

**SECOND QUARTER 2023 SITE MONITORING  
DATA CARPIO A26-05 Facility  
COGCC REMEDIATION # 20996**

Prepared for:



2115 117th Avenue  
Greeley, CO 80631

Prepared by:



6855 W. 119<sup>th</sup> Ave  
Broomfield, CO 80020

**TABLE 1**  
**GROUNDWATER ELEVATION DATA**  
**NOBLE ENERGY, INC. - CARPIO A26-05 FACILITY**



Monitoring Well ID	Date	Top of Casing Elevation (ft. AMSL)	Total Depth (ft. BTOC)	Depth to Water (ft.) <sup>(1)</sup>	Depth to LNAPL (ft.) <sup>(1)</sup>	LNAPL Thickness (ft.)	Groundwater Elevation* (ft. AMSL)
BH01	06/22/22	4654.84	11.49	3.26	ND	ND	4651.64
BH01	09/12/22	4654.84	11.48	5.18	ND	ND	4649.72
BH01	11/16/22	4654.84	11.34	4.05	ND	ND	4650.85
BH01	02/02/23	4654.84	11.27	2.68	ND	ND	4652.22
BH01	05/16/23	4654.84	11.15	1.42	ND	ND	4653.48
BH02	06/22/22	4654.43	12.12	2.85	ND	ND	4651.64
BH02	09/12/22	4654.43	12.05	4.76	ND	ND	4649.73
BH02	11/16/22	4654.43	12.03	3.64	ND	ND	4650.85
BH02	02/02/23	4654.43	12.03	2.26	ND	ND	4652.23
BH02	05/16/23	4654.43	11.89	1.03	ND	ND	4653.46
BH03	06/22/22	4653.56	11.71	2.07	ND	ND	4651.62
BH03	09/12/22	4653.56	11.45	4.15	ND	ND	4649.54
BH03	11/16/22	4653.56	11.43	2.84	ND	ND	4650.85
BH03	02/02/23	4653.56	11.40	1.48	ND	ND	4652.21
BH03	05/16/23	4653.56	11.26	0.33	ND	ND	4653.36
BH04	06/22/22	4654.90	11.36	3.32	ND	ND	4651.64
BH04	09/12/22	4654.90	11.37	5.24	ND	ND	4649.72
BH04	11/16/22	4654.90	11.36	4.11	ND	ND	4650.85
BH04	02/02/23	4654.90	11.28	2.73	ND	ND	4652.23
BH04	05/16/23	4654.90	11.23	1.51	ND	ND	4653.45
BH05	06/22/22	4655.16	10.00	2.22	ND	ND	4653.10
BH05	09/12/22	4655.16	9.85	4.69	ND	ND	4650.63
BH05	11/16/22	4655.16	9.90	3.22	ND	ND	4652.10
BH05	02/02/23	4655.16	9.75	1.87	ND	ND	4653.45
BH05	05/16/23	4655.16	9.52	0.66	ND	ND	4654.66
BH06	11/16/22	4653.33	12.41	3.76	ND	ND	4649.63
BH06	02/02/23	4653.33	12.32	2.46	ND	ND	4650.93
BH06	05/16/23	4653.33	12.27	1.06	ND	ND	4652.33
BH07	11/16/22	4655.17	13.00	4.26	ND	ND	4648.91
BH07	02/02/23	4655.17	12.93	2.87	ND	ND	4650.30
BH07	05/16/23	4655.17	12.60	1.66	ND	ND	4651.51
BH08	11/16/22	4653.43	11.64	4.23	ND	ND	4649.20
BH08	02/02/23	4653.43	12.91	3.89	ND	ND	4649.54
BH08	05/16/23	4653.43	11.40	1.63	ND	ND	4651.80
BH09	11/16/22	4655.90	12.83	4.43	ND	ND	4649.16
BH09	02/02/23	4655.90	12.28	2.76	ND	ND	4650.83
BH09	05/16/23	4655.90	11.90	1.88	ND	ND	4651.71
BH10	11/16/22	4653.82	12.91	2.94	ND	ND	4648.52
BH10	02/02/23	4653.82	11.62	0.39	ND	ND	4651.07
BH10	05/16/23	4653.82	13.04	0.32	ND	ND	4651.14

**Notes:**

<sup>(1)</sup> Depth to water measurements were collected from top of casing and adjusted using survey data to reflect depth of water from ground surface.

\* Groundwater elevation was corrected for product thickness (when present) using the following calculation:

$$\text{Groundwater elevation} = (\text{TOC Elevation} - \text{Measured Depth to Water}) + (\text{LNAPL Thickness in Well} \times \text{LNAPL Relative Density})$$

LNAPL relative density was estimated to be 0.75

**Definitions:**

- ft. = Feet
- AMSL = Above mean sea level
- BTOC = Below top of casing
- BGS = Below ground surface
- LNAPL = Light non-aqueous phase liquid
- ND = No LNAPL detected

