.63	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **07/10/24 15:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.186	0.00100	units	1	BHG0421	07/16/24	07/16/24	Calculation	

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

Date Sampled: **07/10/24 15:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project Number: UWRWE-A3585-ABN  
Project Manager: Paul Henchan

**Reported:**  
07/18/24 09:19

**FL02 WH-04FT**  
**2407142-02 (Soil)**

**Summit Scientific**

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

% Solids	75.0	%	1	BHG0337	07/12/24	07/12/24	Calculation
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**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **07/10/24 15:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.312	0.0100	mmhos/cm	1	BHG0357	07/12/24	07/15/24	EPA 120.1	

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

Date Sampled: **07/10/24 15:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.17		pH Units	1	BHG0358	07/12/24	07/15/24	EPA 9045D	

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Gollner 027-07  
Project Number: UWRWE-A3585-ABN  
Project Manager: Paul Henchan

**Reported:**  
07/18/24 09:19

## 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 BHG0341 - EPA 5030 Soil MS

##### Blank (BHG0341-BLK1)

Prepared & Analyzed: 07/12/24

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	"							
Surrogate: 1,2-Dichloroethane-d4	0.0447		"	0.0400		112	50-150			
Surrogate: Toluene-d8	0.0402		"	0.0400		100	50-150			
Surrogate: 4-Bromofluorobenzene	0.0415		"	0.0400		104	50-150			

##### LCS (BHG0341-BS1)

Prepared & Analyzed: 07/12/24

Benzene	0.101	0.0020	mg/kg	0.100		101	70-130			
Toluene	0.117	0.0050	"	0.100		117	70-130			
Ethylbenzene	0.114	0.0050	"	0.100		114	70-130			
m,p-Xylene	0.226	0.010	"	0.200		113	70-130			
o-Xylene	0.110	0.0050	"	0.100		110	70-130			
1,2,4-Trimethylbenzene	0.109	0.0050	"	0.100		109	70-130			
1,3,5-Trimethylbenzene	0.111	0.0050	"	0.100		111	70-130			
Naphthalene	0.0960	0.0038	"	0.100		96.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0404		"	0.0400		101	50-150			
Surrogate: Toluene-d8	0.0411		"	0.0400		103	50-150			
Surrogate: 4-Bromofluorobenzene	0.0398		"	0.0400		99.4	50-150			

##### Matrix Spike (BHG0341-MS1)

Source: 2407123-01

Prepared & Analyzed: 07/12/24

Benzene	0.0930	0.0020	mg/kg	0.100	ND	93.0	70-130			
Toluene	0.106	0.0050	"	0.100	ND	106	70-130			
Ethylbenzene	0.0985	0.0050	"	0.100	ND	98.5	70-130			
m,p-Xylene	0.193	0.010	"	0.200	ND	96.3	70-130			
o-Xylene	0.0977	0.0050	"	0.100	ND	97.7	70-130			
1,2,4-Trimethylbenzene	0.0891	0.0050	"	0.100	ND	89.1	70-130			
1,3,5-Trimethylbenzene	0.0890	0.0050	"	0.100	ND	89.0	70-130			
Naphthalene	0.0870	0.0038	"	0.100	ND	87.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0466		"	0.0400		116	50-150			
Surrogate: Toluene-d8	0.0402		"	0.0400		101	50-150			
Surrogate: 4-Bromofluorobenzene	0.0397		"	0.0400		99.2	50-150			

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Project Manager: Paul Henchan

**Reported:**  
07/18/24 09:19

**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 BHG0341 - EPA 5030 Soil MS**

Matrix Spike Dup (BHG0341-MSD1)		Source: 2407123-01			Prepared & Analyzed: 07/12/24					
Benzene	0.0895	0.0020	mg/kg	0.100	ND	89.5	70-130	3.91	30	
Toluene	0.119	0.0050	"	0.100	ND	119	70-130	11.3	30	
Ethylbenzene	0.113	0.0050	"	0.100	ND	113	70-130	13.7	30	
m,p-Xylene	0.221	0.010	"	0.200	ND	110	70-130	13.5	30	
o-Xylene	0.107	0.0050	"	0.100	ND	107	70-130	8.81	30	
1,2,4-Trimethylbenzene	0.0987	0.0050	"	0.100	ND	98.7	70-130	10.3	30	
1,3,5-Trimethylbenzene	0.100	0.0050	"	0.100	ND	100	70-130	12.0	30	
Naphthalene	0.0878	0.0038	"	0.100	ND	87.8	70-130	0.927	30	
Surrogate: 1,2-Dichloroethane-d4		0.0354	"	0.0400		88.5	50-150			
Surrogate: Toluene-d8		0.0406	"	0.0400		102	50-150			
Surrogate: 4-Bromofluorobenzene		0.0392	"	0.0400		98.1	50-150			

