



Third Party														
Removal Date														
Sample taken?														
PID Readings														
Photo Number(s)														
Other Facility Equipment														
Equipment type	MH01	FLARE01	FLARE02											
Equipment Condition	good	good	good											
Age														
Soil impacts observed during	None observed	None observed	None observed											
PID Readings	0.0	0.2	0.2											
Sample taken?	Yes, see below	Yes, see below	Yes, see below											
Photo Number(s)	2	3	4											
Other observations regarding other facility or third party equipment:														
Sample taken below meter house and flare. (MH01@0.5' & Flare01@0.5')														
Summary														
Was impacted soil identified?														
<div> <div>No</div> <div>Yes - less than 10 cubic yards</div> <div>Yes - more than 10 cubic yards</div> </div>														
Total number of samples field screened: 13					Total number of samples collected: 13									
Highest PID Reading: 0.8					Total number of samples submitted to lab for analysis: 10									
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?														
<div> <div>No</div> <div>Yes - not impacted or in contact with impacted soils</div> <div>Yes - groundwater impacted and/or in contact with impacted soils</div> </div>														
Measured depth to groundwater: 3.5'					Was remedial groundwater removal conducted? Yes No									
Date Groundwater was encountered: 3/11/2022					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: 1					Total Volume of groundwater removed:									
Total number of samples submitted to lab for analysis: 1														



Photographic Log

							
Equipment ID:		Equipment Type:		Equipment ID:MH01		Equipment Type:	
Material:	Volume:	Contents:	Material:	Volume:	Contents:		
Notes/Conditions:			Notes/Conditions:				



Photographic Log

													
Equipment ID: FLARE01			Equipment Type:			Equipment ID: FLARE02			Equipment Type:				
Material:			Volume:		Contents:		Material:			Volume:		Contents:	
Notes/Conditions:						Notes/Conditions:							



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:GW01			Equipment Type:				
Material:			Volume:		Contents:		Material:			Volume:		Contents:	
Notes/Conditions:						Notes/Conditions:							

Photographic Log

													
Equipment ID: <small>AST01</small>			Equipment Type:			Equipment ID: <small>SEP01-DL01</small>			Equipment Type:				
Material:			Volume:		Contents:		Material:			Volume:		Contents:	
Notes/Conditions:						Notes/Conditions:							

Photographic Log

											
Equipment ID:SEP01-FL01			Equipment Type:			Equipment ID:SEP02-DL02			Equipment Type:		
Material:		Volume:		Contents:		Material:		Volume:		Contents:	
Notes/Conditions:						Notes/Conditions:					

Photographic Log

									
						Equipment ID: BG01		Equipment Type:	
						Material:	Volume:	Contents:	
						Notes/Conditions:			
			Equipment ID:		Equipment Type:				
Material:		Volume:	Contents:						
Notes/Conditions:			Notes/Conditions:						

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

Soil Sample ID	Date	PID (ppm)	Visual	Olfactory	Sample Type (Grab/Lab)	Latitude ¹	Longitude	PDOP
SS01@2.5'	3/11/2022	0.2	No Staining	No Odor	Lab	40.45877682	-104.5264823	1.0
SS02@2.5'	3/11/2022	0.8	No Staining	No Odor	Lab	40.45875470	-104.5264751	1.1
SS03@2.5'	3/11/2022	0.1	No Staining	No Odor	Lab	40.45874747	-104.5264967	1.0
SS04@2.5'	3/11/2022	0.2	Organic Content	No Odor	Lab	40.45876347	-104.5265098	1.0
FS01@3.5'	3/11/2022	0.5	Organic Content	No Odor	Lab	40.45876080	-104.5264995	1.0
AST01@0.5'	3/11/2022	0.0	No Staining	No Odor	Lab	40.45872039	-104.5264918	1.0
FLARE01@0.5'	3/11/2022	0.2	No Staining	No Odor	Grab	40.45905061	-104.5263862	1.0
FLARE02@0.5'	3/11/2022	0.1	No Staining	No Odor	Grab	40.45905213	-104.5264938	1.1
MH01@0.5'	3/11/2022	0.0	No Staining	No Odor	Grab	40.45897113	-104.5264103	1.2
SEP01-FL01@3'	3/11/2022	0.0	No Staining	No Odor	Lab	40.45899069	-104.5264601	1.0
SEP01-DL01@3'	3/11/2022	0.4	Organic Content	No Odor	Lab	40.45893753	-104.5264894	1.1
SEP01-DL02@3'	3/11/2022	0.5	No Staining	No Odor	Lab	40.45895047	-104.5264585	1.1
BG01@3'	3/11/2022	0.0	No Staining	No Odor	Grab	40.45913415	-104.5263173	1.1

Notes:

PID = Photo-ionization detector

ppm = parts per million

PDOP = Position dilution of precision

HC = Hydrocarbon

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

TABLE 2
SOIL ANALYTICAL DATA
NOBLE ENERGY, INC. - CARPIO A26-05(FAC)

Soil Sample ID	Date	¹ Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	1,2,4 - TMB (mg/kg)	1,3,5 - TMB (mg/kg)	Naphthalene (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	TPH-ORO (mg/kg)	Acenaphthene (mg/kg)	Anthracene (mg/kg)	Benz(a) (mg/kg)	Benzo(a) (mg/kg)	Benzo(b) (mg/kg)	Benzo(k) (mg/kg)	Chrysene (mg/kg)	A,H (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	1,2,3-CD (mg/kg)	Pyrene (mg/kg)	1-M (mg/kg)	2-M (mg/kg)
Residential SSL ²		1.2	490	5.8	58	30	27	2		500		360	1,800	1.1	0.11	1.1	11	110	0.11	240	240	1.1	180	18	24
Protection of Groundwater SSL ^{2,3}		0.0026	0.69	0.78	9.9	0.0081	0.0087	0.0038		500		0.55	6	0.011	0.24	0.3	2.9	9	0.096	8.9	0.54	0.98	1.3	0.006	0.019
AST01@0.5'	03/11/22	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.00038	<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
SS01@2.5'	03/11/22	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.00038	<0.50	<50	<50	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
SS02@2.5'	03/11/22	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.00038	<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
SS03@2.5'	03/11/22	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.00038	<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
SS04@2.5'	03/11/22	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.00038	<0.50	<50	<50	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
FS01@3.5'	03/11/22	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.00038	<0.50	<50	<50	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
SEP01-DL01@3'	03/11/22	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.00038	<0.50	<50	<50	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
SEP01-FL01@3'	03/11/22	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.00038	<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
SEP02-DL02@3'	03/11/22	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.00038	<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
AST01@0.5'	03/11/22	7.90	1.17	0.592	0.0373
SS01@2.5'	03/11/22	7.68	1.21	0.528	0.0638
SS02@2.5'	03/11/22	8.00	0.720	0.317	0.0209
SS03@2.5'	03/11/22	7.73	1.16	0.599	0.0623
SS04@2.5'	03/11/22	7.80	1.80	1.10	0.0800
FS01@3.5'	03/11/22	7.94	1.41	0.659	0.0574
SEP01-DL01@3'	03/11/22	7.70	1.35	3.06	0.582
SEP01-FL01@3'	03/11/22	7.79	1.11	2.30	0.259
SEP02-DL02@3'	03/11/22	7.80	1.78	2.72	0.203

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) = Benzantracene
Benzo(b) = Benzo[fluoranthene]
Benzo(k) = Benzo[fluoranthene]
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 3
GROUNDWATER ANALYTICAL DATA
NOBLE ENERGY, INC. - CARPIO A26-05(FAC)

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)	Total Dissolved Solids	Chlorides (mg/L)	Sulfates (mg/L)
COGCC Standard		5	560	700	1,400	140	67	67	1.25 X Background	250	250
GW01@3.5'	03/11/22	21	91	9.3	97	3.0	22	9.3	NA	NA	NA

Notes:

NA - Not analyzed

COGCC = Colorado Oil and Gas Conservation Commission

µg/L = Micrograms per liter

mg/L = Milligrams per liter

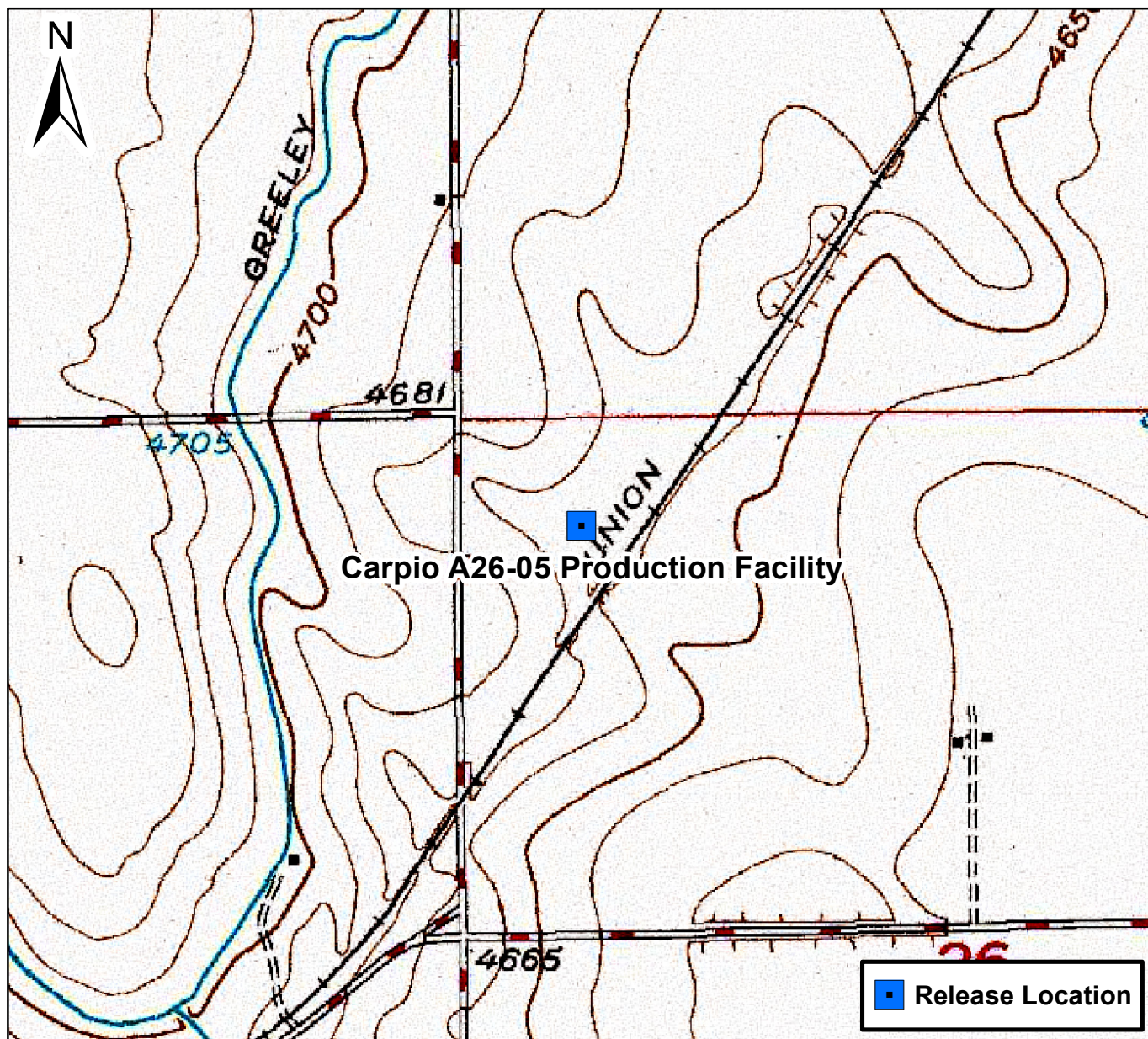
1,2,4 - TMB = 1,2,4 - trimethylbenzene

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



0 1,000 2,000 Feet

Figure 1

Site Location Map
Carpio A26-05 Production Facility
SWNE S26 T6N R64W
Weld County, Colorado





Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

April 12, 2022

Jacob Whritenour

Tasman Geosciences

6855 W. 119th Ave.

Broomfield, CO 80020

RE: Noble - Carpio A26-05 FAC

Work Order #2203187

Enclosed are the results of analyses for samples received by Summit Scientific on 03/11/22 15:15. 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 FAC
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/12/22 13:34

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
AST01@0.5'	2203187-01	Soil	03/11/22 12:20	03/11/22 15:15
SS01@2.5'	2203187-02	Soil	03/11/22 12:00	03/11/22 15:15
SS02@2.5'	2203187-03	Soil	03/11/22 12:02	03/11/22 15:15
SS03@2.5'	2203187-04	Soil	03/11/22 12:04	03/11/22 15:15
SS04@2.5'	2203187-05	Soil	03/11/22 12:06	03/11/22 15:15
FS01@3.5'	2203187-06	Soil	03/11/22 12:08	03/11/22 15:15
SEP01-DL01@3'	2203187-07	Soil	03/11/22 12:33	03/11/22 15:15
SEP01-FL01@3'	2203187-08	Soil	03/11/22 12:36	03/11/22 15:15
SEP02-DL02@3'	2203187-09	Soil	03/11/22 12:40	03/11/22 15:15
GW01@3.5'	2203187-11	Water	03/11/22 12:10	03/11/22 15:15

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

2203187.1

S₂

4653 Table Mountain Drive ♦ Golden, Colorado 80403

303-277-9310

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: 303 829 0530 / 720 616 8383

Project Name: Corpio A26-05 FAC

Sampler Name: Halina North

Project Number: UWIRWE - A1698 - ABN

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested							Special Instructions
					HCl	HNO ₃	None	Other	Water	Soil	Air-Canister #	Other	VOC - 915	TPH - 915	PAH - 915	SAR, EC, pH	Boron - HWS	HOLD		
1	ASTO1@0.5'	3/11/22	12:20	2			X			X				X	X	X	X	X		
2	SSO1@2.5'		12:00															X	HOLD	
3	SSO2@2.5'		12:02																	
4	SSO3@2.5'		12:04															X	HOLD	
5	SSO4@2.5'		12:06															X	HOLD	
6	FSO1@3.5'		12:08																	
7	SEPO1-DLO1@3'		12:33																	
8	SEPO1-FL01@3'		12:36																	
9	SEPO2-DLO2@3'		12:40																	
10	B601@3'		12:50	1													X	X	X	HOLD

Relinquished by: Halina North Date/Time: 3/11/22 15:15
Relinquished by: Tasman's Lock Box Date/Time: 3/11/22 15:15
Relinquished by: Tasman's Lock Box Date/Time: 3/11/22 15:15

Received by: Tasman's Lock Box Date/Time: 3/11/22 15:15
Received by: [Signature] Date/Time: 3/11/22 15:15
Received by: Date/Time:

Turn Around Time (Check)
Same Day 72 hours
24 hours Standard
48 hours
Sample Integrity:
Temperature Upon Receipt: 3.2
Samples Intact: Yes No

Notes:

Summit Scientific

2203187.2

S₂

4653 Table Mountain Drive ♦ Golden, Colorado 80403

303-277-9310

Page 2 of 2

Client: Noble / Tasman Geosciences

Project Manager: Jake Whritenour

Address: 6855 W. 119th Ave.

