

Wellhead Closure Checklist

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

Additional attachments (optional):		Pit Closure		Tank Battery Closure		Flowline Closure		Partially Buried Vault Closure	
Site Name & COGCC Facility Number: Carpio A26-05		Date: 3/1/2022					Remediation Project #: 20992		
Associated Wells:		Age of Site:					Number of Photos Attached: 6		
Location: (GPS coordinates of wellhead or southeastern most wellhead for multiple) 40.458781, -104.524690							Estimated Facility Size (acres):		
General Condition of Site: (General observations regarding housekeeping, corrosion, waste management, etc.) Good - no visible signs of erosion, corrosion, or contamination									
USCS Soil Type: SW - Well Graded Sand				Estimated Depth to Groundwater: > 5'					
Hydrocarbon Impacted Soils / Spills: (Note estimated size and if impact appears to be surficial or extends to an unknown depth) None observed									
Salt Crusted Soils or Impacted Vegetation: (Note estimated size and if impact appears to be surficial or extends to an unknown depth) None observed									
Wellhead(s)									
Well API	05-123-22849								
Age									
Condition of surface around wellhead	Good								
PID Readings									
Condition of subsurface (staining present)	Good								
PID Readings	0.0								
Sample taken? Location/Sample ID#	Yes, see below								
Photo Number(s)	1 - 6								
Other observations regarding wellheads: A soil sample was taken from each of the four excavation sidewalls (SS01-SS04@2.5') as well as the excavation floor (FS01@5') and the flowline at wellhead (FL01-A@4').									
Summary									
Was impacted soil identified? No Yes - less than 10 cubic yards Yes - more than 10 cubic yards									
Total number of samples field screened: 6				Total number of samples collected: 6					
Highest PID Reading: 0.0				Total number of samples submitted to lab for analysis: 3					
If more than 10 cubic yards of impacted soil were observed:									
Vertical extent:				Estimated spill volume:					
Lateral extent:				Volume of soil removed:					
Is additional investigation required?									
Was groundwater encountered during the investigation? No Yes - not impacted or in contact with impacted soils Yes - groundwater impacted and/or in contact with impacted soils									
Measured depth to groundwater:				Was remedial groundwater removal conducted? Yes No					
Date Groundwater was encountered:				Commencement date of removal:					
Sheen on groundwater? Yes No				Volume of groundwater removed prior to sampling:					
Free product observed? Yes No				Volume of groundwater removed post sampling:					
Total number of samples collected:				Total Volume of groundwater removed:					
Total number of samples submitted to lab for analysis:									

Photographic Log



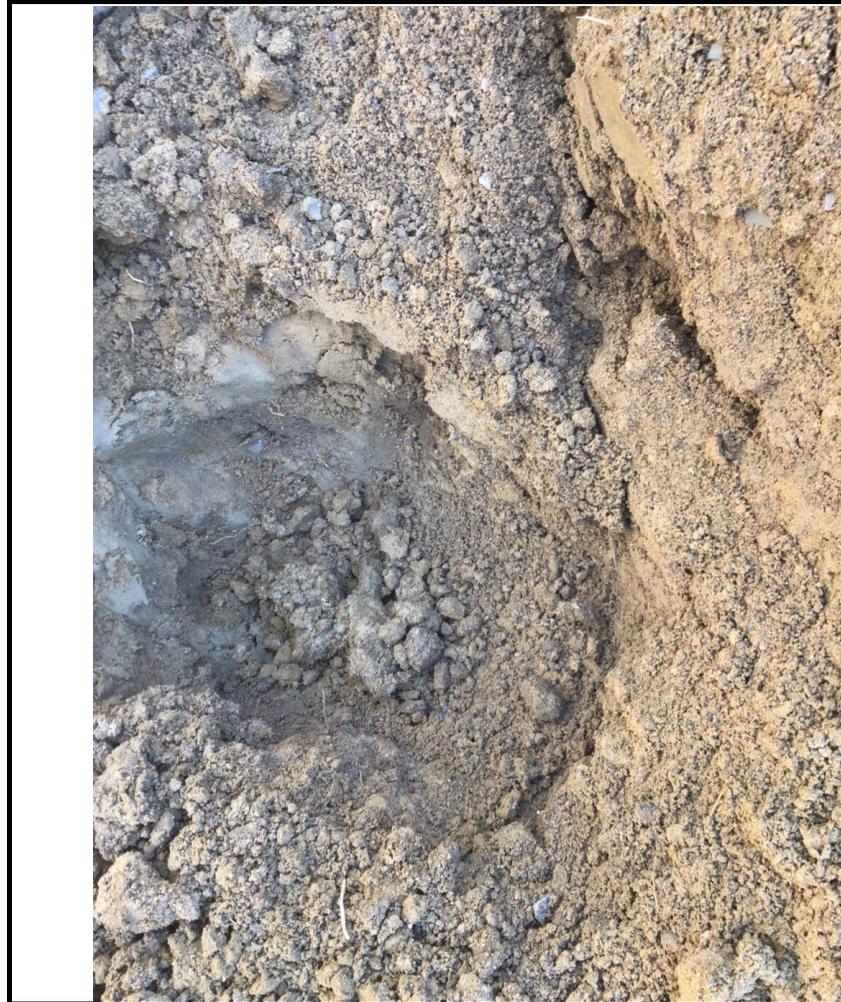
Equipment ID: SS01		Equipment Type:		Equipment ID: SS02		Equipment Type:	
Material:	Volume:	Contents:		Material:	Volume:	Contents:	
Notes/Conditions:				Notes/Conditions:			

Photographic Log



Equipment ID: SS03		Equipment Type:		Equipment ID: SS04		Equipment Type:	
Material:	Volume:	Contents:		Material:	Volume:	Contents:	
Notes/Conditions:				Notes/Conditions:			

Photographic Log



Equipment ID: FS01		Equipment Type:		Equipment ID: FL01-A		Equipment Type:	
Material:	Volume:	Contents:		Material:	Volume:	Contents:	
Notes/Conditions:				Notes/Conditions:			

Flowline Closure Checklist

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

Additional Attachments:		Tank Battery Closure		Wellhead Closure		Pit Closure		Partially Buried Vault Closure
Site Name & COGCC Facility Number: Carpio A26-05		Date: 3/15/2022			Remediation Project #: 20992			
Associated Wells: 1		Age of Site:			Number of Photos Attached: 9			
Starting point: (GPS coordinates and descriptions) 40.458735 -104.524284								
End point: (GPS coordinates and descriptions) 40.458993 -104.526457								
USCS Soil Type: Well Graded sand - SW					Estimated Depth to Groundwater: 3 feet			
Hydrocarbon Impacted Soils / Spills: (Note estimated size and if impact appears to be surficial or extends to an unknown depth) None observed								
Salt Crusted Soils or Impacted Vegetation: (Note estimated size and if impact appears to be surficial or extends to an unknown depth) None observed								
Flowlines								
Flowline type	Oil/Gas/Water							
Depth	3'							
Age								
Length	625'							
Construction Material	Steele							
Were flowlines pulled?	yes							
Visual Integrity of lines	ok							
Visual impacts if trenched	none observed							
PID Readings if trenched	0.0 - 0.4							
Sample taken? Location/Sample ID#	yes, see below							
Photo Number(s)	9							
Other observations regarding on location flowlines: Every bell hole used for pulling was sampled, beginning at FL01-C@3' - FL01-H@3'. Groundwater was encountered in three bell holes and was sampled.								
Summary								
Was impacted soil identified? No Yes - less than 10 cubic yards Yes - more than 10 cubic yards								
Total number of samples field screened: 6					Total number of samples collected: 6			
Highest PID Reading: 0.4					Total number of samples submitted to lab for analysis: 1			
If more than 10 cubic yards of impacted soil were observed:								
Vertical extent:					Estimated spill volume:			
Lateral extent:					Volume of soil removed:			
Is additional investigation required?								
Was groundwater encountered during the investigation? No Yes - not impacted or in contact with impacted soils Yes - groundwater impacted and/or in contact with impacted soils								
Measured depth to groundwater: 3'					Was remedial groundwater removal conducted? Yes No			
Date Groundwater was encountered: 3/15/2022					Commencement date of removal:			
Sheen on groundwater? Yes No					Volume of groundwater removed prior to sampling:			
Free product observed? Yes No					Volume of groundwater removed post sampling:			
Total number of samples collected: 3					Total Volume of groundwater removed:			
Total number of samples submitted to lab for analysis: 3								