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Project: Noble - Gollner 027-07  
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Project Manager: Paul Henchan

**Reported:**  
07/18/24 09:19

**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 BHG0344 - EPA 3550A**

**Blank (BHG0344-BLK1)**

Prepared: 07/12/24 Analyzed: 07/13/24

C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
Surrogate: o-Terphenyl	11.6		"	12.5		93.0	30-150			

**LCS (BHG0344-BS1)**

Prepared: 07/12/24 Analyzed: 07/13/24

C10-C28 (DRO)	558	50	mg/kg	500		112	70-130			
Surrogate: o-Terphenyl	13.7		"	12.5		110	30-150			

**Matrix Spike (BHG0344-MS1)**

Source: 2407123-01

Prepared: 07/12/24 Analyzed: 07/13/24

C10-C28 (DRO)	500	50	mg/kg	500	ND	100	70-130			
Surrogate: o-Terphenyl	11.6		"	12.5		92.7	30-150			

**Matrix Spike Dup (BHG0344-MSD1)**

Source: 2407123-01

Prepared: 07/12/24 Analyzed: 07/13/24

C10-C28 (DRO)	423	50	mg/kg	500	ND	84.6	70-130	16.8	20	
Surrogate: o-Terphenyl	9.91		"	12.5		79.3	30-150			

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Project: Noble - Gollner 027-07  
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Project Manager: Paul Henchan

**Reported:**  
07/18/24 09:19

## 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 BHG0332 - EPA 5030 Soil MS

##### Blank (BHG0332-BLK1)

Prepared & Analyzed: 07/12/24

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	"							
Surrogate: 2-Methylnaphthalene-d10	0.0287		"	0.0333		86.1	40-150			
Surrogate: Fluoranthene-d10	0.0302		"	0.0333		90.5	40-150			

##### LCS (BHG0332-BS1)

Prepared & Analyzed: 07/12/24

Acenaphthene	0.0234	0.00500	mg/kg	0.0333		70.2	31-137			
Anthracene	0.0233	0.00500	"	0.0333		69.9	30-120			
Benzo (a) anthracene	0.0249	0.00500	"	0.0333		74.7	30-120			
Benzo (a) pyrene	0.0236	0.00500	"	0.0333		70.8	30-120			
Benzo (b) fluoranthene	0.0236	0.00500	"	0.0333		70.7	30-120			
Benzo (k) fluoranthene	0.0227	0.00500	"	0.0333		68.1	30-120			
Chrysene	0.0229	0.00500	"	0.0333		68.8	30-120			
Dibenz (a,h) anthracene	0.0210	0.00500	"	0.0333		63.0	30-120			
Fluoranthene	0.0226	0.00500	"	0.0333		67.9	30-120			
Fluorene	0.0233	0.00500	"	0.0333		69.8	30-120			
Indeno (1,2,3-cd) pyrene	0.0171	0.00500	"	0.0333		51.3	30-120			
Pyrene	0.0242	0.00500	"	0.0333		72.7	35-142			
1-Methylnaphthalene	0.0206	0.00500	"	0.0333		61.8	35-142			
2-Methylnaphthalene	0.0239	0.00500	"	0.0333		71.6	35-142			
Surrogate: 2-Methylnaphthalene-d10	0.0217		"	0.0333		65.1	40-150			
Surrogate: Fluoranthene-d10	0.0233		"	0.0333		69.9	40-150			

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Project: Noble - Gollner 027-07  
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Project Manager: Paul Henchan