E-Mail: jwhritenour@tasman-geo.com

City/State/Zip: Broomfield / CO/ 80020

Phone: 303-487-1228

Project Name: Carpio A26-05 FAC

Sampler Name: Halina North

Project Number: UWRWE-A1698-ABN

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested								Special Instructions
					HCl	HNO ₃	None	Other	Water	Soil	Air-Canister #	Other	8260 BTEX	Naphthalene	1,2,4-TMB	1,3,5-TMB	TDS	Chloride	Sulfate		
1	GW01@35'	3/11/22	12:10	3	X				X					X	X	X	X	X	X		
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					

Relinquished by: <u>Halina North</u>	Date/Time: <u>3/11/22 15:15</u>	Received by: <u>Tasman's Lock Box</u>	Date/Time: <u>3/11/22 15:15</u>	Turn Around Time (Check) ___ Same Day ___ 72 hours ___ 24 hours <input checked="" type="checkbox"/> Standard ___ 48 hours ___ Sample Integrity: Temperature Upon Receipt: <u>3.2</u> Samples Intact: <input checked="" type="radio"/> Yes ___ No	Notes:
Relinquished by: <u>Tasman's Lock Box</u>	Date/Time: <u>3/11/22 15:15</u>	Received by: <u>[Signature]</u>	Date/Time: <u>3/11/22 15:15</u>		
Relinquished by: <u></u>	Date/Time: <u></u>	Received by: <u></u>	Date/Time: <u></u>		

S₂2/2
Sample Receipt Checklist

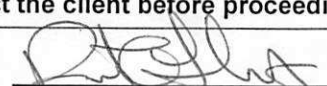
S2 Work Order# 2203187

Client: Noble-Tasman Client Project ID: Carpio A2C-03 FACShipped Via: ☐ H.D. ☒ P.U. ☐ FedEx ☐ UPS ☐ USPS ☐ Other _____ Airbill #: _____Matrix (check all that apply): ☐ Air ☒ Soil/Solid ☐ Water ☐ Other: _____
(Describe)Temp (°C) 3.2

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, H ₂ SO ₄ , NaOH, HNO ₃ , etc.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	HCl
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 or Initials
3-11-22
Date/Time



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

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

Reported:
04/12/22 13:34

AST01@0.5'
2203187-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/11/22 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFC0238	03/14/22	03/15/22	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: **03/11/22 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		100 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		103 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.0 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/11/22 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFC0239	03/14/22	03/15/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **03/11/22 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		98.8 %	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 FAC
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/12/22 13:34

AST01@0.5'
2203187-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/11/22 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFC0241	03/14/22	03/15/22	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: **03/11/22 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		67.2 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		66.0 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/11/22 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.0373	0.0100	mg/L	1	BFC0273	03/25/22	03/31/22	EPA 6020B	

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

Date Sampled: **03/11/22 12:20**

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 FAC
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/12/22 13:34

AST01@0.5'
2203187-01 (Soil)

Summit Scientific

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

Calcium	39.5	0.0528	mg/L dry	1	BFC0251	03/14/22	03/16/22	EPA 6020B
Magnesium	13.0	0.0528	"	"	"	"	"	"
Sodium	33.2	0.0528	"	"	"	"	"	"

Calculated Analysis

Date Sampled: **03/11/22 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.17	0.00100	units	1	BFC0362	03/17/22	03/17/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/11/22 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	94.7		%	1	BFC0343	03/17/22	03/17/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/11/22 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.592	0.0100	mmhos/cm	1	BFC0284	03/15/22	03/15/22	EPA 120.1	

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

Date Sampled: **03/11/22 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.90		pH Units	1	BFC0283	03/15/22	03/15/22	EPA 9045D	

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

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

Reported:
04/12/22 13:34

SS01@2.5'
2203187-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

I-02

Date Sampled: **03/11/22 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFD0074	04/05/22	04/07/22	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: **03/11/22 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		129 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		104 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

I-02

Date Sampled: **03/11/22 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFD0075	04/05/22	04/06/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **03/11/22 12:00**

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

PAH by EPA Method 8270D SIM

I-02

Summit Scientific

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

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

Reported:
04/12/22 13:34

SS01@2.5'
2203187-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

I-02

Date Sampled: **03/11/22 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFD0077	04/05/22	04/05/22	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: **03/11/22 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		59.4 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		53.7 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/11/22 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.0638	0.0100	mg/L	1	BFD0148	04/07/22	04/12/22	EPA 6020B	

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

Date Sampled: **03/11/22 12:00**

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

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

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

Reported:
04/12/22 13:34

SS01@2.5'
2203187-02 (Soil)

Summit Scientific

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

Calcium	30.1	0.0525	mg/L dry	1	BFD0109	04/06/22	04/09/22	EPA 6020B
Magnesium	9.83	0.0525	"	"	"	"	"	"
Sodium	29.8	0.0525	"	"	"	"	"	"

Calculated Analysis

Date Sampled: **03/11/22 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.21	0.00100	units	1	BFD0182	04/10/22	04/10/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/11/22 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	95.2		%	1	BFD0162	04/08/22	04/08/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/11/22 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.528	0.0100	mmhos/cm	1	BFD0145	04/07/22	04/07/22	EPA 120.1	

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

Date Sampled: **03/11/22 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.68		pH Units	1	BFD0143	04/07/22	04/07/22	EPA 9045D	I-02

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

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

Reported:
04/12/22 13:34

SS02@2.5'
2203187-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/11/22 12:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFC0238	03/14/22	03/15/22	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: **03/11/22 12:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		105 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		104 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.3 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/11/22 12:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFC0239	03/14/22	03/15/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **03/11/22 12:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		87.3 %	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 FAC
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/12/22 13:34

SS02@2.5'
2203187-03 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/11/22 12:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFC0241	03/14/22	03/15/22	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: **03/11/22 12:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		73.9 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		73.7 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/11/22 12:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.0209	0.0100	mg/L	1	BFC0273	03/25/22	03/31/22	EPA 6020B	

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

Date Sampled: **03/11/22 12:02**

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 FAC
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/12/22 13:34

SS02@2.5'
2203187-03 (Soil)

Summit Scientific

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

Calcium	20.9	0.0525	mg/L dry	1	BFC0251	03/14/22	03/16/22	EPA 6020B
Magnesium	6.77	0.0525	"	"	"	"	"	"
Sodium	14.8	0.0525	"	"	"	"	"	"

Calculated Analysis

Date Sampled: **03/11/22 12:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.720	0.00100	units	1	BFC0362	03/17/22	03/17/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/11/22 12:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	95.2		%	1	BFC0343	03/17/22	03/17/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/11/22 12:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.317	0.0100	mmhos/cm	1	BFC0284	03/15/22	03/15/22	EPA 120.1	

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

Date Sampled: **03/11/22 12:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.00		pH Units	1	BFC0283	03/15/22	03/15/22	EPA 9045D	

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

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

Reported:
04/12/22 13:34

SS03@2.5'
2203187-04 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

I-02

Date Sampled: **03/11/22 12:04**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BFD0074	04/05/22	04/08/22	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: **03/11/22 12:04**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		149 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		104 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		105 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

I-02

Date Sampled: **03/11/22 12:04**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BFD0075	04/05/22	04/06/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **03/11/22 12:04**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		96.1 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

I-02

Summit Scientific

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

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

Reported:
04/12/22 13:34

SS03@2.5'
2203187-04 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

I-02

Date Sampled: **03/11/22 12:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFD0077	04/05/22	04/05/22	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: **03/11/22 12:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		63.7 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		58.5 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/11/22 12:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.0623	0.0100	mg/L	1	BFD0148	04/07/22	04/12/22	EPA 6020B	

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

Date Sampled: **03/11/22 12:04**

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 FAC
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/12/22 13:34

SS03@2.5'
2203187-04 (Soil)

Summit Scientific

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

Calcium	36.8	0.0532	mg/L dry	1	BFD0109	04/06/22	04/09/22	EPA 6020B
Magnesium	11.4	0.0532	"	"	"	"	"	"
Sodium	31.4	0.0532	"	"	"	"	"	"

Calculated Analysis

Date Sampled: **03/11/22 12:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.16	0.00100	units	1	BFD0182	04/10/22	04/10/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/11/22 12:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	93.9		%	1	BFD0162	04/08/22	04/08/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/11/22 12:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.599	0.0100	mmhos/cm	1	BFD0145	04/07/22	04/07/22	EPA 120.1	

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

Date Sampled: **03/11/22 12:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.73		pH Units	1	BFD0143	04/07/22	04/07/22	EPA 9045D	I-02

