

TABLE 1
SOIL SAMPLE LOCATIONS
NOBLE ENERGY, INC. - THOMPSON 28-10 FAC

Soil Sample ID	Date	PID (ppm)	Visual	Olfactory	Sample Type (Grab/Lab)	Latitude ¹	Longitude	PDOP
SEP01-FL@3.5'	02/27/23	0.2	No Staining	No Odor	Lab	40.2808032	-104.5593418	1.9
SEP01-DL@4'	02/27/23	0.2	No Staining	No Odor	Lab	40.2807648	-104.5593856	0.8
MH01@0.5'	02/27/23	0.6	No Staining	No Odor	Grab	40.2807335	-104.5592862	1.1
MH02@0.5'	02/27/23	0.3	No Staining	No Odor	Grab	40.2807676	-104.5593304	0.9
Flare01@0.5'	02/27/23	0.3	No Staining	No Odor	Grab	40.2807066	-104.5592242	0.9
AST01@0.5'	02/27/23	0.0	No Staining	No Odor	Lab	40.2806712	-104.5596889	2.1
SS01@2.5'	03/02/23	0.4	No Staining	No Odor	Lab	40.2807278	-104.5596322	0.9
SS02@2.5'	03/02/23	1.0	No Staining	No Odor	Lab	40.2807086	-104.5595922	0.9
SS03@2.5'	03/02/23	0.6	No Staining	No Odor	Lab	40.2806886	-104.5596275	0.8
SS04@2.5'	03/02/23	1.0	No Staining	No Odor	Lab	40.2807078	-104.5596582	0.8
FS01@5.5'	03/02/23	0.7	No Staining	No Odor	Lab	40.2807078	-104.5596302	1.1

Notes:

PID = Photo-ionization detector

ppm = parts per million

PDOP = Position dilution of precision

HC = Hydrocarbon

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. - THOMPSON 28-10 FAC

Soil Sample ID	Date	¹ 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 ²		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 ^{2,3}		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
SEP01-FL@3.5'	02/27/23	<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
SEP01-DL@4'	02/27/23	<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
AST01@0.5'	02/27/23	<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
SS02@2.5'	03/02/23	<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
FS01@5.5'	03/02/23	<0.0020	<0.0050	<0.0050	<0.010	0.067	0.035	<0.0038	1.9	<50	<50	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00510	0.0192	

Soil Sample ID	Date	pH	SAR	EC (mmhos/cm)	Boron (mg/L)
Residential SSL ²		6 - 8.3	<6	<4mmhos/cm	2
SEP01-FL@3.5'	02/27/23	7.91	0.107	0.245	0.110
SEP01-DL@4'	02/27/23	7.23	0.274	0.215	0.0870
AST01@0.5'	02/27/23	4.89	0.0363	0.0665	0.0316
SS02@2.5'	03/02/23	7.93	0.0658	0.211	0.141
FS01@5.5'	03/02/23	7.85	0.295	0.262	0.128

Notes:

- Compounds referenced from 2 CCR 404-1, Table 915-1, effective January 15, 2021.
- Soil Screening Levels (SSL) 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:

COGCC = Colorado Oil and Gas Conservation 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 = Millmhos 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 COGCC Table 915-1 standard

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

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

Benz(a) = Benzanthracene

Benzo(b) = Benzofluoranthene

Benzo(k) = Benzofluoranthene

Benzo(a) = Benzopyrene

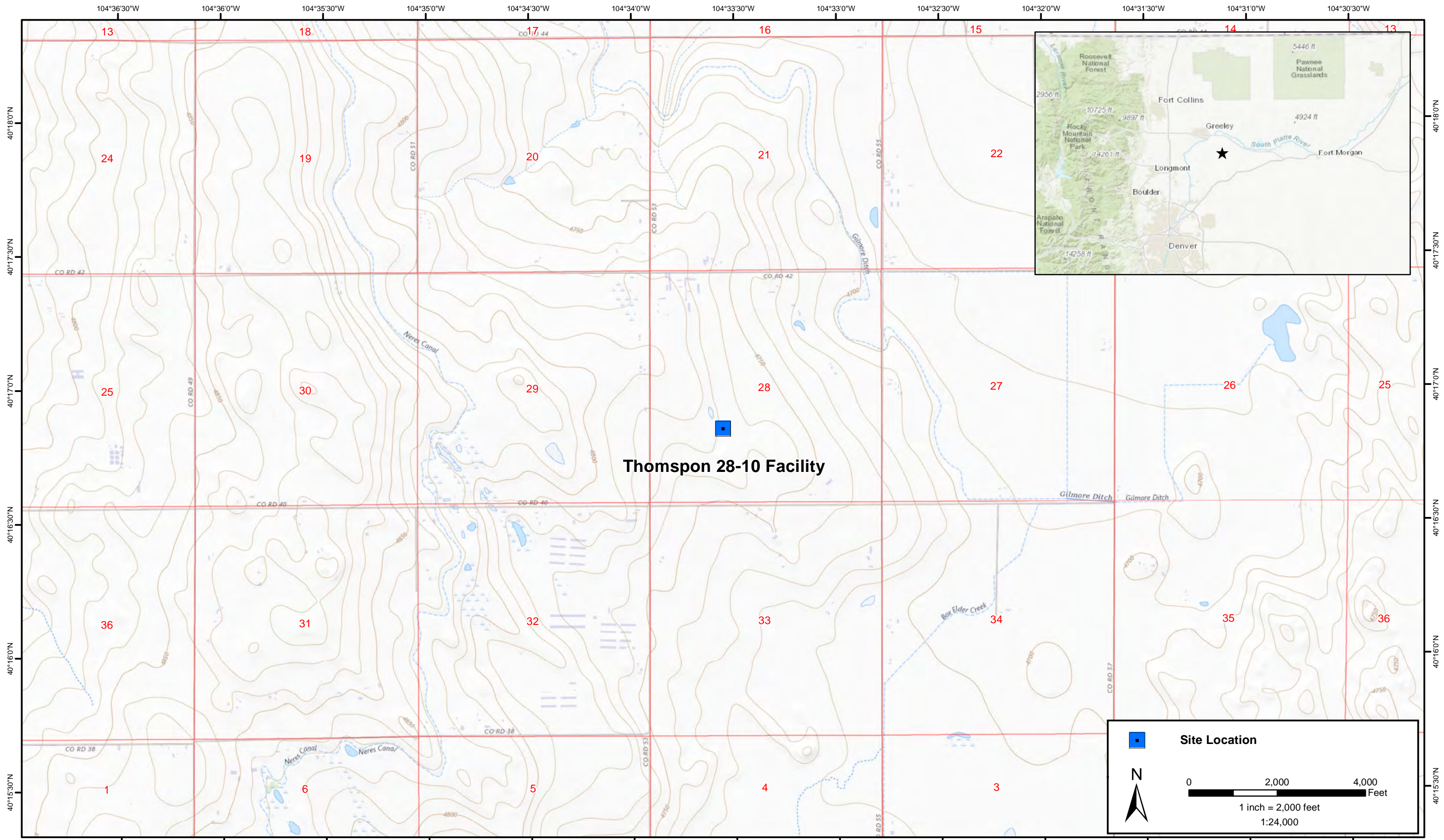
A,H = Dibenzoanthracene

1,2,3-CD = Indenopyrene

1-M = 1-methylnaphthalene

2-M = 2-methylnaphthalene

RP = Results Pending



DATE:	March 2023
DESIGNED BY:	S. Vogt
DRAWN BY:	L. Reed



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

Noble Energy, Inc - DJ Basin
Thomson 28-10 Facility
 NESW Sec 28 T4N-R64W
 Weld County, Colorado