**Reported:**  
07/18/24 09:19

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

#### Summit Scientific

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

#### Batch BHG0332 - EPA 5030 Soil MS

##### Matrix Spike (BHG0332-MS1)

Source: 2407139-01

Prepared & Analyzed: 07/12/24

Acenaphthene	0.0203	0.00500	mg/kg	0.0333	ND	60.8	31-137		
Anthracene	0.0194	0.00500	"	0.0333	ND	58.1	30-120		
Benzo (a) anthracene	0.0206	0.00500	"	0.0333	ND	61.8	30-120		
Benzo (a) pyrene	0.0190	0.00500	"	0.0333	ND	57.1	30-120		
Benzo (b) fluoranthene	0.0183	0.00500	"	0.0333	ND	54.9	30-120		
Benzo (k) fluoranthene	0.0175	0.00500	"	0.0333	ND	52.5	30-120		
Chrysene	0.0185	0.00500	"	0.0333	ND	55.5	30-120		
Dibenz (a,h) anthracene	0.0195	0.00500	"	0.0333	ND	58.5	30-120		
Fluoranthene	0.0194	0.00500	"	0.0333	ND	58.1	30-120		
Fluorene	0.0196	0.00500	"	0.0333	ND	58.8	30-120		
Indeno (1,2,3-cd) pyrene	0.0156	0.00500	"	0.0333	ND	46.8	30-120		
Pyrene	0.0198	0.00500	"	0.0333	ND	59.5	35-142		
1-Methylnaphthalene	0.0166	0.00500	"	0.0333	ND	49.7	15-130		
2-Methylnaphthalene	0.0180	0.00500	"	0.0333	ND	54.1	15-130		
Surrogate: 2-Methylnaphthalene-d10	0.0167		"	0.0333		50.0	40-150		
Surrogate: Fluoranthene-d10	0.0207		"	0.0333		62.1	40-150		

##### Matrix Spike Dup (BHG0332-MSD1)

Source: 2407139-01

Prepared & Analyzed: 07/12/24

Acenaphthene	0.0221	0.00500	mg/kg	0.0333	ND	66.3	31-137	8.68	30
Anthracene	0.0208	0.00500	"	0.0333	ND	62.5	30-120	7.29	30
Benzo (a) anthracene	0.0227	0.00500	"	0.0333	ND	68.0	30-120	9.57	30
Benzo (a) pyrene	0.0208	0.00500	"	0.0333	ND	62.4	30-120	8.81	30
Benzo (b) fluoranthene	0.0200	0.00500	"	0.0333	ND	60.1	30-120	9.03	30
Benzo (k) fluoranthene	0.0187	0.00500	"	0.0333	ND	56.1	30-120	6.66	30
Chrysene	0.0206	0.00500	"	0.0333	ND	61.7	30-120	10.6	30
Dibenz (a,h) anthracene	0.0208	0.00500	"	0.0333	ND	62.5	30-120	6.63	30
Fluoranthene	0.0216	0.00500	"	0.0333	ND	64.7	30-120	10.7	30
Fluorene	0.0217	0.00500	"	0.0333	ND	65.0	30-120	10.0	30
Indeno (1,2,3-cd) pyrene	0.0169	0.00500	"	0.0333	ND	50.7	30-120	8.10	30
Pyrene	0.0223	0.00500	"	0.0333	ND	66.9	35-142	11.7	30
1-Methylnaphthalene	0.0196	0.00500	"	0.0333	ND	58.7	15-130	16.6	50
2-Methylnaphthalene	0.0204	0.00500	"	0.0333	ND	61.1	15-130	12.2	50
Surrogate: 2-Methylnaphthalene-d10	0.0197		"	0.0333		59.0	40-150		
Surrogate: Fluoranthene-d10	0.0227		"	0.0333		68.2	40-150		

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Project: Noble - Gollner 027-07  
Project Number: UWRWE-A3585-ABN  
Project Manager: Paul Henchan

**Reported:**  
07/18/24 09:19

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

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

**Batch BHG0340 - EPA 3050B**

**Blank (BHG0340-BLK1)**

Prepared: 07/12/24 Analyzed: 07/13/24

Boron ND 2.00 mg/L

**LCS (BHG0340-BS1)**

Prepared: 07/12/24 Analyzed: 07/13/24

Boron 4.98 2.00 mg/L 5.00 99.6 80-120

**Duplicate (BHG0340-DUP1)**

**Source: 2407137-01**

Prepared: 07/12/24 Analyzed: 07/13/24

Boron 0.0521 2.00 mg/L 0.106 67.8 20 QR-01

**Matrix Spike (BHG0340-MS1)**

**Source: 2407137-01**

Prepared: 07/12/24 Analyzed: 07/13/24

Boron 5.08 2.00 mg/L 5.02 0.106 99.0 75-125

**Matrix Spike Dup (BHG0340-MSD1)**

**Source: 2407137-01**

Prepared: 07/12/24 Analyzed: 07/13/24

Boron 5.34 2.00 mg/L 5.02 0.106 104 75-125 4.96 25

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Project Manager: Paul Henchan