Photographic Log


Equipment ID: FL01-C		Equipment Type:		Equipment ID: GW01		Equipment Type:	
Material:	Volume:	Contents:		Material:	Volume:	Contents:	
Notes/Conditions:				Notes/Conditions:			

Photographic Log



Equipment ID: FL01-D		Equipment Type:		Equipment ID: GW02		Equipment Type:	
Material:	Volume:	Contents:		Material:	Volume:	Contents:	
Notes/Conditions:				Notes/Conditions:			

Photographic Log



Equipment ID: FL01-E		Equipment Type:		Equipment ID: GW03		Equipment Type:	
Material:	Volume:	Contents:		Material:	Volume:	Contents:	
Notes/Conditions:				Notes/Conditions:			

Photographic Log



Equipment ID: FL01-F		Equipment Type:			Equipment ID: FL01-G		Equipment Type:				
Material:		Volume:		Contents:		Material:		Volume:		Contents:	
Notes/Conditions:						Notes/Conditions:					

Photographic Log

							
Equipment ID: FL01-H		Equipment Type:		Equipment ID:		Equipment Type:	
Material:		Volume:		Material:		Volume:	
Contents:				Contents:			
Notes/Conditions:				Notes/Conditions:			

TABLE 1
SOIL SAMPLE LOCATIONS
NOBLE ENERGY, INC. - CARPIO A26-05

Soil Sample ID	Date	PID (ppm)	Visual	Olfactory	Sample Type (Grab/Lab)	Latitude ¹	Longitude	PDOP
SS01@2.5'	3/1/2022	0.0	No Staining	No Odor	Grab	40.45873184	-104.52426490	1.1
SS02@2.5'	3/1/2022	0.0	No Staining	No Odor	Grab	40.45873063	-104.52426754	1.2
SS03@2.5'	3/1/2022	0.0	No Staining	No Odor	Grab	40.45870860	-104.52426736	1.2
SS04@2.5'	3/1/2022	0.0	No Staining	No Odor	Grab	40.45872201	-104.52428941	1.3
FL01-A@4'	3/1/2022	0.0	No Staining	No Odor	Lab	40.45873144	-104.52428399	1.3
FS01@5'	3/1/2022	0.0	No Staining	No Odor	Lab	40.45872436	-104.52427601	1.4
FL01-C@3'	3/15/2022	0.4	Orgainc Content	No Odor	Grab	40.45899951	-104.52635779	1.1
FL01-D@3'	3/15/2022	0.1	No Staining	No Odor	Grab	40.45894567	-104.52610111	1.0
FL01-E@3'	3/15/2022	0.4	No Staining	No Odor	Grab	40.45889674	-104.52593464	1.0
FL01-F@3'	3/15/2022	0.0	No Staining	No Odor	Lab	40.45873923	-104.52542552	1.0
FL01-G@3'	3/15/2022	0.0	No Staining	No Odor	Grab	40.45869645	-104.52484904	1.0
FL01-H@3'	3/15/2022	0.0	No Staining	No Odor	Grab	40.45873653	-104.52428572	1.2

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
GROUNDWATER SAMPLE LOCATIONS
NOBLE ENERGY, INC. - CARPIO A26-05

Soil Sample ID	Date	Turbidity	Sheen	Olfactory	Sample Type (Grab/Lab)	Latitude ¹	Longitude	PDOP
GW01@3'	3/15/2022	Medium Turbidity	No Sheen	No Odor	Lab	40.45899951	-104.5263578	1.1
GW02@3'	3/15/2022	Low Turbidity	No Sheen	No Odor	Lab	40.45894567	-104.5261011	1.0
GW03@3'	3/15/2022	Low Turbidity	No Sheen	No Odor	Lab	40.45873923	-104.5254255	1.0

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 3
SOIL ANALYTICAL DATA
NOBLE ENERGY, INC. - CARPIO A26-05

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
FS01@5'	3/1/2022	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
FL01-A@4'	3/1/2022	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
FL01-F@3'	3/15/2022	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500

Soil Sample ID	Date	pH	SAR	EC (mmhos/cm)	Boron (mg/L)
Residential SSL ²		6 - 8.3	<6	<4mmhos/cm	2
FS01@5'	3/1/2022	8.19	1.47	0.596	<0.0100
FL01-A@4'	3/1/2022	8.09	0.836	0.341	<0.0100
FL01-F@3'	3/15/2022	8.10	4.16	6.26	0.407

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 = Millimhos per centimeter
 mg/L = Milligrams per liter
 < = Analytical result is less than the indicated laboratory reporting limit

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

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

TABLE 4
GROUNDWATER ANALYTICAL DATA
NOBLE ENERGY, INC. - CARPIO A26-05

Monitoring Well ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Naphthalene (µg/L)	1,2,4 - TMB (µg/L)	1,3,5 - TMB (µg/L)
COGCC Standard		5	560	700	1,400	140	67	67
GW01@3'	03/15/22	<1.0	<1.0	<1.0	<2.0	66	<1.0	<1.0
GW02@3'	03/15/22	<1.0	<1.0	<1.0	12	32	1.3	1.2
GW03@3'	03/15/22	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0

Notes:

COGCC = Colorado Oil and Gas Conservation Commission

µg/L = Micrograms per liter

mg/L = Milligrams per liter

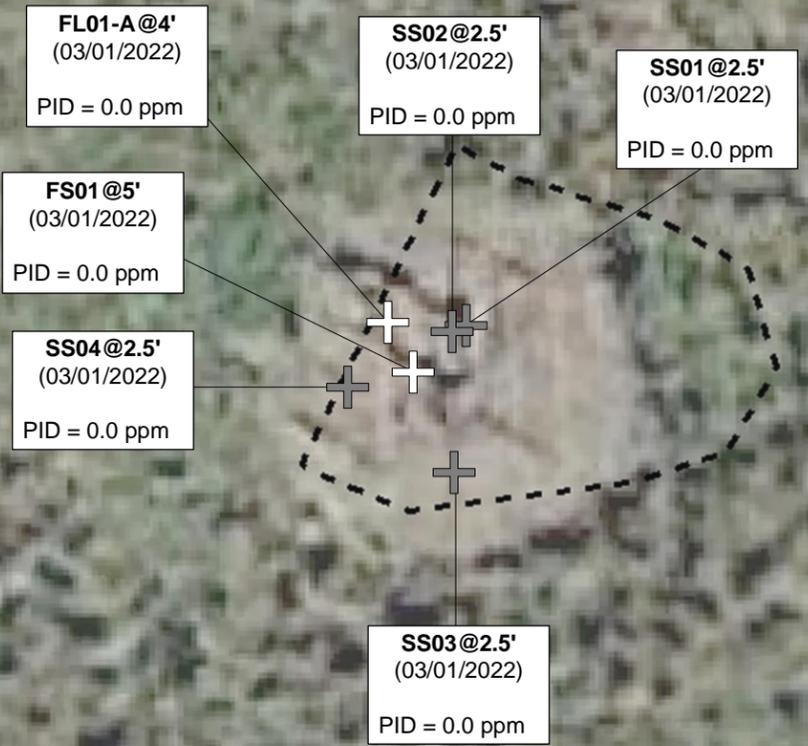
1,2,4 - TMB = 1,2,4 - trimethylbenzene

1,3,5 - TMB = 1,3,5 - trimethylbenzene

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

Groundwater standards referenced from COGCC Table 915-1

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



Legend

- Excavation Extent (Collected via Trimble GPS)
- ⊕ Soil Sample Location – Field Screen (Collected via Trimble GPS)
- ⊕ Soil Sample Location – Lab Analyzed (Collected via Trimble GPS)