TABLE 2  
GROUNDWATER ANALYTICAL DATA  
NOBLE ENERGY, INC. - CARPIO A26-05 FACILITY



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)	TDS (mg/L)	Chloride Ion (mg/L)	Sulfate Ion (mg/L)
COGCC Standard		5	560	700	1,400	140	67	67	<1.25 x Background	250 or <1.25 x Background	250 or <1.25 x Background
GW01@3.5'	03/11/22	21	91	9.3	97	3.0	22	9.3	NA	NA	NA
BH01	06/22/22	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,730	67.8	1,510
BH01	09/12/22	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,920	31.0	1,820
BH01	11/16/22	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,250	33.2	624
BH01	02/02/23	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,490	38.2	899
BH01	05/16/23	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,660	68.2	1,400
BH02	06/22/22	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,350	34.8	1,280
BH02	09/12/22	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,290	29.4	1,250
BH02	11/16/22	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,090	32.6	496
BH02	02/02/23	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,160	37.2	657
BH02	05/16/23	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,470	58.4	1,050
BH03	06/22/22	100	110	92	5,600	9.6	170	74	1,620	64.6	1,290
BH03	09/12/22	34	<1.0	1.3	<2.0	<1.0	3.9	<1.0	1,580	27.8	1,540
BH03	11/16/22	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,280	30.4	694
BH03	02/02/23	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,330	37.4	804
BH03	05/16/23	1.8	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,550	51.4	1,200
BH04	06/22/22	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,700	69.0	1,460
BH04	09/12/22	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,620	37.4	1,560
BH04	11/16/22	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,280	42.6	607
BH04	02/02/23	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,400	39.6	864
BH04	05/16/23	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,490	44.6	1,040
BH05	06/22/22	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,730	37.0	1,660
BH05	09/12/22	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,640	34.0	1,590
BH05	11/16/22	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,390	24.0	634
BH05 <sup>(2)</sup>	02/02/23	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,610	42.4	1010
BH05 <sup>(2)</sup>	05/16/23	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,990	41.8	1,670
BH06	11/16/22	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,160	30.4	505
BH06	02/02/23	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,260	33.2	805
BH06	05/16/23	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,680	84.0	1,160
BH07	11/16/22	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,150	27.0	551
BH07	02/02/23	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,340	36.0	844
BH07	05/16/23	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	2,500	156	1,850
BH08	11/16/22	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,180	25.6	640
BH08	02/02/23	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,440	38.4	879
BH08	05/16/23	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,540	59.0	1,020
BH09	11/16/22	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,210	19.6	502
BH09	02/02/23	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,360	34.6	849
BH09	05/16/23	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,650	41.6	1,140
BH10	11/16/22	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,210	18.0	393
BH10	02/02/23	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,500	39.4	958
BH10	05/16/23	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1,810	27.8	1,440

Notes:

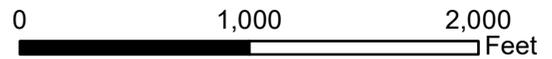
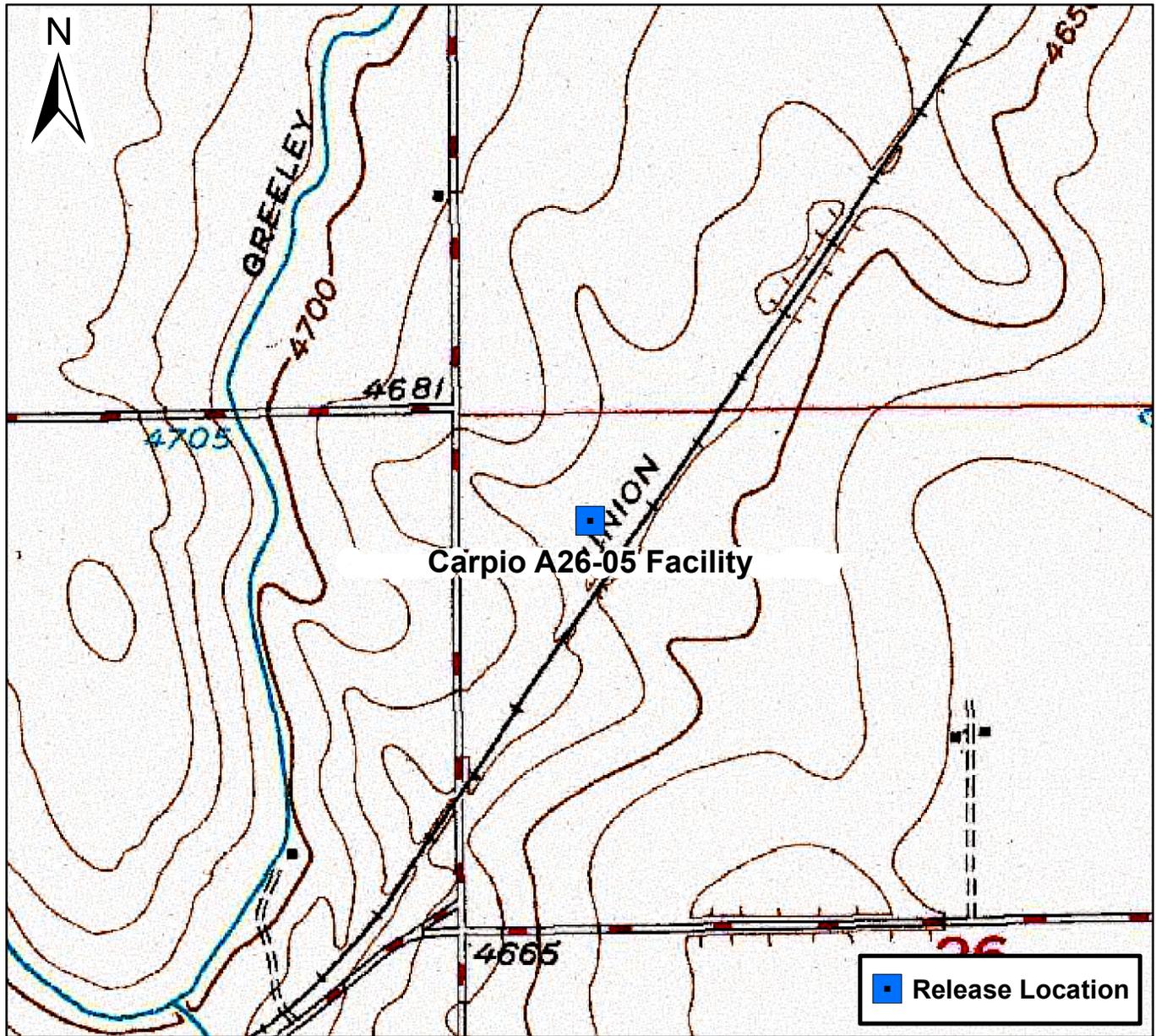
<sup>(1)</sup> Groundwater standards referenced from 2 CCR 404-1, Table 915-1 (January 15, 2021).

