

TABLE 1
SOIL SAMPLE LOCATIONS
NOBLE ENERGY, INC. - HANSCOME C02 FL

Soil Sample ID	Date	PID (ppm)	Visual	Olfactory	Sample Type (Grab/Lab)	Latitude ¹	Longitude	PDOP
FL01-A@4'	03/15/23	0.0	No Staining	No Odor	Lab	40.28527288	-104.5630301	0.9
FL01-B@5'	03/15/23	0.0	No Staining	No Odor	Lab	40.28517195	-104.5650454	0.8
FL01-C@4'	03/15/23	0.0	No Staining	No Odor	Grab	40.28525740	-104.5637297	0.9
FL01-D@4'	03/15/23	0.0	No Staining	No Odor	Grab	40.28515948	-104.5644206	0.9
FL01-E@4'	03/15/23	0.0	No Staining	No Odor	Grab	40.28512103	-104.5646518	0.9
FL01-F@4'	03/15/23	0.0	No Staining	No Odor	Lab	40.28508140	-104.5648238	0.9

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. - HANSCOME C02 FL

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
FL01-A@4'	03/15/23	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50	0.0190	0.0284	0.0331	0.0154	0.0276	0.0106	0.0280	<0.00500	0.0860	0.0213	0.0108	0.0621	<0.00500	<0.00500
FL01-B@5'	03/15/23	<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	
FL01-F@4'	03/15/23	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50	0.755	1.29	1.59	0.830	1.49	0.523	1.29	<0.00500	3.87	0.958	0.499	2.77	0.0531	0.0472

Soil Sample ID	Date	pH	SAR	EC (mmhos/cm)	Boron (mg/L)
Residential SSL ²		6 - 8.3	<6	<4mmhos/cm	2
FL01-A@4'	03/15/23	7.43	1.89	0.485	0.165
FL01-B@5'	03/15/23	7.84	0.348	0.301	0.218
FL01-F@4'	03/15/23	6.84	0.891	0.964	0.0885

Notes:

1. Compounds referenced from 2 CCR 404-1, Table 915-1, effective January 15, 2021.

2. Soil Screening Levels (SSL) referenced from EPA Regional Screening Levels (EPA RSLs) for Chemical Contaminants at Superfund Sites, effective November 2020.

3. 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

Photographic Log



Equipment ID: FL01-A@4'

Equipment Type: Flowline

Material: Steel

Volume:

Contents: Oil/Gas/Water

Notes/Conditions:



Equipment ID: FL01-B@5'

Equipment Type: Flowline


Material: Steel

Volume:

Contents: Oil/Gas/Water

Notes/Conditions:

Photographic Log

							
Equipment ID: FL01-C@4'		Equipment Type: Flowline		Equipment ID: FL01-D@4'		Equipment Type: Flowline	
Material: Steel		Volume:		Contents: Oil/Gas/Water		Material: Steel	
						Volume:	
						Contents: Oil/Gas/Water	
Notes/Conditions:				Notes/Conditions:			

Photographic Log


Equipment ID: FL01-E@4'

Equipment Type: Flowline

Material: Steel

Volume:
Contents: Oil/Gas/Water

Notes/Conditions:

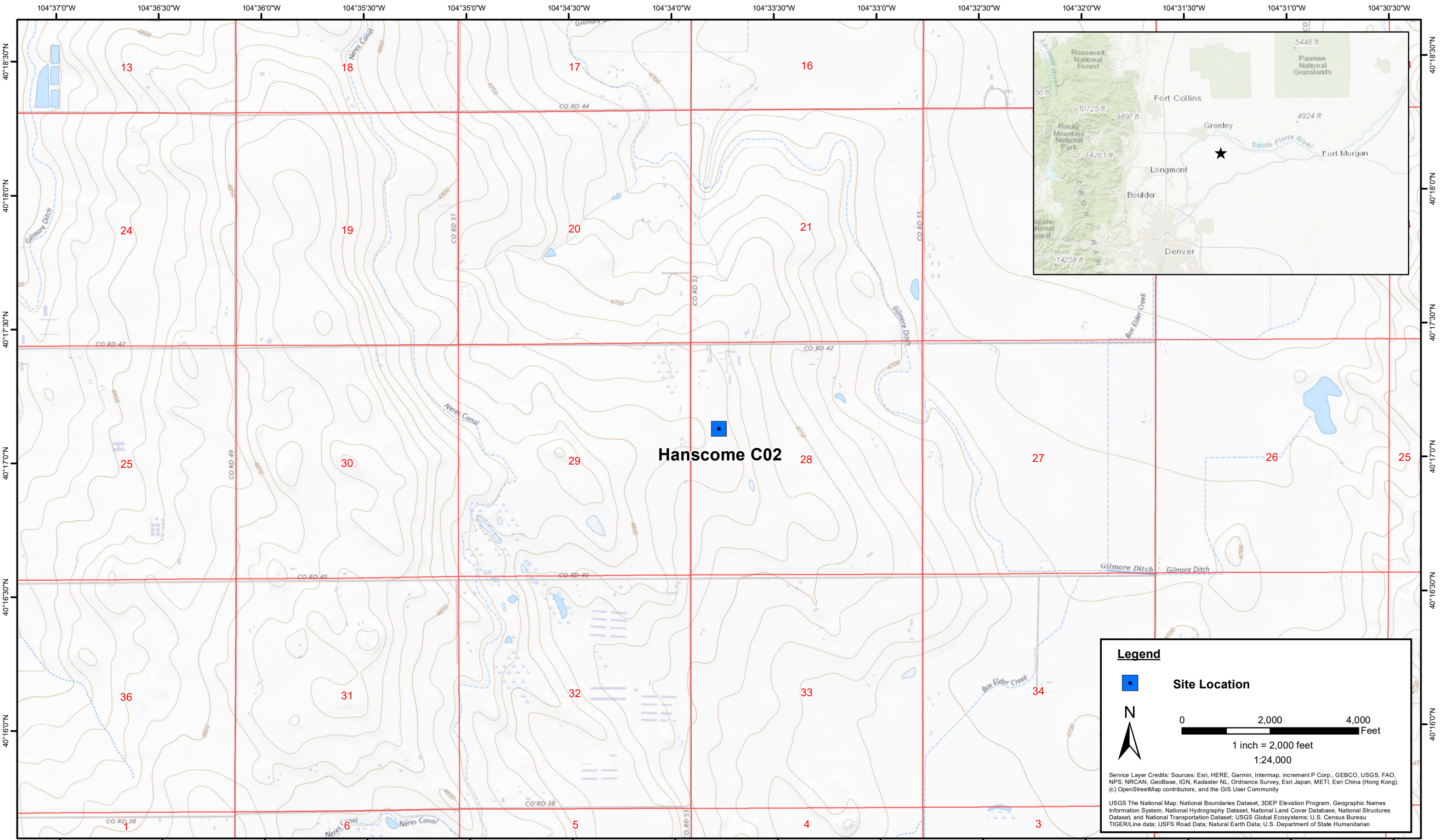
Equipment ID: FL01-F@4'

Equipment Type: Flowline

Material: Steel

Volume:
Contents: Oil/Gas/Water

Notes/Conditions:



DATE:	March 2023
DESIGNED BY:	J. Whritenour
DRAWN BY:	L. Reed

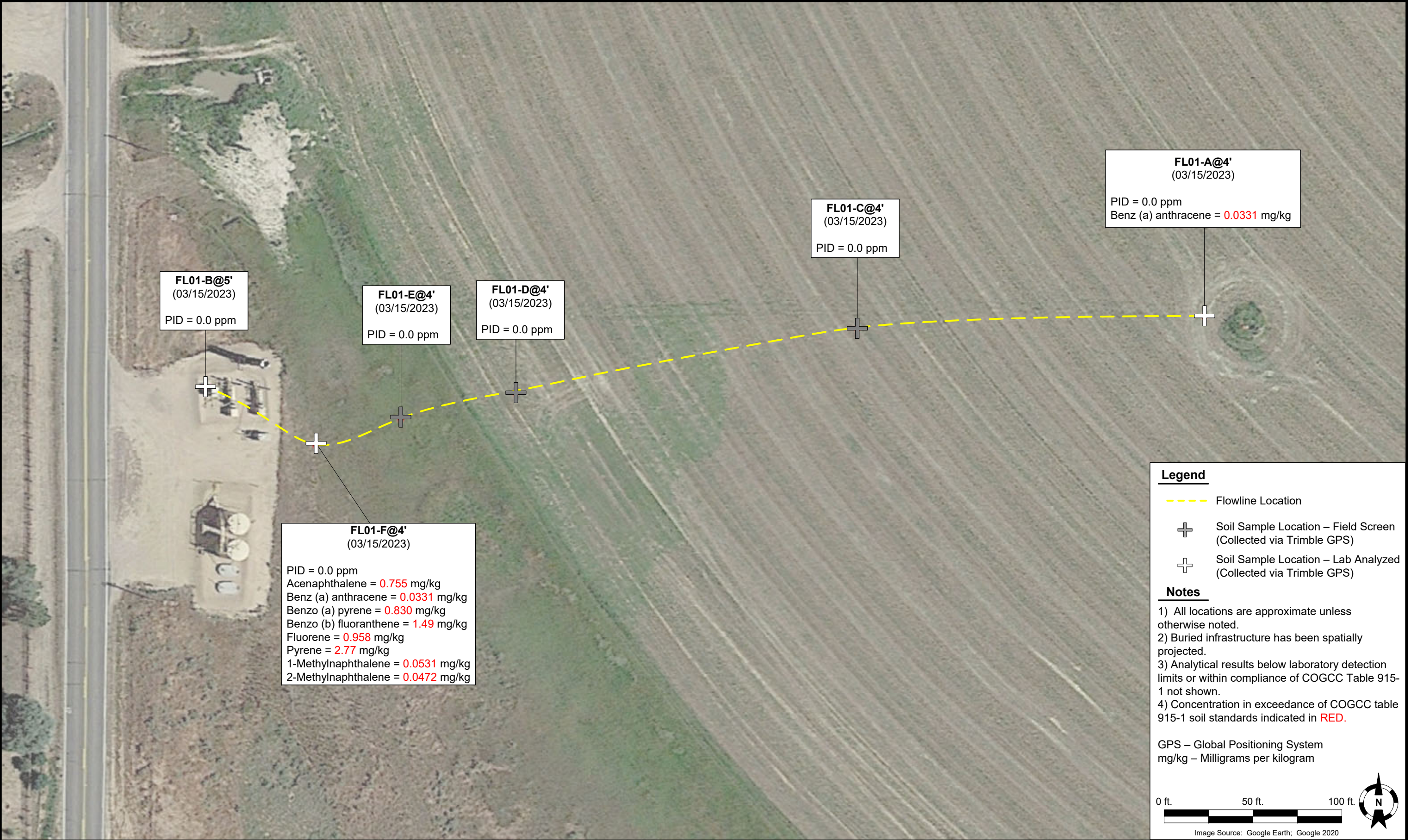


Tasman, Inc.
6855 W. 119th Ave
Broomfield, CO 80020

Noble Energy, Inc - DJ Basin
Hanscome C02
SWNW Sec. 28-T4N-R64W
Weld County, Colorado

Site Location Map

Figure
1



Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

March 24, 2023

Jacob Whritenour

Tasman Geosciences

6855 W. 119th Ave.

Broomfield, CO 80020

RE: Noble - Hanscome C02

Work Order #2303414

Enclosed are the results of analyses for samples received by Summit Scientific on 03/15/23 18:18. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

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

Scott Sheely For Paul Shrewsbury
President



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

Project: Noble - Hanscome C02
Project Number: UWRWE-A2384-ABN
Project Manager: Jacob Whritenour

Reported:
03/24/23 14:23

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FL01-A@4'	2303414-01	Soil	03/15/23 13:43	03/15/23 18:18
FL01-B@5'	2303414-02	Soil	03/15/23 14:25	03/15/23 18:18
FL01-F@4'	2303414-03	Soil	03/15/23 14:08	03/15/23 18:18

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: Chevron
Address: 6855 W. 119th Ave		E-Mail: Jwhritenour@tasman-geo.com	Project Name/Location: <u>Hanscome CO2</u>
City/State/Zip: Broomfield, CO 80020			AFE#:
Phone: 303-261-6246		Project Name: <u>Hanscome CO2</u>	PO/Billing Codes:
Sampler Name: Stanley Gilbert		Project Number: <u>UWRWE-A2384-ABN</u>	Contact: <u>Jacob Bulla</u>

					Preservative				Matrix				Analysis Requested								Special Instructions
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other _____	Water	Soil	Air-Canister #	Other _____	VOC - 915	TPH - 915	PAH - 915	pH,EC,SAR	Boron - HWS	Metals - 915	HOLD		
1	FLO1-A@4'	3/15/23	13:43	2			X			X			X	X	X	X	X				pH, EC, SAR by saturated paste
2	FLO1-B@5'	I	14:25	I			I			I			I	I	I	I	I				
3	FLO1-F@4'	I	14:08	L			I			I			I	I	I	I	I				
4																					
5																					
6																					
7																					
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12																					
13																					
14																					
15																					

Relinquished by: <u>[Signature]</u>	Date/Time: <u>3/15/23</u> <u>16:27</u>	Received by: <u>Tasman Lock Box</u>	Date/Time: <u>3/15/23</u> <u>16:27</u>	TAT Business Days	Field DO	Notes:
Relinquished by: <u>Tasman Lock Box</u>	Date/Time: <u>3/15/23</u> <u>18:18</u>	Received by: <u>[Signature]</u>	Date/Time: <u>3/15/23</u> <u>18:18</u>	Same Day	Field EC	
				1 Day	Field ORP	
				2 Days	Field pH	
				3 Days	Field Temp.	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Standard	X Field Turb.	
Temperature Upon Receipt: <u>12.1</u>	Corrected Temperature: <u>12.1</u>	IR gun #: <u>1</u>	HNO3 lot #:			

S₂

Sample Receipt Checklist

S2 Work Order#

2303414

Client: Noble Frisman Client Project ID: Hanscome Co2Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other ☐ Airbill #: ☐

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------	--------------------------	--------------------------

Matrix (Check all that apply) Air ☐ Soil/Solid ☒ Water ☐ Other ☐Temp (°C) 12.1Thermometer # 1

	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.