Notes

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

GPS – Global Positioning System
 mg/kg – Milligrams per kilogram

0 ft. 10 ft. 20 ft.

Image Source: Google Earth; Google 2020

DATE:	3/24/2022
DESIGNED BY:	JW
DRAWN BY:	LR



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

**Noble Energy, Inc. – DJ Basin
 Carpio A26-05 Wellhead**
 SWNW, Section 26, Township 6 North, Range 64 West
 Weld County, Colorado

Wellhead Closure & Soil
 Analytical Results Map
 (3/1/2022)

**FIGURE
 1**



DATE: 3/24/2022

DESIGNED BY: JW

DRAWN BY: LR



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

Noble Energy, Inc. – DJ Basin
Carpio A26-05 Wellhead
SWNW, Section 26, Township 6 North, Range 64 West
Weld County, Colorado

Flowline Closure, Soil &
Groundwater Analytical
Results Map
(3/15/2022)

FIGURE
2

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

March 14, 2022

Jacob Whritenour
Tasman Geosciences
6855 W. 119th Ave.
Broomfield, CO 80020
RE: Noble - Carpio A26-05
Work Order #2203009

Enclosed are the results of analyses for samples received by Summit Scientific on 03/01/22 16:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. Shrewsbury', with a stylized, cursive script.

Paul Shrewsbury
President



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

Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
03/14/22 10:56

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FS01@5'	2203009-02	Soil	03/01/22 13:33	03/01/22 16:20
FL01-A@4'	2203009-03	Soil	03/01/22 13:35	03/01/22 16:20

Summit Scientific

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

Summit Scientific

S₂

2203009

4653 Table Mountain Drive ♦ Golden, Colorado 80403
303-277-9310

Page 1 of 1

Client: Noble / Tasman Geosciences Project Manager: Jake Whritenour, Invoice: Jeff White

Address: 6855 W. 119th Ave. E-Mail: Jwhritenour@tasman-geo.com

City/State/Zip: Broomfield / CO / 80020

Phone: 3038290530 / 7206168383 Project Name: Carpio A26-05

Sampler Name: Halina North & Stanley Gilbert Project Number: UWRWE-A1698-ABN

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	SAR, EC, pH	Boron - HWS		HOLD	
1	SS04@2.5'	3/1/22	13:31	2			X			X			X	X	X	X	X	X	X	HOLD
2	FS01@5'	3/1/22	13:33	2			X			X			X	X	X	X	X	X		
3	FL01-A@4'	3/1/22	13:35	2			X			X			X	X	X	X	X			
4																				
5																				
6																				
7																				
8																				
9																				
10																				

Relinquished by: <i>Halina North</i> Date/Time: 3/1/22 16:20	Received by: Tasman's Lock Box Date/Time: 3/1/22 16:20	Turn Around Time (Check) <input type="checkbox"/> Same Day <input type="checkbox"/> 72 hours <input type="checkbox"/> 24 hours <input checked="" type="checkbox"/> Standard <input type="checkbox"/> 48 hours <input type="checkbox"/> Sample Integrity: Temperature Upon Receipt: <u>4.4</u> Samples Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Notes:
Relinquished by: Tasman's Lock Box Date/Time: 3/22 1620	Received by: <i>[Signature]</i> Date/Time: 3/22 1620		
Relinquished by:	Received by:		

S₂

Sample Receipt Checklist

S2 Work Order# 2203009

Client: Noble-Tasman Client Project ID: Carpic A2C6-05

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

Matrix (check all that apply): Air Soil/Solid Water Other: _____
(Describe)

Temp (°C) 44

Thermometer ID: G86A9201901378

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C ⁽¹⁾ ? NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	-			ON ICE
Were all samples received intact ⁽¹⁾ ?	-			
Was adequate sample volume provided ⁽¹⁾ ?	-			
If custody seals are present, are they intact ⁽¹⁾ ?	-			
Are samples with holding times due within 48 hours sample due within 48 hours present?		-		
Is a chain-of-custody (COC) form present and filled out completely ⁽¹⁾ ?	-			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	-			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	-			
Is the COC properly relinquished by the client w/ date and time recorded ⁽¹⁾ ?	-			
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.			-	
Are samples preserved that require preservation (excluding cooling) ⁽¹⁾ ? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, etc.			-	
If samples are acid preserved for metals, is the pH ≤ 2 ⁽¹⁾ ? Record the pH in Comments.			-	
If dissolved metals are requested, were samples field filtered?			-	

Additional Comments (if any):

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

[Signature]
Custodian Printed Name or Initials

3-1-22
Date/Time



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

Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
03/14/22 10:56

FS01@5'
2203009-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/01/22 13:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFC0046	03/03/22	03/04/22	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: **03/01/22 13:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130		"	"	"	"	
Surrogate: Toluene-d8		96.8 %	70-130		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		91.0 %	70-130		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/01/22 13:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFC0049	03/03/22	03/04/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **03/01/22 13:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		113 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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



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

Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
03/14/22 10:56

FS01@5'
2203009-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/01/22 13:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFC0059	03/03/22	03/05/22	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: **03/01/22 13:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		57.4 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		53.1 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/01/22 13:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	0.0100	mg/L	1	BFC0079	03/04/22	03/10/22	EPA 6020B	

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

Date Sampled: **03/01/22 13:33**

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 - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
03/14/22 10:56

FS01@5'
2203009-02 (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	131	0.0593	mg/L dry	1	BFC0060	03/03/22	03/10/22	EPA 6020B	
Magnesium	67.8	0.0593	"	"	"	"	"	"	
Sodium	83.3	0.0593	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **03/01/22 13:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.47	0.00100	units	1	BFC0213	03/11/22	03/11/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/01/22 13:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	84.3		%	1	BFC0115	03/07/22	03/07/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/01/22 13:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.596	0.0100	mmhos/cm	1	BFC0035	03/02/22	03/02/22	EPA 120.1	

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

Date Sampled: **03/01/22 13:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.19		pH Units	1	BFC0034	03/02/22	03/02/22	EPA 9045D	

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Broomfield CO, 80020

Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
03/14/22 10:56

FL01-A@4'
2203009-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/01/22 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFC0046	03/03/22	03/04/22	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: **03/01/22 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		97.4 %	70-130		"	"	"	"	
Surrogate: Toluene-d8		97.0 %	70-130		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89.1 %	70-130		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/01/22 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFC0049	03/03/22	03/04/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **03/01/22 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		109 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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

Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
03/14/22 10:56

FL01-A@4'
2203009-03 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/01/22 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFC0059	03/03/22	03/05/22	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: **03/01/22 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		49.7 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		48.9 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/01/22 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	0.0100	mg/L	1	BFC0079	03/04/22	03/10/22	EPA 6020B	

