

# Flowline Closure Checklist

## ECMC Rule 911.a.(4) Environmental Site Closure Assessment Field Form

Additional Attachments:		Tank Battery Closure		Wellhead Closure		Pit Closure		Partially Buried Vault Closure
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Site Name & ECMC Facility Number: UNI UPR C25-6	Date: 2/12/2024, 2/13/2024	Remediation Project #: 22716
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Associated Wells:	Age of Site:	Number of Photos Attached: 9
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Starting point: (GPS coordinates and descriptions)  
40.285498, -104.501596

End point: (GPS coordinates and descriptions)  
40.2854688, -104.501593

USCS Soil Type: SM      Estimated Depth to Groundwater: >4'

Hydrocarbon Impacted Soils / Spills: (Note estimated size and if impact appears to be surficial or extends to an unknown depth)  
None observed

Salt Crusted Soils or Impacted Vegetation: (Note estimated size and if impact appears to be surficial or extends to an unknown depth)  
None observed

### Flowlines

Flowline type	Oil / Gas / Water			
Depth	3'			
Age				
Length	1,908'			
Construction Material	Steel			
Were flowlines pulled?	Yes			
Visual Integrity of lines	Good			
Visual impacts if trenched	None			
PID Readings if trenched	0.0 - 0.2			
Sample taken? Location/Sample ID#	Yes, see below			
Photo Number(s)				

Other observations regarding on location flowlines:  
  
Samples were taken along the flowline path (FL01-C@3' - FL01-K@3').

### Summary

Was impacted soil identified? <b>No</b>	
Total number of samples field screened: 9	Total number of samples collected: 9
Highest PID Reading: 0.2	Total number of samples submitted to lab for analysis: 2
<b>If more than 10 cubic yards of impacted soil were observed:</b>	
Vertical extent:	Estimated spill volume:
Lateral extent:	Volume of soil removed:
Is additional investigation required?	
Was groundwater encountered during the investigation? <b>No</b>	
Measured depth to groundwater:	Was remedial groundwater removal conducted?
Date Groundwater was encountered:	Commencement date of removal:
Sheen on groundwater?	Volume of groundwater removed prior to sampling:
Free product observed?	Volume of groundwater removed post sampling:
Total number of samples collected:	Total Volume of groundwater removed:
Total number of samples submitted to lab for analysis:	

**Photographic Log**


<b>Equipment ID:</b> FL01-C@3'		<b>Equipment Type:</b>		<b>Equipment ID:</b> FL01-D@3'		<b>Equipment Type:</b>	
<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>		<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>	
<b>Notes/Conditions:</b>				<b>Notes/Conditions:</b>			

## Photographic Log



<b>Equipment ID:</b> FL01-E@4'		<b>Equipment Type:</b>		<b>Equipment ID:</b> FL01-F@4'		<b>Equipment Type:</b>	
<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>		<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>	
<b>Notes/Conditions:</b>				<b>Notes/Conditions:</b>			

**Photographic Log**


<b>Equipment ID:</b> FL01-G@3'		<b>Equipment Type:</b>	
<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>	
<b>Notes/Conditions:</b>			

<b>Equipment ID:</b> FL01-H@3'		<b>Equipment Type:</b>	
<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>	
<b>Notes/Conditions:</b>			

### Photographic Log



<b>Equipment ID:</b> FL01-I@3'		<b>Equipment Type:</b>		<b>Equipment ID:</b> FL01-J@3'		<b>Equipment Type:</b>	
<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>		<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>	
<b>Notes/Conditions:</b>				<b>Notes/Conditions:</b>			



<b>Equipment ID:</b> FL01-K@3'		<b>Equipment Type:</b>		<b>Equipment ID:</b>		<b>Equipment Type:</b>	
<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>		<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>	
<b>Notes/Conditions:</b>				<b>Notes/Conditions:</b>			

**TABLE 1**  
**SOIL SAMPLE LOCATIONS**  
**NOBLE ENERGY, INC. - UNI UPR C25-06**

Soil Sample ID	Date	PID (ppm)	Visual	Olfactory	Sample Type (Grab/Lab)	Latitude <sup>1</sup>	Longitude <sup>1</sup>	PDOP
FL01-C@3'	02/12/24	0.2	No Staining	No Odor	Grab	40.285441	-104.501883	0.8
FL01-D@3'	02/12/24	0.0	No Staining	No Odor	Lab	40.285535	-104.502199	0.9
FL01-E@4'	02/12/24	0.0	No Staining	No Odor	Lab	40.285742	-104.502369	0.9
FL01-F@4'	02/12/24	0.1	No Staining	No Odor	Grab	40.286033	-104.502422	0.9
FL01-G@3'	02/13/24	0.0	No Staining	No Odor	Grab	40.286752	-104.502647	0.9
FL01-H@3'	02/13/24	0.0	No Staining	No Odor	Grab	40.287653	-104.502982	0.8
FL01-I@4'	02/13/24	0.0	No Staining	No Odor	Grab	40.288547	-104.503313	0.8
FL01-J@4'	02/13/24	0.0	No Staining	No Odor	Grab	40.288875	-104.503454	0.9
FL01-K@3'	02/13/24	0.0	No Staining	No Odor	Grab	40.289370	-104.503624	0.8

Notes:

PID = Photoionization detector

ppm = parts per million

PDOP = Position dilution of precision

1.) Latitude and longitude coordinates will be provided in decimal degrees with an accuracy and precision of 5 decimals of a degree using the North American Datum ("NAD") of 1983

TABLE 2  
SOIL ANALYTICAL DATA  
NOBLE ENERGY, INC. - UNI UPR C25-06

Soil Sample ID	Date	<sup>1</sup> Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	1,2,4 - TMB (mg/kg)	1,3,5 - TMB (mg/kg)	Naphthalene (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	TPH-ORO (mg/kg)	Acenaphthene (mg/kg)	Anthracene (mg/kg)	Benz(a) (mg/kg)	Benzo(a) (mg/kg)	Benzo(b) (mg/kg)	Benzo(k) (mg/kg)	Chrysene (mg/kg)	A,H (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	1,2,3-CD (mg/kg)	Pyrene (mg/kg)	1-M (mg/kg)	2-M (mg/kg)
Residential SSL <sup>1,2</sup>		1.2	490	5.8	58	30	27	2	500			360	1,800	1.1	0.11	1.1	11	110	0.11	240	240	1.1	180	18	24
Protection of Groundwater SSL <sup>1,2,3</sup>		0.0026	0.69	0.78	9.9	0.0081	0.0087	0.0038	500			0.55	6	0.011	0.24	0.3	2.9	9	0.096	8.9	0.54	0.98	1.3	0.006	0.019
FL01-D@3'	02/12/24	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
FL01-E@4'	02/12/24	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500

Soil Sample ID	Date	pH	SAR	EC (mmhos/cm)	Boron (mg/L)
SSR <sup>1,2</sup>		6 - 8.3	<6	<4mmhos/cm	2
FL01-D@3'	02/12/24	8.14	2.27	0.531	<2.00
FL01-E@4'	02/12/24	8.31	2.11	0.441	<2.00