<sup>(2)</sup> Monitoring well used for inorganic background levels.

Definitions:

- < = Analytical result is less than the indicated laboratory reporting limit
- COGCC = Colorado Oil and Gas Conservation Commission
- mg/L = Milligrams per liter
- µg/L = Micrograms per liter
- 1,2,4 - TMB = 1,2,4 Trimethylbenzene
- 1,3,5 - TMB = 1,3,5 Trimethylbenzene
- TDS = Total Dissolved Solids
- NA = Not analyzed

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



### Figure 1

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





**Legend**

-  Monitoring Well Location  
(Collected via Trimble GPS)
-  Excavation Extent  
(Collected via Trimble GPS)

**Notes**

- 1) All locations are approximate unless otherwise noted.
- 2) Site Infrastructure has been removed; shown for illustrative purposes only.

GPS – Global Positioning System  
 mg/L – Milligrams per liter  
 µg/L – Micrograms per liter

0 ft.                      25 ft.                      50 ft. 

Image Source: Google Earth; Google 2020

DATE:	03/27/2023
DESIGNED BY:	JW
DRAWN BY:	HM

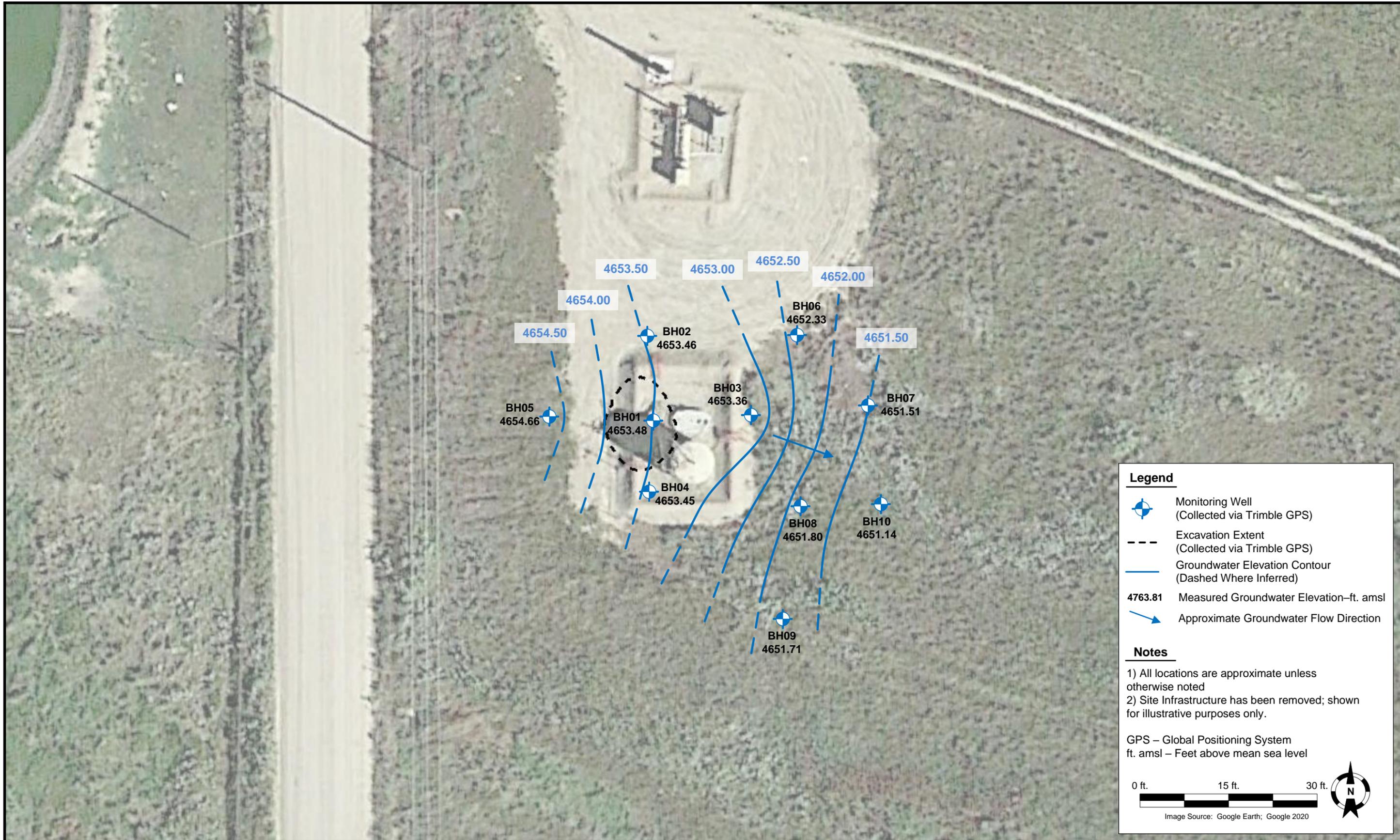


**TASMAN** Tasman, Inc.  
 6855 W 119<sup>th</sup> Avenue  
 Broomfield, CO 80020

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

Site Overview Map

FIGURE  
2



**Legend**

- Monitoring Well (Collected via Trimble GPS)
- Excavation Extent (Collected via Trimble GPS)
- Groundwater Elevation Contour (Dashed Where Inferred)
- 4763.81** Measured Groundwater Elevation—ft. amsl
- Approximate Groundwater Flow Direction

**Notes**

- 1) All locations are approximate unless otherwise noted
- 2) Site Infrastructure has been removed; shown for illustrative purposes only.

GPS – Global Positioning System  
ft. amsl – Feet above mean sea level

0 ft.      15 ft.      30 ft.

Image Source: Google Earth; Google 2020

DATE:	06/05/2023
DESIGNED BY:	JW
DRAWN BY:	LR



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