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

Date Sampled: **03/01/22 13:35**

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 - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
03/14/22 10:56

FL01-A@4'
2203009-03 (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	34.6	0.0618	mg/L dry	1	BFC0060	03/03/22	03/10/22	EPA 6020B	
Magnesium	17.2	0.0618	"	"	"	"	"	"	
Sodium	24.1	0.0618	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **03/01/22 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.836	0.00100	units	1	BFC0213	03/11/22	03/11/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/01/22 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	80.9		%	1	BFC0115	03/07/22	03/07/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/01/22 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.341	0.0100	mmhos/cm	1	BFC0035	03/02/22	03/02/22	EPA 120.1	

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

Date Sampled: **03/01/22 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.09		pH Units	1	BFC0034	03/02/22	03/02/22	EPA 9045D	

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

Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
03/14/22 10:56

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 BFC0046 - EPA 5030 Soil MS

Blank (BFC0046-BLK1)

Prepared: 03/03/22 Analyzed: 03/04/22

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0386		"	0.0400		96.5	70-130			
<i>Surrogate: Toluene-d8</i>	0.0386		"	0.0400		96.6	70-130			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0362		"	0.0400		90.6	70-130			

LCS (BFC0046-BS1)

Prepared: 03/03/22 Analyzed: 03/04/22

Benzene	0.0610	0.0020	mg/kg	0.0750		81.3	70-130			
Toluene	0.0673	0.0050	"	0.0750		89.7	70-130			
Ethylbenzene	0.0674	0.0050	"	0.0750		89.9	70-130			
m,p-Xylene	0.140	0.010	"	0.150		93.5	70-130			
o-Xylene	0.0735	0.0050	"	0.0750		98.0	70-130			
1,2,4-Trimethylbenzene	0.0762	0.0050	"	0.0750		102	70-130			
1,3,5-Trimethylbenzene	0.0749	0.0050	"	0.0750		99.9	70-130			
Naphthalene	0.0693	0.0038	"	0.0750		92.4	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0395		"	0.0400		98.7	70-130			
<i>Surrogate: Toluene-d8</i>	0.0390		"	0.0400		97.6	70-130			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0383		"	0.0400		95.8	70-130			

Matrix Spike (BFC0046-MS1)

Source: 2203005-01

Prepared: 03/03/22 Analyzed: 03/04/22

Benzene	0.0623	0.0020	mg/kg	0.0750	ND	83.1	70-130			
Toluene	0.0681	0.0050	"	0.0750	ND	90.8	70-130			
Ethylbenzene	0.0672	0.0050	"	0.0750	ND	89.6	70-130			
m,p-Xylene	0.140	0.010	"	0.150	ND	93.5	70-130			
o-Xylene	0.0731	0.0050	"	0.0750	ND	97.5	70-130			
1,2,4-Trimethylbenzene	0.0765	0.0050	"	0.0750	ND	102	70-130			
1,3,5-Trimethylbenzene	0.0748	0.0050	"	0.0750	ND	99.7	70-130			
Naphthalene	0.0798	0.0038	"	0.0750	ND	106	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0387		"	0.0400		96.7	70-130			
<i>Surrogate: Toluene-d8</i>	0.0394		"	0.0400		98.4	70-130			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0383		"	0.0400		95.8	70-130			

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

Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
03/14/22 10:56

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 BFC0046 - EPA 5030 Soil MS

Matrix Spike Dup (BFC0046-MSD1)	Source: 2203005-01			Prepared: 03/03/22 Analyzed: 03/04/22						
Benzene	0.0611	0.0020	mg/kg	0.0750	ND	81.5	70-130	1.90	30	
Toluene	0.0673	0.0050	"	0.0750	ND	89.7	70-130	1.29	30	
Ethylbenzene	0.0670	0.0050	"	0.0750	ND	89.3	70-130	0.268	30	
m,p-Xylene	0.141	0.010	"	0.150	ND	94.2	70-130	0.810	30	
o-Xylene	0.0738	0.0050	"	0.0750	ND	98.4	70-130	0.899	30	
1,2,4-Trimethylbenzene	0.0785	0.0050	"	0.0750	ND	105	70-130	2.59	30	
1,3,5-Trimethylbenzene	0.0761	0.0050	"	0.0750	ND	101	70-130	1.79	30	
Naphthalene	0.0782	0.0038	"	0.0750	ND	104	70-130	2.01	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0388</i>		<i>"</i>	<i>0.0400</i>		<i>97.1</i>	<i>70-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0394</i>		<i>"</i>	<i>0.0400</i>		<i>98.6</i>	<i>70-130</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0381</i>		<i>"</i>	<i>0.0400</i>		<i>95.3</i>	<i>70-130</i>			

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Broomfield CO, 80020

Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
03/14/22 10:56

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 BFC0049 - EPA 3550A

Blank (BFC0049-BLK1)

Prepared: 03/03/22 Analyzed: 03/04/22

C10-C28 (DRO)	ND	50	mg/kg								
C28-C36 (ORO)	ND	50	"								

LCS (BFC0049-BS1)

Prepared: 03/03/22 Analyzed: 03/04/22

C10-C28 (DRO)	523	50	mg/kg	500	105	70-130					
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Matrix Spike (BFC0049-MS1)

Source: 2203005-03

Prepared: 03/03/22 Analyzed: 03/04/22

C10-C28 (DRO)	608	50	mg/kg	500	21.1	117	70-130				
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Matrix Spike Dup (BFC0049-MSD1)

Source: 2203005-03

Prepared: 03/03/22 Analyzed: 03/04/22

C10-C28 (DRO)	604	50	mg/kg	500	21.1	117	70-130	0.564	20		
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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
03/14/22 10:56

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BFC0059 - EPA 5030 Soil MS

Blank (BFC0059-BLK1)

Prepared: 03/03/22 Analyzed: 03/04/22

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>0.0213</i>		"	<i>0.0333</i>		<i>64.0</i>		<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0190</i>		"	<i>0.0333</i>		<i>57.0</i>		<i>40-150</i>			

LCS (BFC0059-BS1)

Prepared: 03/03/22 Analyzed: 03/04/22

Acenaphthene	0.0190	0.00500	mg/kg	0.0333		57.0		31-137			
Anthracene	0.0189	0.00500	"	0.0333		56.7		30-120			
Benzo (a) anthracene	0.0209	0.00500	"	0.0333		62.6		30-120			
Benzo (a) pyrene	0.0157	0.00500	"	0.0333		47.0		30-120			
Benzo (b) fluoranthene	0.0161	0.00500	"	0.0333		48.2		30-120			
Benzo (k) fluoranthene	0.0176	0.00500	"	0.0333		52.8		30-120			
Chrysene	0.0217	0.00500	"	0.0333		65.0		30-120			
Dibenz (a,h) anthracene	0.0135	0.00500	"	0.0333		40.4		30-120			
Fluoranthene	0.0192	0.00500	"	0.0333		57.5		30-120			
Fluorene	0.0198	0.00500	"	0.0333		59.5		30-120			
Indeno (1,2,3-cd) pyrene	0.0154	0.00500	"	0.0333		46.1		30-120			
Pyrene	0.0214	0.00500	"	0.0333		64.1		35-142			
1-Methylnaphthalene	0.0198	0.00500	"	0.0333		59.3		35-142			
2-Methylnaphthalene	0.0208	0.00500	"	0.0333		62.4		35-142			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0207</i>		"	<i>0.0333</i>		<i>62.1</i>		<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0206</i>		"	<i>0.0333</i>		<i>61.8</i>		<i>40-150</i>			