Soil Sample ID	Date	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (VI) (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Zinc (mg/kg)
Residential SSL <sup>1,2</sup>		0.68	15,000	71	0.3	3,100	400	1,500	390	390	23,000
Protection of Groundwater SSL <sup>1,2,3</sup>		0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
FL01-D@3'	02/12/24	1.02	28.7	<0.200	<0.080	1.78	2.84	1.82	<0.260	0.0266	8.81
FL01-E@4'	02/12/24	1.08	29.9	<0.200	<0.080	1.83	2.91	2.17	<0.260	<0.0200	8.83

Notes:

- Compounds referenced from 2 CCR 404-1, Table 915-1, effective January 15, 2021.
- Soil Screening Levels (SSL) and Soil Suitability for Reclamation (SSR) standards referenced from EPA Regional Screening Levels (EPA RSLs) for Chemical Contaminants at Superfund Sites, effective November 2020.
- SSLs are applicable if a pathway for communication with groundwater is present.

Definitions:

ECMC = Energy & Carbon Management Commission

TPH-GRO = Total petroleum hydrocarbons - gasoline range organics

TPH-DRO = Total petroleum hydrocarbons - diesel range organics

TPH-ORO = Total petroleum hydrocarbons - oil range organics

mg/kg = Milligrams per kilogram

SAR = Sodium Adsorption Ratio

EC = Electrical Conductivity

mmhos/cm = Millimhos per centimeter

mg/L = Milligrams per liter

< = Analytical result is less than the indicated laboratory reporting limit

Highlighted results are equal to or exceed the ECMC Table 915-1 standard

1,2,4 - TMB = 1,2,4 Trimethylbenzene

1,3,5 - TMB = 1,3,5 Trimethylbenzene

Benzo(a) = Benzo(a)anthracene

Benzo(b) = Benzo(b)fluoranthene

Benzo(k) = Benzo(k)fluoranthene

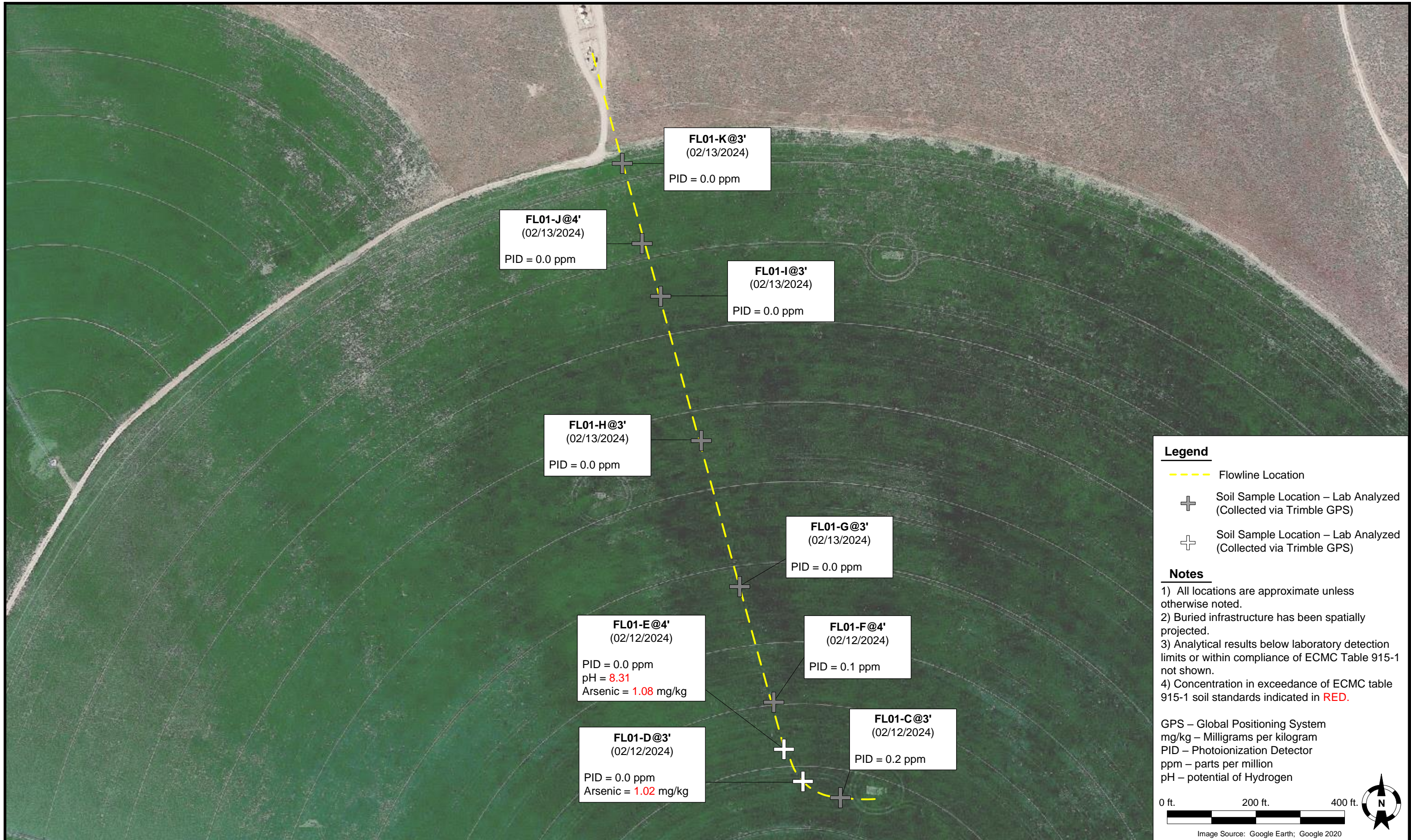
Benzo(a) = Benzo(a)pyrene

A,H = Dibenzo(a,h)anthracene

1,2,3-CD = Indeno(1,2,3-cd)pyrene

1-M = 1-methylnaphthalene

2-M = 2-methylnaphthalene



**Legend**

- Flowline Location
- + Soil Sample Location – Lab Analyzed (Collected via Trimble GPS)
- + Soil Sample Location – Lab Analyzed (Collected via Trimble GPS)

**Notes**

- 1) All locations are approximate unless otherwise noted.
- 2) Buried infrastructure has been spatially projected.
- 3) Analytical results below laboratory detection limits or within compliance of ECMC Table 915-1 not shown.
- 4) Concentration in exceedance of ECMC table 915-1 soil standards indicated in **RED**.

GPS – Global Positioning System  
 mg/kg – Milligrams per kilogram  
 PID – Photoionization Detector  
 ppm – parts per million  
 pH – potential of Hydrogen

0 ft. 200 ft. 400 ft.

