

# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

June 25, 2024

Jacob Whritenour

Tasman Geosciences

6855 W. 119th Ave.

Broomfield, CO 80020

RE: Noble - Phillips DL 24-24

Work Order #2406151

Enclosed are the results of analyses for samples received by Summit Scientific on 06/11/24 17:26. 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 written in a cursive, flowing style.

Natalie Tessier For Paul Shrewsbury

President



Tasman Geosciences  
6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Phillips DL 24-24  
Project Number: UWRWE-A2609-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
06/25/24 08:09

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FL01-06@3'	2406151-01	Soil	06/11/24 10:20	06/11/24 17:26
FL01-07@3'	2406151-02	Soil	06/11/24 10:29	06/11/24 17:26

# SUMMIT SCIENTIFIC

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

Lab ID	Page	of
2406151		1

<b>Send Data To:</b>		<b>Send Invoice To:</b>
Client: Noble/Tasman	Project Manager: Jake Whritenour	Company: <u>CANIRON</u>
Address: 6855 W. 119th Ave.	E-Mail: Jwhritenour@tasman-geo.com	Project Name/Location:
City/State/Zip: Broomfield/CO/ 80020	Project name: <u>Phillips DL2424</u>	AFE#: <u>UNRINE-A2609-ABN</u>
Phone: <u>978-857-4408 EW</u>		PO/Billing Codes:
Sampler Name: <u>Matthew Wentzel EW</u>	Project Number:	Contact: <u>Wade Arstein</u>

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested						Special Instructions		
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	Metals - 915	VOC - 915	TPH - 915	PAH - 915	SAR, EC, pH	Boron - HWS		HOLD	
1	FLDI-06@3'	6/11/24	1020	3			X			X				X	X	X	X	X	X		SAR, EC, pH by saturated paste
2	FLDI-07@3'	L	1029	X			L			L				X	X	X	X	X	X		
3																					
4																					
5																					
6																					
7																					
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10																					
11																					
12																					
13																					
14																					
15																					

Relinquished by: <u>Shannon Woods</u>	Date/Time: <u>6/11/24 1700</u>	Received by: <u>Tasman Lock Box</u>	Date/Time: <u>6/11/24 1700</u>	TAT Business Days	Field DO	Notes:
				Same Day	Field EC	
Relinquished by: <u>Tasman Lock Box</u>	Date/Time: <u>6/24 1726</u>	Received by: <u>[Signature]</u>	Date/Time: <u>6/24 1726</u>	1 Day	Field ORP	
				2 Days	Field pH	
				3 Days	Field Temp.	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Standard	Field Turb.	
Temperature Upon Receipt: <u>7.9</u>	Corrected Temperature: <u>8</u>	IR gun #: <u>1</u>	HNO3 lot #: _____			

S<sub>2</sub>

Sample Receipt Checklist

S2 Work Order# 2406151

Client: Noble Gasman Client Project ID: Phillips DL 24-24

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

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

Temp (°C)

Thermometer #

	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"/>	
If custody seals are present, are they intact? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are samples due within 48 hours present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe <sup>2+</sup> ), Hexavalent Chromium (Cr <sup>6+</sup> , Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out Completely? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? <b>If yes, contact client and note in narrative.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling)? <sup>(1)</sup> Note the type of preservative in the comments column – HCl, H <sub>2</sub> SO <sub>4</sub> , NaOH, HNO <sub>3</sub> , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2? <sup>(1)</sup> Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Additional Comments (if any):

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

AS  
Custodian Printed Name

6/11/24  
Date/Time



Tasman Geosciences  
6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Phillips DL 24-24

Project Number: UWRWE-A2609-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
06/25/24 08:09

**FL01-06@3'**  
**2406151-01 (Soil)**

**Summit Scientific**

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

Date Sampled: **06/11/24 10:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHF0323	06/12/24	06/13/24	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: **06/11/24 10:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0453	113 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0398	99.4 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0404	101 %		50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **06/11/24 10:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHF0324	06/12/24	06/13/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **06/11/24 10:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	7.91	63.3 %		30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

Summit Scientific

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**2406151-01 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **06/11/24 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHF0321	06/12/24	06/13/24	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: **06/11/24 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0198	59.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0220	66.0 %	40-150		"	"	"	"	

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

Date Sampled: **06/11/24 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHF0340	06/12/24	06/15/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **06/11/24 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Tasman Geosciences  
6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Phillips DL 24-24