**Reported:**  
07/18/24 09:19

**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 BHG0346 - EPA 3050B**

**Blank (BHG0346-BLK1)**

Prepared: 07/12/24 Analyzed: 07/17/24

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 (BHG0346-BS1)**

Prepared: 07/12/24 Analyzed: 07/17/24

Arsenic	38.6	0.200	mg/kg wet	40.0	96.4	80-120
Barium	39.0	0.400	"	40.0	97.5	80-120
Cadmium	1.93	0.200	"	2.00	96.4	80-120
Copper	40.3	0.400	"	40.0	101	80-120
Lead	19.1	0.200	"	20.0	95.4	80-120
Nickel	40.4	0.400	"	40.0	101	80-120
Silver	1.92	0.0200	"	2.00	96.0	80-120
Zinc	39.5	0.400	"	40.0	98.7	80-120
Selenium	3.71	0.260	"	4.00	92.7	80-120

**Duplicate (BHG0346-DUP1)**

Source: 2407142-02

Prepared: 07/12/24 Analyzed: 07/17/24

Arsenic	5.83	0.200	mg/kg dry	5.41	7.40	20	QR-03
Barium	226	0.400	"	140	47.2	20	
Cadmium	0.322	0.200	"	0.288	11.1	20	
Copper	6.78	0.400	"	6.82	0.662	20	
Lead	11.0	0.200	"	11.0	0.160	20	
Nickel	7.85	0.400	"	7.57	3.63	20	
Silver	0.0555	0.0200	"	0.0475	15.5	20	
Zinc	25.5	0.400	"	24.9	2.68	20	
Selenium	ND	0.260	"	ND		20	

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Project: Noble - Gollner 027-07  
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Project Manager: Paul Henchan

**Reported:**  
07/18/24 09:19

**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 BHG0346 - EPA 3050B**

Matrix Spike (BHG0346-MS1)			Source: 2407142-02		Prepared: 07/12/24 Analyzed: 07/17/24						
Arsenic	55.7	0.200	mg/kg dry	53.3	5.41	94.3	75-125				
Barium	266	0.400	"	53.3	140	237	75-125				QM-07
Cadmium	2.87	0.200	"	2.67	0.288	97.0	75-125				
Copper	32.0	0.400	"	53.3	6.82	47.2	75-125				QM-05
Lead	35.8	0.200	"	26.7	11.0	92.8	75-125				
Nickel	33.1	0.400	"	53.3	7.57	47.8	75-125				QM-05
Silver	2.54	0.0200	"	2.67	0.0475	93.4	75-125				
Zinc	51.5	0.400	"	53.3	24.9	49.9	75-125				QM-05
Selenium	3.78	0.260	"	5.33	ND	70.8	75-125				QM-07

Matrix Spike Dup (BHG0346-MSD1)			Source: 2407142-02		Prepared: 07/12/24 Analyzed: 07/17/24						
Arsenic	53.5	0.200	mg/kg dry	50.9	5.41	94.5	75-125	4.00	25		
Barium	213	0.400	"	50.9	140	145	75-125	21.8	25		QM-07
Cadmium	2.69	0.200	"	2.54	0.288	94.3	75-125	6.69	25		
Copper	30.4	0.400	"	50.9	6.82	46.3	75-125	5.14	25		QM-05
Lead	34.5	0.200	"	25.4	11.0	92.5	75-125	3.44	25		
Nickel	31.6	0.400	"	50.9	7.57	47.2	75-125	4.63	25		QM-05
Silver	2.39	0.0200	"	2.54	0.0475	92.3	75-125	5.85	25		
Zinc	49.7	0.400	"	50.9	24.9	48.9	75-125	3.47	25		QM-05
Selenium	3.44	0.260	"	5.09	ND	67.5	75-125	9.41	25		QM-07

Post Spike (BHG0346-PS1)			Source: 2407142-02		Prepared: 07/12/24 Analyzed: 07/17/24						
Arsenic	113		ug/l	100	10.1	103	75-125				
Barium	381		"	100	262	119	75-125				
Cadmium	5.62		"	5.00	0.540	102	75-125				
Copper	61.8		"	100	12.8	49.0	75-125				QM-01
Lead	71.0		"	50.0	20.6	101	75-125				
Nickel	63.9		"	100	14.2	49.7	75-125				QM-01
Silver	5.11		"	5.00	0.0890	100	75-125				
Zinc	99.4		"	100	46.6	52.8	75-125				QM-01
Selenium	8.46		"	10.0	0.205	82.5	75-125				