Custodian Printed Name

Date/Time

3-15-23



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

Project: Noble - Hanscome C02
Project Number: UWRWE-A2384-ABN
Project Manager: Jacob Whritenour

Reported:
03/24/23 14:23

FL01-A@4'
2303414-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/15/23 13:43**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BGC0570	03/18/23	03/20/23	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: **03/15/23 13:43**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0478	120 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0397	99.2 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0425	106 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/15/23 13:43**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BGC0573	03/18/23	03/22/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **03/15/23 13:43**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	11.4	91.3 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Noble - Hanscome C02
Project Number: UWRWE-A2384-ABN
Project Manager: Jacob Whritenour

Reported:
03/24/23 14:23

FL01-A@4'
2303414-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/15/23 13:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	0.0190	0.00500	mg/kg	1	BGC0771	03/23/23	03/23/23	EPA 8270D SIM	
Anthracene	0.0284	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	0.0331	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	0.0154	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	0.0276	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	0.0106	0.00500	"	"	"	"	"	"	
Chrysene	0.0280	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	0.0860	0.00500	"	"	"	"	"	"	
Fluorene	0.0213	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	0.0108	0.00500	"	"	"	"	"	"	
Pyrene	0.0621	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **03/15/23 13:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0231	69.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0202	60.6 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/15/23 13:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.165	0.0100	mg/L	1	BGC0653	03/20/23	03/22/23	EPA 6020B	

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

Date Sampled: **03/15/23 13:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	25.8	0.0530	mg/L dry	1	BGC0700	03/21/23	03/22/23	EPA 6020B	

Summit Scientific

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Tasman Geosciences
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Broomfield CO, 80020

Project: Noble - Hanscome C02
Project Number: UWRWE-A2384-ABN
Project Manager: Jacob Whritenour

Reported:
03/24/23 14:23

FL01-A@4'
2303414-01 (Soil)

Summit Scientific

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

Magnesium	11.7	0.0530	mg/L dry	1	BGC0700	03/21/23	03/22/23	EPA 6020B
Sodium	46.1	0.0530	"	"	"	"	"	"

Calculated Analysis

Date Sampled: **03/15/23 13:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.89	0.00100	units	1	BGC0784	03/23/23	03/23/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/15/23 13:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	94.3		%	1	BGC0684	03/21/23	03/21/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/15/23 13:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.485	0.0100	mmhos/cm	1	BGC0729	03/22/23	03/22/23	EPA 120.1	

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

Date Sampled: **03/15/23 13:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.43		pH Units	1	BGC0728	03/22/23	03/22/23	EPA 9045D	

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Noble - Hanscome C02
Project Number: UWRWE-A2384-ABN
Project Manager: Jacob Whritenour

Reported:
03/24/23 14:23

FL01-B@5'
2303414-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/15/23 14:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BGC0570	03/18/23	03/20/23	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: **03/15/23 14:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0466	117 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0388	97.0 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0417	104 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/15/23 14:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BGC0573	03/18/23	03/22/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **03/15/23 14:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	13.3	106 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Project: Noble - Hanscome C02
Project Number: UWRWE-A2384-ABN
Project Manager: Jacob Whritenour

Reported:
03/24/23 14:23

FL01-B@5'
2303414-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/15/23 14:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BGC0771	03/23/23	03/23/23	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: **03/15/23 14:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0226	67.7 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0223	67.0 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/15/23 14:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.218	0.0100	mg/L	1	BGC0653	03/20/23	03/22/23	EPA 6020B	

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

Date Sampled: **03/15/23 14:25**

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 - Hanscome C02
Project Number: UWRWE-A2384-ABN
Project Manager: Jacob Whritenour

Reported:
03/24/23 14:23

FL01-B@5'
2303414-02 (Soil)

Summit Scientific

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

Calcium	30.3	0.0586	mg/L dry	1	BGC0700	03/21/23	03/22/23	EPA 6020B
Magnesium	7.80	0.0586	"	"	"	"	"	"
Sodium	8.30	0.0586	"	"	"	"	"	"

Calculated Analysis

Date Sampled: **03/15/23 14:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.348	0.00100	units	1	BGC0784	03/23/23	03/23/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/15/23 14:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	85.3		%	1	BGC0684	03/21/23	03/21/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/15/23 14:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.301	0.0100	mmhos/cm	1	BGC0729	03/22/23	03/22/23	EPA 120.1	