Project Number: UWRWE-A2609-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
06/25/24 08:09

**FL01-06@3'**  
**2406151-01 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	3.89	0.200	mg/kg dry	1	BHF0383	06/13/24	06/18/24	EPA 6020B	
Barium	81.7	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	4.63	0.400	"	"	"	"	"	"	
Lead	5.87	0.200	"	"	"	"	"	"	
Nickel	5.85	0.400	"	"	"	"	"	"	
Silver	0.0297	0.0200	"	"	"	"	"	"	
Zinc	19.0	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **06/11/24 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHF0375	06/13/24	06/13/24	EPA 7196A	

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

Date Sampled: **06/11/24 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	85.6	0.0500	mg/L dry	1	BHF0472	06/17/24	06/18/24	EPA 6020B	
Magnesium	4.59	0.0500	"	"	"	"	"	"	
Sodium	2.85	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **06/11/24 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0813	0.00100	units	1	BHF0558	06/19/24	06/19/24	Calculation	

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

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**Reported:**  
06/25/24 08:09

**FL01-06@3'**  
**2406151-01 (Soil)**

**Summit Scientific**

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

Date Sampled: **06/11/24 10:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
% Solids	82.1			%	1	BHF0418	06/14/24	06/14/24	Calculation	

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

Date Sampled: **06/11/24 10:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Specific Conductance (EC)	0.109	0.0100		mmhos/cm	1	BHF0473	06/17/24	06/18/24	EPA 120.1	

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

Date Sampled: **06/11/24 10:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	8.71			pH Units	1	BHF0474	06/17/24	06/18/24	EPA 9045D	

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Project: Noble - Phillips DL 24-24  
Project Number: UWRWE-A2609-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
06/25/24 08:09

**FL01-07@3'**  
**2406151-02 (Soil)**

**Summit Scientific**

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

Date Sampled: **06/11/24 10:29**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHF0323	06/12/24	06/13/24	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: **06/11/24 10:29**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0425	106 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0394	98.6 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0411	103 %		50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **06/11/24 10:29**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHF0324	06/12/24	06/13/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **06/11/24 10:29**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	8.38	67.1 %		30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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06/25/24 08:09

**FL01-07@3'**  
**2406151-02 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **06/11/24 10:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHF0321	06/12/24	06/13/24	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: **06/11/24 10:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0165	49.4 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0175	52.5 %	40-150		"	"	"	"	

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

Date Sampled: **06/11/24 10:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHF0340	06/12/24	06/15/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **06/11/24 10:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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6855 W. 119th Ave.  
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Project: Noble - Phillips DL 24-24

Project Number: UWRWE-A2609-ABN  
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**Reported:**  
06/25/24 08:09

**FL01-07@3'**  
**2406151-02 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	4.75	0.200	mg/kg dry	1	BHF0383	06/13/24	06/18/24	EPA 6020B	
Barium	91.7	0.400	"	"	"	"	"	"	
Cadmium	0.253	0.200	"	"	"	"	"	"	
Copper	4.93	0.400	"	"	"	"	"	"	
Lead	7.36	0.200	"	"	"	"	"	"	
Nickel	6.44	0.400	"	"	"	"	"	"	
Silver	0.0463	0.0200	"	"	"	"	"	"	
Zinc	23.5	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **06/11/24 10:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHF0375	06/13/24	06/13/24	EPA 7196A	

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

Date Sampled: **06/11/24 10:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	67.4	0.0500	mg/L dry	1	BHF0472	06/17/24	06/18/24	EPA 6020B	
Magnesium	4.47	0.0500	"	"	"	"	"	"	
Sodium	1.62	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **06/11/24 10:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0516	0.00100	units	1	BHF0558	06/19/24	06/19/24	Calculation	

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

Date Sampled: **06/11/24 10:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project: Noble - Phillips DL 24-24  
Project Number: UWRWE-A2609-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
06/25/24 08:09

**FL01-07@3'**  
**2406151-02 (Soil)**

**Summit Scientific**

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

% Solids	87.4	%	1	BHF0418	06/14/24	06/14/24	Calculation
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**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **06/11/24 10:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	<b>0.0950</b>	0.0100	mmhos/cm	1	BHF0473	06/17/24	06/18/24	EPA 120.1	