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

Site Assessment  
Groundwater Potentiometric  
Surface Contour Map  
(05/16/2023)

**FIGURE  
3**

BH02	
Compound	05/16/23
Benzene (ug/L)	<1.0
Toluene (ug/L)	<1.0
Ethylbenzene (ug/L)	<1.0
Total Xylenes (ug/L)	<2.0
Naphthalene (ug/L)	<1.0
1,2,4-Trimethylbenzene (ug/L)	<1.0
1,3,5-Trimethylbenzene (ug/L)	<1.0
Total Dissolved Solids (mg/L)	1,470
Chloride (mg/L)	58.4
Sulfate (mg/L)	1,050

BH03	
Compound	05/16/23
Benzene (ug/L)	1.8
Toluene (ug/L)	<1.0
Ethylbenzene (ug/L)	<1.0
Total Xylenes (ug/L)	<2.0
Naphthalene (ug/L)	<1.0
1,2,4-Trimethylbenzene (ug/L)	<1.0
1,3,5-Trimethylbenzene (ug/L)	<1.0
Total Dissolved Solids (mg/L)	1,550
Chloride (mg/L)	51.4
Sulfate (mg/L)	1,200

BH06	
Compound	05/16/23
Benzene (ug/L)	<1.0
Toluene (ug/L)	<1.0
Ethylbenzene (ug/L)	<1.0
Total Xylenes (ug/L)	<2.0
Naphthalene (ug/L)	<1.0
1,2,4-Trimethylbenzene (ug/L)	<1.0
1,3,5-Trimethylbenzene (ug/L)	<1.0
Total Dissolved Solids (mg/L)	1,680
Chloride (mg/L)	84.0
Sulfate (mg/L)	1,160

BH07	
Compound	05/16/23
Benzene (ug/L)	<1.0
Toluene (ug/L)	<1.0
Ethylbenzene (ug/L)	<1.0
Total Xylenes (ug/L)	<2.0
Naphthalene (ug/L)	<1.0
1,2,4-Trimethylbenzene (ug/L)	<1.0
1,3,5-Trimethylbenzene (ug/L)	<1.0
Total Dissolved Solids (mg/L)	2,500
Chloride (mg/L)	156.0
Sulfate (mg/L)	1,850

BH01	
Compound	05/16/23
Benzene (ug/L)	<1.0
Toluene (ug/L)	<1.0
Ethylbenzene (ug/L)	<1.0
Total Xylenes (ug/L)	<2.0
Naphthalene (ug/L)	<1.0
1,2,4-Trimethylbenzene (ug/L)	<1.0
1,3,5-Trimethylbenzene (ug/L)	<1.0
Total Dissolved Solids (mg/L)	1,660
Chloride (mg/L)	68.2
Sulfate (mg/L)	1,400

BH05	
Compound	05/16/23
Benzene (ug/L)	<1.0
Toluene (ug/L)	<1.0
Ethylbenzene (ug/L)	<1.0
Total Xylenes (ug/L)	<2.0
Naphthalene (ug/L)	<1.0
1,2,4-Trimethylbenzene (ug/L)	<1.0
1,3,5-Trimethylbenzene (ug/L)	<1.0
Total Dissolved Solids (mg/L)	1,990
Chloride (mg/L)	41.8
Sulfate (mg/L)	1,670