Image Source: Google Earth; Google 2020

DATE: 03/06/2024

DESIGNED BY: JW

DRAWN BY: KS

**TASMAN**  
GEOSCIENCES

Tasman Geosciences, Inc.  
6855 W 119<sup>th</sup> Avenue  
Broomfield, CO 80020

**Noble Energy, Inc. – DJ Basin**  
**UNI UPR C25-06**  
 SENW, Section 25, Township 4 North, Range 64 West  
 Weld County, Colorado

Flowline Closure & Soil  
 Analytical Results Map  
 (02/12/2024, 02/13/2024)

**FIGURE**  
1

# Summit Scientific

---

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

April 08, 2024

Jacob Whritenour

Tasman Geosciences

6855 W. 119th Ave.

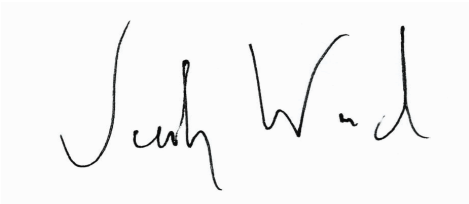
Broomfield, CO 80020

RE: Noble - UNI UPR C 25-06 Flowline

Work Order #2402221

Enclosed are the results of analyses for samples received by Summit Scientific on 02/12/24 17:32. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Jacob Wood". The signature is written in a cursive style with a large initial "J" and a distinct "W".

Jacob Wood For Paul Shrewsbury

President



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

Project: Noble - UNI UPR C 25-06 Flowline

Project Number: UWRWE-A2397-ABN

Project Manager: Jacob Whritenour

**Reported:**  
04/08/24 13:20

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FL01-D@3'	2402221-01	Soil	02/12/24 14:06	02/12/24 17:32
FL01-E@3'	2402221-02	Soil	02/12/24 14:18	02/12/24 17:32

Summit Scientific

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

# SUMMIT SCIENTIFIC

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

Lab ID	Page 1 of 1
2402221	

Client: Noble/Tasman	<b>Send Data To:</b> Project Manager: Jake Whritenour	<b>Send Invoice To:</b> Company: Noble/Chevron
Address: 6855 W. 119th Avenue	E-Mail: jwhritenour@tasman-geo.com	Project Name/Location:
City/State/Zip: Broomfield, CO 80020		AFE#: <u>UWRWE-A2397-ABN</u>
Phone:	Project Name: <u>UNI UPR C25-6 Flowline</u>	PO/Billing Codes:
Sampler Name: <u>David V. Kaitlin S.</u>	Project Number:	Contact: <u>Miguel Barron</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	915-VOC	915-PAH	915-TPH	pH, EC, SAR	Boron		915-Metals
1	FL01-D03'	2/12/24	1406	3			X			X				X	X	X	X	X	
2	FL01-E04'	2/12/24	1418	3			X			X				X	X	X	X	X	
3														X	X	X	X	X	
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			

Relinquished by: <u>[Signature]</u>	Date/Time: <u>2/12/24 1630</u>	Received by: <u>Tasman lockbox</u>	Date/Time: <u>2/12/24 1630</u>	TAT Business Days	Field DO	Notes:
Relinquished by: <u>[Signature]</u>	Date/Time: <u>2/12/24 1732</u>	Received by: <u>[Signature]</u>	Date/Time: <u>2/12/24 1732</u>	Same Day	Field EC	
Relinquished by:	Date/Time:	Received by:	Date/Time:	1 Day	Field ORP	
Relinquished by:	Date/Time:	Received by:	Date/Time:	2 Days	Field pH	
Relinquished by:	Date/Time:	Received by:	Date/Time:	3 Days	Field Temp.	
Temperature Upon Receipt: <u>8.1</u>	Corrected Temperature: <u>8</u>	IR gun #:		Standard	X Field Turb.	
					HNO3 lot #:	

S<sub>2</sub>

Sample Receipt Checklist

S2 Work Order# 2402221

Client: Nobel Tasman Client Project ID: UNI UPR C25-6 Flowline

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? (1) NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	on ice
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 <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? (1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded? (1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact? (1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided? (1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received? (1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC? (1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling)? (1) Note the type of preservative in the comments column – HCl, H <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? (1) Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Comments (if any):				

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

AS  
Custodian Printed Name

2/12/24  
Date/Time



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

Project: Noble - UNI UPR C 25-06 Flowline

Project Number: UWRWE-A2397-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
04/08/24 13:20

**FL01-D@3'**  
**2402221-01 (Soil)**

Summit Scientific

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

Date Sampled: **02/12/24 14:06**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHB0420	02/13/24	02/14/24	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: **02/12/24 14:06**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0423	106 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0423	106 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0417	104 %		50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **02/12/24 14:06**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHB0421	02/13/24	02/14/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **02/12/24 14:06**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	16.1	128 %		30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

Summit Scientific

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



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

Project: Noble - UNI UPR C 25-06 Flowline

Project Number: UWRWE-A2397-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
04/08/24 13:20

**FL01-D@3'**  
**2402221-01 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **02/12/24 14:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHB0412	02/13/24	02/14/24	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: **02/12/24 14:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0160	48.0 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0185	55.6 %	40-150		"	"	"	"	

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

Date Sampled: **02/12/24 14:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHB0684	02/21/24	02/23/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **02/12/24 14:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Summit Scientific

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

Project: Noble - UNI UPR C 25-06 Flowline

Project Number: UWRWE-A2397-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
04/08/24 13:20

**FL01-D@3'**  
**2402221-01 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	1.02	0.200	mg/kg dry	1	BHC1046	03/28/24	04/05/24	EPA 6020B	
Barium	28.7	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.78	0.400	"	"	"	"	"	"	
Lead	2.84	0.200	"	"	"	"	"	"	
Nickel	1.82	0.400	"	"	"	"	"	"	
Silver	0.0266	0.0200	"	"	"	"	"	"	
Zinc	8.81	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

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

Date Sampled: **02/12/24 14:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	161	0.0500	mg/L dry	1	BHB0503	02/15/24	02/20/24	EPA 6020B	
Magnesium	59.8	0.0500	"	"	"	"	"	"	
Sodium	133	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **02/12/24 14:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.27	0.00100	units	1	BHB0739	02/22/24	02/22/24	Calculation	

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

Date Sampled: **02/12/24 14:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	96.1		%	1	BHB0718	02/22/24	02/22/24	Calculation	

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

Date Sampled: **02/12/24 14:06**

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 - UNI UPR C 25-06 Flowline

Project Number: UWRWE-A2397-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
04/08/24 13:20

**FL01-D@3'**  
**2402221-01 (Soil)**

**Summit Scientific**

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

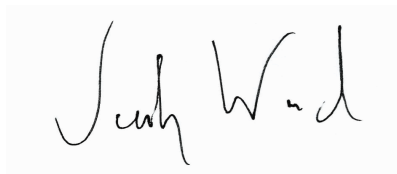
Specific Conductance (EC)	0.531	0.0100	mmhos/cm	1	BHB0540	02/16/24	02/20/24	EPA 120.1
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**Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction**