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

Date Sampled: **06/11/24 10:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	<b>8.82</b>		pH Units	1	BHF0474	06/17/24	06/18/24	EPA 9045D	

Summit Scientific

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Tasman Geosciences  
6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Phillips DL 24-24

Project Number: UWRWE-A2609-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
06/25/24 08:09

### 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 BHF0323 - EPA 5030 Soil MS

##### Blank (BHF0323-BLK1)

Prepared & Analyzed: 06/12/24

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	0.0471		"	0.0400		118	50-150				
Surrogate: Toluene-d8	0.0401		"	0.0400		100	50-150				
Surrogate: 4-Bromofluorobenzene	0.0402		"	0.0400		100	50-150				

##### LCS (BHF0323-BS1)

Prepared & Analyzed: 06/12/24

Benzene	0.121	0.0020	mg/kg	0.100		121	70-130				
Toluene	0.129	0.0050	"	0.100		129	70-130				
Ethylbenzene	0.121	0.0050	"	0.100		121	70-130				
m,p-Xylene	0.237	0.010	"	0.200		119	70-130				
o-Xylene	0.117	0.0050	"	0.100		117	70-130				
1,2,4-Trimethylbenzene	0.117	0.0050	"	0.100		117	70-130				
1,3,5-Trimethylbenzene	0.117	0.0050	"	0.100		117	70-130				
Naphthalene	0.114	0.0038	"	0.100		114	70-130				
Surrogate: 1,2-Dichloroethane-d4	0.0469		"	0.0400		117	50-150				
Surrogate: Toluene-d8	0.0419		"	0.0400		105	50-150				
Surrogate: 4-Bromofluorobenzene	0.0406		"	0.0400		102	50-150				

##### Matrix Spike (BHF0323-MS1)

Source: 2406141-01

Prepared & Analyzed: 06/12/24

Benzene	0.106	0.0020	mg/kg	0.100	ND	106	70-130				
Toluene	0.108	0.0050	"	0.100	ND	108	70-130				
Ethylbenzene	0.108	0.0050	"	0.100	ND	108	70-130				
m,p-Xylene	0.216	0.010	"	0.200	ND	108	70-130				
o-Xylene	0.102	0.0050	"	0.100	ND	102	70-130				
1,2,4-Trimethylbenzene	0.117	0.0050	"	0.100	ND	117	70-130				
1,3,5-Trimethylbenzene	0.101	0.0050	"	0.100	ND	101	70-130				
Naphthalene	0.104	0.0038	"	0.100	ND	104	70-130				
Surrogate: 1,2-Dichloroethane-d4	0.0466		"	0.0400		117	50-150				
Surrogate: Toluene-d8	0.0417		"	0.0400		104	50-150				
Surrogate: 4-Bromofluorobenzene	0.0400		"	0.0400		100	50-150				

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Phillips DL 24-24

Project Number: UWRWE-A2609-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
06/25/24 08:09

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

**Summit Scientific**

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

**Batch BHF0323 - EPA 5030 Soil MS**

Matrix Spike Dup (BHF0323-MSD1)	Source: 2406141-01			Prepared & Analyzed: 06/12/24						
Benzene	0.115	0.0020	mg/kg	0.100	ND	115	70-130	7.36	30	
Toluene	0.117	0.0050	"	0.100	ND	117	70-130	8.37	30	
Ethylbenzene	0.111	0.0050	"	0.100	ND	111	70-130	2.90	30	
m,p-Xylene	0.221	0.010	"	0.200	ND	110	70-130	2.31	30	
o-Xylene	0.106	0.0050	"	0.100	ND	106	70-130	3.96	30	
1,2,4-Trimethylbenzene	0.114	0.0050	"	0.100	ND	114	70-130	2.54	30	
1,3,5-Trimethylbenzene	0.105	0.0050	"	0.100	ND	105	70-130	4.48	30	
Naphthalene	0.0994	0.0038	"	0.100	ND	99.4	70-130	4.48	30	
Surrogate: 1,2-Dichloroethane-d4	0.0496		"	0.0400		124	50-150			
Surrogate: Toluene-d8	0.0420		"	0.0400		105	50-150			
Surrogate: 4-Bromofluorobenzene	0.0410		"	0.0400		103	50-150			

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Project: Noble - Phillips DL 24-24

Project Number: UWRWE-A2609-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
06/25/24 08:09