BH04	
Compound	05/16/23
Benzene (ug/L)	<1.0
Toluene (ug/L)	<1.0
Ethylbenzene (ug/L)	<1.0
Total Xylenes (ug/L)	<2.0
Naphthalene (ug/L)	<1.0
1,2,4-Trimethylbenzene (ug/L)	<1.0
1,3,5-Trimethylbenzene (ug/L)	<1.0
Total Dissolved Solids (mg/L)	1,490
Chloride (mg/L)	44.6
Sulfate (mg/L)	1,040

BH09	
Compound	05/16/23
Benzene (ug/L)	<1.0
Toluene (ug/L)	<1.0
Ethylbenzene (ug/L)	<1.0
Total Xylenes (ug/L)	<2.0
Naphthalene (ug/L)	<1.0
1,2,4-Trimethylbenzene (ug/L)	<1.0
1,3,5-Trimethylbenzene (ug/L)	<1.0
Total Dissolved Solids (mg/L)	1,650
Chloride (mg/L)	41.6
Sulfate (mg/L)	1,140

BH10	
Compound	05/16/23
Benzene (ug/L)	<1.0
Toluene (ug/L)	<1.0
Ethylbenzene (ug/L)	<1.0
Total Xylenes (ug/L)	<2.0
Naphthalene (ug/L)	<1.0
1,2,4-Trimethylbenzene (ug/L)	<1.0
1,3,5-Trimethylbenzene (ug/L)	<1.0
Total Dissolved Solids (mg/L)	1,810
Chloride (mg/L)	27.8
Sulfate (mg/L)	1,440

BH08	
Compound	05/16/23
Benzene (ug/L)	<1.0
Toluene (ug/L)	<1.0
Ethylbenzene (ug/L)	<1.0
Total Xylenes (ug/L)	<2.0
Naphthalene (ug/L)	<1.0
1,2,4-Trimethylbenzene (ug/L)	<1.0
1,3,5-Trimethylbenzene (ug/L)	<1.0
Total Dissolved Solids (mg/L)	1,540
Chloride (mg/L)	59.0
Sulfate (mg/L)	1,020

**Legend**

-  Monitoring Well Location (Collected via Trimble GPS)
-  Excavation Extent (Collected via Trimble GPS)

**Notes**

- 1) All locations are approximate unless otherwise noted.
- 2) Site Infrastructure has been removed; shown for illustrative purposes only.
- 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 standards indicated in **RED**.

GPS – Global Positioning System  
 mg/L – Milligrams per liter  
 µg/L – Micrograms per liter

Contaminant of Concern	COGCC Concentration Standard
B - Benzene	<5 ug/L
T - Toluene	<560 ug/L
E - Ethylbenzene	<700 ug/L
X – Total Xylenes	<1,400 ug/L
N – Naphthalene	<140 ug/L
1,2,4-TMB – 1, 2, 4-Trimethylbenzene	<67 ug/L
1,3,5-TMB – 1, 3, 5-Trimethylbenzene	<67 ug/L
TDS – Total Dissolved Solids	<1.25 x background
Cl – Chloride Ion	<250 mg/L or 1.25 x background
SO <sub>4</sub> – Sulfate Ion	<250 mg/L or 1.25 x background

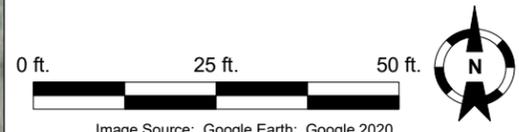


Image Source: Google Earth; Google 2020

DATE: 05/26/2023

DESIGNED BY: JW

DRAWN BY: HM



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

Groundwater Analytical  
 Results Map  
 (05/16/2023)

FIGURE  
 4

# Summit Scientific

---

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

May 24, 2023

Jacob Whritenour

Tasman Geosciences

6855 W. 119th Ave.

Broomfield, CO 80020

RE: Noble - Carpio A26-05 FAC

Work Order #2305387

Enclosed are the results of analyses for samples received by Summit Scientific on 05/16/23 16:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jacob Wood For 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

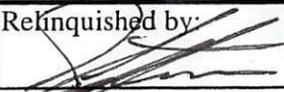
**Reported:**  
05/24/23 14:56

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH01	2305387-01	Water	05/16/23 11:02	05/16/23 16:30
BH02	2305387-02	Water	05/16/23 10:50	05/16/23 16:30
BH03	2305387-03	Water	05/16/23 10:59	05/16/23 16:30
BH04	2305387-04	Water	05/16/23 10:24	05/16/23 16:30
BH05	2305387-05	Water	05/16/23 10:10	05/16/23 16:30
BH06	2305387-06	Water	05/16/23 10:48	05/16/23 16:30
BH07	2305387-07	Water	05/16/23 10:36	05/16/23 16:30
BH08	2305387-08	Water	05/16/23 10:38	05/16/23 16:30
BH09	2305387-09	Water	05/16/23 10:07	05/16/23 16:30
BH10	2305387-10	Water	05/16/23 10:22	05/16/23 16:30