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Project: Noble - Gollner 027-07  
Project Number: UWRWE-A3585-ABN  
Project Manager: Paul Henchan

**Reported:**  
07/18/24 09:19

**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 BHG0385 - EPA 3050B**

**Blank (BHG0385-BLK1)**

Prepared & Analyzed: 07/15/24

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 (BHG0385-BS1)**

Prepared & Analyzed: 07/15/24

Arsenic	44.2	0.200	mg/kg wet	40.0	110	80-120
Barium	36.3	0.400	"	40.0	90.8	80-120
Cadmium	1.77	0.200	"	2.00	88.5	80-120
Copper	40.3	0.400	"	40.0	101	80-120
Lead	17.9	0.200	"	20.0	89.6	80-120
Nickel	46.4	0.400	"	40.0	116	80-120
Silver	1.83	0.0200	"	2.00	91.4	80-120
Zinc	42.9	0.400	"	40.0	107	80-120
Selenium	3.97	0.260	"	4.00	99.3	80-120

**Duplicate (BHG0385-DUP1)**

Source: 2405229-01

Prepared & Analyzed: 07/15/24

Arsenic	0.315	0.200	mg/kg dry	0.342	8.23	20
Barium	34.6	0.400	"	37.5	8.16	20
Cadmium	0.0504	0.200	"	0.0549	8.70	20
Copper	2.10	0.400	"	2.05	2.40	20
Lead	3.08	0.200	"	3.16	2.68	20
Nickel	1.20	0.400	"	1.26	4.53	20
Silver	0.0108	0.0200	"	0.00916	16.7	20
Zinc	4.94	0.400	"	5.21	5.26	20
Selenium	ND	0.260	"	ND		20

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Gollner 027-07  
Project Number: UWRWE-A3585-ABN  
Project Manager: Paul Henchan

**Reported:**  
07/18/24 09:19

**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 BHG0385 - EPA 3050B**

**Matrix Spike (BHG0385-MS1)**

Source: 2405229-01

Prepared & Analyzed: 07/15/24

Arsenic	17.4	0.200	mg/kg dry	43.2	0.342	39.4	75-125			QM-05
Barium	69.0	0.400	"	43.2	37.5	72.9	75-125			QM-07
Cadmium	1.95	0.200	"	2.16	0.0549	87.7	75-125			
Copper	33.1	0.400	"	43.2	2.05	71.9	75-125			QM-07
Lead	20.7	0.200	"	21.6	3.16	81.0	75-125			
Nickel	19.0	0.400	"	43.2	1.26	41.1	75-125			QM-05
Silver	1.90	0.0200	"	2.16	0.00916	87.4	75-125			
Zinc	21.6	0.400	"	43.2	5.21	37.9	75-125			QM-05
Selenium	3.58	0.260	"	4.32	ND	82.9	75-125			

**Matrix Spike Dup (BHG0385-MSD1)**

Source: 2405229-01

Prepared & Analyzed: 07/15/24

Arsenic	18.2	0.200	mg/kg dry	43.2	0.342	41.4	75-125	4.89	25	QM-05
Barium	79.0	0.400	"	43.2	37.5	96.0	75-125	13.4	25	
Cadmium	2.02	0.200	"	2.16	0.0549	91.0	75-125	3.61	25	
Copper	35.7	0.400	"	43.2	2.05	78.0	75-125	7.65	25	
Lead	21.6	0.200	"	21.6	3.16	85.4	75-125	4.50	25	
Nickel	19.9	0.400	"	43.2	1.26	43.3	75-125	4.80	25	QM-05
Silver	1.97	0.0200	"	2.16	0.00916	90.7	75-125	3.69	25	
Zinc	23.0	0.400	"	43.2	5.21	41.2	75-125	6.53	25	QM-05
Selenium	3.74	0.260	"	4.32	ND	86.6	75-125	4.28	25	

**Post Spike (BHG0385-PS1)**

Source: 2405229-01

Prepared: 07/15/24 Analyzed: 07/16/24

Arsenic	42.4		ug/l	100	0.750	41.6	75-125			QM-01
Barium	191		"	100	82.2	109	75-125			
Cadmium	5.02		"	5.00	0.120	98.0	75-125			
Copper	80.7		"	100	4.50	76.2	75-125			
Lead	52.2		"	50.0	6.94	90.5	75-125			
Nickel	45.4		"	100	2.76	42.6	75-125			QM-01
Silver	4.88		"	5.00	0.0201	97.2	75-125			
Zinc	52.1		"	100	11.4	40.7	75-125			QM-01
Selenium	9.14		"	10.0	0.0365	91.0	75-125			