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

Date Sampled: **03/15/23 14:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.84		pH Units	1	BGC0728	03/22/23	03/22/23	EPA 9045D	

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Project: Noble - Hanscome C02
Project Number: UWRWE-A2384-ABN
Project Manager: Jacob Whritenour

Reported:
03/24/23 14:23

FL01-F@4'
2303414-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/15/23 14:08**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BGC0570	03/18/23	03/21/23	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: **03/15/23 14:08**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0508	127 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0368	91.9 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0411	103 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/15/23 14:08**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BGC0573	03/18/23	03/22/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **03/15/23 14:08**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	11.4	91.3 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Tasman Geosciences
6855 W. 119th Ave.
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Project: Noble - Hanscome C02
Project Number: UWRWE-A2384-ABN
Project Manager: Jacob Whritenour

Reported:
03/24/23 14:23

FL01-F@4'
2303414-03 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/15/23 14:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	0.755	0.0500	mg/kg	10	BGC0771	03/23/23	03/24/23	EPA 8270D SIM	
Anthracene	1.29	0.0500	"	"	"	"	"	"	
Benzo (a) anthracene	1.59	0.0500	"	"	"	"	"	"	
Benzo (a) pyrene	0.830	0.0500	"	"	"	"	"	"	
Benzo (b) fluoranthene	1.49	0.0500	"	"	"	"	"	"	
Benzo (k) fluoranthene	0.523	0.0500	"	"	"	"	"	"	
Chrysene	1.29	0.0500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	1	"	"	03/23/23	"	
Fluoranthene	3.87	0.0500	"	10	"	"	03/24/23	"	E
Fluorene	0.958	0.0500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	0.499	0.0500	"	"	"	"	"	"	
Pyrene	2.77	0.0500	"	"	"	"	"	"	E
1-Methylnaphthalene	0.0531	0.00500	"	1	"	"	03/23/23	"	
2-Methylnaphthalene	0.0472	0.00500	"	"	"	"	"	"	

Date Sampled: **03/15/23 14:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0250	74.9 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0201	60.3 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/15/23 14:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.0885	0.0100	mg/L	1	BGC0653	03/20/23	03/22/23	EPA 6020B	

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

Date Sampled: **03/15/23 14:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	65.6	0.0538	mg/L dry	1	BGC0700	03/21/23	03/22/23	EPA 6020B	

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

Project: Noble - Hanscome C02
Project Number: UWRWE-A2384-ABN
Project Manager: Jacob Whritenour

Reported:
03/24/23 14:23

FL01-F@4'
2303414-03 (Soil)

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

Magnesium	21.4	0.0538	mg/L dry	1	BGC0700	03/21/23	03/22/23	EPA 6020B
Sodium	32.5	0.0538	"	"	"	"	"	"

Calculated Analysis

Date Sampled: **03/15/23 14:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.891	0.00100	units	1	BGC0784	03/23/23	03/23/23	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/15/23 14:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	92.9		%	1	BGC0684	03/21/23	03/21/23	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/15/23 14:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.964	0.0100	mmhos/cm	1	BGC0729	03/22/23	03/22/23	EPA 120.1	

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

Date Sampled: **03/15/23 14:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	6.84		pH Units	1	BGC0728	03/22/23	03/22/23	EPA 9045D	

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

Project: Noble - Hanscome C02
Project Number: UWRWE-A2384-ABN
Project Manager: Jacob Whritenour

Reported:
03/24/23 14:23

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BGC0570 - EPA 5030 Soil MS

Blank (BGC0570-BLK1)

Prepared: 03/18/23 Analyzed: 03/20/23

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	"							
Surrogate: 1,2-Dichloroethane-d4	0.0482		"	0.0400		121	50-150			
Surrogate: Toluene-d8	0.0384		"	0.0400		96.1	50-150			
Surrogate: 4-Bromofluorobenzene	0.0415		"	0.0400		104	50-150			

LCS (BGC0570-BS1)

Prepared: 03/18/23 Analyzed: 03/20/23

Benzene	0.0812	0.0020	mg/kg	0.100		81.2	70-130			
Toluene	0.0742	0.0050	"	0.100		74.2	70-130			
Ethylbenzene	0.0869	0.0050	"	0.100		86.9	70-130			
m,p-Xylene	0.177	0.010	"	0.200		88.4	70-130			
o-Xylene	0.0852	0.0050	"	0.100		85.2	70-130			
1,2,4-Trimethylbenzene	0.0814	0.0050	"	0.100		81.4	70-130			
1,3,5-Trimethylbenzene	0.0834	0.0050	"	0.100		83.4	70-130			
Naphthalene	0.0759	0.0038	"	0.100		75.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0430		"	0.0400		108	50-150			
Surrogate: Toluene-d8	0.0385		"	0.0400		96.2	50-150			
Surrogate: 4-Bromofluorobenzene	0.0414		"	0.0400		104	50-150			