		<b>Send Data To:</b>	<b>Send Invoice To:</b>
Client: Noble / Tasman, Inc.		Project Manager: Jake Whritenour	Company: Noble Energy, Inc.
Address: 6855 W. 119th Ave.		E-Mail: Jwhritenour@tasman-geo.com	Project Name/Location: <b>Corpio AZG-05 (FAC)</b>
City/State/Zip: Broomfield / CO / 80020			AFE#:
Phone: 303-487-1228		Project Name: <b>Corpio AZG-05 (FAC)</b>	PO/Billing Codes:
Sampler Name: Patrick Kline		Project Number: N/A	Contact: Dan Peterson

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested						Special Instructions	
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	BTEX	Naphthalene	1,2,4-TMB	1,3,5-TMB	TDS	Chloride		Sulfate
1	BH01	5/16/23	1102	4	3				X					X	X	X	X	X	X	
2	BH02		1050																	
3	BH03		1059																	
4	BH04		1024																	
5	BH05		1010																	
6	BH06		1048																	
7	BH07		1036																	
8	BH08		1038																	
9	BH09		1067																	
10	BH10		1022																	
11																				
12																				
13																				
14																				
15																				

Relinquished by: 	Date/Time: 5/16/23 1430	Received by: Summit North Office	Date/Time: 5/16/23 1430	TAT Business Days		Field DO		Notes:
				Same Day		Field EC		
Relinquished by: SZ	Date/Time: 5/16/23 1630	Received by: 	Date/Time: 5/16/23 1630	1 Day		Field ORP		
				2 Days		Field pH		
Relinquished by:	Date/Time:	Received by:	Date/Time:	3 Days		Field Temp.		
				Standard	X	Field Turb.		
Temperature Upon Receipt: 8.4		Corrected Temperature: 		IR gun #: 1		HNO3 lot #:		

S<sub>2</sub>

Sample Receipt Checklist

S2 Work Order# 2305387

Client: Noble/Tasman Client Project ID: Carpio AZC-05(FAC)

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

Matrix (Check all that apply) Air  Soil/Solid  Water  Other

Temp (°C)  Thermometer #

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? <sup>(1)</sup> 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"/>	OUTSIDE
If custody seals are present, are they intact? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are samples due within 48 hours present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe <sup>2+</sup> ), Hexavalent Chromium (Cr <sup>6+</sup> , Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out Completely? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC? <sup>(1)</sup>	<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)? <sup>(1)</sup> Note the type of preservative in the comments column – HCl, H <sub>2</sub> SO <sub>4</sub> , NaOH, HNO <sub>3</sub> , etc.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	HCl
If samples are acid preserved for metals, is the pH ≤ 2? <sup>(1)</sup> 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):

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

AS  
Custodian Printed Name

5/14/23  
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:**  
05/24/23 14:56

**BH01**  
**2305387-01 (Water)**

**Summit Scientific**

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

Date Sampled: **05/16/23 11:02**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BGE0607	05/17/23	05/17/23	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: **05/16/23 11:02**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	14.8	111 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.1	98.6 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.4	100 %		21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **05/16/23 11:02**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Chloride</b>	<b>68.2</b>	12.0		mg/L	200	BGE0680	05/19/23	05/19/23	EPA 300.0	
<b>Sulfate</b>	<b>1400</b>	60.0		"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **05/16/23 11:02**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Total Dissolved Solids</b>	<b>1660</b>	10.0		mg/L	1	BGE0616	05/17/23	05/17/23	SM2540C	

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

**Reported:**  
05/24/23 14:56

**BH02**  
**2305387-02 (Water)**

**Summit Scientific**

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

Date Sampled: **05/16/23 10:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	BGE0607	05/17/23	05/17/23	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: **05/16/23 10:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	13.5	101 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	12.4	93.2 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.3	99.7 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **05/16/23 10:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	<b>58.4</b>	12.0	mg/L	200	BGE0680	05/19/23	05/19/23	EPA 300.0	
Sulfate	<b>1050</b>	60.0	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **05/16/23 10:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Total Dissolved Solids</b>	<b>1470</b>	10.0	mg/L	1	BGE0616	05/17/23	05/17/23	SM2540C	

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

**Reported:**  
05/24/23 14:56

**BH03**  
**2305387-03 (Water)**

**Summit Scientific**

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

Date Sampled: **05/16/23 10:59**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Benzene</b>	<b>1.8</b>	1.0	ug/l	1	BGE0607	05/17/23	05/17/23	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: **05/16/23 10:59**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	14.6	110 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	13.3	99.6 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.9	96.6 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **05/16/23 10:59**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Chloride</b>	<b>51.4</b>	12.0	mg/L	200	BGE0680	05/19/23	05/19/23	EPA 300.0	
<b>Sulfate</b>	<b>1200</b>	60.0	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **05/16/23 10:59**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Total Dissolved Solids</b>	<b>1550</b>	10.0	mg/L	1	BGE0616	05/17/23	05/17/23	SM2540C	