Date Sampled: **02/12/24 14:06**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	8.14			pH Units	1	BHB0539	02/16/24	02/20/24	EPA 9045D	

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Project: Noble - UNI UPR C 25-06 Flowline

Project Number: UWRWE-A2397-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
04/08/24 13:20

**FL01-E@3'**  
**2402221-02 (Soil)**

**Summit Scientific**

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

Date Sampled: **02/12/24 14:18**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHB0420	02/13/24	02/14/24	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: **02/12/24 14:18**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0389	97.3 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0422	106 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0406	101 %		50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **02/12/24 14:18**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHB0421	02/13/24	02/14/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **02/12/24 14:18**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	16.2	129 %		30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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Project Number: UWRWE-A2397-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
04/08/24 13:20

**FL01-E@3'**  
**2402221-02 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **02/12/24 14:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHB0412	02/13/24	02/14/24	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: **02/12/24 14:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0161	48.4 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0199	59.6 %	40-150		"	"	"	"	

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

Date Sampled: **02/12/24 14:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHB0684	02/21/24	02/23/24	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **02/12/24 14:18**

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 - UNI UPR C 25-06 Flowline

Project Number: UWRWE-A2397-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
04/08/24 13:20

**FL01-E@3'**  
**2402221-02 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	1.08	0.200	mg/kg dry	1	BHC1046	03/28/24	04/05/24	EPA 6020B	
Barium	29.9	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.83	0.400	"	"	"	"	"	"	
Lead	2.91	0.200	"	"	"	"	"	"	
Nickel	2.17	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	8.83	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

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

Date Sampled: **02/12/24 14:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	123	0.0500	mg/L dry	1	BHB0503	02/15/24	02/20/24	EPA 6020B	
Magnesium	41.6	0.0500	"	"	"	"	"	"	
Sodium	106	0.0500	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **02/12/24 14:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.11	0.00100	units	1	BHB0739	02/22/24	02/22/24	Calculation	

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

Date Sampled: **02/12/24 14:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	95.9		%	1	BHB0718	02/22/24	02/22/24	Calculation	

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

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Project Number: UWRWE-A2397-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
04/08/24 13:20

**FL01-E@3'**  
**2402221-02 (Soil)**

**Summit Scientific**

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

Date Sampled: **02/12/24 14:18**


Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Specific Conductance (EC)	<b>0.441</b>	0.0100		mmhos/cm	1	BHB0540	02/16/24	02/20/24	EPA 120.1	

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

Date Sampled: **02/12/24 14:18**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>pH</b>	<b>8.31</b>			pH Units	1	BHB0539	02/16/24	02/20/24	EPA 9045D	

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Project Number: UWRWE-A2397-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
04/08/24 13:20

### 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 BHB0420 - EPA 5030 Soil MS

##### Blank (BHB0420-BLK1)

Prepared & Analyzed: 02/13/24

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>	0.0379		"	0.0400		94.8	50-150				
<i>Surrogate: Toluene-d8</i>	0.0403		"	0.0400		101	50-150				
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0424		"	0.0400		106	50-150				

##### LCS (BHB0420-BS1)

Prepared & Analyzed: 02/13/24

Benzene	0.105	0.0020	mg/kg	0.100		105	70-130				
Toluene	0.0989	0.0050	"	0.100		98.9	70-130				
Ethylbenzene	0.0965	0.0050	"	0.100		96.5	70-130				
m,p-Xylene	0.183	0.010	"	0.200		91.5	70-130				
o-Xylene	0.0909	0.0050	"	0.100		90.9	70-130				
1,2,4-Trimethylbenzene	0.0929	0.0050	"	0.100		92.9	70-130				
1,3,5-Trimethylbenzene	0.0909	0.0050	"	0.100		90.9	70-130				
Naphthalene	0.118	0.0038	"	0.100		118	70-130				
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0380		"	0.0400		95.1	50-150				
<i>Surrogate: Toluene-d8</i>	0.0401		"	0.0400		100	50-150				
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0416		"	0.0400		104	50-150				

##### Matrix Spike (BHB0420-MS1)

Source: 2402152-01

Prepared & Analyzed: 02/13/24

Benzene	0.0964	0.0020	mg/kg	0.100	ND	96.4	70-130				
Toluene	0.0871	0.0050	"	0.100	ND	87.1	70-130				
Ethylbenzene	0.0787	0.0050	"	0.100	ND	78.7	70-130				
m,p-Xylene	0.154	0.010	"	0.200	ND	77.2	70-130				
o-Xylene	0.0810	0.0050	"	0.100	ND	81.0	70-130				
1,2,4-Trimethylbenzene	0.0677	0.0050	"	0.100	ND	67.7	70-130				QM-07
1,3,5-Trimethylbenzene	0.0755	0.0050	"	0.100	ND	75.5	70-130				
Naphthalene	0.0655	0.0038	"	0.100	ND	65.5	70-130				QM-07
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0373		"	0.0400		93.3	50-150				
<i>Surrogate: Toluene-d8</i>	0.0408		"	0.0400		102	50-150				
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0417		"	0.0400		104	50-150				

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Broomfield CO, 80020

Project: Noble - UNI UPR C 25-06 Flowline

Project Number: UWRWE-A2397-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
04/08/24 13:20

**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	RPD	

**Batch BHB0420 - EPA 5030 Soil MS**

Matrix Spike Dup (BHB0420-MSD1)	Source: 2402152-01			Prepared & Analyzed: 02/13/24						
Benzene	0.0982	0.0020	mg/kg	0.100	ND	98.2	70-130	1.82	30	
Toluene	0.0879	0.0050	"	0.100	ND	87.9	70-130	0.926	30	
Ethylbenzene	0.0756	0.0050	"	0.100	ND	75.6	70-130	3.97	30	
m,p-Xylene	0.151	0.010	"	0.200	ND	75.7	70-130	1.98	30	
o-Xylene	0.0806	0.0050	"	0.100	ND	80.6	70-130	0.446	30	
1,2,4-Trimethylbenzene	0.0638	0.0050	"	0.100	ND	63.8	70-130	5.98	30	QM-07
1,3,5-Trimethylbenzene	0.0753	0.0050	"	0.100	ND	75.3	70-130	0.199	30	
Naphthalene	0.0612	0.0038	"	0.100	ND	61.2	70-130	6.82	30	QM-07
Surrogate: 1,2-Dichloroethane-d4	0.0393		"	0.0400		98.3	50-150			
Surrogate: Toluene-d8	0.0414		"	0.0400		104	50-150			
Surrogate: 4-Bromofluorobenzene	0.0423		"	0.0400		106	50-150			

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Project: Noble - UNI UPR C 25-06 Flowline  
Project Number: UWRWE-A2397-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
04/08/24 13:20