Site Location Map

Figure
1



DATE: 03/09/2023

DESIGNED BY: JW

DRAWN BY: HM

TASMAN
 GEOSCIENCES

Tasman Geosciences, Inc.
 6855 W 119th Avenue
 Broomfield, CO 80020

Noble Energy, Inc. – DJ Basin
Thompson 28-10 FAC
 NESW, Section 28, Township 4 North, Range 64 West
 Weld County, Colorado

Tank Battery Closure & Soil
 Analytical Results Map
 (02/27/2023 & 03/02/2023)

FIGURE
 2

Photographic Log


Equipment ID: SEP01-FL@3.5'		Equipment Type: Separator		Equipment ID: MH01@0.5'		Equipment Type:	
Material: Steel		Volume:		Material:		Volume:	
Contents: Oil/Gas/Water		Contents:		Contents:		Contents:	
Notes/Conditions:				Notes/Conditions:			

Photographic Log



Equipment ID: MH02@0.5'	Equipment Type: Partially Buried Vault	
Material: Concrete	Volume:	Contents: Produced Water
Notes/Conditions:		

Equipment ID: Flare01@0.5'	Equipment Type: Emission Control Device	
Material: Concrete	Volume:	Contents:
Notes/Conditions:		

Photographic Log


Equipment ID: SEP01-DL@4'		Equipment Type: Dump Line		Equipment ID: AST01@0.5'		Equipment Type: Above Ground Storage Tank	
Material: Steel		Volume:		Material: Steel		Volume:	
Contents: Produced Water				Contents: Crude Oil			
Notes/Conditions: Sample collected by Back hoe, poor soil grade				Notes/Conditions:			

Photographic Log


Equipment ID: SS01 @2.5'		Equipment Type: Partially Buried Vault		Equipment ID: SS02		Equipment Type: Partially Buried Vault	
Material: Concrete	Volume:	Contents: Produced Water		Material: Concrete	Volume:	Contents: Produced Water	
Notes/Conditions:				Notes/Conditions:			

Photographic Log



Equipment ID: SS03@2.5'		Equipment Type: Partially Buried Vault		Equipment ID: SS04		Equipment Type: Partially Buried Vault	
Material: Concrete	Volume:	Contents: Produced Water		Material: Concrete	Volume:	Contents: Produced Water	
Notes/Conditions:				Notes/Conditions:			

Photographic Log

											
Equipment ID: FS01 @5.5'		Equipment Type: Partially Buried Vault		Equipment ID:		Equipment Type:					
Material: Concrete		Volume:		Contents: Produced Water		Material:		Volume:		Contents:	
Notes/Conditions:						Notes/Conditions:					

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

March 08, 2023

Jacob Whritenour

Tasman Geosciences

6855 W. 119th Ave.

Broomfield, CO 80020

RE: Noble - Thompson 28-10

Work Order #2302505

Enclosed are the results of analyses for samples received by Summit Scientific on 02/27/23 17:40. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Scott Sheely For Paul Shrewsbury

President



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

Project: Noble - Thompson 28-10

Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/08/23 12:17

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SEP01-FL@3.5'	2302505-01	Soil	02/27/23 00:00	02/27/23 17:40
SEP01-DL@4'	2302505-02	Soil	02/27/23 00:00	02/27/23 17:40
AST01@0.5'	2302505-03	Soil	02/27/23 00:00	02/27/23 17:40

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.

Send Data To:		Send Invoice To:
Client: Noble/Tasman	Project Manager: Jake Whritenour	Company: Noble
Address: 6855 W 119TH AVE	E-Mail: Jwhritenour@tasman-geo.com	Project Name/Location: Thompson 23-10
City/State/Zip: Broomfield CO 80020		AFE#:
Phone: 503-915-3046	Project Name: Thompson 23-10	PO/Billing Codes: UWRWE-A2396-ABN
Sampler Name: Martin Medeiros	Project Number: UWRWE-A2396-ABN	Contact: Wade Firestien

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested					Special Instructions	
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	VOC-915	TPH-915	PAH-915	pH, EC, SAR		Boron-HWS
1	SEPDI-FL@3.5'	2/27/23		1			X			X			X	X	X	X	X	-PH, EC, SAR by saturated paste
2	SEPDI-DL@4'	2/27/23		↓									↓	↓	↓	↓	↓	
3	ASTON@0.5'	2/27/23		↓									↓	↓	↓	↓	↓	
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		

Relinquished by: Martin Medeiros Date/Time: 15:30 2/27/23	Received by: [Signature] Date/Time: 15:30 2/27/23	TAT Business Days	Field DO	Notes:
		Same Day	Field EC	
Relinquished by: Tasman Lock Box Date/Time: 1740 2/27/23	Received by: [Signature] Date/Time: 1740 2/27/23	1 Day	Field ORP	
		2 Days	Field pH	
		3 Days	Field Temp.	
Relinquished by:	Received by:	Standard	X Field Turb.	
Temperature Upon Receipt: 10.4	Corrected Temperature: 10	IR gun #: 1	HNO3 lot #:	

S₂

Sample Receipt Checklist

S2 Work Order# 2302505

Client: Noble Gasman Client Project ID: Thompson 28-10

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

AS

Custodian Printed Name

2/27/23

Date/Time



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

Project: Noble - Thompson 28-10

Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/08/23 12:17

SEP01-FL@3.5'
2302505-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BGC0005	03/01/23	03/02/23	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: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0390	97.6 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0430	107 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0468	117 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BGC0006	03/01/23	03/01/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	10.8	86.4 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Noble - Thompson 28-10
Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/08/23 12:17

SEP01-FL@3.5'
2302505-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGB0842	02/28/23	03/01/23	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: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0235	70.6 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0226	67.7 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.110	0.0100	mg/L	1	BGB0833	02/27/23	03/01/23	EPA 6020B	