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

**Reported:**  
05/24/23 14:56

**BH04**  
**2305387-04 (Water)**

**Summit Scientific**

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

Date Sampled: **05/16/23 10:24**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BGE0607	05/17/23	05/17/23	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: **05/16/23 10:24**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	14.8	111 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.3	99.8 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.3	99.7 %		21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **05/16/23 10:24**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chloride	<b>44.6</b>	12.0		mg/L	200	BGE0680	05/19/23	05/19/23	EPA 300.0	
Sulfate	<b>1040</b>	60.0		"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **05/16/23 10:24**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Total Dissolved Solids</b>	<b>1490</b>	10.0		mg/L	1	BGE0616	05/17/23	05/17/23	SM2540C	

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

**Reported:**  
05/24/23 14:56

**BH05**  
**2305387-05 (Water)**

**Summit Scientific**

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

Date Sampled: **05/16/23 10:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BGE0607	05/17/23	05/17/23	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: **05/16/23 10:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	14.6	109 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.1	98.3 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.2	99.4 %		21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **05/16/23 10:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Chloride</b>	<b>41.8</b>	12.0		mg/L	200	BGE0680	05/19/23	05/19/23	EPA 300.0	
<b>Sulfate</b>	<b>1670</b>	60.0		"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **05/16/23 10:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Total Dissolved Solids</b>	<b>1990</b>	10.0		mg/L	1	BGE0616	05/17/23	05/17/23	SM2540C	

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

**Reported:**  
05/24/23 14:56

**BH06**  
**2305387-06 (Water)**

**Summit Scientific**

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

Date Sampled: **05/16/23 10:48**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BGE0607	05/17/23	05/17/23	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: **05/16/23 10:48**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	13.8	103 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	12.5	93.8 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.3	99.9 %		21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **05/16/23 10:48**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Chloride</b>	<b>84.0</b>	12.0		mg/L	200	BGE0680	05/19/23	05/19/23	EPA 300.0	
<b>Sulfate</b>	<b>1160</b>	60.0		"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **05/16/23 10:48**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Total Dissolved Solids</b>	<b>1680</b>	10.0		mg/L	1	BGE0616	05/17/23	05/17/23	SM2540C	

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

**Reported:**  
05/24/23 14:56

**BH07**  
**2305387-07 (Water)**

**Summit Scientific**

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

Date Sampled: **05/16/23 10:36**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BGE0607	05/17/23	05/17/23	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: **05/16/23 10:36**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	14.7	110 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.2	99.2 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.1	98.2 %		21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **05/16/23 10:36**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chloride	156	12.0		mg/L	200	BGE0680	05/19/23	05/19/23	EPA 300.0	
Sulfate	1850	60.0		"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **05/16/23 10:36**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Total Dissolved Solids	2500	10.0		mg/L	1	BGE0616	05/17/23	05/17/23	SM2540C	

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

**Reported:**  
05/24/23 14:56

**BH08**  
**2305387-08 (Water)**

**Summit Scientific**

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

Date Sampled: **05/16/23 10:38**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BGE0607	05/17/23	05/17/23	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: **05/16/23 10:38**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	14.5	109 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.2	98.7 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.2	99.3 %		21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **05/16/23 10:38**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Chloride</b>	<b>59.0</b>	12.0		mg/L	200	BGE0680	05/19/23	05/19/23	EPA 300.0	
<b>Sulfate</b>	<b>1020</b>	60.0		"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **05/16/23 10:38**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Total Dissolved Solids</b>	<b>1540</b>	10.0		mg/L	1	BGE0616	05/17/23	05/17/23	SM2540C	

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

**Reported:**  
05/24/23 14:56

**BH09**  
**2305387-09 (Water)**

**Summit Scientific**

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

Date Sampled: **05/16/23 10:07**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BGE0607	05/17/23	05/17/23	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: **05/16/23 10:07**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	14.3	107 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.1	98.0 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.3	99.7 %		21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **05/16/23 10:07**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chloride	<b>41.6</b>	12.0		mg/L	200	BGE0680	05/19/23	05/19/23	EPA 300.0	
Sulfate	<b>1140</b>	60.0		"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **05/16/23 10:07**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Total Dissolved Solids</b>	<b>1650</b>	10.0		mg/L	1	BGE0616	05/17/23	05/17/23	SM2540C	

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

**Reported:**  
05/24/23 14:56

**BH10**  
**2305387-10 (Water)**

**Summit Scientific**

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

Date Sampled: **05/16/23 10:22**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BGE0607	05/17/23	05/18/23	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: **05/16/23 10:22**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	13.8	103 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	12.6	94.3 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.2	98.7 %		21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **05/16/23 10:22**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Chloride</b>	<b>27.8</b>	12.0		mg/L	200	BGE0680	05/19/23	05/19/23	EPA 300.0	
<b>Sulfate</b>	<b>1440</b>	60.0		"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **05/16/23 10:22**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Total Dissolved Solids</b>	<b>1810</b>	10.0		mg/L	1	BGE0616	05/17/23	05/17/23	SM2540C	

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

**Reported:**  
05/24/23 14:56

### Volatile Organic Compounds by EPA Method 8260B - Quality Control

#### Summit Scientific

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

#### Batch BGE0607 - EPA 5030 Water MS

##### Blank (BGE0607-BLK1)

Prepared & Analyzed: 05/17/23

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>	14.4		"	13.3		108		23-173		
<i>Surrogate: Toluene-d8</i>	13.1		"	13.3		98.3		20-170		
<i>Surrogate: 4-Bromofluorobenzene</i>	13.0		"	13.3		97.8		21-167		