**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 BHB0421 - EPA 3550A**

**Blank (BHB0421-BLK1)**

Prepared & Analyzed: 02/13/24

C10-C28 (DRO)	ND	50	mg/kg								
C28-C36 (ORO)	ND	50	"								
Surrogate: <i>o</i> -Terphenyl	9.81		"	12.5		78.5	30-150				

**LCS (BHB0421-BS1)**

Prepared & Analyzed: 02/13/24

C10-C28 (DRO)	396	50	mg/kg	500		79.2	70-130				
Surrogate: <i>o</i> -Terphenyl	16.5		"	12.5		132	30-150				

**Matrix Spike (BHB0421-MS1)**

Source: 2402152-01

Prepared & Analyzed: 02/13/24

C10-C28 (DRO)	393	50	mg/kg	500	15.2	75.5	70-130				
Surrogate: <i>o</i> -Terphenyl	17.3		"	12.5		138	30-150				

**Matrix Spike Dup (BHB0421-MSD1)**

Source: 2402152-01

Prepared & Analyzed: 02/13/24

C10-C28 (DRO)	414	50	mg/kg	500	15.2	79.8	70-130	5.25	20		
Surrogate: <i>o</i> -Terphenyl	17.2		"	12.5		137	30-150				

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Project: Noble - UNI UPR C 25-06 Flowline  
Project Number: UWRWE-A2397-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
04/08/24 13:20

**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 BHB0412 - EPA 5030 Soil MS**

**Blank (BHB0412-BLK1)**

Prepared & Analyzed: 02/13/24

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>0.0140</i>		"	<i>0.0333</i>		<i>42.1</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0290</i>		"	<i>0.0333</i>		<i>87.0</i>	<i>40-150</i>			

**LCS (BHB0412-BS1)**

Prepared & Analyzed: 02/13/24

Acenaphthene	0.0285	0.00500	mg/kg	0.0333		85.4	31-137			
Anthracene	0.0310	0.00500	"	0.0333		92.9	30-120			
Benzo (a) anthracene	0.0279	0.00500	"	0.0333		83.8	30-120			
Benzo (a) pyrene	0.0271	0.00500	"	0.0333		81.3	30-120			
Benzo (b) fluoranthene	0.0282	0.00500	"	0.0333		84.5	30-120			
Benzo (k) fluoranthene	0.0311	0.00500	"	0.0333		93.4	30-120			
Chrysene	0.0312	0.00500	"	0.0333		93.5	30-120			
Dibenz (a,h) anthracene	0.0235	0.00500	"	0.0333		70.4	30-120			
Fluoranthene	0.0303	0.00500	"	0.0333		90.9	30-120			
Fluorene	0.0314	0.00500	"	0.0333		94.1	30-120			
Indeno (1,2,3-cd) pyrene	0.0235	0.00500	"	0.0333		70.4	30-120			
Pyrene	0.0310	0.00500	"	0.0333		92.9	35-142			
1-Methylnaphthalene	0.0223	0.00500	"	0.0333		66.8	35-142			
2-Methylnaphthalene	0.0288	0.00500	"	0.0333		86.5	35-142			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0250</i>		"	<i>0.0333</i>		<i>75.0</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0301</i>		"	<i>0.0333</i>		<i>90.3</i>	<i>40-150</i>			

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

Project: Noble - UNI UPR C 25-06 Flowline

Project Number: UWRWE-A2397-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
04/08/24 13:20

**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 BHB0412 - EPA 5030 Soil MS**

**Matrix Spike (BHB0412-MS1)**

Source: 2402119-03

Prepared & Analyzed: 02/13/24

Acenaphthene	0.0219	0.00500	mg/kg	0.0333	ND	65.6	31-137			
Anthracene	0.0233	0.00500	"	0.0333	ND	69.9	30-120			
Benzo (a) anthracene	0.0254	0.00500	"	0.0333	ND	76.1	30-120			
Benzo (a) pyrene	0.0232	0.00500	"	0.0333	ND	69.5	30-120			
Benzo (b) fluoranthene	0.0246	0.00500	"	0.0333	ND	73.7	30-120			
Benzo (k) fluoranthene	0.0228	0.00500	"	0.0333	ND	68.5	30-120			
Chrysene	0.0235	0.00500	"	0.0333	ND	70.5	30-120			
Dibenz (a,h) anthracene	0.0168	0.00500	"	0.0333	ND	50.3	30-120			
Fluoranthene	0.0260	0.00500	"	0.0333	ND	77.9	30-120			
Fluorene	0.0227	0.00500	"	0.0333	ND	68.2	30-120			
Indeno (1,2,3-cd) pyrene	0.0178	0.00500	"	0.0333	ND	53.4	30-120			
Pyrene	0.0281	0.00500	"	0.0333	ND	84.4	35-142			
1-Methylnaphthalene	0.0200	0.00500	"	0.0333	ND	60.1	15-130			
2-Methylnaphthalene	0.0238	0.00500	"	0.0333	ND	71.3	15-130			
Surrogate: 2-Methylnaphthalene-d10	0.0200		"	0.0333		60.0	40-150			
Surrogate: Fluoranthene-d10	0.0238		"	0.0333		71.4	40-150			

**Matrix Spike Dup (BHB0412-MSD1)**

Source: 2402119-03

Prepared & Analyzed: 02/13/24

Acenaphthene	0.0171	0.00500	mg/kg	0.0333	ND	51.4	31-137	24.4	30
Anthracene	0.0180	0.00500	"	0.0333	ND	53.9	30-120	25.9	30
Benzo (a) anthracene	0.0194	0.00500	"	0.0333	ND	58.3	30-120	26.5	30
Benzo (a) pyrene	0.0171	0.00500	"	0.0333	ND	51.4	30-120	29.9	30
Benzo (b) fluoranthene	0.0215	0.00500	"	0.0333	ND	64.4	30-120	13.4	30
Benzo (k) fluoranthene	0.0196	0.00500	"	0.0333	ND	58.9	30-120	15.1	30
Chrysene	0.0189	0.00500	"	0.0333	ND	56.6	30-120	22.0	30
Dibenz (a,h) anthracene	0.0155	0.00500	"	0.0333	ND	46.6	30-120	7.63	30
Fluoranthene	0.0214	0.00500	"	0.0333	ND	64.2	30-120	19.2	30
Fluorene	0.0199	0.00500	"	0.0333	ND	59.7	30-120	13.3	30
Indeno (1,2,3-cd) pyrene	0.0155	0.00500	"	0.0333	ND	46.6	30-120	13.6	30
Pyrene	0.0217	0.00500	"	0.0333	ND	65.1	35-142	25.8	30
1-Methylnaphthalene	0.0188	0.00500	"	0.0333	ND	56.4	15-130	6.49	50
2-Methylnaphthalene	0.0359	0.00500	"	0.0333	ND	108	15-130	40.7	50
Surrogate: 2-Methylnaphthalene-d10	0.0160		"	0.0333		48.0	40-150		
Surrogate: Fluoranthene-d10	0.0170		"	0.0333		51.1	40-150		