Summit Scientific

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

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

Reported:
04/12/22 13:34

SS04@2.5'
2203187-05 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

I-02

Date Sampled: **03/11/22 12:06**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BFD0074	04/05/22	04/08/22	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: **03/11/22 12:06**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		145 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		107 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		106 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

I-02

Date Sampled: **03/11/22 12:06**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BFD0075	04/05/22	04/06/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **03/11/22 12:06**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		102 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

I-02

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

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

Reported:
04/12/22 13:34

SS04@2.5'
2203187-05 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

I-02

Date Sampled: **03/11/22 12:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFD0077	04/05/22	04/05/22	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: **03/11/22 12:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		67.8 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		56.2 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/11/22 12:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.0800	0.0100	mg/L	1	BFD0148	04/07/22	04/12/22	EPA 6020B	

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

Date Sampled: **03/11/22 12:06**

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

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

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

Reported:
04/12/22 13:34

SS04@2.5'
2203187-05 (Soil)

Summit Scientific

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

Calcium	65.8	0.0540	mg/L dry	1	BFD0109	04/06/22	04/09/22	EPA 6020B
Magnesium	25.2	0.0540	"	"	"	"	"	"
Sodium	67.9	0.0540	"	"	"	"	"	"

Calculated Analysis

Date Sampled: **03/11/22 12:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.80	0.00100	units	1	BFD0182	04/10/22	04/10/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/11/22 12:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	92.5		%	1	BFD0162	04/08/22	04/08/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/11/22 12:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.10	0.0100	mmhos/cm	1	BFD0145	04/07/22	04/07/22	EPA 120.1	

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

Date Sampled: **03/11/22 12:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.80		pH Units	1	BFD0143	04/07/22	04/07/22	EPA 9045D	I-02

Summit Scientific

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

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

Reported:
04/12/22 13:34

FS01@3.5'
2203187-06 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/11/22 12:08**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BFC0238	03/14/22	03/15/22	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: **03/11/22 12:08**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		101 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		100 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.2 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/11/22 12:08**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BFC0239	03/14/22	03/15/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **03/11/22 12:08**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		94.7 %	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 FAC
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/12/22 13:34

FS01@3.5'
2203187-06 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/11/22 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFC0241	03/14/22	03/15/22	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: **03/11/22 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		59.1 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		61.2 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/11/22 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.0574	0.0100	mg/L	1	BFC0273	03/25/22	03/31/22	EPA 6020B	

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

Date Sampled: **03/11/22 12:08**

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 FAC
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/12/22 13:34

FS01@3.5'
2203187-06 (Soil)

Summit Scientific

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

Calcium	46.8	0.0590	mg/L dry	1	BFC0251	03/14/22	03/16/22	EPA 6020B
Magnesium	16.6	0.0590	"	"	"	"	"	"
Sodium	44.0	0.0590	"	"	"	"	"	"

Calculated Analysis

Date Sampled: **03/11/22 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.41	0.00100	units	1	BFC0362	03/17/22	03/17/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/11/22 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	84.7		%	1	BFC0343	03/17/22	03/17/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/11/22 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.659	0.0100	mmhos/cm	1	BFC0284	03/15/22	03/15/22	EPA 120.1	

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

Date Sampled: **03/11/22 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.94		pH Units	1	BFC0283	03/15/22	03/15/22	EPA 9045D	

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

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

Reported:
04/12/22 13:34

SEP01-DL01@3'
2203187-07 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/11/22 12:33**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BFC0238	03/14/22	03/15/22	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: **03/11/22 12:33**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		101 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		101 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.7 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/11/22 12:33**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BFC0239	03/14/22	03/15/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **03/11/22 12:33**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		87.4 %	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 FAC
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/12/22 13:34

SEP01-DL01@3'
2203187-07 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/11/22 12:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFC0241	03/14/22	03/15/22	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: **03/11/22 12:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		58.9 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		55.6 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/11/22 12:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.582	0.0100	mg/L	1	BFC0273	03/25/22	03/31/22	EPA 6020B	

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

Date Sampled: **03/11/22 12:33**

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 FAC
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/12/22 13:34

SEP01-DL01@3'
2203187-07 (Soil)

Summit Scientific

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

Calcium	319	0.0610	mg/L dry	1	BFC0251	03/14/22	03/16/22	EPA 6020B
Magnesium	168	0.0610	"	"	"	"	"	"
Sodium	120	0.0610	"	"	"	"	"	"

Calculated Analysis

Date Sampled: **03/11/22 12:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.35	0.00100	units	1	BFC0362	03/17/22	03/17/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/11/22 12:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	82.0		%	1	BFC0343	03/17/22	03/17/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/11/22 12:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	3.06	0.0100	mmhos/cm	1	BFC0284	03/15/22	03/15/22	EPA 120.1	

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

Date Sampled: **03/11/22 12:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.70		pH Units	1	BFC0283	03/15/22	03/15/22	EPA 9045D	

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

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

Reported:
04/12/22 13:34

SEP01-FL01@3'
2203187-08 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/11/22 12:36**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BFC0238	03/14/22	03/15/22	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: **03/11/22 12:36**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		97.2 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		102 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.6 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/11/22 12:36**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BFC0239	03/14/22	03/15/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **03/11/22 12:36**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		98.7 %	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 FAC
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/12/22 13:34

SEP01-FL01@3'
2203187-08 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/11/22 12:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFC0241	03/14/22	03/15/22	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: **03/11/22 12:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		54.6 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		55.3 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/11/22 12:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.259	0.0100	mg/L	1	BFC0273	03/25/22	03/31/22	EPA 6020B	

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

Date Sampled: **03/11/22 12:36**

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 FAC
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/12/22 13:34

SEP01-FL01@3'
2203187-08 (Soil)

Summit Scientific

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

Calcium	268	0.0607	mg/L dry	1	BFC0251	03/14/22	03/16/22	EPA 6020B
Magnesium	96.1	0.0607	"	"	"	"	"	"
Sodium	83.1	0.0607	"	"	"	"	"	"

Calculated Analysis

Date Sampled: **03/11/22 12:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.11	0.00100	units	1	BFC0362	03/17/22	03/17/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/11/22 12:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	82.3		%	1	BFC0343	03/17/22	03/17/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/11/22 12:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	2.30	0.0100	mmhos/cm	1	BFC0284	03/15/22	03/15/22	EPA 120.1	

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

Date Sampled: **03/11/22 12:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.79		pH Units	1	BFC0283	03/15/22	03/15/22	EPA 9045D	

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Broomfield CO, 80020

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

Reported:
04/12/22 13:34

SEP02-DL02@3'
2203187-09 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/11/22 12:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BFC0238	03/14/22	03/15/22	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: **03/11/22 12:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		96.8 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		102 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.7 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **03/11/22 12:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BFC0239	03/14/22	03/15/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **03/11/22 12:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		86.3 %	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 FAC
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/12/22 13:34

SEP02-DL02@3'
2203187-09 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **03/11/22 12:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFC0241	03/14/22	03/15/22	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: **03/11/22 12:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		57.0 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		55.7 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **03/11/22 12:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.203	0.0100	mg/L	1	BFC0273	03/25/22	03/31/22	EPA 6020B	

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

Date Sampled: **03/11/22 12:40**

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 FAC
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/12/22 13:34

SEP02-DL02@3'
2203187-09 (Soil)

Summit Scientific

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

Calcium	316	0.0607	mg/L dry	1	BFC0251	03/14/22	03/16/22	EPA 6020B
Magnesium	104	0.0607	"	"	"	"	"	"
Sodium	143	0.0607	"	"	"	"	"	"

Calculated Analysis

Date Sampled: **03/11/22 12:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.78	0.00100	units	1	BFC0362	03/17/22	03/17/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/11/22 12:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	82.3		%	1	BFC0343	03/17/22	03/17/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/11/22 12:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	2.72	0.0100	mmhos/cm	1	BFC0284	03/15/22	03/15/22	EPA 120.1	