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

Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
03/14/22 10:56

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 BFC0059 - EPA 5030 Soil MS

Matrix Spike (BFC0059-MS1)	Source: 2202234-02			Prepared: 03/03/22 Analyzed: 03/04/22						
Acenaphthene	0.0144	0.00500	mg/kg	0.0333	ND	43.2	31-137			
Anthracene	0.0144	0.00500	"	0.0333	ND	43.3	30-120			
Benzo (a) anthracene	0.0171	0.00500	"	0.0333	0.00259	43.6	30-120			
Benzo (a) pyrene	0.0127	0.00500	"	0.0333	ND	38.0	30-120			
Benzo (b) fluoranthene	0.0164	0.00500	"	0.0333	0.00600	31.2	30-120			
Benzo (k) fluoranthene	0.0139	0.00500	"	0.0333	ND	41.7	30-120			
Chrysene	0.0171	0.00500	"	0.0333	0.00362	40.5	30-120			
Dibenz (a,h) anthracene	0.0192	0.00500	"	0.0333	ND	57.7	30-120			
Fluoranthene	0.0154	0.00500	"	0.0333	0.00223	39.5	30-120			
Fluorene	0.0157	0.00500	"	0.0333	ND	47.1	30-120			
Indeno (1,2,3-cd) pyrene	0.0177	0.00500	"	0.0333	ND	53.0	30-120			
Pyrene	0.0186	0.00500	"	0.0333	0.00559	39.0	35-142			
1-Methylnaphthalene	0.0183	0.00500	"	0.0333	ND	54.8	15-130			
2-Methylnaphthalene	0.0182	0.00500	"	0.0333	ND	54.6	15-130			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0190</i>		<i>"</i>	<i>0.0333</i>		<i>56.9</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0168</i>		<i>"</i>	<i>0.0333</i>		<i>50.5</i>	<i>40-150</i>			

Matrix Spike Dup (BFC0059-MSD1)	Source: 2202234-02			Prepared: 03/03/22 Analyzed: 03/04/22						
Acenaphthene	0.0149	0.00500	mg/kg	0.0333	ND	44.6	31-137	3.09	30	
Anthracene	0.0152	0.00500	"	0.0333	ND	45.6	30-120	5.01	30	
Benzo (a) anthracene	0.0173	0.00500	"	0.0333	0.00259	44.1	30-120	1.01	30	
Benzo (a) pyrene	0.0126	0.00500	"	0.0333	ND	37.8	30-120	0.548	30	
Benzo (b) fluoranthene	0.0173	0.00500	"	0.0333	0.00600	34.0	30-120	5.48	30	
Benzo (k) fluoranthene	0.0141	0.00500	"	0.0333	ND	42.4	30-120	1.64	30	
Chrysene	0.0172	0.00500	"	0.0333	0.00362	40.8	30-120	0.610	30	
Dibenz (a,h) anthracene	0.0171	0.00500	"	0.0333	ND	51.4	30-120	11.5	30	
Fluoranthene	0.0153	0.00500	"	0.0333	0.00223	39.1	30-120	0.950	30	
Fluorene	0.0165	0.00500	"	0.0333	ND	49.5	30-120	5.01	30	
Indeno (1,2,3-cd) pyrene	0.0149	0.00500	"	0.0333	ND	44.8	30-120	16.9	30	
Pyrene	0.0189	0.00500	"	0.0333	0.00559	39.8	35-142	1.35	30	
1-Methylnaphthalene	0.0160	0.00500	"	0.0333	ND	48.0	15-130	13.3	50	
2-Methylnaphthalene	0.0164	0.00500	"	0.0333	ND	49.2	15-130	10.3	50	
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0175</i>		<i>"</i>	<i>0.0333</i>		<i>52.5</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0167</i>		<i>"</i>	<i>0.0333</i>		<i>50.2</i>	<i>40-150</i>			

Summit Scientific

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

Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
03/14/22 10:56

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 BFC0079 - EPA 3050B

Blank (BFC0079-BLK1)

Prepared: 03/04/22 Analyzed: 03/10/22

Boron ND 0.0100 mg/L

LCS (BFC0079-BS1)

Prepared: 03/04/22 Analyzed: 03/10/22

Boron 4.10 0.0100 mg/L 5.00 82.1 80-120

Duplicate (BFC0079-DUP1)

Source: 2203006-01

Prepared: 03/04/22 Analyzed: 03/10/22

Boron ND 0.0100 mg/L ND 20

Matrix Spike (BFC0079-MS1)

Source: 2203006-01

Prepared: 03/04/22 Analyzed: 03/10/22

Boron 3.92 0.0100 mg/L 5.00 ND 78.4 75-125

Matrix Spike Dup (BFC0079-MSD1)

Source: 2203006-01

Prepared: 03/04/22 Analyzed: 03/10/22

Boron 3.96 0.0100 mg/L 5.00 ND 79.1 75-125 0.998 25

Summit Scientific

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

Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
03/14/22 10:56

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

Summit Scientific

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

Batch BFC0060 - General Preparation

Blank (BFC0060-BLK1)

Prepared: 03/03/22 Analyzed: 03/10/22

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

LCS (BFC0060-BS1)

Prepared: 03/03/22 Analyzed: 03/10/22

Calcium	5.40	0.0500	mg/L wet	5.00	108	70-130				
Magnesium	5.14	0.0500	"	5.00	103	70-130				
Sodium	4.78	0.0500	"	5.00	95.7	70-130				

Summit Scientific

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

Project: Noble - Carpio A26-05
 Project Number: UWRWE-A1698-ABN
 Project Manager: Jacob Whritenour

Reported:
 03/14/22 10:56

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 BFC0115 - General Preparation

Duplicate (BFC0115-DUP1)

Source: 2203001-09

Prepared & Analyzed: 03/07/22

% Solids	98.3		%		98.2			0.0887	20	
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Summit Scientific

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

Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
03/14/22 10:56

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 BFC0035 - General Preparation

Blank (BFC0035-BLK1)

Prepared & Analyzed: 03/02/22

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BFC0035-BS1)

Prepared & Analyzed: 03/02/22

Specific Conductance (EC) 0.150 0.0100 mmhos/cm 0.150 99.8 95-105

Duplicate (BFC0035-DUP1)

Source: 2203005-04

Prepared & Analyzed: 03/02/22

Specific Conductance (EC) 0.409 0.0100 mmhos/cm 0.409 0.0733 20

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

Project: Noble - Carpio A26-05
 Project Number: UWRWE-A1698-ABN
 Project Manager: Jacob Whritenour

Reported:
 03/14/22 10:56

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 BFC0034 - General Preparation

LCS (BFC0034-BS1)

Prepared & Analyzed: 03/02/22

pH 9.15 pH Units 9.18 99.7 95-105

Duplicate (BFC0034-DUP1)

Source: 2203005-04

Prepared & Analyzed: 03/02/22

pH 8.16 pH Units 8.15 0.123 20

Summit Scientific

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

Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
03/14/22 10:56

Notes and Definitions

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

April 01, 2022

Jacob Whritenour
Tasman Geosciences
6855 W. 119th Ave.
Broomfield, CO 80020
RE: Noble - Carpio A26-05
Work Order #2203257

Enclosed are the results of analyses for samples received by Summit Scientific on 03/15/22 15:05. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Paul Shrewsbury
President