Summit Scientific

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

Project: Noble - UNI UPR C 25-06 Flowline

Project Number: UWRWE-A2397-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
04/08/24 13:20

**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	Limit	

**Batch BHB0684 - EPA 3050B**

**Blank (BHB0684-BLK1)**

Prepared: 02/21/24 Analyzed: 02/23/24

Boron ND 2.00 mg/L

**LCS (BHB0684-BS1)**

Prepared: 02/21/24 Analyzed: 02/23/24

Boron 4.53 2.00 mg/L 5.00 90.6 80-120

**Duplicate (BHB0684-DUP1)**

Source: 2402152-02

Prepared: 02/21/24 Analyzed: 02/23/24

Boron 0.252 2.00 mg/L 0.297 16.2 20

**Matrix Spike (BHB0684-MS1)**

Source: 2402152-02

Prepared: 02/21/24 Analyzed: 02/23/24

Boron 4.65 2.00 mg/L 5.00 0.297 87.0 75-125

**Matrix Spike Dup (BHB0684-MSD1)**

Source: 2402152-02

Prepared: 02/21/24 Analyzed: 02/23/24

Boron 4.83 2.00 mg/L 5.00 0.297 90.6 75-125 3.77 25

Summit Scientific

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

Project: Noble - UNI UPR C 25-06 Flowline

Project Number: UWRWE-A2397-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
04/08/24 13:20

**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 BHC1046 - EPA 3050B**

**Blank (BHC1046-BLK1)**

Prepared: 03/28/24 Analyzed: 04/05/24

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 (BHC1046-BS1)**

Prepared: 03/28/24 Analyzed: 04/05/24

Arsenic	38.6	0.200	mg/kg wet	40.0		96.6	80-120
Barium	39.6	0.400	"	40.0		99.0	80-120
Cadmium	1.93	0.200	"	2.00		96.6	80-120
Copper	42.6	0.400	"	40.0		106	80-120
Lead	19.2	0.200	"	20.0		96.0	80-120
Nickel	41.8	0.400	"	40.0		104	80-120
Silver	1.97	0.0200	"	2.00		98.7	80-120
Zinc	42.0	0.400	"	40.0		105	80-120
Selenium	4.17	0.260	"	4.00		104	80-120

**Duplicate (BHC1046-DUP1)**

Source: 2402131-21

Prepared: 03/28/24 Analyzed: 04/05/24

Arsenic	1.53	0.200	mg/kg dry	1.49		2.57	20
Barium	60.6	0.400	"	54.4		10.8	20
Cadmium	0.169	0.200	"	0.153		9.74	20
Copper	4.53	0.400	"	4.39		3.14	20
Lead	5.74	0.200	"	5.73		0.237	20
Nickel	3.28	0.400	"	3.04		7.60	20
Silver	0.0458	0.0200	"	0.0404		12.4	20
Zinc	14.7	0.400	"	13.4		8.96	20
Selenium	ND	0.260	"	ND			20

Summit Scientific

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

Project: Noble - UNI UPR C 25-06 Flowline

Project Number: UWRWE-A2397-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
04/08/24 13:20

**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 BHC1046 - EPA 3050B**

**Matrix Spike (BHC1046-MS1)**

Source: 2402131-21

Prepared: 03/28/24 Analyzed: 04/05/24

Arsenic	39.7	0.200	mg/kg dry	41.2	1.49	92.6	75-125				
Barium	106	0.400	"	41.2	54.4	125	75-125				
Cadmium	2.17	0.200	"	2.06	0.153	97.6	75-125				
Copper	33.0	0.400	"	41.2	4.39	69.3	75-125				QM-05
Lead	25.3	0.200	"	20.6	5.73	95.1	75-125				
Nickel	31.6	0.400	"	41.2	3.04	69.3	75-125				QM-05
Silver	1.99	0.0200	"	2.06	0.0404	94.6	75-125				
Zinc	46.1	0.400	"	41.2	13.4	79.3	75-125				
Selenium	3.50	0.260	"	4.12	ND	84.8	75-125				

**Matrix Spike Dup (BHC1046-MSD1)**

Source: 2402131-21

Prepared: 03/28/24 Analyzed: 04/05/24

Arsenic	40.0	0.200	mg/kg dry	41.2	1.49	93.3	75-125	0.656	25		
Barium	106	0.400	"	41.2	54.4	125	75-125	0.205	25		
Cadmium	2.18	0.200	"	2.06	0.153	98.2	75-125	0.570	25		
Copper	32.2	0.400	"	41.2	4.39	67.5	75-125	2.29	25		QM-05
Lead	25.2	0.200	"	20.6	5.73	94.4	75-125	0.544	25		
Nickel	31.0	0.400	"	41.2	3.04	67.7	75-125	2.12	25		QM-05
Silver	1.97	0.0200	"	2.06	0.0404	93.6	75-125	1.04	25		
Zinc	43.0	0.400	"	41.2	13.4	71.7	75-125	7.05	25		QM-05
Selenium	3.44	0.260	"	4.12	ND	83.4	75-125	1.57	25		

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

Project: Noble - UNI UPR C 25-06 Flowline

Project Number: UWRWE-A2397-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
04/08/24 13:20

**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 BHB0503 - General Preparation**

**Blank (BHB0503-BLK1)**

Prepared: 02/15/24 Analyzed: 02/20/24

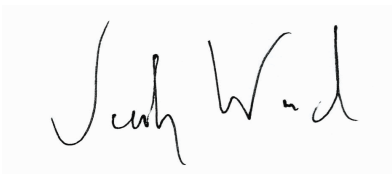
Calcium	ND	0.0500	mg/L wet							
Magnesium	ND	0.0500	"							
Sodium	ND	0.0500	"							

**LCS (BHB0503-BS1)**

Prepared: 02/15/24 Analyzed: 02/20/24

Calcium	6.37	0.0500	mg/L wet	5.00	127	70-130				
Magnesium	5.72	0.0500	"	5.00	114	70-130				
Sodium	6.29	0.0500	"	5.00	126	70-130				

Summit Scientific



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

Project: Noble - UNI UPR C 25-06 Flowline

Project Number: UWRWE-A2397-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
04/08/24 13:20

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

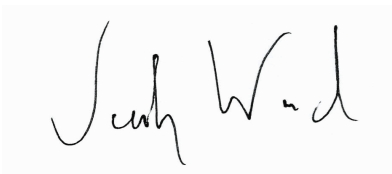
**Summit Scientific**

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

**Batch BHB0718 - General Preparation**

<b>Duplicate (BHB0718-DUP1)</b>		<b>Source: 2402221-01</b>			<b>Prepared &amp; Analyzed: 02/22/24</b>			
% Solids	95.3		%		96.1		0.859	20

Summit Scientific



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

Project: Noble - UNI UPR C 25-06 Flowline

Project Number: UWRWE-A2397-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
04/08/24 13:20