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

Date Sampled: **03/11/22 12:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.80		pH Units	1	BFC0283	03/15/22	03/15/22	EPA 9045D	

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

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

Reported:
04/12/22 13:34

GW01@3.5'
2203187-11 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/11/22 12:10**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	21	1.0	ug/l	1	BFC0291	03/15/22	03/16/22	EPA 8260B	
Toluene	91	1.0	"	"	"	"	"	"	
Ethylbenzene	9.3	1.0	"	"	"	"	"	"	
Xylenes (total)	97	2.0	"	"	"	"	"	"	
Naphthalene	3.0	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	22	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	9.3	1.0	"	"	"	"	"	"	

Date Sampled: **03/11/22 12:10**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		118 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		125 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		103 %	21-167		"	"	"	"	

Summit Scientific

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6855 W. 119th Ave.
Broomfield CO, 80020

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

Reported:
04/12/22 13:34

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 BFC0238 - EPA 5030 Soil MS

Blank (BFC0238-BLK1)

Prepared: 03/14/22 Analyzed: 03/15/22

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	"							
Surrogate: 1,2-Dichloroethane-d4	0.0388		"	0.0400		97.0	50-150			
Surrogate: Toluene-d8	0.0408		"	0.0400		102	50-150			
Surrogate: 4-Bromofluorobenzene	0.0382		"	0.0400		95.5	50-150			

LCS (BFC0238-BS1)

Prepared: 03/14/22 Analyzed: 03/15/22

Benzene	0.0573	0.0020	mg/kg	0.0750		76.4	70-130			
Toluene	0.0616	0.0050	"	0.0750		82.1	70-130			
Ethylbenzene	0.0586	0.0050	"	0.0750		78.2	70-130			
m,p-Xylene	0.125	0.010	"	0.150		83.2	70-130			
o-Xylene	0.0602	0.0050	"	0.0750		80.2	70-130			
1,2,4-Trimethylbenzene	0.0662	0.0050	"	0.0750		88.2	70-130			
1,3,5-Trimethylbenzene	0.0631	0.0050	"	0.0750		84.1	70-130			
Naphthalene	0.0604	0.0038	"	0.0750		80.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0409		"	0.0400		102	50-150			
Surrogate: Toluene-d8	0.0412		"	0.0400		103	50-150			
Surrogate: 4-Bromofluorobenzene	0.0421		"	0.0400		105	50-150			

Matrix Spike (BFC0238-MS1)

Source: 2203187-01

Prepared: 03/14/22 Analyzed: 03/15/22

Benzene	0.0589	0.0020	mg/kg	0.0750	ND	78.5	70-130			
Toluene	0.0647	0.0050	"	0.0750	ND	86.3	70-130			
Ethylbenzene	0.0634	0.0050	"	0.0750	ND	84.6	70-130			
m,p-Xylene	0.135	0.010	"	0.150	ND	90.3	70-130			
o-Xylene	0.0661	0.0050	"	0.0750	ND	88.1	70-130			
1,2,4-Trimethylbenzene	0.0726	0.0050	"	0.0750	ND	96.8	70-130			
1,3,5-Trimethylbenzene	0.0696	0.0050	"	0.0750	ND	92.8	70-130			
Naphthalene	0.0736	0.0038	"	0.0750	ND	98.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0395		"	0.0400		98.8	50-150			
Surrogate: Toluene-d8	0.0410		"	0.0400		102	50-150			
Surrogate: 4-Bromofluorobenzene	0.0409		"	0.0400		102	50-150			

Summit Scientific

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

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

Reported:
04/12/22 13:34

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 BFC0238 - EPA 5030 Soil MS

Matrix Spike Dup (BFC0238-MSD1)

Source: 2203187-01

Prepared: 03/14/22 Analyzed: 03/15/22

Benzene	0.0603	0.0020	mg/kg	0.0750	ND	80.4	70-130	2.37	30	
Toluene	0.0647	0.0050	"	0.0750	ND	86.3	70-130	0.0464	30	
Ethylbenzene	0.0662	0.0050	"	0.0750	ND	88.3	70-130	4.35	30	
m,p-Xylene	0.142	0.010	"	0.150	ND	94.6	70-130	4.65	30	
o-Xylene	0.0683	0.0050	"	0.0750	ND	91.0	70-130	3.31	30	
1,2,4-Trimethylbenzene	0.0751	0.0050	"	0.0750	ND	100	70-130	3.33	30	
1,3,5-Trimethylbenzene	0.0715	0.0050	"	0.0750	ND	95.3	70-130	2.68	30	
Naphthalene	0.0848	0.0038	"	0.0750	ND	113	70-130	14.1	30	
Surrogate: 1,2-Dichloroethane-d4	0.0387		"	0.0400		96.8	50-150			
Surrogate: Toluene-d8	0.0401		"	0.0400		100	50-150			
Surrogate: 4-Bromofluorobenzene	0.0407		"	0.0400		102	50-150			

Batch BFC0291 - EPA 5030 Water MS

Blank (BFC0291-BLK1)

Prepared & Analyzed: 03/15/22

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	"							
Surrogate: 1,2-Dichloroethane-d4	11.8		"	13.3		88.6	23-173			
Surrogate: Toluene-d8	13.0		"	13.3		97.3	20-170			
Surrogate: 4-Bromofluorobenzene	13.3		"	13.3		100	21-167			

LCS (BFC0291-BS1)

Prepared & Analyzed: 03/15/22

Benzene	48.2	1.0	ug/l	50.0		96.3	51-132			
Toluene	43.1	1.0	"	50.0		86.2	51-138			
Ethylbenzene	43.5	1.0	"	50.0		86.9	58-146			
m,p-Xylene	86.9	2.0	"	100		86.9	57-144			
o-Xylene	46.8	1.0	"	50.0		93.6	53-146			
Naphthalene	45.3	1.0	"	50.0		90.5	70-130			
1,2,4-Trimethylbenzene	48.2	1.0	"	50.0		96.4	70-130			
1,3,5-Trimethylbenzene	51.4	1.0	"	50.0		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	11.5		"	13.3		86.0	23-173			
Surrogate: Toluene-d8	12.5		"	13.3		93.5	20-170			
Surrogate: 4-Bromofluorobenzene	11.9		"	13.3		89.0	21-167			

Summit Scientific

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

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

Reported:
04/12/22 13:34

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 BFC0291 - EPA 5030 Water MS

Matrix Spike (BFC0291-MS1)

Source: 2203187-11

Prepared & Analyzed: 03/15/22

Benzene	66.4	1.0	ug/l	50.0	21.0	90.8	34-141			
Toluene	112	1.0	"	50.0	91.0	41.1	27-151			
Ethylbenzene	57.9	1.0	"	50.0	9.34	97.1	29-160			
m,p-Xylene	161	2.0	"	100	69.9	90.9	20-166			
o-Xylene	77.5	1.0	"	50.0	26.6	102	33-159			
Naphthalene	45.8	1.0	"	50.0	3.04	85.5	70-130			
1,2,4-Trimethylbenzene	76.4	1.0	"	50.0	21.7	109	70-130			
1,3,5-Trimethylbenzene	67.8	1.0	"	50.0	9.33	117	70-130			
Surrogate: 1,2-Dichloroethane-d4	10.8		"	13.3		81.1	23-173			
Surrogate: Toluene-d8	12.8		"	13.3		96.4	20-170			
Surrogate: 4-Bromofluorobenzene	12.7		"	13.3		95.0	21-167			

Matrix Spike Dup (BFC0291-MSD1)