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Project: Noble - Gollner 027-07  
Project Number: UWRWE-A3585-ABN  
Project Manager: Paul Henchan

**Reported:**  
07/18/24 09:19

**Hexavalent Chromium by EPA Method 7196 - Quality Control**  
**Summit Scientific**

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

**Batch BHG0347 - 3060A Mod**

**Blank (BHG0347-BLK1)**

Prepared & Analyzed: 07/12/24

Chromium, Hexavalent ND 0.30 mg/kg wet

**LCS (BHG0347-BS1)**

Prepared & Analyzed: 07/12/24

Chromium, Hexavalent 24.2 0.30 mg/kg wet 25.0 96.8 80-120

**Duplicate (BHG0347-DUP1)**

**Source: 2407123-01**

Prepared & Analyzed: 07/12/24

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

**Matrix Spike (BHG0347-MS1)**

**Source: 2407123-01**

Prepared & Analyzed: 07/12/24

Chromium, Hexavalent 24.4 0.30 mg/kg dry 25.6 ND 95.2 75-125

**Matrix Spike Dup (BHG0347-MSD1)**

**Source: 2407123-01**

Prepared & Analyzed: 07/12/24

Chromium, Hexavalent 24.8 0.30 mg/kg dry 25.6 ND 96.8 75-125 1.67 20

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PO Box 1289  
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Project: Noble - Gollner 027-07  
Project Number: UWRWE-A3585-ABN  
Project Manager: Paul Henchan

**Reported:**  
07/18/24 09:19

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

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

**Batch BHG0339 - General Preparation**

**Blank (BHG0339-BLK1)**

Prepared: 07/12/24 Analyzed: 07/16/24

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

**LCS (BHG0339-BS1)**

Prepared: 07/12/24 Analyzed: 07/16/24

Calcium	5.07	0.0500	mg/L wet	5.00	101	70-130
Magnesium	5.47	0.0500	"	5.00	109	70-130
Sodium	5.61	0.0500	"	5.00	112	70-130

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Fremont Environmental	Project: Noble - Gollner 027-07	
PO Box 1289	Project Number: UWRWE-A3585-ABN	<b>Reported:</b>
Wellington CO, 80549	Project Manager: Paul Henchan	07/18/24 09:19

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

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

Batch BHG0337 - General Preparation

Duplicate (BHG0337-DUP1)		Source: 2406108-04			Prepared & Analyzed: 07/12/24					
% Solids	84.3		%		85.1			0.905	20	

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*Atalio Bessin*



Fremont Environmental  
PO Box 1289  
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Project: Noble - Gollner 027-07  
Project Number: UWRWE-A3585-ABN  
Project Manager: Paul Henchan

**Reported:**  
07/18/24 09:19

**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 BHG0357 - General Preparation**

**Blank (BHG0357-BLK1)**

Prepared: 07/12/24 Analyzed: 07/15/24

Specific Conductance (EC) ND 0.0100 mmhos/cm

**LCS (BHG0357-BS1)**

Prepared: 07/12/24 Analyzed: 07/15/24

Specific Conductance (EC) 0.151 0.0100 mmhos/cm 0.150 101 95-105

**Duplicate (BHG0357-DUP1)**

**Source: 2407142-01**

Prepared: 07/12/24 Analyzed: 07/15/24

Specific Conductance (EC) 0.202 0.0100 mmhos/cm 0.204 1.28 20

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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Gollner 027-07

Project Number: UWRWE-A3585-ABN  
Project Manager: Paul Henchan

**Reported:**  
07/18/24 09:19

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

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

**Batch BHG0358 - General Preparation**

**LCS (BHG0358-BS1)**

Prepared: 07/12/24 Analyzed: 07/15/24

pH	9.13	pH Units	9.18	99.5	95-105
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**Duplicate (BHG0358-DUP1)**

Source: 2407142-01

Prepared: 07/12/24 Analyzed: 07/15/24

pH	8.51	pH Units	8.62	1.28	20
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Fremont Environmental  
PO Box 1289  
Wellington CO, 80549

Project: Noble - Gollner 027-07

Project Number: UWRWE-A3585-ABN  
Project Manager: Paul Henchan

**Reported:**  
07/18/24 09:19

### Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. 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.
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