**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 BHB0540 - General Preparation**

**Blank (BHB0540-BLK1)**

Prepared: 02/16/24 Analyzed: 02/20/24

Specific Conductance (EC) ND 0.0100 mmhos/cm

**LCS (BHB0540-BS1)**

Prepared: 02/16/24 Analyzed: 02/20/24

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

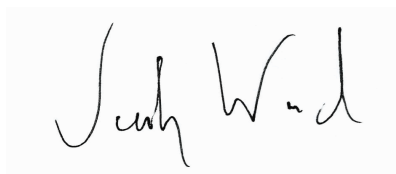
**Duplicate (BHB0540-DUP1)**

Source: 2402221-01

Prepared: 02/16/24 Analyzed: 02/20/24

Specific Conductance (EC) 0.528 0.0100 mmhos/cm 0.531 0.699 20

Summit Scientific



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

Project: Noble - UNI UPR C 25-06 Flowline

Project Number: UWRWE-A2397-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
04/08/24 13:20

**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 BHB0539 - General Preparation**

**LCS (BHB0539-BS1)**

Prepared: 02/16/24 Analyzed: 02/20/24

pH	9.29	pH Units	9.18	101	95-105
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**Duplicate (BHB0539-DUP1)**

Source: 2402175-01

Prepared: 02/16/24 Analyzed: 02/20/24

pH	8.31	pH Units	8.35	0.480	20
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Summit Scientific



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**Division of Environmental Testing**

2115 N Scranton St Suite 3040A  
Aurora, CO 80045  
800-440-5184

March 16, 2024

4653 Table Mountain Drive  
Golden, CO 80403  
303-277-9310  
reports@s2scientific.com

**Project Manager :** Mikayla Axtell  
**Project Name :** 2402221  
**Project Number :** N/A

Attached are the analytical results for 2402221 N/A received by Elevation Diagnostics, Division of Environmental Testing on February 21, 2024. This is associated with Elevation's number AA05174 .

The results were analyzed under the guidelines of various methods. These methods are identified in the report as follows: "SW" is referring to the EPA's SW-846 Compendium; "EPA" is referring to 40 CFR part 136; "HACH" is referring to a method which was validated by HACH®; "SM" is referring to a revision of the Standard Methods For the Examination of Water and Wastewater; and "ASTM" is referring to the standard test method set forth by ASTM International.

The analytical results in this report apply specifically to the samples listed in the attached Chain of Custody. This report may only be duplicated in full.

Any deviations to sample integrity, method specifications, or Elevation Diagnostics's standard operating procedures are documented in the report below.

Please contact us for any questions or comments concerning the content of this report.

Thank you,

Elevation Diagnostics, Division of Environmental Testing

Kristen Reichel  
Laboratory Director  
CSO,CCO


# SUMMIT SCIENTIFIC

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

Lab ID \_\_\_\_\_ Page \_\_\_\_\_ of \_\_\_\_\_

<b>Send Data To:</b>		<b>Send Invoice To:</b>	
Client: Summit Scientific	Project Manager: Mikayla Axtell	Company:	
Address:	E-Mail: reports@sscientific.com	Project Name/Location:	
City/State/Zip:		AFE#:	
Phone:	Project Name: 2402221	PO/Billing Codes:	
Sampler Name:	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
1	FL01-D@3'	2/12/24	14:06	1					X					
2	FL01-E@4'	2/12/24	14:18	1					X					
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														

Relinquished by: 	Date/Time: 2/12/24	Received by:	Date/Time:	TAT Business Days	Field DO	Notes: Temp: 23.8 C Corrected Temp: 25.8 C Thermometer: EDXEQ238 Sample Intact pH Check: No 2024-02-21-023
Relinquished by:	Date/Time:	Received by:	Date/Time:	Same Day	Field EC	
Relinquished by:	Date/Time:	Received by:	Date/Time:	1 Day	Field ORP	
Relinquished by:	Date/Time:	Received by:	Date/Time:	2 Days	Field pH	
Relinquished by:	Date/Time:	Received by:	Date/Time:	3 Days	Field Temp.	
Temperature Upon Receipt: 9.2	Corrected Temperature	IR gun #:	HNO3 lot #:	Standard	Field Turb.	

The results listed pertain only to the samples submitted to Elevation Diagnostics, Division of Environmental Testing as per the Chain of Custody attached. This report may only be duplicated in full.



**Division of Environmental Testing**

2115 N Scranton St Suite 3040A  
 Aurora, CO 80045  
 800-440-5184

**Report Date :** 3/16/2024

**Report Time :** 16:36

**FINAL RESULTS REPORT**

REPORT TO
4653 Table Mountain Drive Golden, CO 80403 303-277-9310 reports@s2scientific.com

**Project Manager :** Mikayla Axtell  
**Project Name :** 2402221  
**Project Number :** N/A

Sample ID	Customer ID	Analyte Name Analysis Start	Dilution	Result	Units	Reporting Limit	Method Reference
AA05174-1	FL01-D@3'						
	Collected : 02/12/2024	14:06					
		Chromium VI, Soil					EPA 3060A & EPA
		03/04/2024 11:37		<0.080	mg/kg	0.080	7199
AA05175-1	FL01-E@4'						
	Collected : 02/12/2024	02:18					
		Chromium VI, Soil					EPA 3060A & EPA
		03/04/2024 11:37		<0.080	mg/kg	0.080	7199



**Division of Environmental Testing**

2115 N Scranton St Suite 3040A

Aurora, CO 80045

800-440-5184

**Report Date :** 3/16/2024

**Report Time :** 16:36

**FINAL RESULTS REPORT**

REPORT TO
4653 Table Mountain Drive Golden, CO 80403 303-277-9310 reports@s2scientific.com

**Project Manager :** Mikayla Axtell

**Project Name :** 2402221

**Project Number :** N/A

Sample ID	Customer ID	Analyte Name Analysis Start	Dilution	Result	Units	Reporting Limit	Method Reference
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**QC Report**

**CHROM\_VI\_SOIL-2128**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%Rec	% REC Limits	RPD	RPD Limit
DUP	AA05398	<0.080	0.001	mg/kg	<0.080				
DUP	AA05612	<0.080	0.080	mg/kg	<0.080				
MB	AA05979	0.539		ppb					
LCS	AA05981	39.193		ppb	40	97.982			
LCS	AA05982	39.449		ppb	40	98.622			



**Division of Environmental Testing**

2115 N Scranton St Suite 3040A  
 Aurora, CO 80045  
 800-440-5184

**Report Date :** 3/16/2024

**Report Time :** 16:36

**FINAL RESULTS REPORT**

REPORT TO
4653 Table Mountain Drive Golden, CO 80403 303-277-9310 reports@s2scientific.com

**Project Manager :** Mikayla Axtell  
**Project Name :** 2402221  
**Project Number :** N/A

Sample ID	Customer ID	Analyte Name Analysis Start	Dilution	Result	Units	Reporting Limit	Method Reference
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**QC Report**