Source: 2203187-11

Prepared & Analyzed: 03/15/22

Benzene	69.1	1.0	ug/l	50.0	21.0	96.2	34-141	3.97	30	
Toluene	80.4	1.0	"	50.0	91.0	NR	27-151	32.4	30	QM-07
Ethylbenzene	59.6	1.0	"	50.0	9.34	100	29-160	2.88	30	
m,p-Xylene	163	2.0	"	100	69.9	93.6	20-166	1.63	30	
o-Xylene	79.0	1.0	"	50.0	26.6	105	33-159	1.92	30	
Naphthalene	46.4	1.0	"	50.0	3.04	86.7	70-130	1.30	30	
1,2,4-Trimethylbenzene	78.0	1.0	"	50.0	21.7	112	70-130	2.02	30	
1,3,5-Trimethylbenzene	69.7	1.0	"	50.0	9.33	121	70-130	2.76	30	
Surrogate: 1,2-Dichloroethane-d4	11.2		"	13.3		84.2	23-173			
Surrogate: Toluene-d8	9.24		"	13.3		69.3	20-170			
Surrogate: 4-Bromofluorobenzene	12.9		"	13.3		96.5	21-167			

Batch BFD0074 - EPA 5030 Soil MS

Blank (BFD0074-BLK1)

Prepared: 04/05/22 Analyzed: 04/07/22

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	"							
Surrogate: 1,2-Dichloroethane-d4	0.0560		"	0.0400		140	50-150			
Surrogate: Toluene-d8	0.0416		"	0.0400		104	50-150			

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

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

Reported:
04/12/22 13:34

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 BFD0074 - EPA 5030 Soil MS

Blank (BFD0074-BLK1)

Prepared: 04/05/22 Analyzed: 04/07/22

Surrogate: 4-Bromofluorobenzene	0.0422		mg/kg	0.0400		105	50-150
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LCS (BFD0074-BS1)

Prepared: 04/05/22 Analyzed: 04/07/22

Benzene	0.0946	0.0020	mg/kg	0.100		94.6	70-130
Toluene	0.103	0.0050	"	0.100		103	70-130
Ethylbenzene	0.0901	0.0050	"	0.100		90.1	70-130
m,p-Xylene	0.189	0.010	"	0.200		94.6	70-130
o-Xylene	0.0952	0.0050	"	0.100		95.2	70-130
1,2,4-Trimethylbenzene	0.103	0.0050	"	0.100		103	70-130
1,3,5-Trimethylbenzene	0.0964	0.0050	"	0.100		96.4	70-130
Naphthalene	0.106	0.0038	"	0.100		106	70-130
Surrogate: 1,2-Dichloroethane-d4	0.0543		"	0.0400		136	50-150
Surrogate: Toluene-d8	0.0410		"	0.0400		102	50-150
Surrogate: 4-Bromofluorobenzene	0.0432		"	0.0400		108	50-150

Matrix Spike (BFD0074-MS1)

Source: 2204037-04

Prepared: 04/05/22 Analyzed: 04/07/22

Benzene	0.0846	0.0020	mg/kg	0.100	ND	84.6	70-130
Toluene	0.0933	0.0050	"	0.100	ND	93.3	70-130
Ethylbenzene	0.0801	0.0050	"	0.100	ND	80.1	70-130
m,p-Xylene	0.167	0.010	"	0.200	ND	83.3	70-130
o-Xylene	0.0859	0.0050	"	0.100	ND	85.9	70-130
1,2,4-Trimethylbenzene	0.0917	0.0050	"	0.100	ND	91.7	70-130
1,3,5-Trimethylbenzene	0.0880	0.0050	"	0.100	ND	88.0	70-130
Naphthalene	0.102	0.0038	"	0.100	ND	102	70-130
Surrogate: 1,2-Dichloroethane-d4	0.0535		"	0.0400		134	50-150
Surrogate: Toluene-d8	0.0412		"	0.0400		103	50-150
Surrogate: 4-Bromofluorobenzene	0.0424		"	0.0400		106	50-150

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

Reported:
04/12/22 13:34

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 BFD0074 - EPA 5030 Soil MS

Matrix Spike Dup (BFD0074-MSD1)		Source: 2204037-04			Prepared: 04/05/22 Analyzed: 04/07/22					
Benzene	0.0857	0.0020	mg/kg	0.100	ND	85.7	70-130	1.23	30	
Toluene	0.0955	0.0050	"	0.100	ND	95.5	70-130	2.32	30	
Ethylbenzene	0.0804	0.0050	"	0.100	ND	80.4	70-130	0.337	30	
m,p-Xylene	0.170	0.010	"	0.200	ND	84.8	70-130	1.71	30	
o-Xylene	0.0865	0.0050	"	0.100	ND	86.5	70-130	0.766	30	
1,2,4-Trimethylbenzene	0.0935	0.0050	"	0.100	ND	93.5	70-130	1.94	30	
1,3,5-Trimethylbenzene	0.0876	0.0050	"	0.100	ND	87.6	70-130	0.410	30	
Naphthalene	0.112	0.0038	"	0.100	ND	112	70-130	9.14	30	
<hr/>										
Surrogate: 1,2-Dichloroethane-d4	0.0544		"	0.0400		136	50-150			
Surrogate: Toluene-d8	0.0425		"	0.0400		106	50-150			
Surrogate: 4-Bromofluorobenzene	0.0418		"	0.0400		105	50-150			

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Broomfield CO, 80020

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

Reported:
04/12/22 13:34

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 BFC0239 - EPA 3550A

Blank (BFC0239-BLK1)

Prepared: 03/14/22 Analyzed: 03/15/22

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

LCS (BFC0239-BS1)

Prepared: 03/14/22 Analyzed: 03/15/22

C10-C28 (DRO)	465	50	mg/kg	500	93.0	70-130
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Matrix Spike (BFC0239-MS1)

Source: 2203187-01

Prepared: 03/14/22 Analyzed: 03/15/22

C10-C28 (DRO)	460	50	mg/kg	500	19.5	88.1	70-130
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Matrix Spike Dup (BFC0239-MSD1)

Source: 2203187-01

Prepared: 03/14/22 Analyzed: 03/15/22

C10-C28 (DRO)	508	50	mg/kg	500	19.5	97.6	70-130	9.81	20
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Batch BFD0075 - EPA 3550A

Blank (BFD0075-BLK1)

Prepared & Analyzed: 04/05/22

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

LCS (BFD0075-BS1)

Prepared: 04/05/22 Analyzed: 04/06/22

C10-C28 (DRO)	438	50	mg/kg	500	87.6	70-130
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Matrix Spike (BFD0075-MS1)

Source: 2204037-04

Prepared: 04/05/22 Analyzed: 04/06/22

C10-C28 (DRO)	405	50	mg/kg	500	14.3	78.1	70-130
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Matrix Spike Dup (BFD0075-MSD1)

Source: 2204037-04

Prepared: 04/05/22 Analyzed: 04/06/22

C10-C28 (DRO)	430	50	mg/kg	500	14.3	83.2	70-130	6.14	20
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Project: Noble - Carpio A26-05 FAC
Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/12/22 13:34

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 BFC0241 - EPA 5030 Soil MS

Blank (BFC0241-BLK1)

Prepared & Analyzed: 03/14/22

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	"							
Surrogate: 2-Methylnaphthalene-d10	0.0217		"	0.0333		65.0	40-150			
Surrogate: Fluoranthene-d10	0.0214		"	0.0333		64.1	40-150			

LCS (BFC0241-BS1)

Prepared & Analyzed: 03/14/22

Acenaphthene	0.0208	0.00500	mg/kg	0.0333		62.3	31-137			
Anthracene	0.0207	0.00500	"	0.0333		62.0	30-120			
Benzo (a) anthracene	0.0194	0.00500	"	0.0333		58.2	30-120			
Benzo (a) pyrene	0.0207	0.00500	"	0.0333		62.1	30-120			
Benzo (b) fluoranthene	0.0191	0.00500	"	0.0333		57.4	30-120			
Benzo (k) fluoranthene	0.0239	0.00500	"	0.0333		71.7	30-120			
Chrysene	0.0222	0.00500	"	0.0333		66.5	30-120			
Dibenz (a,h) anthracene	0.0259	0.00500	"	0.0333		77.7	30-120			
Fluoranthene	0.0224	0.00500	"	0.0333		67.2	30-120			
Fluorene	0.0215	0.00500	"	0.0333		64.5	30-120			
Indeno (1,2,3-cd) pyrene	0.0319	0.00500	"	0.0333		95.7	30-120			
Pyrene	0.0225	0.00500	"	0.0333		67.6	35-142			
1-Methylnaphthalene	0.0189	0.00500	"	0.0333		56.6	35-142			
2-Methylnaphthalene	0.0219	0.00500	"	0.0333		65.7	35-142			
Surrogate: 2-Methylnaphthalene-d10	0.0215		"	0.0333		64.6	40-150			
Surrogate: Fluoranthene-d10	0.0232		"	0.0333		69.6	40-150			