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

Project: Noble - Carpio A26-05

Project Number: UWRWE-A1698-ABN

Project Manager: Jacob Whritenour

Reported:
04/01/22 10:47

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FL01-F@3'	2203257-01	Soil	03/15/22 12:36	03/15/22 15:05
GW01@3'	2203257-02	Water	03/15/22 12:05	03/15/22 15:05
GW02@3'	2203257-03	Water	03/15/22 12:20	03/15/22 15:05
GW03@3'	2203257-04	Water	03/15/22 12:30	03/15/22 15:05

Summit Scientific

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

Summit Scientific

S₂

2203257

4653 Table Mountain Drive ♦ Golden, Colorado 80403
303-277-9310

Client: Noble / Tasman Project Manager: Jake Whritenour, Invoice: Jeff White
Address: 6855 W. 119th Ave E-Mail: jwhritenour@tasman-geo.com
City/State/Zip: Broomfield/ CO/ 80020
Phone: 303261-6246 Project Name: CARPIO A26-05
Sampler Name: Stanley Gilbert Project Number: UWRWE-A2698-ABN

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	HOLD	TEX, NAP		TMB	
1	FLO1-F @ 3'	3/15/22	12:36	2			X			X				X	X	X	X	X			SAR, EC, PH By Saturated paste	
2	GW01 @ 3'	↓	12:05	3					X											X		
3	GW02 @ 3'	↓	12:20	3					X											X		
4	GW03 @ 3'	↓	12:30	3					X											X		
5																						
6																						
7																						
8																						
9																						
10																						

Relinquished by: 	Date/Time: 3/15/22 15:05	Received by: Tasman's Lock Box	Date/Time: 3/15/22 15:05	Turn Around Time (Check) Same Day <input type="checkbox"/> 72 hours <input type="checkbox"/> 24 hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/> 48 hours <input type="checkbox"/> Sample Integrity: Temperature Upon Receipt: <u>4.9</u> Samples Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No	Notes:
Relinquished by: Tasman's Lock Box	Date/Time:	Received by: 	Date/Time: 3/15/22 15:05		
Relinquished by:	Date/Time:	Received by:	Date/Time:		

S₂

Sample Receipt Checklist

S2 Work Order# 2203257

Client: Noble-Tasman Client Project ID: Carpio AZG-05

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

Matrix (check all that apply): Air Soil/Solid Water Other: _____
(Describe)

Temp (°C) 4.9

Thermometer ID: G86A9201901378

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°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
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"/>	
If custody seals are present, are they intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are samples with holding times due within 48 hours sample due within 48 hours present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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"/>	
Is the COC properly relinquished by the client w/ date and time recorded ⁽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 checked="" type="checkbox"/>	<input type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling) ⁽¹⁾ ? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, 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):

PH

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

[Signature]
Custodian Printed Name or Initials

3.15.22
Date/Time



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

Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/01/22 10:47

FL01-F@3'
2203257-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/15/22 12:36**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BFC0327	03/16/22	03/17/22	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: **03/15/22 12:36**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		99.8 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		100 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.1 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/15/22 12:36**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BFC0328	03/16/22	03/17/22	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **03/15/22 12:36**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl		94.8 %		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 - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/01/22 10:47

FL01-F@3'
2203257-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/15/22 12:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFC0315	03/16/22	03/17/22	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: **03/15/22 12:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		55.8 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		43.5 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/15/22 12:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.407	0.0100	mg/L	1	BFC0372	03/25/22	03/30/22	EPA 6020B	

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

Date Sampled: **03/15/22 12:36**

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 - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/01/22 10:47

FL01-F@3'
2203257-01 (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	419	0.0585	mg/L dry	1	BFC0357	03/17/22	03/22/22	EPA 6020B	
Magnesium	403	0.0585	"	"	"	"	"	"	
Sodium	497	0.0585	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **03/15/22 12:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	4.16	0.00100	units	1	BFC0512	03/23/22	03/23/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/15/22 12:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	85.5		%	1	BFC0445	03/21/22	03/21/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/15/22 12:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	6.26	0.0100	mmhos/cm	1	BFC0390	03/18/22	03/18/22	EPA 120.1	

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

Date Sampled: **03/15/22 12:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.10		pH Units	1	BFC0389	03/18/22	03/18/22	EPA 9045D	

Summit Scientific

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

Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/01/22 10:47

GW01@3'
2203257-02 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/15/22 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	BFC0358	03/17/22	03/18/22	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	
Naphthalene	66	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	

Date Sampled: **03/15/22 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		138 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		104 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		103 %	21-167		"	"	"	"	

Summit Scientific

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

Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/01/22 10:47

GW02@3'
2203257-03 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/15/22 12:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BFC0358	03/17/22	03/18/22	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	12	2.0		"	"	"	"	"	"	
Naphthalene	32	1.0		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	1.3	1.0		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	1.2	1.0		"	"	"	"	"	"	

Date Sampled: **03/15/22 12:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		110 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		131 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %		21-167		"	"	"	"	

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

Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/01/22 10:47

GW03@3'
2203257-04 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/15/22 12:30**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	1.0	ug/l	1	BFC0358	03/17/22	03/18/22	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	

Date Sampled: **03/15/22 12:30**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		112 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		104 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.2 %	21-167		"	"	"	"	

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/01/22 10:47

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 BFC0327 - EPA 5030 Soil MS

Blank (BFC0327-BLK1)

Prepared & Analyzed: 03/16/22

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0391		"	0.0400		97.6	50-150			
<i>Surrogate: Toluene-d8</i>	0.0413		"	0.0400		103	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0378		"	0.0400		94.6	50-150			

LCS (BFC0327-BS1)

Prepared & Analyzed: 03/16/22

Benzene	0.0599	0.0020	mg/kg	0.0750		79.9	70-130			
Toluene	0.0638	0.0050	"	0.0750		85.1	70-130			
Ethylbenzene	0.0660	0.0050	"	0.0750		88.0	70-130			
m,p-Xylene	0.140	0.010	"	0.150		93.4	70-130			
o-Xylene	0.0674	0.0050	"	0.0750		89.9	70-130			
1,2,4-Trimethylbenzene	0.0704	0.0050	"	0.0750		93.8	70-130			
1,3,5-Trimethylbenzene	0.0695	0.0050	"	0.0750		92.7	70-130			
Naphthalene	0.0632	0.0038	"	0.0750		84.2	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0381		"	0.0400		95.2	50-150			
<i>Surrogate: Toluene-d8</i>	0.0403		"	0.0400		101	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0398		"	0.0400		99.5	50-150			

Matrix Spike (BFC0327-MS1)

Source: 2203066-03

Prepared & Analyzed: 03/16/22

Benzene	0.0617	0.0020	mg/kg	0.0750	ND	82.3	70-130			
Toluene	0.0654	0.0050	"	0.0750	ND	87.2	70-130			
Ethylbenzene	0.0658	0.0050	"	0.0750	ND	87.7	70-130			
m,p-Xylene	0.141	0.010	"	0.150	ND	93.9	70-130			
o-Xylene	0.0687	0.0050	"	0.0750	ND	91.6	70-130			
1,2,4-Trimethylbenzene	0.0734	0.0050	"	0.0750	ND	97.9	70-130			
1,3,5-Trimethylbenzene	0.0715	0.0050	"	0.0750	ND	95.3	70-130			
Naphthalene	0.0716	0.0038	"	0.0750	0.00939	82.9	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0384		"	0.0400		96.1	50-150			
<i>Surrogate: Toluene-d8</i>	0.0407		"	0.0400		102	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0409		"	0.0400		102	50-150			