**Extractable Petroleum Hydrocarbons by 8015 - Quality Control**  
**Summit Scientific**

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

**Batch BHF0324 - EPA 3550A**

**Blank (BHF0324-BLK1)**

Prepared & Analyzed: 06/12/24

C10-C28 (DRO)	ND	50	mg/kg								
C28-C36 (ORO)	ND	50	"								
Surrogate: <i>o</i> -Terphenyl	14.9		"	12.5		119		30-150			

**LCS (BHF0324-BS1)**

Prepared & Analyzed: 06/12/24

C10-C28 (DRO)	562	50	mg/kg	500		112		70-130			
Surrogate: <i>o</i> -Terphenyl	14.0		"	12.5		112		30-150			

**Matrix Spike (BHF0324-MS1)**

Source: 2406140-08

Prepared & Analyzed: 06/12/24

C10-C28 (DRO)	590	50	mg/kg	500	25.3	113		70-130			
Surrogate: <i>o</i> -Terphenyl	13.8		"	12.5		110		30-150			

**Matrix Spike Dup (BHF0324-MSD1)**

Source: 2406140-08

Prepared & Analyzed: 06/12/24

C10-C28 (DRO)	538	50	mg/kg	500	25.3	103		70-130	9.24	20	
Surrogate: <i>o</i> -Terphenyl	14.2		"	12.5		114		30-150			

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Broomfield CO, 80020

Project: Noble - Phillips DL 24-24  
Project Number: UWRWE-A2609-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
06/25/24 08:09

**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 BHF0321 - EPA 5030 Soil MS**

**Blank (BHF0321-BLK1)**

Prepared & Analyzed: 06/12/24

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	"							
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0279</i>		<i>"</i>	<i>0.0333</i>		<i>83.6</i>		<i>40-150</i>		
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0294</i>		<i>"</i>	<i>0.0333</i>		<i>88.1</i>		<i>40-150</i>		

**LCS (BHF0321-BS1)**

Prepared & Analyzed: 06/12/24

Acenaphthene	0.0230	0.00500	mg/kg	0.0333		69.1		31-137		
Anthracene	0.0232	0.00500	"	0.0333		69.6		30-120		
Benzo (a) anthracene	0.0246	0.00500	"	0.0333		73.8		30-120		
Benzo (a) pyrene	0.0208	0.00500	"	0.0333		62.5		30-120		
Benzo (b) fluoranthene	0.0217	0.00500	"	0.0333		65.1		30-120		
Benzo (k) fluoranthene	0.0227	0.00500	"	0.0333		68.0		30-120		
Chrysene	0.0240	0.00500	"	0.0333		71.9		30-120		
Dibenz (a,h) anthracene	0.0184	0.00500	"	0.0333		55.2		30-120		
Fluoranthene	0.0234	0.00500	"	0.0333		70.3		30-120		
Fluorene	0.0268	0.00500	"	0.0333		80.4		30-120		
Indeno (1,2,3-cd) pyrene	0.0132	0.00500	"	0.0333		39.5		30-120		
Pyrene	0.0272	0.00500	"	0.0333		81.8		35-142		
1-Methylnaphthalene	0.0265	0.00500	"	0.0333		79.6		35-142		
2-Methylnaphthalene	0.0275	0.00500	"	0.0333		82.5		35-142		
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0269</i>		<i>"</i>	<i>0.0333</i>		<i>80.8</i>		<i>40-150</i>		
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0250</i>		<i>"</i>	<i>0.0333</i>		<i>75.1</i>		<i>40-150</i>		

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Phillips DL 24-24

Project Number: UWRWE-A2609-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
06/25/24 08:09