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

Reported:
04/12/22 13:34

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BFC0241 - EPA 5030 Soil MS

Matrix Spike (BFC0241-MS1)

Source: 2203182-01

Prepared: 03/14/22 Analyzed: 03/15/22

Acenaphthene	0.0303	0.00500	mg/kg	0.0333	ND	90.9	31-137			
Anthracene	0.0927	0.00500	"	0.0333	ND	278	30-120			QM-07
Benzo (a) anthracene	0.0108	0.00500	"	0.0333	ND	32.3	30-120			
Benzo (a) pyrene	0.00989	0.00500	"	0.0333	ND	29.7	30-120			QM-07
Benzo (b) fluoranthene	0.00752	0.00500	"	0.0333	ND	22.5	30-120			QM-07
Benzo (k) fluoranthene	0.00706	0.00500	"	0.0333	ND	21.2	30-120			QM-07
Chrysene	0.0185	0.00500	"	0.0333	0.00884	29.1	30-120			QM-07
Dibenz (a,h) anthracene	0.00849	0.00500	"	0.0333	ND	25.5	30-120			QM-07
Fluoranthene	0.0134	0.00500	"	0.0333	ND	40.1	30-120			
Fluorene	0.0658	0.00500	"	0.0333	0.0553	31.7	30-120			
Indeno (1,2,3-cd) pyrene	0.0128	0.00500	"	0.0333	ND	38.5	30-120			
Pyrene	0.0121	0.00500	"	0.0333	ND	36.3	35-142			
1-Methylnaphthalene	0.187	0.00500	"	0.0333	0.310	NR	15-130			QM-07
2-Methylnaphthalene	0.503	0.00500	"	0.0333	0.552	NR	15-130			QM-07
Surrogate: 2-Methylnaphthalene-d10	0.0124		"	0.0333		37.2	40-150			S-02
Surrogate: Fluoranthene-d10	0.0114		"	0.0333		34.2	40-150			S-02

Matrix Spike Dup (BFC0241-MSD1)

Source: 2203182-01

Prepared: 03/14/22 Analyzed: 03/15/22

Acenaphthene	0.0149	0.00500	mg/kg	0.0333	ND	44.8	31-137	67.9	30	QM-07
Anthracene	0.0517	0.00500	"	0.0333	ND	155	30-120	56.8	30	QM-07
Benzo (a) anthracene	0.00802	0.00500	"	0.0333	ND	24.1	30-120	29.1	30	QM-07
Benzo (a) pyrene	0.00719	0.00500	"	0.0333	ND	21.6	30-120	31.5	30	QM-07
Benzo (b) fluoranthene	0.00525	0.00500	"	0.0333	ND	15.7	30-120	35.5	30	QM-07
Benzo (k) fluoranthene	0.00449	0.00500	"	0.0333	ND	13.5	30-120	44.5	30	QM-07
Chrysene	0.0145	0.00500	"	0.0333	0.00884	16.9	30-120	24.6	30	QM-07
Dibenz (a,h) anthracene	0.00536	0.00500	"	0.0333	ND	16.1	30-120	45.3	30	QM-07
Fluoranthene	0.00726	0.00500	"	0.0333	ND	21.8	30-120	59.1	30	QM-07
Fluorene	0.0316	0.00500	"	0.0333	0.0553	NR	30-120	70.1	30	QM-07
Indeno (1,2,3-cd) pyrene	0.00802	0.00500	"	0.0333	ND	24.1	30-120	46.2	30	QM-07
Pyrene	0.00841	0.00500	"	0.0333	ND	25.2	35-142	35.9	30	QM-07
1-Methylnaphthalene	0.0941	0.00500	"	0.0333	0.310	NR	15-130	65.9	50	QM-07
2-Methylnaphthalene	0.200	0.00500	"	0.0333	0.552	NR	15-130	86.2	50	QM-07
Surrogate: 2-Methylnaphthalene-d10	0.00818		"	0.0333		24.5	40-150			S-02
Surrogate: Fluoranthene-d10	0.00883		"	0.0333		26.5	40-150			S-02

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

Reported:
04/12/22 13:34

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 BFD0077 - EPA 5030 Soil MS

Blank (BFD0077-BLK1)

Prepared & Analyzed: 04/05/22

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	"							
Surrogate: 2-Methylnaphthalene-d10	0.0206		"	0.0333		61.9	40-150			
Surrogate: Fluoranthene-d10	0.0180		"	0.0333		54.1	40-150			

LCS (BFD0077-BS1)

Prepared & Analyzed: 04/05/22

Acenaphthene	0.0176	0.00500	mg/kg	0.0333		52.9	31-137			
Anthracene	0.0179	0.00500	"	0.0333		53.8	30-120			
Benzo (a) anthracene	0.0167	0.00500	"	0.0333		50.2	30-120			
Benzo (a) pyrene	0.0197	0.00500	"	0.0333		59.0	30-120			
Benzo (b) fluoranthene	0.0194	0.00500	"	0.0333		58.3	30-120			
Benzo (k) fluoranthene	0.0215	0.00500	"	0.0333		64.4	30-120			
Chrysene	0.0179	0.00500	"	0.0333		53.6	30-120			
Dibenz (a,h) anthracene	0.0191	0.00500	"	0.0333		57.4	30-120			
Fluoranthene	0.0202	0.00500	"	0.0333		60.5	30-120			
Fluorene	0.0169	0.00500	"	0.0333		50.6	30-120			
Indeno (1,2,3-cd) pyrene	0.0123	0.00500	"	0.0333		36.8	30-120			
Pyrene	0.0158	0.00500	"	0.0333		47.4	35-142			
1-Methylnaphthalene	0.0242	0.00500	"	0.0333		72.6	35-142			
2-Methylnaphthalene	0.0221	0.00500	"	0.0333		66.4	35-142			
Surrogate: 2-Methylnaphthalene-d10	0.0244		"	0.0333		73.1	40-150			
Surrogate: Fluoranthene-d10	0.0205		"	0.0333		61.5	40-150			

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Broomfield CO, 80020

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

Reported:
04/12/22 13:34

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BFD0077 - EPA 5030 Soil MS

Matrix Spike (BFD0077-MS1)

Source: 2203187-02

Prepared & Analyzed: 04/05/22

Acenaphthene	0.0160	0.00500	mg/kg	0.0333	ND	48.0	31-137		
Anthracene	0.0164	0.00500	"	0.0333	ND	49.3	30-120		
Benzo (a) anthracene	0.0161	0.00500	"	0.0333	ND	48.2	30-120		
Benzo (a) pyrene	0.0187	0.00500	"	0.0333	ND	56.1	30-120		
Benzo (b) fluoranthene	0.0186	0.00500	"	0.0333	ND	55.7	30-120		
Benzo (k) fluoranthene	0.0203	0.00500	"	0.0333	ND	60.9	30-120		
Chrysene	0.0168	0.00500	"	0.0333	ND	50.3	30-120		
Dibenz (a,h) anthracene	0.0175	0.00500	"	0.0333	ND	52.4	30-120		
Fluoranthene	0.0190	0.00500	"	0.0333	ND	56.9	30-120		
Fluorene	0.0156	0.00500	"	0.0333	ND	46.9	30-120		
Indeno (1,2,3-cd) pyrene	0.0114	0.00500	"	0.0333	ND	34.3	30-120		
Pyrene	0.0160	0.00500	"	0.0333	ND	48.1	35-142		
1-Methylnaphthalene	0.0201	0.00500	"	0.0333	ND	60.2	15-130		
2-Methylnaphthalene	0.0188	0.00500	"	0.0333	ND	56.4	15-130		
Surrogate: 2-Methylnaphthalene-d10	0.0197		"	0.0333		59.0	40-150		
Surrogate: Fluoranthene-d10	0.0192		"	0.0333		57.5	40-150		