**METALS\_S-2134**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%Rec	% REC Limits	RPD	RPD Limit
<b>AA05398</b>									
<b>Arsenic</b>									
DUP	1.363	25.000	mg/kg		1.533			11.740	0 - 15
Matrix Spike	9.940		mg/kg	10.000	1.533	84.070			
<b>Barium</b>									
DUP	31.296	25.000	mg/kg		28.895			7.9779	0 - 15
Matrix Spike	36.956		mg/kg	10.000	28.895	80.610			
<b>Cadmium</b>									
DUP	0.038	1.000	mg/kg		0.037			2.6667	0 - 15
Matrix Spike	8.756		mg/kg	10.000	0.037	87.190			
<b>Copper</b>									
DUP	3.752	25.000	mg/kg		4.229			11.953	0 - 15
Matrix Spike	12.756		mg/kg	10.000	4.229	85.270			
<b>Lead</b>									
DUP	2.642	25.000	mg/kg		2.667			0.94180	0 - 15
Matrix Spike	11.573		mg/kg	10.000	2.667	89.060			
<b>Nickel</b>									
DUP	2.240	25.000	mg/kg		2.160			3.6364	0 - 15
Matrix Spike	11.065		mg/kg	10.000	2.160	89.050			
<b>Selenium</b>									
DUP	1.191	25.000	mg/kg		1.144			4.0257	0 - 15
Matrix Spike	9.811		mg/kg	10.000	1.144	86.670			
<b>Silver</b>									
DUP	<0.250	250.000	mg/kg		<0.250				
Matrix Spike	8.095		mg/kg	10.000	<0.250	80.950			



**Division of Environmental Testing**

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 Aurora, CO 80045  
 800-440-5184

**Report Date :** 3/16/2024

**Report Time :** 16:36

**FINAL RESULTS REPORT**

REPORT TO
4653 Table Mountain Drive Golden, CO 80403 303-277-9310 reports@s2scientific.com

**Project Manager :** Mikayla Axtell  
**Project Name :** 2402221  
**Project Number :** N/A

Sample ID	Customer ID	Analyte Name Analysis Start	Dilution	Result	Units	Reporting Limit	Method Reference
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<b>Zinc</b>							
DUP	10.929	25.000	mg/kg	9.841		10.477	0 - 15
Matrix Spike	19.015		mg/kg	10.000	9.841	91.740	
<b>AA06062</b>							
<b>Arsenic</b>							
MB	0.202		µg/kg				
<b>Barium</b>							
MB	0.053		µg/kg				
<b>Cadmium</b>							
MB	0.058		µg/kg				
<b>Copper</b>							
MB	-1.317		µg/kg				
<b>Lead</b>							
MB	0.114		µg/kg				
<b>Nickel</b>							
MB	0.063		µg/kg				
<b>Selenium</b>							
MB	0.249		µg/kg				
<b>Silver</b>							
MB	3.153		µg/kg				
<b>Zinc</b>							
MB	0.098		µg/kg				
<b>AA06064</b>							
<b>Arsenic</b>							
LCS	85.878		µg/kg	90	95.420	80 - 120	
<b>Barium</b>							
LCS	89.977		µg/kg	90	99.974	80 - 120	
<b>Cadmium</b>							
LCS	89.412		µg/kg	90	99.347	80 - 120	
<b>Copper</b>							



**Division of Environmental Testing**

2115 N Scranton St Suite 3040A  
 Aurora, CO 80045  
 800-440-5184

**Report Date :** 3/16/2024

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REPORT TO
4653 Table Mountain Drive Golden, CO 80403 303-277-9310 reports@s2scientific.com

**Project Manager :** Mikayla Axtell  
**Project Name :** 2402221  
**Project Number :** N/A

Sample ID	Customer ID	Analyte Name Analysis Start	Dilution	Result	Units	Reporting Limit	Method Reference
LCS	90.082	µg/kg	90	100.09	80 - 120		
<b>Lead</b>							
LCS	90.632	µg/kg	90	100.70	80 - 120		
<b>Nickel</b>							
LCS	89.340	µg/kg	90	99.267	80 - 120		
<b>Selenium</b>							
LCS	90.070	µg/kg	90	100.08	80 - 120		
<b>Silver</b>							
LCS	101.289	µg/kg	90	112.54	80 - 120		
<b>Zinc</b>							
LCS	89.590	µg/kg	90	99.544	80 - 120		
<b>AA06065</b>							
<b>Arsenic</b>							
LCS	78.106	µg/kg	90	86.784	80 - 120		
<b>Barium</b>							
LCS	80.802	µg/kg	90	89.780	80 - 120		
<b>Cadmium</b>							
LCS	81.417	µg/kg	90	90.463	80 - 120		
<b>Copper</b>							
LCS	84.373	µg/kg	90	93.748	80 - 120		
<b>Lead</b>							
LCS	89.462	µg/kg	90	99.402	80 - 120		
<b>Nickel</b>							
LCS	81.812	µg/kg	90	90.902	80 - 120		
<b>Selenium</b>							
LCS	78.846	µg/kg	90	87.607	80 - 120		
<b>Silver</b>							
LCS	101.383	µg/kg	90	112.65	80 - 120		
<b>Zinc</b>							
LCS	80.312	µg/kg	90	89.236	80 - 120		



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4653 Table Mountain Drive Golden, CO 80403 303-277-9310 reports@s2scientific.com

**Project Manager :** Mikayla Axtell  
**Project Name :** 2402221  
**Project Number :** N/A

Sample ID	Customer ID	Analyte Name Analysis Start	Dilution	Result	Units	Reporting Limit	Method Reference

Qualifier	Explanation
H1	Sample received outside of regulatory holding time.
H2	Sample analyzed outside of regulatory holding time due to a laboratory error.
P1	Sample received outside temperature requirements, 0-6°C.
P2	Sample received unpreserved.
P3	Broken or leaking sample container.
P4	Sample improperly collected
P5	Sample improperly preserved
B	The same analyte is found in the associated blank
B1	Blank failed high, indicating possible high bias in sample results.
B2	Blank failed low, indicating possible low bias in sample results.
MS	Matrix Spike / Matrix Spike Duplicate recovery and/or RPD limit exceeded, indicating potential matrix interference.
QC	Associated batch quality control was outside the acceptable range
D1	Duplicate RPD limit exceeded due to low sample concentration.
D2	Duplicate RPD limit exceeded due to matrix interference.
S	Surrogate recovery failed, indicating potential matrix interference.
RL1	Reporting limits raised due to matrix interference.
RL2	Reporting limits raised due to limited sample.
U	Sample result less than method detection limit.
J	Sample result less than reporting limit but higher than method detection limit.
EST	The concentration indicated has been estimated due to high analyte content
E	Electronic loss or corruption of data.
I	Subcontracted sample



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

Project: Noble - UNI UPR C 25-06 Flowline

Project Number: UWRWE-A2397-ABN  
Project Manager: Jacob Whritenour

**Reported:**  
04/08/24 13:20

### Notes and Definitions

- 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