Matrix Spike (BGC0570-MS1)

Source: 2303404-01

Prepared: 03/18/23 Analyzed: 03/20/23

Benzene	0.0825	0.0020	mg/kg	0.100	ND	82.5	70-130			
Toluene	0.0760	0.0050	"	0.100	ND	76.0	70-130			
Ethylbenzene	0.0916	0.0050	"	0.100	ND	91.6	70-130			
m,p-Xylene	0.184	0.010	"	0.200	ND	92.2	70-130			
o-Xylene	0.0868	0.0050	"	0.100	ND	86.8	70-130			
1,2,4-Trimethylbenzene	0.0837	0.0050	"	0.100	ND	83.7	70-130			
1,3,5-Trimethylbenzene	0.0870	0.0050	"	0.100	ND	87.0	70-130			
Naphthalene	0.0820	0.0038	"	0.100	ND	82.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0419		"	0.0400		105	50-150			
Surrogate: Toluene-d8	0.0383		"	0.0400		95.7	50-150			
Surrogate: 4-Bromofluorobenzene	0.0411		"	0.0400		103	50-150			

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

Project: Noble - Hanscome C02
Project Number: UWRWE-A2384-ABN
Project Manager: Jacob Whritenour

Reported:
03/24/23 14:23

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

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

Batch BGC0570 - EPA 5030 Soil MS

Matrix Spike Dup (BGC0570-MSD1)	Source: 2303404-01			Prepared: 03/18/23 Analyzed: 03/20/23						
Benzene	0.0842	0.0020	mg/kg	0.100	ND	84.2	70-130	2.05	30	
Toluene	0.0762	0.0050	"	0.100	ND	76.2	70-130	0.315	30	
Ethylbenzene	0.0880	0.0050	"	0.100	ND	88.0	70-130	4.01	30	
m,p-Xylene	0.179	0.010	"	0.200	ND	89.5	70-130	2.89	30	
o-Xylene	0.0859	0.0050	"	0.100	ND	85.9	70-130	1.11	30	
1,2,4-Trimethylbenzene	0.0837	0.0050	"	0.100	ND	83.7	70-130	0.0358	30	
1,3,5-Trimethylbenzene	0.0858	0.0050	"	0.100	ND	85.8	70-130	1.39	30	
Naphthalene	0.0835	0.0038	"	0.100	ND	83.5	70-130	1.78	30	
Surrogate: 1,2-Dichloroethane-d4	0.0447		"	0.0400		112	50-150			
Surrogate: Toluene-d8	0.0390		"	0.0400		97.6	50-150			
Surrogate: 4-Bromofluorobenzene	0.0413		"	0.0400		103	50-150			

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

Project: Noble - Hanscome C02
Project Number: UWRWE-A2384-ABN
Project Manager: Jacob Whritenour

Reported:
03/24/23 14:23

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BGC0573 - EPA 3550A

Blank (BGC0573-BLK1)

Prepared: 03/18/23 Analyzed: 03/22/23

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

LCS (BGC0573-BS1)

Prepared: 03/18/23 Analyzed: 03/22/23

C10-C28 (DRO)	359	50	mg/kg	500		71.8	70-130			
Surrogate: o-Terphenyl	12.5		"	12.5		99.7	30-150			

Matrix Spike (BGC0573-MS1)

Source: 2303404-01

Prepared: 03/18/23 Analyzed: 03/22/23

C10-C28 (DRO)	387	50	mg/kg	500	31.8	71.0	70-130			
Surrogate: o-Terphenyl	11.2		"	12.5		89.8	30-150			

Matrix Spike Dup (BGC0573-MSD1)

Source: 2303404-01

Prepared: 03/18/23 Analyzed: 03/22/23

C10-C28 (DRO)	388	50	mg/kg	500	31.8	71.2	70-130	0.306	20	
Surrogate: o-Terphenyl	11.6		"	12.5		93.0	30-150			

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Broomfield CO, 80020

Project: Noble - Hanscome C02
Project Number: UWRWE-A2384-ABN
Project Manager: Jacob Whritenour

Reported:
03/24/23 14:23

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BGC0771 - EPA 5030 Soil MS

Blank (BGC0771-BLK1)

Prepared & Analyzed: 03/23/23

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	0.0280		"	0.0333		84.0	40-150			
Surrogate: Fluoranthene-d10	0.0285		"	0.0333		85.5	40-150			