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

Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/01/22 10:47

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 BFC0327 - EPA 5030 Soil MS

Matrix Spike Dup (BFC0327-MSD1)	Source: 2203066-03			Prepared & Analyzed: 03/16/22						
Benzene	0.0601	0.0020	mg/kg	0.0750	ND	80.2	70-130	2.61	30	
Toluene	0.0648	0.0050	"	0.0750	ND	86.4	70-130	0.968	30	
Ethylbenzene	0.0677	0.0050	"	0.0750	ND	90.3	70-130	2.97	30	
m,p-Xylene	0.144	0.010	"	0.150	ND	95.8	70-130	2.00	30	
o-Xylene	0.0690	0.0050	"	0.0750	ND	92.0	70-130	0.436	30	
1,2,4-Trimethylbenzene	0.0742	0.0050	"	0.0750	ND	99.0	70-130	1.06	30	
1,3,5-Trimethylbenzene	0.0731	0.0050	"	0.0750	ND	97.5	70-130	2.28	30	
Naphthalene	0.0635	0.0038	"	0.0750	0.00939	72.2	70-130	11.9	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0361</i>		<i>"</i>	<i>0.0400</i>		<i>90.2</i>	<i>50-150</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0402</i>		<i>"</i>	<i>0.0400</i>		<i>101</i>	<i>50-150</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0390</i>		<i>"</i>	<i>0.0400</i>		<i>97.4</i>	<i>50-150</i>			

Batch BFC0358 - EPA 5030 Water MS

Blank (BFC0358-BLK1)	Prepared: 03/17/22 Analyzed: 03/18/22									
Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	2.0	"							
Naphthalene	ND	1.0	"							
1,2,4-Trimethylbenzene	ND	1.0	"							
1,3,5-Trimethylbenzene	ND	1.0	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>13.7</i>		<i>"</i>	<i>13.3</i>		<i>103</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>13.4</i>		<i>"</i>	<i>13.3</i>		<i>101</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>13.6</i>		<i>"</i>	<i>13.3</i>		<i>102</i>	<i>21-167</i>			

LCS (BFC0358-BS1)	Prepared: 03/17/22 Analyzed: 03/18/22									
Benzene	41.4	1.0	ug/l	50.0		82.8	51-132			
Toluene	40.6	1.0	"	50.0		81.1	51-138			
Ethylbenzene	45.7	1.0	"	50.0		91.4	58-146			
m,p-Xylene	91.2	2.0	"	100		91.2	57-144			
o-Xylene	45.6	1.0	"	50.0		91.1	53-146			
Naphthalene	49.4	1.0	"	50.0		98.9	70-130			
1,2,4-Trimethylbenzene	47.5	1.0	"	50.0		95.0	70-130			
1,3,5-Trimethylbenzene	46.6	1.0	"	50.0		93.2	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>11.7</i>		<i>"</i>	<i>13.3</i>		<i>87.8</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>13.5</i>		<i>"</i>	<i>13.3</i>		<i>101</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>13.5</i>		<i>"</i>	<i>13.3</i>		<i>101</i>	<i>21-167</i>			

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

Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/01/22 10:47

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 BFC0358 - EPA 5030 Water MS

Matrix Spike (BFC0358-MS1)

Source: 2203264-01

Prepared: 03/17/22 Analyzed: 03/18/22

Benzene	51.9	1.0	ug/l	50.0	ND	104	34-141			
Toluene	51.8	1.0	"	50.0	ND	104	27-151			
Ethylbenzene	48.9	1.0	"	50.0	ND	97.8	29-160			
m,p-Xylene	96.9	2.0	"	100	ND	96.9	20-166			
o-Xylene	48.1	1.0	"	50.0	ND	96.2	33-159			
Naphthalene	51.2	1.0	"	50.0	ND	102	70-130			
1,2,4-Trimethylbenzene	50.2	1.0	"	50.0	ND	100	70-130			
1,3,5-Trimethylbenzene	49.6	1.0	"	50.0	ND	99.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	12.1		"	13.3		90.9	23-173			
Surrogate: Toluene-d8	13.6		"	13.3		102	20-170			
Surrogate: 4-Bromofluorobenzene	13.6		"	13.3		102	21-167			

Matrix Spike Dup (BFC0358-MSD1)

Source: 2203264-01

Prepared: 03/17/22 Analyzed: 03/18/22

Benzene	53.9	1.0	ug/l	50.0	ND	108	34-141	3.82	30	
Toluene	53.1	1.0	"	50.0	ND	106	27-151	2.52	30	
Ethylbenzene	50.0	1.0	"	50.0	ND	100	29-160	2.24	30	
m,p-Xylene	99.2	2.0	"	100	ND	99.2	20-166	2.30	30	
o-Xylene	49.4	1.0	"	50.0	ND	98.7	33-159	2.61	30	
Naphthalene	53.0	1.0	"	50.0	ND	106	70-130	3.40	30	
1,2,4-Trimethylbenzene	52.5	1.0	"	50.0	ND	105	70-130	4.44	30	
1,3,5-Trimethylbenzene	52.8	1.0	"	50.0	ND	106	70-130	6.19	30	
Surrogate: 1,2-Dichloroethane-d4	12.3		"	13.3		92.3	23-173			
Surrogate: Toluene-d8	13.4		"	13.3		100	20-170			
Surrogate: 4-Bromofluorobenzene	13.3		"	13.3		99.5	21-167			

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

Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/01/22 10:47

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 BFC0328 - EPA 3550A

Blank (BFC0328-BLK1)

Prepared: 03/16/22 Analyzed: 03/17/22

C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							

LCS (BFC0328-BS1)

Prepared: 03/16/22 Analyzed: 03/17/22

C10-C28 (DRO)	443	50	mg/kg	500	88.6	70-130				
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Matrix Spike (BFC0328-MS1)

Source: 2203066-03

Prepared: 03/16/22 Analyzed: 03/17/22

C10-C28 (DRO)	429	50	mg/kg	500	27.7	80.2	70-130			
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Matrix Spike Dup (BFC0328-MSD1)

Source: 2203066-03

Prepared: 03/16/22 Analyzed: 03/17/22

C10-C28 (DRO)	470	50	mg/kg	500	27.7	88.5	70-130	9.22	20	
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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/01/22 10:47

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 BFC0315 - EPA 5030 Soil MS

Blank (BFC0315-BLK1)

Prepared: 03/16/22 Analyzed: 03/17/22

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>	0.0279		"	0.0333		83.6	40-150			
<i>Surrogate: Fluoranthene-d10</i>	0.0222		"	0.0333		66.6	40-150			

LCS (BFC0315-BS1)

Prepared: 03/16/22 Analyzed: 03/19/22

Acenaphthene	0.0266	0.00500	mg/kg	0.0333		79.9	31-137			
Anthracene	0.0270	0.00500	"	0.0333		81.1	30-120			
Benzo (a) anthracene	0.0275	0.00500	"	0.0333		82.5	30-120			
Benzo (a) pyrene	0.0346	0.00500	"	0.0333		104	30-120			
Benzo (b) fluoranthene	0.0308	0.00500	"	0.0333		92.5	30-120			
Benzo (k) fluoranthene	0.0361	0.00500	"	0.0333		108	30-120			
Chrysene	0.0318	0.00500	"	0.0333		95.5	30-120			
Dibenz (a,h) anthracene	0.0342	0.00500	"	0.0333		103	30-120			
Fluoranthene	0.0297	0.00500	"	0.0333		89.2	30-120			
Fluorene	0.0287	0.00500	"	0.0333		86.0	30-120			
Indeno (1,2,3-cd) pyrene	0.0250	0.00500	"	0.0333		75.0	30-120			
Pyrene	0.0313	0.00500	"	0.0333		94.0	35-142			
1-Methylnaphthalene	0.0237	0.00500	"	0.0333		71.0	35-142			
2-Methylnaphthalene	0.0221	0.00500	"	0.0333		66.4	35-142			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	0.0232		"	0.0333		69.7	40-150			
<i>Surrogate: Fluoranthene-d10</i>	0.0281		"	0.0333		84.4	40-150			