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

Date Sampled: **02/27/23 00:00**

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 - Thompson 28-10
Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/08/23 12:17

SEP01-FL@3.5'
2302505-01 (Soil)

Summit Scientific

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	68.2	0.0541	mg/L dry	1	BGC0071	03/02/23	03/06/23	EPA 6020B	
Magnesium	11.0	0.0541	"	"	"	"	"	"	
Sodium	3.61	0.0541	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.107	0.00100	units	1	BGC0185	03/07/23	03/07/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	92.3		%	1	BGB0870	02/28/23	03/01/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.245	0.0100	mmhos/cm	1	BGC0084	03/03/23	03/03/23	EPA 120.1	

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

Date Sampled: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.91		pH Units	1	BGC0083	03/03/23	03/03/23	EPA 9045D	

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

Project: Noble - Thompson 28-10
Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/08/23 12:17

SEP01-DL@4'
2302505-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BGC0005	03/01/23	03/02/23	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: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0377	94.4 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0423	106 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0441	110 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BGC0006	03/01/23	03/01/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	10.6	84.5 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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

Project: Noble - Thompson 28-10
Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/08/23 12:17

SEP01-DL@4'
2302505-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGB0842	02/28/23	03/01/23	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: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0337	101 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0240	72.0 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.0870	0.0100	mg/L	1	BGB0833	02/27/23	03/01/23	EPA 6020B	

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

Date Sampled: **02/27/23 00:00**

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 - Thompson 28-10
Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/08/23 12:17

SEP01-DL@4'
2302505-02 (Soil)

Summit Scientific

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	102	0.0537	mg/L dry	1	BGC0071	03/02/23	03/06/23	EPA 6020B	
Magnesium	17.8	0.0537	"	"	"	"	"	"	
Sodium	11.4	0.0537	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.274	0.00100	units	1	BGC0185	03/07/23	03/07/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	93.0		%	1	BGB0870	02/28/23	03/01/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.215	0.0100	mmhos/cm	1	BGC0084	03/03/23	03/03/23	EPA 120.1	

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

Date Sampled: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.23		pH Units	1	BGC0083	03/03/23	03/03/23	EPA 9045D	

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Noble - Thompson 28-10
Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/08/23 12:17

AST01@0.5'
2302505-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BGC0005	03/01/23	03/02/23	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: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0385	96.2 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0436	109 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0465	116 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BGC0006	03/01/23	03/01/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	11.2	89.8 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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

Project: Noble - Thompson 28-10

Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/08/23 12:17

AST01@0.5'
2302505-03 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGB0842	02/28/23	03/01/23	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: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0287	86.1 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0207	62.1 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.0316	0.0100	mg/L	1	BGB0833	02/27/23	03/01/23	EPA 6020B	

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

Date Sampled: **02/27/23 00:00**

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 - Thompson 28-10
Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/08/23 12:17

AST01@0.5'
2302505-03 (Soil)

Summit Scientific

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	49.5	0.0541	mg/L dry	1	BGC0071	03/02/23	03/06/23	EPA 6020B	
Magnesium	6.96	0.0541	"	"	"	"	"	"	
Sodium	1.03	0.0541	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0363	0.00100	units	1	BGC0185	03/07/23	03/07/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	92.3		%	1	BGB0870	02/28/23	03/01/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.0665	0.0100	mmhos/cm	1	BGC0084	03/03/23	03/03/23	EPA 120.1	

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

Date Sampled: **02/27/23 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	4.89		pH Units	1	BGC0083	03/03/23	03/03/23	EPA 9045D	

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

Project: Noble - Thompson 28-10

Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/08/23 12:17

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BGC0005 - EPA 5030 Soil MS

Blank (BGC0005-BLK1)

Prepared & Analyzed: 03/01/23

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>	<i>0.0482</i>		<i>"</i>	<i>0.0400</i>		<i>120</i>		<i>50-150</i>		
<i>Surrogate: Toluene-d8</i>	<i>0.0411</i>		<i>"</i>	<i>0.0400</i>		<i>103</i>		<i>50-150</i>		
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0439</i>		<i>"</i>	<i>0.0400</i>		<i>110</i>		<i>50-150</i>		

LCS (BGC0005-BS1)

Prepared & Analyzed: 03/01/23

Benzene	0.172	0.0020	mg/kg	0.150		115		70-130		
Toluene	0.177	0.0050	"	0.150		118		70-130		
Ethylbenzene	0.172	0.0050	"	0.150		115		70-130		
m,p-Xylene	0.348	0.010	"	0.300		116		70-130		
o-Xylene	0.162	0.0050	"	0.150		108		70-130		
1,2,4-Trimethylbenzene	0.149	0.0050	"	0.150		99.5		70-130		
1,3,5-Trimethylbenzene	0.153	0.0050	"	0.150		102		70-130		
Naphthalene	0.142	0.0038	"	0.150		94.4		70-130		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0484</i>		<i>"</i>	<i>0.0400</i>		<i>121</i>		<i>50-150</i>		
<i>Surrogate: Toluene-d8</i>	<i>0.0407</i>		<i>"</i>	<i>0.0400</i>		<i>102</i>		<i>50-150</i>		
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0427</i>		<i>"</i>	<i>0.0400</i>		<i>107</i>		<i>50-150</i>		

Matrix Spike (BGC0005-MS1)

Source: 2302488-01

Prepared & Analyzed: 03/01/23

Benzene	0.152	0.0020	mg/kg	0.150	ND	101		70-130		
Toluene	0.159	0.0050	"	0.150	ND	106		70-130		
Ethylbenzene	0.149	0.0050	"	0.150	ND	99.5		70-130		
m,p-Xylene	0.301	0.010	"	0.300	ND	100		70-130		
o-Xylene	0.144	0.0050	"	0.150	ND	96.0		70-130		
1,2,4-Trimethylbenzene	0.136	0.0050	"	0.150	ND	90.7		70-130		
1,3,5-Trimethylbenzene	0.137	0.0050	"	0.150	ND	91.5		70-130		
Naphthalene	0.148	0.0038	"	0.150	ND	98.6		70-130		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0491</i>		<i>"</i>	<i>0.0400</i>		<i>123</i>		<i>50-150</i>		
<i>Surrogate: Toluene-d8</i>	<i>0.0413</i>		<i>"</i>	<i>0.0400</i>		<i>103</i>		<i>50-150</i>		
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0418</i>		<i>"</i>	<i>0.0400</i>		<i>105</i>		<i>50-150</i>		

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

Project: Noble - Thompson 28-10
Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/08/23 12:17