**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 BHF0321 - EPA 5030 Soil MS**

<b>Matrix Spike (BHF0321-MS1)</b>	<b>Source: 2406139-01</b>			<b>Prepared &amp; Analyzed: 06/12/24</b>						
Acenaphthene	0.0291	0.00500	mg/kg	0.0333	ND	87.2	31-137			
Anthracene	0.0280	0.00500	"	0.0333	ND	84.0	30-120			
Benzo (a) anthracene	0.0326	0.00500	"	0.0333	ND	97.9	30-120			
Benzo (a) pyrene	0.0280	0.00500	"	0.0333	ND	84.1	30-120			
Benzo (b) fluoranthene	0.0264	0.00500	"	0.0333	ND	79.2	30-120			
Benzo (k) fluoranthene	0.0234	0.00500	"	0.0333	ND	70.3	30-120			
Chrysene	0.0318	0.00500	"	0.0333	ND	95.4	30-120			
Dibenz (a,h) anthracene	0.0260	0.00500	"	0.0333	ND	78.0	30-120			
Fluoranthene	0.0296	0.00500	"	0.0333	ND	88.9	30-120			
Fluorene	0.0284	0.00500	"	0.0333	ND	85.3	30-120			
Indeno (1,2,3-cd) pyrene	0.0323	0.00500	"	0.0333	ND	97.0	30-120			
Pyrene	0.0379	0.00500	"	0.0333	ND	114	35-142			
1-Methylnaphthalene	0.0292	0.00500	"	0.0333	ND	87.5	15-130			
2-Methylnaphthalene	0.0273	0.00500	"	0.0333	ND	82.0	15-130			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0302</i>		<i>"</i>	<i>0.0333</i>		<i>90.5</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0288</i>		<i>"</i>	<i>0.0333</i>		<i>86.4</i>	<i>40-150</i>			

<b>Matrix Spike Dup (BHF0321-MSD1)</b>	<b>Source: 2406139-01</b>			<b>Prepared &amp; Analyzed: 06/12/24</b>						
Acenaphthene	0.0232	0.00500	mg/kg	0.0333	ND	69.5	31-137	22.7	30	
Anthracene	0.0240	0.00500	"	0.0333	ND	72.1	30-120	15.2	30	
Benzo (a) anthracene	0.0254	0.00500	"	0.0333	ND	76.3	30-120	24.8	30	
Benzo (a) pyrene	0.0215	0.00500	"	0.0333	ND	64.5	30-120	26.3	30	
Benzo (b) fluoranthene	0.0213	0.00500	"	0.0333	ND	63.9	30-120	21.4	30	
Benzo (k) fluoranthene	0.0192	0.00500	"	0.0333	ND	57.5	30-120	20.0	30	
Chrysene	0.0239	0.00500	"	0.0333	ND	71.6	30-120	28.6	30	
Dibenz (a,h) anthracene	0.0232	0.00500	"	0.0333	ND	69.6	30-120	11.4	30	
Fluoranthene	0.0244	0.00500	"	0.0333	ND	73.2	30-120	19.4	30	
Fluorene	0.0241	0.00500	"	0.0333	ND	72.4	30-120	16.4	30	
Indeno (1,2,3-cd) pyrene	0.0276	0.00500	"	0.0333	ND	82.8	30-120	15.9	30	
Pyrene	0.0281	0.00500	"	0.0333	ND	84.3	35-142	29.6	30	
1-Methylnaphthalene	0.0228	0.00500	"	0.0333	ND	68.4	15-130	24.5	50	
2-Methylnaphthalene	0.0233	0.00500	"	0.0333	ND	69.9	15-130	16.0	50	
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0224</i>		<i>"</i>	<i>0.0333</i>		<i>67.1</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0257</i>		<i>"</i>	<i>0.0333</i>		<i>77.0</i>	<i>40-150</i>			

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Tasman Geosciences  
6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Phillips DL 24-24

Project Number: UWRWE-A2609-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
06/25/24 08:09

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

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

**Batch BHF0340 - EPA 3050B**

<b>Blank (BHF0340-BLK1)</b>				Prepared: 06/12/24 Analyzed: 06/14/24						
Boron	ND	2.00	mg/L							
<b>LCS (BHF0340-BS1)</b>				Prepared: 06/12/24 Analyzed: 06/15/24						
Boron	4.84	2.00	mg/L	5.00		96.7	80-120			
<b>Duplicate (BHF0340-DUP1)</b>				Source: 2406142-01			Prepared: 06/12/24 Analyzed: 06/15/24			
Boron	0.877	2.00	mg/L		0.883			0.672	20	
<b>Matrix Spike (BHF0340-MS1)</b>				Source: 2406142-01			Prepared: 06/12/24 Analyzed: 06/15/24			
Boron	6.20	2.00	mg/L	5.00	0.883	106	75-125			
<b>Matrix Spike Dup (BHF0340-MSD1)</b>				Source: 2406142-01			Prepared: 06/12/24 Analyzed: 06/15/24			
Boron	6.35	2.00	mg/L	5.00	0.883	109	75-125	2.42	25	

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Project: Noble - Phillips DL 24-24