Matrix Spike Dup (BFD0077-MSD1)

Source: 2203187-02

Prepared & Analyzed: 04/05/22

Acenaphthene	0.0161	0.00500	mg/kg	0.0333	ND	48.2	31-137	0.537	30
Anthracene	0.0160	0.00500	"	0.0333	ND	48.0	30-120	2.70	30
Benzo (a) anthracene	0.0153	0.00500	"	0.0333	ND	45.8	30-120	5.00	30
Benzo (a) pyrene	0.0175	0.00500	"	0.0333	ND	52.4	30-120	6.88	30
Benzo (b) fluoranthene	0.0178	0.00500	"	0.0333	ND	53.3	30-120	4.46	30
Benzo (k) fluoranthene	0.0193	0.00500	"	0.0333	ND	57.9	30-120	5.15	30
Chrysene	0.0157	0.00500	"	0.0333	ND	47.1	30-120	6.53	30
Dibenz (a,h) anthracene	0.0169	0.00500	"	0.0333	ND	50.6	30-120	3.55	30
Fluoranthene	0.0185	0.00500	"	0.0333	ND	55.4	30-120	2.60	30
Fluorene	0.0155	0.00500	"	0.0333	ND	46.6	30-120	0.762	30
Indeno (1,2,3-cd) pyrene	0.0109	0.00500	"	0.0333	ND	32.7	30-120	4.99	30
Pyrene	0.0151	0.00500	"	0.0333	ND	45.4	35-142	5.93	30
1-Methylnaphthalene	0.0207	0.00500	"	0.0333	ND	62.2	15-130	3.21	50
2-Methylnaphthalene	0.0205	0.00500	"	0.0333	ND	61.5	15-130	8.72	50
Surrogate: 2-Methylnaphthalene-d10	0.0222		"	0.0333		66.5	40-150		
Surrogate: Fluoranthene-d10	0.0186		"	0.0333		55.8	40-150		

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

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

Reported:
04/12/22 13:34

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

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

Batch BFC0273 - EPA 3050B

Blank (BFC0273-BLK1)				Prepared: 03/25/22 Analyzed: 03/31/22						
Boron	ND	0.0100	mg/L							
LCS (BFC0273-BS1)				Prepared: 03/25/22 Analyzed: 03/31/22						
Boron	4.69	0.0100	mg/L	5.00		93.8	80-120			
Duplicate (BFC0273-DUP1)				Source: 2203162-04		Prepared: 03/25/22 Analyzed: 03/31/22				
Boron	0.609	0.0100	mg/L		0.587			3.65	20	
Matrix Spike (BFC0273-MS1)				Source: 2203162-04		Prepared: 03/25/22 Analyzed: 03/31/22				
Boron	5.42	0.0100	mg/L	5.00	0.587	96.6	75-125			
Matrix Spike Dup (BFC0273-MSD1)				Source: 2203162-04		Prepared: 03/25/22 Analyzed: 03/31/22				
Boron	5.71	0.0100	mg/L	5.00	0.587	102	75-125	5.24	25	

Batch BFD0148 - EPA 3050B

Blank (BFD0148-BLK1)				Prepared: 04/07/22 Analyzed: 04/12/22						
Boron	ND	0.0100	mg/L							
LCS (BFD0148-BS1)				Prepared: 04/07/22 Analyzed: 04/12/22						
Boron	5.07	0.0100	mg/L	5.00		101	80-120			
Duplicate (BFD0148-DUP1)				Source: 2203187-02		Prepared: 04/07/22 Analyzed: 04/12/22				
Boron	0.0553	0.0100	mg/L		0.0638			14.2	20	
Matrix Spike (BFD0148-MS1)				Source: 2203187-02		Prepared: 04/07/22 Analyzed: 04/12/22				
Boron	5.17	0.0100	mg/L	5.00	0.0638	102	75-125			

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

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

Reported:
04/12/22 13:34

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

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

Batch BFD0148 - EPA 3050B

Matrix Spike Dup (BFD0148-MSD1)

Source: 2203187-02

Prepared: 04/07/22 Analyzed: 04/12/22

Boron	5.20	0.0100	mg/L	5.00	0.0638	103	75-125	0.647	25
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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

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

Reported:
04/12/22 13:34

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 BFC0251 - General Preparation

Blank (BFC0251-BLK1)

Prepared: 03/14/22 Analyzed: 03/16/22

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

LCS (BFC0251-BS1)

Prepared: 03/14/22 Analyzed: 03/16/22

Calcium	5.21	0.0500	mg/L wet	5.00	104	70-130
Magnesium	5.47	0.0500	"	5.00	109	70-130
Sodium	5.17	0.0500	"	5.00	103	70-130

Batch BFD0109 - General Preparation

Blank (BFD0109-BLK1)

Prepared: 04/06/22 Analyzed: 04/09/22

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

LCS (BFD0109-BS1)

Prepared: 04/06/22 Analyzed: 04/09/22

Calcium	5.42	0.0500	mg/L wet	5.00	108	70-130
Magnesium	5.27	0.0500	"	5.00	105	70-130
Sodium	5.16	0.0500	"	5.00	103	70-130

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

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

Reported:
04/12/22 13:34

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 BFC0343 - General Preparation

Duplicate (BFC0343-DUP1)		Source: 2202213-05			Prepared & Analyzed: 03/17/22					
% Solids	94.1		%		94.1			0.0248	20	

Batch BFD0162 - General Preparation

Duplicate (BFD0162-DUP1)		Source: 2203187-02			Prepared & Analyzed: 04/08/22					
% Solids	95.7		%		95.2			0.523	20	

Summit Scientific

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

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

Reported:
04/12/22 13:34

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 BFC0284 - General Preparation

Blank (BFC0284-BLK1)

Prepared & Analyzed: 03/15/22

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BFC0284-BS1)

Prepared & Analyzed: 03/15/22

Specific Conductance (EC) 0.148 0.0100 mmhos/cm 0.150 98.7 95-105

Duplicate (BFC0284-DUP1)

Source: 2201167-06

Prepared & Analyzed: 03/15/22

Specific Conductance (EC) 0.494 0.0100 mmhos/cm 0.504 1.96 20

Batch BFD0145 - General Preparation

Blank (BFD0145-BLK1)

Prepared & Analyzed: 04/07/22

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BFD0145-BS1)

Prepared & Analyzed: 04/07/22

Specific Conductance (EC) 0.149 0.0100 mmhos/cm 0.150 99.2 95-105

Duplicate (BFD0145-DUP1)

Source: 2203187-02

Prepared & Analyzed: 04/07/22

Specific Conductance (EC) 0.529 0.0100 mmhos/cm 0.528 0.151 20

Summit Scientific

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

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

Reported:
04/12/22 13:34

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

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

Batch BFC0283 - General Preparation

LCS (BFC0283-BS1)

Prepared & Analyzed: 03/15/22

pH	9.07		pH Units	9.18	98.8	95-105
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Duplicate (BFC0283-DUP1)

Source: 2201167-06

Prepared & Analyzed: 03/15/22

pH	6.89		pH Units	6.74		2.20	20
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Batch BFD0143 - General Preparation

LCS (BFD0143-BS1)

Prepared & Analyzed: 04/07/22

pH	9.08		pH Units	9.18	98.9	95-105
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Duplicate (BFD0143-DUP1)

Source: 2203187-02

Prepared & Analyzed: 04/07/22

pH	7.66		pH Units	7.68		0.261	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 FAC

Project Number: UWRWE-A1698-ABN
Project Manager: Jacob Whritenour

Reported:
04/12/22 13:34

Notes and Definitions

S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS/LCSD recovery.
I-02	This sample was analyzed outside of the recommended holding time.
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