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

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

Batch BGC0005 - EPA 5030 Soil MS

Matrix Spike Dup (BGC0005-MSD1)	Source: 2302488-01			Prepared & Analyzed: 03/01/23						
Benzene	0.156	0.0020	mg/kg	0.150	ND	104	70-130	2.79	30	
Toluene	0.159	0.0050	"	0.150	ND	106	70-130	0.226	30	
Ethylbenzene	0.148	0.0050	"	0.150	ND	98.9	70-130	0.544	30	
m,p-Xylene	0.304	0.010	"	0.300	ND	101	70-130	0.991	30	
o-Xylene	0.145	0.0050	"	0.150	ND	96.7	70-130	0.768	30	
1,2,4-Trimethylbenzene	0.137	0.0050	"	0.150	ND	91.4	70-130	0.769	30	
1,3,5-Trimethylbenzene	0.137	0.0050	"	0.150	ND	91.5	70-130	0.0219	30	
Naphthalene	0.150	0.0038	"	0.150	ND	100	70-130	1.51	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0511</i>		<i>"</i>	<i>0.0400</i>		<i>128</i>	<i>50-150</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0421</i>		<i>"</i>	<i>0.0400</i>		<i>105</i>	<i>50-150</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0433</i>		<i>"</i>	<i>0.0400</i>		<i>108</i>	<i>50-150</i>			

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Noble - Thompson 28-10
Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/08/23 12:17

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BGC0006 - EPA 3550A

Blank (BGC0006-BLK1)

Prepared & Analyzed: 03/01/23

C10-C28 (DRO)	ND	50	mg/kg								
C28-C36 (ORO)	ND	50	"								
Surrogate: <i>o</i> -Terphenyl	12.5		"	12.5	100	30-150					

LCS (BGC0006-BS1)

Prepared & Analyzed: 03/01/23

C10-C28 (DRO)	527	50	mg/kg	500	105	70-130					
Surrogate: <i>o</i> -Terphenyl	12.2		"	12.5	97.7	30-150					

Matrix Spike (BGC0006-MS1)

Source: 2302503-01

Prepared & Analyzed: 03/01/23

C10-C28 (DRO)	518	50	mg/kg	500	33.3	96.9	70-130				
Surrogate: <i>o</i> -Terphenyl	13.7		"	12.5	110	30-150					

Matrix Spike Dup (BGC0006-MSD1)

Source: 2302503-01

Prepared & Analyzed: 03/01/23

C10-C28 (DRO)	507	50	mg/kg	500	33.3	94.7	70-130	2.11	20		
Surrogate: <i>o</i> -Terphenyl	13.2		"	12.5	105	30-150					

Summit Scientific

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

Project: Noble - Thompson 28-10
Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/08/23 12:17

PAH by EPA Method 8270D SIM - Quality Control
Summit Scientific

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

Batch BGB0842 - EPA 5030 Soil MS

Blank (BGB0842-BLK1)

Prepared: 02/28/23 Analyzed: 03/01/23

Acenaphthene	ND	0.00500	mg/kg							
Anthracene	ND	0.00500	"							
Benzo (a) anthracene	ND	0.00500	"							
Benzo (a) pyrene	ND	0.00500	"							
Benzo (b) fluoranthene	ND	0.00500	"							
Benzo (k) fluoranthene	ND	0.00500	"							
Chrysene	ND	0.00500	"							
Dibenz (a,h) anthracene	ND	0.00500	"							
Fluoranthene	ND	0.00500	"							
Fluorene	ND	0.00500	"							
Indeno (1,2,3-cd) pyrene	ND	0.00500	"							
Pyrene	ND	0.00500	"							
1-Methylnaphthalene	ND	0.00500	"							
2-Methylnaphthalene	ND	0.00500	"							
Surrogate: 2-Methylnaphthalene-d10	0.0385		"	0.0333		115	40-150			
Surrogate: Fluoranthene-d10	0.0358		"	0.0333		108	40-150			

LCS (BGB0842-BS1)

Prepared: 02/28/23 Analyzed: 03/01/23

Acenaphthene	0.0321	0.00500	mg/kg	0.0333		96.2	31-137			
Anthracene	0.0386	0.00500	"	0.0333		116	30-120			
Benzo (a) anthracene	0.0300	0.00500	"	0.0333		90.1	30-120			
Benzo (a) pyrene	0.0374	0.00500	"	0.0333		112	30-120			
Benzo (b) fluoranthene	0.0331	0.00500	"	0.0333		99.3	30-120			
Benzo (k) fluoranthene	0.0312	0.00500	"	0.0333		93.7	30-120			
Chrysene	0.0393	0.00500	"	0.0333		118	30-120			
Dibenz (a,h) anthracene	0.0381	0.00500	"	0.0333		114	30-120			
Fluoranthene	0.0370	0.00500	"	0.0333		111	30-120			
Fluorene	0.0345	0.00500	"	0.0333		104	30-120			
Indeno (1,2,3-cd) pyrene	0.0356	0.00500	"	0.0333		107	30-120			
Pyrene	0.0361	0.00500	"	0.0333		108	35-142			
1-Methylnaphthalene	0.0368	0.00500	"	0.0333		110	35-142			
2-Methylnaphthalene	0.0329	0.00500	"	0.0333		98.6	35-142			
Surrogate: 2-Methylnaphthalene-d10	0.0381		"	0.0333		114	40-150			
Surrogate: Fluoranthene-d10	0.0370		"	0.0333		111	40-150			

Summit Scientific

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

Project: Noble - Thompson 28-10

Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/08/23 12:17

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BGB0842 - EPA 5030 Soil MS

Matrix Spike (BGB0842-MS1)	Source: 2302502-01			Prepared: 02/28/23 Analyzed: 03/01/23							
Acenaphthene	0.0528	0.00500	mg/kg	0.0333	ND	158	31-137				QM-01
Anthracene	0.0259	0.00500	"	0.0333	ND	77.7	30-120				
Benzo (a) anthracene	0.0249	0.00500	"	0.0333	ND	74.8	30-120				
Benzo (a) pyrene	0.0169	0.00500	"	0.0333	ND	50.6	30-120				
Benzo (b) fluoranthene	0.0228	0.00500	"	0.0333	ND	68.4	30-120				
Benzo (k) fluoranthene	0.0224	0.00500	"	0.0333	ND	67.2	30-120				
Chrysene	0.0290	0.00500	"	0.0333	0.00387	75.3	30-120				
Dibenz (a,h) anthracene	0.0249	0.00500	"	0.0333	ND	74.6	30-120				
Fluoranthene	0.0382	0.00500	"	0.0333	ND	115	30-120				
Fluorene	0.101	0.00500	"	0.0333	0.0434	171	30-120				QM-01
Indeno (1,2,3-cd) pyrene	0.0276	0.00500	"	0.0333	ND	82.7	30-120				
Pyrene	0.0354	0.00500	"	0.0333	0.00311	97.0	35-142				
1-Methylnaphthalene	0.227	0.00500	"	0.0333	0.143	252	15-130				QM-01
2-Methylnaphthalene	0.309	0.00500	"	0.0333	0.212	292	15-130				QM-01
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0336</i>		<i>"</i>	<i>0.0333</i>		<i>101</i>	<i>40-150</i>				
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0298</i>		<i>"</i>	<i>0.0333</i>		<i>89.5</i>	<i>40-150</i>				