Project Number: UWRWE-A2609-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
06/25/24 08:09

**Total Metals by EPA 6020B - Quality Control**  
**Summit Scientific**

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

**Batch BHF0383 - EPA 3050B**

**Blank (BHF0383-BLK1)**

Prepared: 06/13/24 Analyzed: 06/18/24

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 (BHF0383-BS1)**

Prepared: 06/13/24 Analyzed: 06/18/24

Arsenic	38.5	0.200	mg/kg wet	40.0	96.2	80-120
Barium	38.3	0.400	"	40.0	95.8	80-120
Cadmium	1.90	0.200	"	2.00	94.9	80-120
Copper	39.8	0.400	"	40.0	99.6	80-120
Lead	19.2	0.200	"	20.0	96.0	80-120
Nickel	39.7	0.400	"	40.0	99.4	80-120
Silver	1.91	0.0200	"	2.00	95.4	80-120
Zinc	39.7	0.400	"	40.0	99.3	80-120
Selenium	3.84	0.260	"	4.00	96.1	80-120

**Duplicate (BHF0383-DUP1)**

Source: 2406151-01

Prepared: 06/13/24 Analyzed: 06/18/24

Arsenic	3.99	0.200	mg/kg dry	3.89	2.37	20
Barium	85.6	0.400	"	81.7	4.60	20
Cadmium	0.212	0.200	"	0.193	9.25	20
Copper	4.86	0.400	"	4.63	4.85	20
Lead	5.87	0.200	"	5.87	0.0427	20
Nickel	6.04	0.400	"	5.85	3.13	20
Silver	0.0307	0.0200	"	0.0297	3.15	20
Zinc	19.9	0.400	"	19.0	5.01	20
Selenium	ND	0.260	"	ND		20

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Phillips DL 24-24

Project Number: UWRWE-A2609-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
06/25/24 08:09

**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 BHF0383 - EPA 3050B**

**Matrix Spike (BHF0383-MS1)**

Source: 2406151-01

Prepared: 06/13/24 Analyzed: 06/18/24

Arsenic	50.7	0.200	mg/kg dry	48.4	3.89	96.9	75-125				
Barium	128	0.400	"	48.4	81.7	94.8	75-125				
Cadmium	2.50	0.200	"	2.42	0.193	95.3	75-125				
Copper	32.5	0.400	"	48.4	4.63	57.6	75-125				QM-05
Lead	26.5	0.200	"	24.2	5.87	85.2	75-125				
Nickel	34.2	0.400	"	48.4	5.85	58.7	75-125				QM-05
Silver	2.27	0.0200	"	2.42	0.0297	92.6	75-125				
Zinc	48.4	0.400	"	48.4	19.0	60.9	75-125				QM-05
Selenium	3.93	0.260	"	4.84	ND	81.2	75-125				

**Matrix Spike Dup (BHF0383-MSD1)**

Source: 2406151-01

Prepared: 06/13/24 Analyzed: 06/18/24

Arsenic	45.2	0.179	mg/kg dry	43.5	3.89	95.0	75-125	11.4	25		
Barium	118	0.357	"	43.5	81.7	83.8	75-125	7.64	25		
Cadmium	2.30	0.179	"	2.18	0.193	96.6	75-125	8.46	25		
Copper	29.0	0.357	"	43.5	4.63	55.9	75-125	11.5	25		QM-05
Lead	24.0	0.179	"	21.8	5.87	83.2	75-125	9.87	25		
Nickel	30.5	0.357	"	43.5	5.85	56.7	75-125	11.5	25		QM-05
Silver	2.04	0.0179	"	2.18	0.0297	92.3	75-125	10.7	25		
Zinc	43.7	0.357	"	43.5	19.0	56.9	75-125	10.1	25		QM-05
Selenium	3.43	0.232	"	4.35	ND	78.9	75-125	13.4	25		

**Post Spike (BHF0383-PS1)**

Source: 2406151-01

Prepared: 06/13/24 Analyzed: 06/18/24

Arsenic	116		ug/l	100	8.11	108	75-125				
Barium	272		"	100	170	101	75-125				
Cadmium	5.65		"	5.00	0.403	105	75-125				
Copper	76.3		"	100	9.65	66.6	75-125				QM-01
Lead	59.7		"	50.0	12.2	94.9	75-125				
Nickel	79.3		"	100	12.2	67.1	75-125				QM-01
Silver	5.22		"	5.00	0.0620	103	75-125				
Zinc	111		"	100	39.5	71.0	75-125				QM-01
Selenium	9.69		"	10.0	0.229	94.6	75-125				