LCS (BGC0771-BS1)

Prepared & Analyzed: 03/23/23

Acenaphthene	0.0311	0.00500	mg/kg	0.0333		93.2	31-137			
Anthracene	0.0293	0.00500	"	0.0333		87.8	30-120			
Benzo (a) anthracene	0.0247	0.00500	"	0.0333		74.0	30-120			
Benzo (a) pyrene	0.0317	0.00500	"	0.0333		95.2	30-120			
Benzo (b) fluoranthene	0.0301	0.00500	"	0.0333		90.4	30-120			
Benzo (k) fluoranthene	0.0362	0.00500	"	0.0333		109	30-120			
Chrysene	0.0273	0.00500	"	0.0333		81.9	30-120			
Dibenz (a,h) anthracene	0.0249	0.00500	"	0.0333		74.6	30-120			
Fluoranthene	0.0293	0.00500	"	0.0333		87.9	30-120			
Fluorene	0.0318	0.00500	"	0.0333		95.5	30-120			
Indeno (1,2,3-cd) pyrene	0.0275	0.00500	"	0.0333		82.4	30-120			
Pyrene	0.0327	0.00500	"	0.0333		98.1	35-142			
1-Methylnaphthalene	0.0334	0.00500	"	0.0333		100	35-142			
2-Methylnaphthalene	0.0206	0.00500	"	0.0333		61.7	35-142			
Surrogate: 2-Methylnaphthalene-d10	0.0399		"	0.0333		120	40-150			
Surrogate: Fluoranthene-d10	0.0308		"	0.0333		92.3	40-150			

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

Project: Noble - Hanscome C02
Project Number: UWRWE-A2384-ABN
Project Manager: Jacob Whritenour

Reported:
03/24/23 14:23

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BGC0771 - EPA 5030 Soil MS

Matrix Spike (BGC0771-MS1)

Source: 2303414-01

Prepared & Analyzed: 03/23/23

Acenaphthene	0.0844	0.00500	mg/kg	0.0333	0.0190	196	31-137			QM-02
Anthracene	0.140	0.00500	"	0.0333	0.0284	335	30-120			QM-02
Benzo (a) anthracene	0.164	0.00500	"	0.0333	0.0331	394	30-120			QM-02
Benzo (a) pyrene	0.0862	0.00500	"	0.0333	0.0154	213	30-120			QM-02
Benzo (b) fluoranthene	0.135	0.00500	"	0.0333	0.0276	322	30-120			QM-02
Benzo (k) fluoranthene	0.0617	0.00500	"	0.0333	0.0106	153	30-120			QM-02
Chrysene	0.133	0.00500	"	0.0333	0.0280	315	30-120			QM-02
Dibenz (a,h) anthracene	0.0419	0.00500	"	0.0333	ND	126	30-120			QM-02
Fluoranthene	0.358	0.00500	"	0.0333	0.0860	816	30-120			QM-02
Fluorene	0.103	0.00500	"	0.0333	0.0213	246	30-120			QM-02
Indeno (1,2,3-cd) pyrene	0.0682	0.00500	"	0.0333	0.0108	172	30-120			QM-02
Pyrene	0.251	0.00500	"	0.0333	0.0621	568	35-142			QM-02
1-Methylnaphthalene	0.0302	0.00500	"	0.0333	ND	90.7	15-130			
2-Methylnaphthalene	0.0230	0.00500	"	0.0333	ND	69.0	15-130			
Surrogate: 2-Methylnaphthalene-d10	0.0299		"	0.0333		89.7	40-150			
Surrogate: Fluoranthene-d10	0.0253		"	0.0333		75.9	40-150			

Matrix Spike Dup (BGC0771-MSD1)

Source: 2303414-01

Prepared & Analyzed: 03/23/23

Acenaphthene	0.0544	0.00500	mg/kg	0.0333	0.0190	106	31-137	43.2	30	QM-02
Anthracene	0.0751	0.00500	"	0.0333	0.0284	140	30-120	60.4	30	QM-02
Benzo (a) anthracene	0.0942	0.00500	"	0.0333	0.0331	183	30-120	54.3	30	QM-02
Benzo (a) pyrene	0.0534	0.00500	"	0.0333	0.0154	114	30-120	47.0	30	QM-02
Benzo (b) fluoranthene	0.0831	0.00500	"	0.0333	0.0276	167	30-120	47.6	30	QM-02
Benzo (k) fluoranthene	0.0452	0.00500	"	0.0333	0.0106	104	30-120	30.9	30	QM-02
Chrysene	0.0718	0.00500	"	0.0333	0.0280	131	30-120	59.7	30	QM-02
Dibenz (a,h) anthracene	0.0337	0.00500	"	0.0333	ND	101	30-120	21.7	30	
Fluoranthene	0.199	0.00500	"	0.0333	0.0860	339	30-120	57.1	30	QM-02
Fluorene	0.0641	0.00500	"	0.0333	0.0213	128	30-120	46.8	30	QM-02
Indeno (1,2,3-cd) pyrene	0.0448	0.00500	"	0.0333	0.0108	102	30-120	41.5	30	QM-02
Pyrene	0.146	0.00500	"	0.0333	0.0621	251	35-142	53.3	30	QM-02
1-Methylnaphthalene	0.0305	0.00500	"	0.0333	ND	91.4	15-130	0.736	50	
2-Methylnaphthalene	0.0207	0.00500	"	0.0333	ND	62.2	15-130	10.4	50	
Surrogate: 2-Methylnaphthalene-d10	0.0311		"	0.0333		93.2	40-150			
Surrogate: Fluoranthene-d10	0.0265		"	0.0333		79.6	40-150			