Matrix Spike Dup (BGB0842-MSD1)	Source: 2302502-01			Prepared: 02/28/23 Analyzed: 03/01/23							
Acenaphthene	0.0604	0.00500	mg/kg	0.0333	ND	181	31-137	13.4	30		QM-01
Anthracene	0.0301	0.00500	"	0.0333	ND	90.4	30-120	15.2	30		
Benzo (a) anthracene	0.0296	0.00500	"	0.0333	ND	88.9	30-120	17.2	30		
Benzo (a) pyrene	0.0198	0.00500	"	0.0333	ND	59.3	30-120	15.9	30		
Benzo (b) fluoranthene	0.0270	0.00500	"	0.0333	ND	81.0	30-120	16.9	30		
Benzo (k) fluoranthene	0.0260	0.00500	"	0.0333	ND	77.9	30-120	14.8	30		
Chrysene	0.0322	0.00500	"	0.0333	0.00387	85.1	30-120	10.6	30		
Dibenz (a,h) anthracene	0.0264	0.00500	"	0.0333	ND	79.1	30-120	5.85	30		
Fluoranthene	0.0436	0.00500	"	0.0333	ND	131	30-120	13.2	30		QM-01
Fluorene	0.113	0.00500	"	0.0333	0.0434	208	30-120	11.3	30		QM-01
Indeno (1,2,3-cd) pyrene	0.0255	0.00500	"	0.0333	ND	76.4	30-120	7.93	30		
Pyrene	0.0460	0.00500	"	0.0333	0.00311	129	35-142	26.0	30		
1-Methylnaphthalene	0.192	0.00500	"	0.0333	0.143	149	15-130	16.3	50		QM-01
2-Methylnaphthalene	0.265	0.00500	"	0.0333	0.212	160	15-130	15.4	50		QM-01
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0373</i>		<i>"</i>	<i>0.0333</i>		<i>112</i>	<i>40-150</i>				
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0368</i>		<i>"</i>	<i>0.0333</i>		<i>110</i>	<i>40-150</i>				

Summit Scientific

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

Project: Noble - Thompson 28-10
Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/08/23 12:17

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

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

Batch BGB0833 - EPA 3050B

Blank (BGB0833-BLK1)

Prepared: 02/27/23 Analyzed: 03/01/23

Boron ND 0.0100 mg/L

LCS (BGB0833-BS1)

Prepared: 02/27/23 Analyzed: 03/01/23

Boron 5.31 0.0100 mg/L 5.00 106 80-120

Duplicate (BGB0833-DUP1)

Source: 2302339-01

Prepared: 02/27/23 Analyzed: 03/01/23

Boron 0.128 0.0100 mg/L 0.136 5.79 20

Matrix Spike (BGB0833-MS1)

Source: 2302339-01

Prepared: 02/27/23 Analyzed: 03/01/23

Boron 5.47 0.0100 mg/L 5.00 0.136 107 75-125

Matrix Spike Dup (BGB0833-MSD1)

Source: 2302339-01

Prepared: 02/27/23 Analyzed: 03/01/23

Boron 5.46 0.0100 mg/L 5.00 0.136 106 75-125 0.257 25

Summit Scientific

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

Project: Noble - Thompson 28-10

Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/08/23 12:17

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

Summit Scientific

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

Batch BGC0071 - General Preparation

Blank (BGC0071-BLK1)

Prepared: 03/02/23 Analyzed: 03/06/23

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

LCS (BGC0071-BS1)

Prepared: 03/02/23 Analyzed: 03/06/23

Calcium	5.19	0.0500	mg/L wet	5.00		104	70-130			
Magnesium	5.31	0.0500	"	5.00		106	70-130			
Sodium	5.32	0.0500	"	5.00		106	70-130			

Summit Scientific

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

Project: Noble - Thompson 28-10

Project Number: UWRWE-A2396-ABN
 Project Manager: Jacob Whritenour

Reported:
 03/08/23 12:17

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 BGB0870 - General Preparation

Duplicate (BGB0870-DUP1)	Source: 2302502-01		Prepared: 02/28/23 Analyzed: 03/01/23			
% Solids	89.5	%		89.1	0.499	20

Summit Scientific

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

Project: Noble - Thompson 28-10

Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/08/23 12:17

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction - Quality Control

Summit Scientific

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

Batch BGC0084 - General Preparation

Blank (BGC0084-BLK1)

Prepared & Analyzed: 03/03/23

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BGC0084-BS1)

Prepared & Analyzed: 03/03/23

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

Duplicate (BGC0084-DUP1)

Source: 2302493-01

Prepared & Analyzed: 03/03/23

Specific Conductance (EC) 0.242 0.0100 mmhos/cm 0.246 1.31 20

Summit Scientific

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

Project: Noble - Thompson 28-10

Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/08/23 12:17

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 BGC0083 - General Preparation

LCS (BGC0083-BS1)

Prepared & Analyzed: 03/03/23

pH 9.10 pH Units 9.18 99.1 95-105

Duplicate (BGC0083-DUP1)

Source: 2302493-01

Prepared & Analyzed: 03/03/23

pH 7.53 pH Units 7.40 1.74 20

Summit Scientific

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

Project: Noble - Thompson 28-10

Project Number: UWRWE-A2396-ABN

Project Manager: Jacob Whritenour

Reported:

03/08/23 12:17

Notes and Definitions

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

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

March 09, 2023

Jacob Whritenour

Tasman Geosciences

6855 W. 119th Ave.

Broomfield, CO 80020

RE: Noble - Thompson 28-10

Work Order #2303075

Enclosed are the results of analyses for samples received by Summit Scientific on 03/02/23 17:34. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read "Scott Sheely".

