

SECOND QUARTER 2020 SITE MONITORING DATA

DUNCAN D20-12, 20-13

COGCC SPILL TRACKING # 459804
COGCC REMEDIATION # 12461

Prepared for:



2115 117th Avenue
Greeley, CO 80631

Prepared by:



6855 West 119th Avenue
Broomfield, Colorado 80020

TABLE 1
GROUNDWATER ELEVATION DATA
NOBLE ENERGY, INC. - DUNCAN D20-12, 20-13

| Monitoring Well ID | Date | Top of Casing Elevation (ft. AMSL) | Total Depth (ft. BTOC) | Depth to Water (ft.) ⁽¹⁾ | Depth to LNAPL (ft.) ⁽¹⁾ | LNAPL Thickness (ft.) | Groundwater Elevation* (ft. AMSL) |
|--------------------|----------|------------------------------------|------------------------|-------------------------------------|-------------------------------------|-----------------------|-----------------------------------|
| BH01 | 08/23/19 | 4772.46 | 21.77 | 5.32 | ND | ND | 4765.17 |
| BH01 | 11/15/19 | 4772.46 | 21.68 | 5.73 | ND | ND | 4764.76 |
| BH01 | 02/05/20 | 4772.46 | 21.47 | 5.38 | ND | ND | 4765.11 |
| BH01 | 05/04/20 | 4772.46 | 21.21 | 3.15 | ND | ND | 4767.34 |
| BH02 | 08/23/19 | 4773.47 | 17.30 | 5.47 | ND | ND | 4765.14 |
| BH02 | 11/15/19 | 4773.47 | 17.23 | 5.89 | ND | ND | 4764.72 |
| BH02 | 02/05/20 | 4773.47 | 17.20 | 5.58 | ND | ND | 4765.03 |
| BH02 | 05/04/20 | 4773.47 | 17.17 | 3.33 | ND | ND | 4767.28 |
| BH03 | 08/23/19 | 4770.68 | 14.10 | 5.83 | ND | ND | 4765.26 |
| BH03 | 11/15/19 | 4770.68 | 13.92 | 6.27 | ND | ND | 4764.82 |
| BH03 | 02/05/20 | 4770.68 | 13.94 | 5.94 | ND | ND | 4765.15 |
| BH03 | 05/04/20 | 4770.68 | 13.87 | 3.67 | ND | ND | 4767.42 |
| BH04 | 08/23/19 | 4773.76 | 20.74 | 5.62 | ND | ND | 4765.20 |
| BH04 | 11/15/19 | 4773.76 | 19.76 | 6.02 | ND | ND | 4764.80 |
| BH04 | 02/05/20 | 4773.76 | 20.42 | 5.69 | ND | ND | 4765.13 |
| BH04 | 05/04/20 | 4773.76 | 19.72 | 3.44 | ND | ND | 4767.38 |
| BH05 | 08/23/19 | 4772.36 | 20.15 | 5.56 | ND | ND | 4765.12 |
| BH05 | 11/15/19 | 4772.36 | 19.69 | 5.93 | ND | ND | 4764.75 |
| BH05 | 02/05/20 | 4772.36 | 19.40 | 5.61 | ND | ND | 4765.07 |
| BH05 | 05/04/20 | 4772.36 | 19.23 | 3.36 | ND | ND | 4767.32 |
| BH06 | 08/23/19 | 4772.64 | 16.63 | 5.53 | ND | ND | 4765.18 |
| BH06 | 11/15/19 | 4772.64 | 16.59 | 5.90 | ND | ND | 4764.81 |
| BH06 | 02/05/20 | 4772.64 | 16.52 | 5.55 | ND | ND | 4765.16 |
| BH06 | 05/04/20 | 4772.64 | 16.60 | 3.32 | ND | ND | 4767.39 |
| BH07 | 02/05/20 | 4772.12 | 16.01 | 5.03 | ND | ND | 4765.00 |
| BH07 | 05/04/20 | 4772.12 | 16.09 | 2.77 | ND | ND | 4767.26 |
| BH08 | 02/05/20 | 4770.79 | 12.65 | 6.00 | ND | ND | 4764.86 |
| BH08 | 05/04/20 | 4770.79 | 12.66 | 3.78 | ND | ND | 4767.08 |

ft. = Feet

AMSL = Above mean sea level

BTOC = Below top of casing

LNAPL = Light non-aqueous phase liquid

ND = No LNAPL detected

1) Depth to water measurements collected prior to third quarter 2019 were measured from top of well casing. Subsequent 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:

Groundwater elevation = (TOC Elevation - Measured Depth to Water)+(LNAPL Thickness in Well x LNAPL Relative Density)

LNAPL relative density was estimated to be approximately 0.75

TABLE 2
GROUNDWATER ANALYTICAL DATA
NOBLE ENERGY, INC. - DUNCAN D20-12, 20-13

| Monitoring Well ID | Date | Benzene (µg/L) | Toluene (µg/L) | Ethylbenzene (µg/L) | Total Xylenes (µg/L) |
|-----------------------|----------|----------------|----------------|---------------------|----------------------|
| COGCC Standard | | 5 | 560 | 700 | 1,400 |
| GW01 | 12/10/18 | 970 | 3.2 | 560 | 3,800 |
| BH01 | 08/23/19 | 440 | <1.0 | 490 | 1,400 |
| BH01 | 11/15/19 | 840 | <1.0 | 420 | 1,200 |
| BH01 | 02/05/20 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH01 | 05/04/20 | 1,100 | <1.0 | 200 | 1,400 |
| BH02 | 08/23/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH02 | 11/15/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH02 | 02/05/20 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH02 | 05/04/20 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH03 | 08/23/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH03 | 11/15/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH03 | 02/05/20 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH03 | 05/04/20 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH04 | 08/23/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH04 | 11/15/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH04 | 02/05/20 | <1.0 | <1.0 | 25 | 79 |
| BH04 | 05/04/20 | 1.1 | <1.0 | 5.9 | 14 |
| BH05 | 08/23/19 | 340 | <1.0 | 500 | 1,700 |
| BH05 | 11/15/19 | 530 | <1.0 | 490 | 1,600 |
| BH05 | 02/05/20 | 240 | <1.0 | 450 | 1,100 |
| BH05 | 05/04/20 | 380 | <1.0 | 190 | 480 |
| BH06 | 08/23/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH06 | 11/15/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH06 | 02/05/20 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH06 | 05/04/20 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH07 | 02/05/20 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH07 | 05/04/20 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH08 | 02/05/20 | <1.0 | <1.0 | <1.0 | 2.5 |
| BH08 | 05/04/20 | <1.0 | <1.0 | <1.0 | <2.0 |

Notes:

COGCC = Colorado Oil and Gas Conservation Commission

µg/L = Micrograms per liter

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

Groundwater standards referenced from COGCC Table 910-1

Highlighted results are equal to or exceed the COGCC Table 910-1 standard

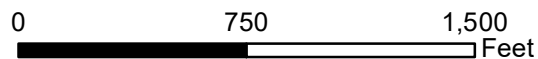
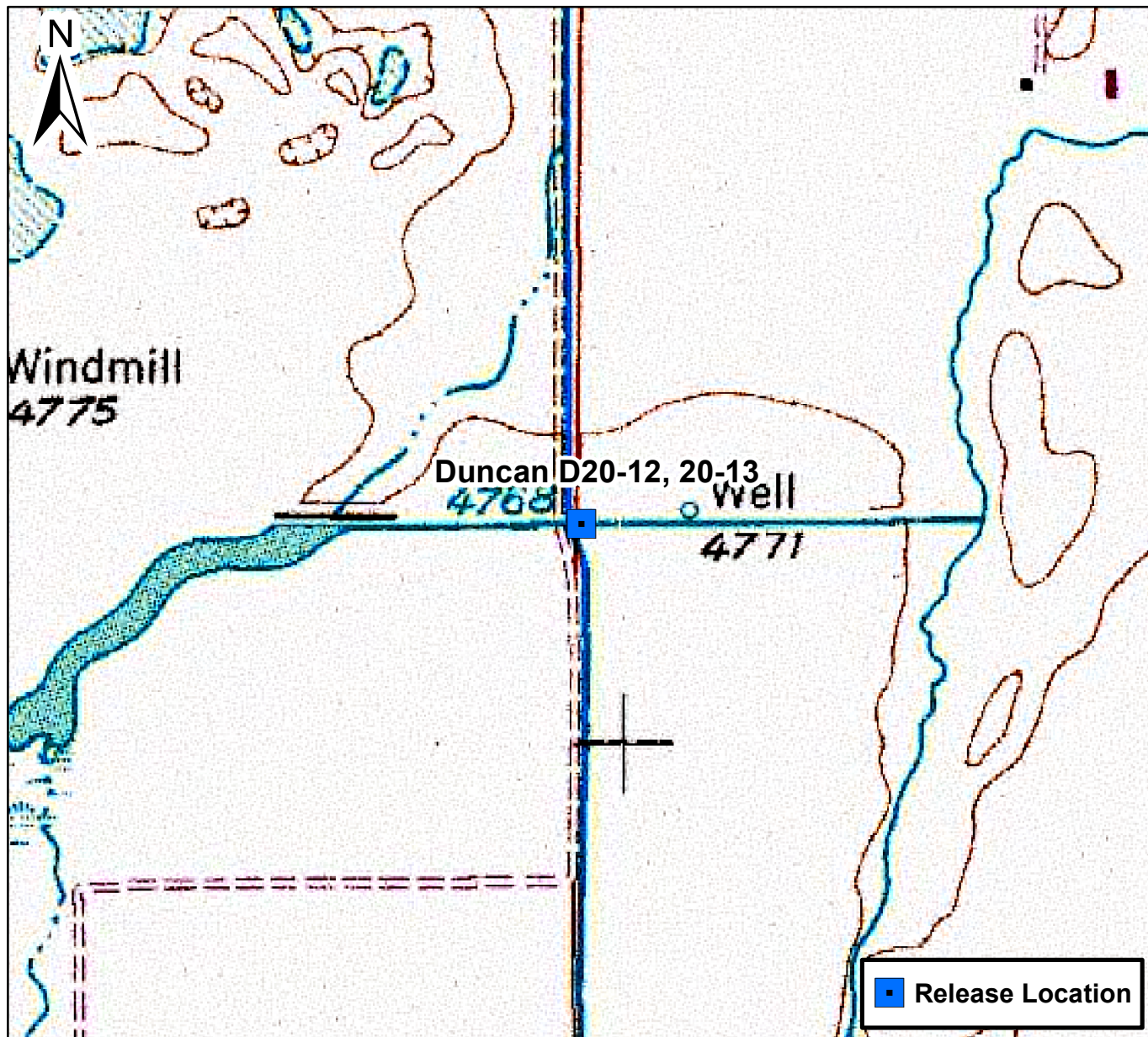
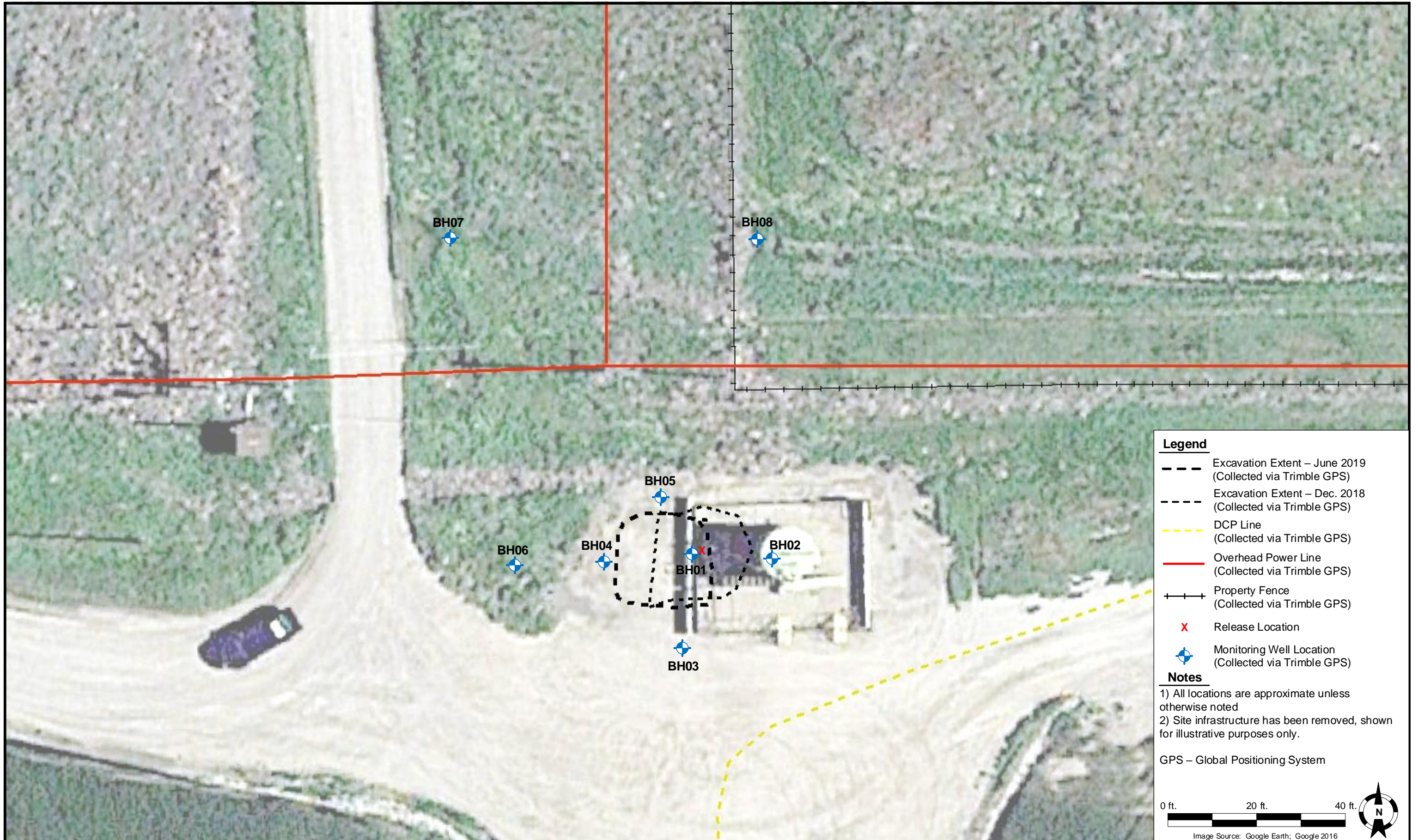