Summit Scientific

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Tasman Geosciences  
6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Phillips DL 24-24

Project Number: UWRWE-A2609-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
06/25/24 08:09

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

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

**Batch BHF0375 - 3060A Mod**

**Blank (BHF0375-BLK1)**

Prepared & Analyzed: 06/13/24

Chromium, Hexavalent      ND      0.30    mg/kg wet

**LCS (BHF0375-BS1)**

Prepared & Analyzed: 06/13/24

Chromium, Hexavalent      26.0      0.30    mg/kg wet      25.0      104      80-120

**Duplicate (BHF0375-DUP1)**

**Source: 2406149-01**

Prepared & Analyzed: 06/13/24

Chromium, Hexavalent      ND      0.30    mg/kg dry      ND      20

**Matrix Spike (BHF0375-MS1)**

**Source: 2406149-01**

Prepared & Analyzed: 06/13/24

Chromium, Hexavalent      31.6      0.30    mg/kg dry      30.7      ND      103      75-125

**Matrix Spike Dup (BHF0375-MSD1)**

**Source: 2406149-01**

Prepared & Analyzed: 06/13/24

Chromium, Hexavalent      29.9      0.30    mg/kg dry      29.8      ND      100      75-125      5.52      20

Summit Scientific

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Broomfield CO, 80020

Project: Noble - Phillips DL 24-24

Project Number: UWRWE-A2609-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
06/25/24 08:09

**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 BHF0472 - General Preparation**

**Blank (BHF0472-BLK1)**

Prepared: 06/17/24 Analyzed: 06/18/24

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

**LCS (BHF0472-BS1)**

Prepared: 06/17/24 Analyzed: 06/18/24

Calcium	5.27	0.0500	mg/L wet	5.00		105	70-130			
Magnesium	5.07	0.0500	"	5.00		101	70-130			
Sodium	4.87	0.0500	"	5.00		97.3	70-130			

Summit Scientific

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Tasman Geosciences  
 6855 W. 119th Ave.  
 Broomfield CO, 80020

Project: Noble - Phillips DL 24-24

Project Number: UWRWE-A2609-ABN

Project Manager: Jacob Whritenour

**Reported:**  
 06/25/24 08:09

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

**Summit Scientific**

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

**Batch BHF0418 - General Preparation**

<b>Duplicate (BHF0418-DUP1)</b>		<b>Source: 2404268-05</b>			<b>Prepared &amp; Analyzed: 06/14/24</b>			
% Solids	85.9		%		85.4		0.576	20

Summit Scientific

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Tasman Geosciences  
6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Phillips DL 24-24

Project Number: UWRWE-A2609-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
06/25/24 08:09

**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 BHF0473 - General Preparation**

**Blank (BHF0473-BLK1)**

Prepared: 06/17/24 Analyzed: 06/18/24

Specific Conductance (EC) ND 0.0100 mmhos/cm

**LCS (BHF0473-BS1)**

Prepared: 06/17/24 Analyzed: 06/18/24

Specific Conductance (EC) 0.150 0.0100 mmhos/cm 0.150 99.9 95-105

**Duplicate (BHF0473-DUP1)**

Source: 2406139-01

Prepared: 06/17/24 Analyzed: 06/18/24

Specific Conductance (EC) 0.184 0.0100 mmhos/cm 0.192 3.93 20

Summit Scientific

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Tasman Geosciences  
6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Phillips DL 24-24

Project Number: UWRWE-A2609-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
06/25/24 08:09

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

**Summit Scientific**

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

**Batch BHF0474 - General Preparation**

**LCS (BHF0474-BS1)**

Prepared: 06/17/24 Analyzed: 06/18/24

pH	9.20	pH Units	9.18	100	95-105
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**Duplicate (BHF0474-DUP1)**

Source: 2406139-01

Prepared: 06/17/24 Analyzed: 06/18/24

pH	7.62	pH Units	7.71	1.17	20
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Summit Scientific

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Tasman Geosciences  
6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Phillips DL 24-24

Project Number: UWRWE-A2609-ABN

Project Manager: Jacob Whritenour

**Reported:**  
06/25/24 08:09

### Notes and Definitions

- 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