Summit Scientific

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

Project: Noble - Hanscome C02
Project Number: UWRWE-A2384-ABN
Project Manager: Jacob Whritenour

Reported:
03/24/23 14:23

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

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

Batch BGC0653 - EPA 3050B

Blank (BGC0653-BLK1)

Prepared: 03/20/23 Analyzed: 03/22/23

Boron ND 0.0100 mg/L

LCS (BGC0653-BS1)

Prepared: 03/20/23 Analyzed: 03/22/23

Boron 4.94 0.0100 mg/L 5.00 98.7 80-120

Duplicate (BGC0653-DUP1)

Source: 2303414-01

Prepared: 03/20/23 Analyzed: 03/22/23

Boron 0.162 0.0100 mg/L 0.165 1.71 20

Matrix Spike (BGC0653-MS1)

Source: 2303414-01

Prepared: 03/20/23 Analyzed: 03/22/23

Boron 5.29 0.0100 mg/L 5.00 0.165 102 75-125

Matrix Spike Dup (BGC0653-MSD1)

Source: 2303414-01

Prepared: 03/20/23 Analyzed: 03/22/23

Boron 5.17 0.0100 mg/L 5.00 0.165 100 75-125 2.30 25

Summit Scientific

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

Project: Noble - Hanscome C02
Project Number: UWRWE-A2384-ABN
Project Manager: Jacob Whritenour

Reported:
03/24/23 14:23

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

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

Batch BGC0700 - General Preparation

Blank (BGC0700-BLK1)

Prepared: 03/21/23 Analyzed: 03/22/23

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

LCS (BGC0700-BS1)

Prepared: 03/21/23 Analyzed: 03/22/23

Calcium	5.21	0.0500	mg/L wet	5.00	104	70-130
Magnesium	4.95	0.0500	"	5.00	99.0	70-130
Sodium	4.72	0.0500	"	5.00	94.3	70-130

Summit Scientific

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

Project: Noble - Hanscome C02
Project Number: UWRWE-A2384-ABN
Project Manager: Jacob Whritenour

Reported:
03/24/23 14:23

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

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

Batch BGC0684 - General Preparation

Duplicate (BGC0684-DUP1)			Source: 2303401-01		Prepared & Analyzed: 03/21/23					
% Solids	95.3		%		95.3			0.0166	20	

Summit Scientific

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

Project: Noble - Hanscome C02
Project Number: UWRWE-A2384-ABN
Project Manager: Jacob Whritenour

Reported:
03/24/23 14:23

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

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

Batch BGC0729 - General Preparation

Blank (BGC0729-BLK1)

Prepared & Analyzed: 03/22/23

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BGC0729-BS1)

Prepared & Analyzed: 03/22/23

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

Duplicate (BGC0729-DUP1)

Source: 2303398-01

Prepared & Analyzed: 03/22/23

Specific Conductance (EC) 5.12 0.0100 mmhos/cm 5.28 3.11 20

Summit Scientific

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

Project: Noble - Hanscome C02

Project Number: UWRWE-A2384-ABN

Project Manager: Jacob Whritenour

Reported:
03/24/23 14:23

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

Summit Scientific

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

Batch BGC0728 - General Preparation

LCS (BGC0728-BS1)

Prepared & Analyzed: 03/22/23

pH	9.18	pH Units	9.18	100	95-105
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Duplicate (BGC0728-DUP1)

Source: 2303398-01

Prepared & Analyzed: 03/22/23

pH	7.34	pH Units	7.37	0.408	20
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Summit Scientific

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

Project: Noble - Hanscome C02

Project Number: UWRWE-A2384-ABN

Project Manager: Jacob Whritenour

Reported:
03/24/23 14:23

Notes and Definitions

QM-02	The RPD and/or percent recovery for this QC sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument.
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