Scott Sheely For Paul Shrewsbury

President



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

Project: Noble - Thompson 28-10

Project Number: UWRWE-A2396-ABN

Project Manager: Jacob Whritenour

Reported:
03/09/23 12:07

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS02@2.5'	2303075-02	Soil	03/02/23 10:52	03/02/23 17:34
FS01@5.5'	2303075-05	Soil	03/02/23 11:00	03/02/23 17:34

Summit Scientific

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SUMMIT SCIENTIFIC

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

Lab ID	Page 1 of 1
2303075	

Client: Noble/Tasman		Project Manager: Jake Whritenour		Company: Noble	
Address: 6855 W 119TH AVE		E-Mail: Jwhritenour@tasman-geo.com		Project Name/Location: Thompson 28-10	
City/State/Zip: Broomfield CO 80020		Project Name: Thompson 28-10		AFE#:	
Phone: 503-915-3046		Project Number: UWRWE-A2396-ABN		PO/Billing Codes: UWRWE-A2396-ABN	
Sampler Name: Martin Medeiros		Project Number: UWRWE-A2396-ABN		Contact: Wade Firestien	

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested						Special Instructions
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	VOC-915	TPH-915	PAH-915	PH, EC, SAR	Boron-HWS	
1	SS01@2.5'	3/2/23	10:50	2			X			X			X	X	X	X	X	-PH, EC, SAR by saturated paste
2	SS02@2.5'	↓	10:52	↓														
3	SS03@2.5'	↓	10:53	↓														
4	SS04@2.5'	↓	10:55	↓														
5	FS01@5.5'	↓	11:00	↓														
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		

Relinquished by: Martin Medeiros	Date/Time: 3/2/23 15:30	Received by: [Signature]	Date/Time: 3/2/23 15:30	TAT Business Days	Field DO	Notes:
Relinquished by: Tasman Lockbox	Date/Time: 3/2/23 17:34	Received by: [Signature]	Date/Time: 3/2/23 17:34	Same Day	Field EC	
				1 Day	Field ORP	
				2 Days	Field pH	
				3 Days	Field Temp.	
Temperature Upon Receipt: 85	Corrected Temperature: [Signature]	IR gun #: 1	HNO3 lot #:	Standard	X Field Turb.	

S₂

S2 Work Order# 2303075

Sample Receipt Checklist

Client: Noble Gasman Client Project ID: Thompson 28-10

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 ²⁺), Hexavalent Chromium (Cr ⁶⁺ , Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out Completely? ⁽¹⁾	<input 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 ₂ SO ₄ , NaOH, HNO ₃ , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2? ⁽¹⁾ Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Additional Comments (if any):

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

AS
Custodian Printed Name

3/2/23
Date/Time



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

Project: Noble - Thompson 28-10
Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/09/23 12:07

SS02@2.5'
2303075-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/02/23 10:52**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BGC0088	03/03/23	03/04/23	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: **03/02/23 10:52**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0365	91.2 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0385	96.2 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0398	99.6 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/02/23 10:52**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BGC0090	03/03/23	03/03/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **03/02/23 10:52**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	3.80	30.4 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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

Project: Noble - Thompson 28-10
Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/09/23 12:07

SS02@2.5'
2303075-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/02/23 10:52**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGC0082	03/03/23	03/04/23	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: **03/02/23 10:52**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0258	77.4 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0251	75.4 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/02/23 10:52**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.141	0.0100	mg/L	1	BGC0145	03/06/23	03/08/23	EPA 6020B	

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

Date Sampled: **03/02/23 10:52**

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 - Thompson 28-10
Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/09/23 12:07

SS02@2.5'
2303075-02 (Soil)

Summit Scientific

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	136	0.0537	mg/L dry	1	BGC0143	03/06/23	03/08/23	EPA 6020B	
Magnesium	24.4	0.0537	"	"	"	"	"	"	
Sodium	3.17	0.0537	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **03/02/23 10:52**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0658	0.00100	units	1	BGC0221	03/08/23	03/08/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/02/23 10:52**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	93.1		%	1	BGC0196	03/07/23	03/08/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/02/23 10:52**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.211	0.0100	mmhos/cm	1	BGC0195	03/07/23	03/07/23	EPA 120.1	

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

Date Sampled: **03/02/23 10:52**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.93		pH Units	1	BGC0194	03/07/23	03/07/23	EPA 9045D	

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

Project: Noble - Thompson 28-10
Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/09/23 12:07

FS01@5.5'
2303075-05 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/02/23 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BGC0088	03/03/23	03/04/23	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	0.067	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	0.035	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	1.9	0.50	"	"	"	"	"	"	

Date Sampled: **03/02/23 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0369	92.2 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0388	97.0 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0407	102 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/02/23 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BGC0090	03/03/23	03/04/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **03/02/23 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	6.74	53.9 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Project: Noble - Thompson 28-10
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Project Manager: Jacob Whritenour

Reported:
03/09/23 12:07

FS01@5.5'
2303075-05 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/02/23 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGC0082	03/03/23	03/04/23	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	0.00510	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	0.0192	0.00500	"	"	"	"	"	"	

Date Sampled: **03/02/23 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0332	99.6 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0271	81.3 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/02/23 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.128	0.0100	mg/L	1	BGC0145	03/06/23	03/08/23	EPA 6020B	

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

Date Sampled: **03/02/23 11:00**

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 - Thompson 28-10
Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/09/23 12:07

FS01@5.5'
2303075-05 (Soil)

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	46.0	0.0532	mg/L dry	1	BGC0143	03/06/23	03/08/23	EPA 6020B	
Magnesium	6.71	0.0532	"	"	"	"	"	"	
Sodium	8.08	0.0532	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **03/02/23 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.295	0.00100	units	1	BGC0221	03/08/23	03/08/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/02/23 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	94.0		%	1	BGC0196	03/07/23	03/08/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/02/23 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.262	0.0100	mmhos/cm	1	BGC0195	03/07/23	03/07/23	EPA 120.1	

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

Date Sampled: **03/02/23 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.85		pH Units	1	BGC0194	03/07/23	03/07/23	EPA 9045D	

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Broomfield CO, 80020

Project: Noble - Thompson 28-10

Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/09/23 12:07

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 BGC0088 - EPA 5030 Soil MS

Blank (BGC0088-BLK1)

Prepared & Analyzed: 03/03/23

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>	<i>0.0389</i>		<i>"</i>	<i>0.0400</i>		<i>97.3</i>	<i>50-150</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0383</i>		<i>"</i>	<i>0.0400</i>		<i>95.7</i>	<i>50-150</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0401</i>		<i>"</i>	<i>0.0400</i>		<i>100</i>	<i>50-150</i>			

LCS (BGC0088-BS1)

Prepared & Analyzed: 03/03/23

Benzene	0.0903	0.0020	mg/kg	0.125		72.2	70-130			
Toluene	0.117	0.0050	"	0.125		93.6	70-130			
Ethylbenzene	0.146	0.0050	"	0.125		116	70-130			
m,p-Xylene	0.292	0.010	"	0.250		117	70-130			
o-Xylene	0.135	0.0050	"	0.125		108	70-130			
1,2,4-Trimethylbenzene	0.145	0.0050	"	0.125		116	70-130			
1,3,5-Trimethylbenzene	0.152	0.0050	"	0.125		121	70-130			
Naphthalene	0.0902	0.0038	"	0.125		72.2	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0378</i>		<i>"</i>	<i>0.0400</i>		<i>94.5</i>	<i>50-150</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0385</i>		<i>"</i>	<i>0.0400</i>		<i>96.3</i>	<i>50-150</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0376</i>		<i>"</i>	<i>0.0400</i>		<i>94.0</i>	<i>50-150</i>			