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Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/01/22 10:47

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 BFC0315 - EPA 5030 Soil MS

Matrix Spike (BFC0315-MS1)	Source: 2203232-01			Prepared: 03/16/22 Analyzed: 03/19/22							
Acenaphthene	0.0170	0.00500	mg/kg	0.0333	ND	51.0	31-137				
Anthracene	0.0184	0.00500	"	0.0333	ND	55.1	30-120				
Benzo (a) anthracene	0.0185	0.00500	"	0.0333	ND	55.6	30-120				
Benzo (a) pyrene	0.0213	0.00500	"	0.0333	ND	63.8	30-120				
Benzo (b) fluoranthene	0.0174	0.00500	"	0.0333	ND	52.3	30-120				
Benzo (k) fluoranthene	0.0195	0.00500	"	0.0333	ND	58.4	30-120				
Chrysene	0.0209	0.00500	"	0.0333	ND	62.8	30-120				
Dibenz (a,h) anthracene	0.0258	0.00500	"	0.0333	ND	77.3	30-120				
Fluoranthene	0.0202	0.00500	"	0.0333	ND	60.6	30-120				
Fluorene	0.0172	0.00500	"	0.0333	ND	51.7	30-120				
Indeno (1,2,3-cd) pyrene	0.0245	0.00500	"	0.0333	ND	73.5	30-120				
Pyrene	0.0203	0.00500	"	0.0333	0.00266	52.9	35-142				
1-Methylnaphthalene	0.0188	0.00500	"	0.0333	ND	56.5	15-130				
2-Methylnaphthalene	0.0229	0.00500	"	0.0333	0.00524	52.9	15-130				
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0179</i>		<i>"</i>	<i>0.0333</i>		<i>53.8</i>	<i>40-150</i>				
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0206</i>		<i>"</i>	<i>0.0333</i>		<i>61.8</i>	<i>40-150</i>				

Matrix Spike Dup (BFC0315-MSD1)	Source: 2203232-01			Prepared: 03/16/22 Analyzed: 03/19/22							
Acenaphthene	0.0135	0.00500	mg/kg	0.0333	ND	40.4	31-137	23.1	30		
Anthracene	0.0137	0.00500	"	0.0333	ND	41.1	30-120	29.1	30		
Benzo (a) anthracene	0.0160	0.00500	"	0.0333	ND	48.1	30-120	14.5	30		
Benzo (a) pyrene	0.0181	0.00500	"	0.0333	ND	54.3	30-120	16.0	30		
Benzo (b) fluoranthene	0.0148	0.00500	"	0.0333	ND	44.5	30-120	16.1	30		
Benzo (k) fluoranthene	0.0161	0.00500	"	0.0333	ND	48.4	30-120	18.7	30		
Chrysene	0.0176	0.00500	"	0.0333	ND	52.7	30-120	17.3	30		
Dibenz (a,h) anthracene	0.0220	0.00500	"	0.0333	ND	66.1	30-120	15.6	30		
Fluoranthene	0.0213	0.00500	"	0.0333	ND	63.8	30-120	5.18	30		
Fluorene	0.0129	0.00500	"	0.0333	ND	38.7	30-120	28.7	30		
Indeno (1,2,3-cd) pyrene	0.0397	0.00500	"	0.0333	ND	119	30-120	47.4	30		
Pyrene	0.0176	0.00500	"	0.0333	0.00266	44.8	35-142	14.3	30		
1-Methylnaphthalene	0.0140	0.00500	"	0.0333	ND	41.9	15-130	29.7	50		
2-Methylnaphthalene	0.0164	0.00500	"	0.0333	0.00524	33.4	15-130	33.0	50		
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0146</i>		<i>"</i>	<i>0.0333</i>		<i>43.9</i>	<i>40-150</i>				
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0164</i>		<i>"</i>	<i>0.0333</i>		<i>49.1</i>	<i>40-150</i>				

Summit Scientific

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

Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/01/22 10:47

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 BFC0372 - EPA 3050B

Blank (BFC0372-BLK1)

Prepared: 03/25/22 Analyzed: 03/30/22

Boron ND 0.0100 mg/L

LCS (BFC0372-BS1)

Prepared: 03/25/22 Analyzed: 03/30/22

Boron 5.20 0.0100 mg/L 5.00 104 80-120

Duplicate (BFC0372-DUP1)

Source: 2203211-01

Prepared: 03/25/22 Analyzed: 03/30/22

Boron 0.0667 0.0100 mg/L 0.0790 16.9 20

Matrix Spike (BFC0372-MS1)

Source: 2203211-01

Prepared: 03/25/22 Analyzed: 03/30/22

Boron 5.42 0.0100 mg/L 5.00 0.0790 107 75-125

Matrix Spike Dup (BFC0372-MSD1)

Source: 2203211-01

Prepared: 03/25/22 Analyzed: 03/30/22

Boron 4.98 0.0100 mg/L 5.00 0.0790 98.0 75-125 8.53 25

Summit Scientific

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Broomfield CO, 80020

Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/01/22 10:47

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

Summit Scientific

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

Batch BFC0357 - General Preparation

Blank (BFC0357-BLK1)

Prepared: 03/17/22 Analyzed: 03/22/22

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

LCS (BFC0357-BS1)

Prepared: 03/17/22 Analyzed: 03/22/22

Calcium	6.01	0.0500	mg/L wet	5.00	120	70-130
Magnesium	5.56	0.0500	"	5.00	111	70-130
Sodium	5.56	0.0500	"	5.00	111	70-130

Summit Scientific

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Tasman Geosciences
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 Broomfield CO, 80020

Project: Noble - Carpio A26-05

Project Number: UWRWE-A1698-ABN

Project Manager: Jacob Whritenour

Reported:
 04/01/22 10:47

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 BFC0445 - General Preparation

Duplicate (BFC0445-DUP1)

Source: 2203256-01

Prepared & Analyzed: 03/21/22

% Solids	96.2		%		97.1			0.921	20	
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Summit Scientific

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

Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/01/22 10:47

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 BFC0390 - General Preparation

Blank (BFC0390-BLK1)

Prepared & Analyzed: 03/18/22

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BFC0390-BS1)

Prepared & Analyzed: 03/18/22

Specific Conductance (EC) 0.150 0.0100 mmhos/cm 0.150 100 95-105

Duplicate (BFC0390-DUP1)

Source: 2203066-03

Prepared & Analyzed: 03/18/22

Specific Conductance (EC) 0.316 0.0100 mmhos/cm 0.323 2.35 20

Summit Scientific

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Noble - Carpio A26-05

Project Number: UWRWE-A1698-ABN

Project Manager: Jacob Whritenour

Reported:
04/01/22 10:47

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 BFC0389 - General Preparation

LCS (BFC0389-BS1)

Prepared & Analyzed: 03/18/22

pH 9.14 pH Units 9.18 99.6 95-105

Duplicate (BFC0389-DUP1)

Source: 2203066-03

Prepared & Analyzed: 03/18/22

pH 8.18 pH Units 7.99 2.35 20

Summit Scientific

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Broomfield CO, 80020

Project: Noble - Carpio A26-05
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/01/22 10:47

Notes and Definitions

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