##### LCS (BGE0607-BS1)

Prepared & Analyzed: 05/17/23

Benzene	36.1	1.0	ug/l	41.7		86.7		51-132		
Toluene	38.4	1.0	"	41.7		92.2		51-138		
Ethylbenzene	44.2	1.0	"	41.7		106		58-146		
m,p-Xylene	90.5	2.0	"	83.3		109		57-144		
o-Xylene	43.3	1.0	"	41.7		104		53-146		
Naphthalene	43.5	1.0	"	41.7		104		70-130		
1,2,4-Trimethylbenzene	49.6	1.0	"	41.7		119		70-130		
1,3,5-Trimethylbenzene	49.7	1.0	"	41.7		119		70-130		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	14.3		"	13.3		107		23-173		
<i>Surrogate: Toluene-d8</i>	12.8		"	13.3		95.9		20-170		
<i>Surrogate: 4-Bromofluorobenzene</i>	12.9		"	13.3		96.5		21-167		

##### Matrix Spike (BGE0607-MS1)

Source: 2305387-01

Prepared & Analyzed: 05/17/23

Benzene	37.9	1.0	ug/l	41.7	ND	91.0		34-141		
Toluene	39.8	1.0	"	41.7	ND	95.5		27-151		
Ethylbenzene	44.1	1.0	"	41.7	ND	106		29-160		
m,p-Xylene	90.0	2.0	"	83.3	ND	108		20-166		
o-Xylene	43.3	1.0	"	41.7	ND	104		33-159		
Naphthalene	48.4	1.0	"	41.7	ND	116		70-130		
1,2,4-Trimethylbenzene	49.8	1.0	"	41.7	ND	120		70-130		
1,3,5-Trimethylbenzene	49.7	1.0	"	41.7	ND	119		70-130		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	15.0		"	13.3		113		23-173		
<i>Surrogate: Toluene-d8</i>	13.1		"	13.3		98.4		20-170		
<i>Surrogate: 4-Bromofluorobenzene</i>	13.2		"	13.3		98.7		21-167		

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

**Reported:**  
05/24/23 14:56

**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		

**Batch BGE0607 - EPA 5030 Water MS**

<b>Matrix Spike Dup (BGE0607-MSD1)</b>	<b>Source: 2305387-01</b>			<b>Prepared &amp; Analyzed: 05/17/23</b>						
Benzene	38.1	1.0	ug/l	41.7	ND	91.4	34-141	0.447	30	
Toluene	39.7	1.0	"	41.7	ND	95.3	27-151	0.226	30	
Ethylbenzene	44.4	1.0	"	41.7	ND	106	29-160	0.565	30	
m,p-Xylene	89.9	2.0	"	83.3	ND	108	20-166	0.133	30	
o-Xylene	43.2	1.0	"	41.7	ND	104	33-159	0.208	30	
Naphthalene	49.4	1.0	"	41.7	ND	119	70-130	2.07	30	
1,2,4-Trimethylbenzene	49.4	1.0	"	41.7	ND	119	70-130	0.846	30	
1,3,5-Trimethylbenzene	49.7	1.0	"	41.7	ND	119	70-130	0.0805	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>15.3</i>		<i>"</i>	<i>13.3</i>		<i>115</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>13.2</i>		<i>"</i>	<i>13.3</i>		<i>99.4</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>13.3</i>		<i>"</i>	<i>13.3</i>		<i>99.7</i>	<i>21-167</i>			



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:**  
05/24/23 14:56

**Anions by EPA Method 300.0 - Quality Control**  
**Summit Scientific**

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

**Batch BGE0680 - General Preparation**

**Blank (BGE0680-BLK1)**

Prepared & Analyzed: 05/19/23

Chloride	ND	0.0600	mg/L						
Sulfate	ND	0.300	"						

**LCS (BGE0680-BS1)**

Prepared & Analyzed: 05/19/23

Chloride	2.79	0.0600	mg/L	3.00	93.0	90-110		
Sulfate	13.5	0.300	"	15.0	90.1	90-110		

**Duplicate (BGE0680-DUP1)**

Source: 2305350-01

Prepared & Analyzed: 05/19/23

Chloride	45.8	12.0	mg/L		44.0		4.01	20
Sulfate	114	60.0	"		129		12.3	20

**Matrix Spike (BGE0680-MS1)**

Source: 2305350-01

Prepared & Analyzed: 05/19/23

Chloride	640	12.0	mg/L	600	44.0	99.3	80-120	
Sulfate	3130	60.0	"	3000	129	100	80-120	



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:**  
05/24/23 14:56

**Total Dissolved Solids by SM2540C - Quality Control**

**Summit Scientific**

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

**Batch BGE0616 - General Preparation**

**Blank (BGE0616-BLK1)**

Prepared & Analyzed: 05/17/23

Total Dissolved Solids                      ND                      10.0                      mg/L

**Duplicate (BGE0616-DUP1)**

**Source: 2305387-01**

Prepared & Analyzed: 05/17/23

Total Dissolved Solids                      1760                      10.0                      mg/L                      1660                      5.50                      20



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:**  
05/24/23 14:56

### 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