Matrix Spike (BGC0088-MS1)

Source: 2303072-01

Prepared & Analyzed: 03/03/23

Benzene	0.0882	0.0020	mg/kg	0.125	ND	70.6	70-130			
Toluene	0.118	0.0050	"	0.125	ND	94.1	70-130			
Ethylbenzene	0.149	0.0050	"	0.125	ND	119	70-130			
m,p-Xylene	0.297	0.010	"	0.250	ND	119	70-130			
o-Xylene	0.138	0.0050	"	0.125	ND	111	70-130			
1,2,4-Trimethylbenzene	0.149	0.0050	"	0.125	ND	119	70-130			
1,3,5-Trimethylbenzene	0.153	0.0050	"	0.125	ND	123	70-130			
Naphthalene	0.0976	0.0038	"	0.125	ND	78.0	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0396</i>		<i>"</i>	<i>0.0400</i>		<i>99.1</i>	<i>50-150</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0388</i>		<i>"</i>	<i>0.0400</i>		<i>97.0</i>	<i>50-150</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0396</i>		<i>"</i>	<i>0.0400</i>		<i>99.0</i>	<i>50-150</i>			

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

Project: Noble - Thompson 28-10
Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/09/23 12:07

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 BGC0088 - EPA 5030 Soil MS

Matrix Spike Dup (BGC0088-MSD1)	Source: 2303072-01			Prepared & Analyzed: 03/03/23						
Benzene	0.117	0.0020	mg/kg	0.125	ND	93.3	70-130	27.8	30	
Toluene	0.117	0.0050	"	0.125	ND	93.5	70-130	0.691	30	
Ethylbenzene	0.143	0.0050	"	0.125	ND	115	70-130	3.66	30	
m,p-Xylene	0.288	0.010	"	0.250	ND	115	70-130	3.05	30	
o-Xylene	0.137	0.0050	"	0.125	ND	110	70-130	0.807	30	
1,2,4-Trimethylbenzene	0.146	0.0050	"	0.125	ND	117	70-130	1.95	30	
1,3,5-Trimethylbenzene	0.151	0.0050	"	0.125	ND	121	70-130	1.70	30	
Naphthalene	0.0988	0.0038	"	0.125	ND	79.1	70-130	1.28	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0408</i>		<i>"</i>	<i>0.0400</i>		<i>102</i>	<i>50-150</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0391</i>		<i>"</i>	<i>0.0400</i>		<i>97.6</i>	<i>50-150</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0400</i>		<i>"</i>	<i>0.0400</i>		<i>100</i>	<i>50-150</i>			

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Project: Noble - Thompson 28-10
Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/09/23 12:07

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BGC0090 - EPA 3550A

Blank (BGC0090-BLK1)

Prepared & Analyzed: 03/03/23

C10-C28 (DRO)	ND	50	mg/kg								
C28-C36 (ORO)	ND	50	"								
Surrogate: <i>o</i> -Terphenyl	11.4		"	12.5		90.8	30-150				

LCS (BGC0090-BS1)

Prepared & Analyzed: 03/03/23

C10-C28 (DRO)	479	50	mg/kg	500		95.7	70-130				
Surrogate: <i>o</i> -Terphenyl	11.6		"	12.5		92.8	30-150				

Matrix Spike (BGC0090-MS1)

Source: 2303072-01

Prepared & Analyzed: 03/03/23

C10-C28 (DRO)	441	50	mg/kg	500	14.1	85.3	70-130				
Surrogate: <i>o</i> -Terphenyl	9.79		"	12.5		78.3	30-150				

Matrix Spike Dup (BGC0090-MSD1)

Source: 2303072-01

Prepared & Analyzed: 03/03/23

C10-C28 (DRO)	505	50	mg/kg	500	14.1	98.3	70-130	13.7	20		
Surrogate: <i>o</i> -Terphenyl	9.08		"	12.5		72.6	30-150				

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Project Manager: Jacob Whritenour

Reported:
03/09/23 12:07

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 BGC0082 - EPA 5030 Soil MS

Blank (BGC0082-BLK1)

Prepared & Analyzed: 03/03/23

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>0.0280</i>		"	<i>0.0333</i>		<i>83.9</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0338</i>		"	<i>0.0333</i>		<i>101</i>	<i>40-150</i>			

LCS (BGC0082-BS1)

Prepared & Analyzed: 03/03/23

Acenaphthene	0.0370	0.00500	mg/kg	0.0333	111	31-137
Anthracene	0.0391	0.00500	"	0.0333	117	30-120
Benzo (a) anthracene	0.0291	0.00500	"	0.0333	87.2	30-120
Benzo (a) pyrene	0.0270	0.00500	"	0.0333	81.0	30-120
Benzo (b) fluoranthene	0.0353	0.00500	"	0.0333	106	30-120
Benzo (k) fluoranthene	0.0380	0.00500	"	0.0333	114	30-120
Chrysene	0.0350	0.00500	"	0.0333	105	30-120
Dibenz (a,h) anthracene	0.0324	0.00500	"	0.0333	97.3	30-120
Fluoranthene	0.0368	0.00500	"	0.0333	111	30-120
Fluorene	0.0400	0.00500	"	0.0333	120	30-120
Indeno (1,2,3-cd) pyrene	0.0260	0.00500	"	0.0333	78.1	30-120
Pyrene	0.0347	0.00500	"	0.0333	104	35-142
1-Methylnaphthalene	0.0368	0.00500	"	0.0333	111	35-142
2-Methylnaphthalene	0.0351	0.00500	"	0.0333	105	35-142
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0361</i>		"	<i>0.0333</i>	<i>108</i>	<i>40-150</i>
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0349</i>		"	<i>0.0333</i>	<i>105</i>	<i>40-150</i>

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Project: Noble - Thompson 28-10

Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/09/23 12:07

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 BGC0082 - EPA 5030 Soil MS

Matrix Spike (BGC0082-MS1)	Source: 2303072-01			Prepared & Analyzed: 03/03/23								
Acenaphthene	0.0196	0.00500	mg/kg	0.0333	ND	58.9	31-137					
Anthracene	0.0198	0.00500	"	0.0333	ND	59.3	30-120					
Benzo (a) anthracene	0.0184	0.00500	"	0.0333	ND	55.3	30-120					
Benzo (a) pyrene	0.0173	0.00500	"	0.0333	ND	51.8	30-120					
Benzo (b) fluoranthene	0.0188	0.00500	"	0.0333	0.00321	46.8	30-120					
Benzo (k) fluoranthene	0.0218	0.00500	"	0.0333	ND	65.3	30-120					
Chrysene	0.0176	0.00500	"	0.0333	ND	52.8	30-120					
Dibenz (a,h) anthracene	0.0156	0.00500	"	0.0333	ND	46.7	30-120					
Fluoranthene	0.0228	0.00500	"	0.0333	ND	68.5	30-120					
Fluorene	0.0231	0.00500	"	0.0333	ND	69.3	30-120					
Indeno (1,2,3-cd) pyrene	0.0173	0.00500	"	0.0333	ND	51.8	30-120					
Pyrene	0.0204	0.00500	"	0.0333	0.00211	54.7	35-142					
1-Methylnaphthalene	0.0212	0.00500	"	0.0333	ND	63.7	15-130					
2-Methylnaphthalene	0.0209	0.00500	"	0.0333	ND	62.6	15-130					
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0204</i>		<i>"</i>	<i>0.0333</i>		<i>61.1</i>	<i>40-150</i>					
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0201</i>		<i>"</i>	<i>0.0333</i>		<i>60.4</i>	<i>40-150</i>					

Matrix Spike Dup (BGC0082-MSD1)	Source: 2303072-01			Prepared: 03/03/23 Analyzed: 03/04/23								
Acenaphthene	0.0223	0.00500	mg/kg	0.0333	ND	66.9	31-137	12.8	30			
Anthracene	0.0266	0.00500	"	0.0333	ND	79.7	30-120	29.4	30			
Benzo (a) anthracene	0.0245	0.00500	"	0.0333	ND	73.4	30-120	28.0	30			
Benzo (a) pyrene	0.0209	0.00500	"	0.0333	ND	62.8	30-120	19.2	30			
Benzo (b) fluoranthene	0.0260	0.00500	"	0.0333	0.00321	68.2	30-120	31.8	30			QR-02
Benzo (k) fluoranthene	0.0283	0.00500	"	0.0333	ND	84.9	30-120	26.2	30			
Chrysene	0.0224	0.00500	"	0.0333	ND	67.2	30-120	24.0	30			
Dibenz (a,h) anthracene	0.0195	0.00500	"	0.0333	ND	58.5	30-120	22.3	30			
Fluoranthene	0.0283	0.00500	"	0.0333	ND	85.0	30-120	21.5	30			
Fluorene	0.0311	0.00500	"	0.0333	ND	93.2	30-120	29.4	30			
Indeno (1,2,3-cd) pyrene	0.0182	0.00500	"	0.0333	ND	54.6	30-120	5.11	30			
Pyrene	0.0269	0.00500	"	0.0333	0.00211	74.3	35-142	27.6	30			
1-Methylnaphthalene	0.0284	0.00500	"	0.0333	ND	85.2	15-130	28.9	50			
2-Methylnaphthalene	0.0274	0.00500	"	0.0333	ND	82.3	15-130	27.3	50			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0280</i>		<i>"</i>	<i>0.0333</i>		<i>84.0</i>	<i>40-150</i>					
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0268</i>		<i>"</i>	<i>0.0333</i>		<i>80.3</i>	<i>40-150</i>					

Summit Scientific

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

Project: Noble - Thompson 28-10
Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/09/23 12:07

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

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

Batch BGC0145 - EPA 3050B

Blank (BGC0145-BLK1)

Prepared: 03/06/23 Analyzed: 03/08/23

Boron ND 0.0100 mg/L

LCS (BGC0145-BS1)

Prepared: 03/06/23 Analyzed: 03/08/23

Boron 10.1 0.0100 mg/L 10.0 101 80-120

Duplicate (BGC0145-DUP1)

Source: 2303075-02

Prepared: 03/06/23 Analyzed: 03/08/23

Boron 0.128 0.0100 mg/L 0.141 9.93 20

Matrix Spike (BGC0145-MS1)

Source: 2303075-02

Prepared: 03/06/23 Analyzed: 03/08/23

Boron 10.1 0.0100 mg/L 10.0 0.141 99.6 75-125

Matrix Spike Dup (BGC0145-MSD1)

Source: 2303075-02

Prepared: 03/06/23 Analyzed: 03/08/23

Boron 10.1 0.0100 mg/L 10.0 0.141 99.3 75-125 0.286 25

Summit Scientific

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Tasman Geosciences
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Broomfield CO, 80020

Project: Noble - Thompson 28-10

Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/09/23 12:07

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

Summit Scientific

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

Batch BGC0143 - General Preparation

Blank (BGC0143-BLK1)

Prepared: 03/06/23 Analyzed: 03/08/23

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

LCS (BGC0143-BS1)

Prepared: 03/06/23 Analyzed: 03/08/23

Calcium	4.46	0.0500	mg/L wet	5.00		89.3	70-130			
Magnesium	4.35	0.0500	"	5.00		87.0	70-130			
Sodium	4.51	0.0500	"	5.00		90.2	70-130			

Summit Scientific

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

Project: Noble - Thompson 28-10
 Project Number: UWRWE-A2396-ABN
 Project Manager: Jacob Whritenour

Reported:
 03/09/23 12:07

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 BGC0196 - General Preparation

Duplicate (BGC0196-DUP1)	Source: 2302120-32	Prepared: 03/07/23	Analyzed: 03/08/23
% Solids	88.6	%	88.7
			0.128
			20

Summit Scientific

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Broomfield CO, 80020

Project: Noble - Thompson 28-10

Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/09/23 12:07

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 BGC0195 - General Preparation

Blank (BGC0195-BLK1)

Prepared & Analyzed: 03/07/23

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BGC0195-BS1)

Prepared & Analyzed: 03/07/23

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

Duplicate (BGC0195-DUP1)

Source: 2303045-01

Prepared & Analyzed: 03/07/23

Specific Conductance (EC) 0.962 0.0100 mmhos/cm 0.973 1.14 20

Summit Scientific

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

Project: Noble - Thompson 28-10

Project Number: UWRWE-A2396-ABN
Project Manager: Jacob Whritenour

Reported:
03/09/23 12:07

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 BGC0194 - General Preparation

LCS (BGC0194-BS1)

Prepared & Analyzed: 03/07/23

pH	9.17	pH Units	9.18	99.9	95-105
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Duplicate (BGC0194-DUP1)

Source: 2303045-01

Prepared & Analyzed: 03/07/23

pH	7.82	pH Units	7.84	0.255	20
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Summit Scientific

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

Project: Noble - Thompson 28-10

Project Number: UWRWE-A2396-ABN

Project Manager: Jacob Whritenour

Reported:
03/09/23 12:07

Notes and Definitions

- QR-02 The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
- 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