Figure 1

Site Location Map
Duncan D20-12, 20-13
NWSW S20 T3N R64W
Weld County, Colorado





Legend

- - - Excavation Extent – June 2019 (Collected via Trimble GPS)
- - - Excavation Extent – Dec. 2018 (Collected via Trimble GPS)
- - - DCP Line (Collected via Trimble GPS)
- Overhead Power Line (Collected via Trimble GPS)
- + + + Property Fence (Collected via Trimble GPS)
- X Release Location
- Monitoring Well Location (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

0 ft. 20 ft. 40 ft.

Image Source: Google Earth; Google 2016

| | | | | | |
|------------------|--|--|---|---------------|-------------|
| DATE: 02/28/2020 |  TASMAN GEOSCIENCES | Tasman Geosciences, Inc. 6855 W. 119 th Avenue Broomfield, CO 80020 | Noble Energy, Inc. – DJ Basin Duncan D20-12, 20-13 NWSW, Section 20, Township 3 North, Range 64 West Weld County, Colorado | Site Overview | FIGURE 2 |
| DESIGNED BY: JW | | | | | |
| DRAWN BY: KC | | | | | |



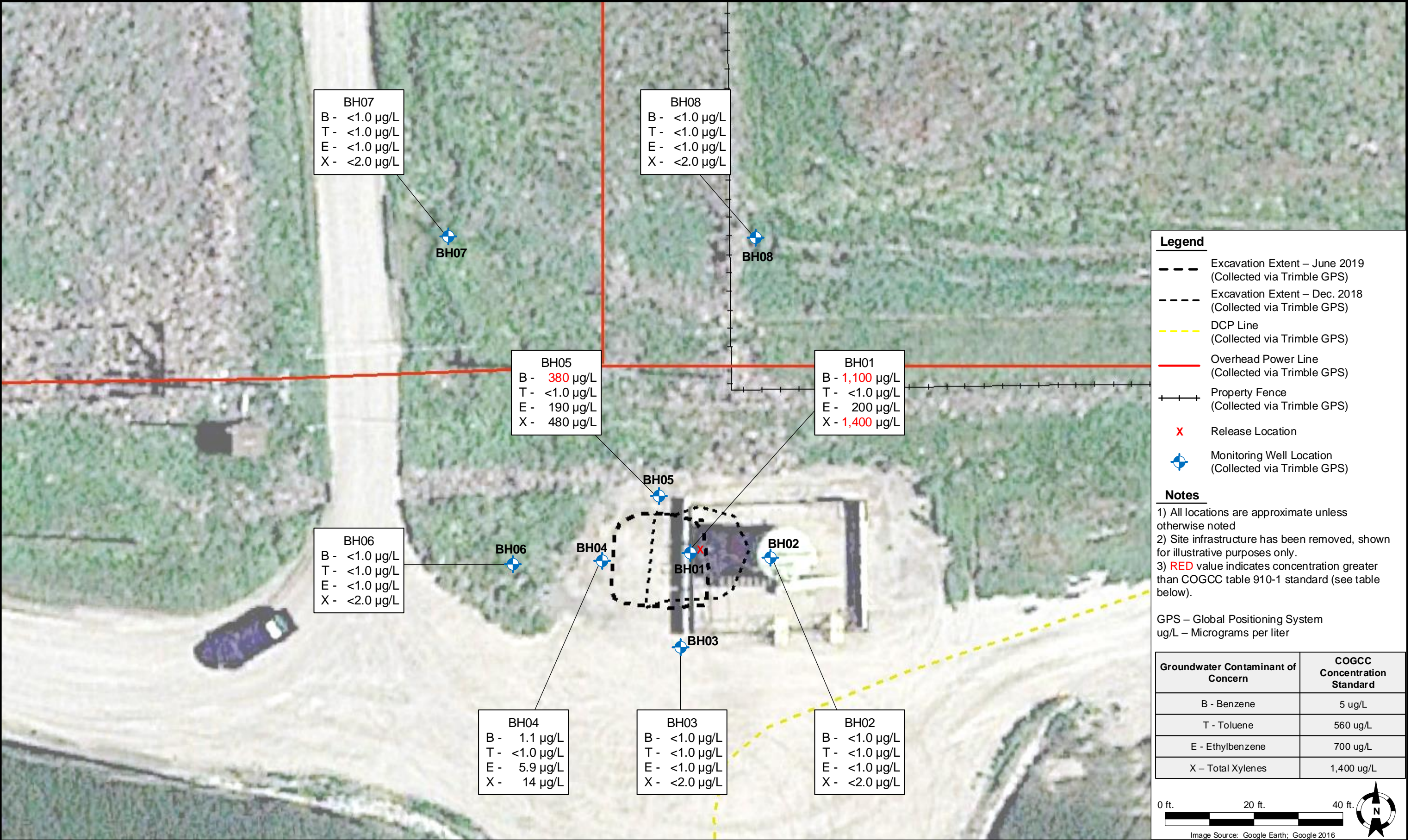
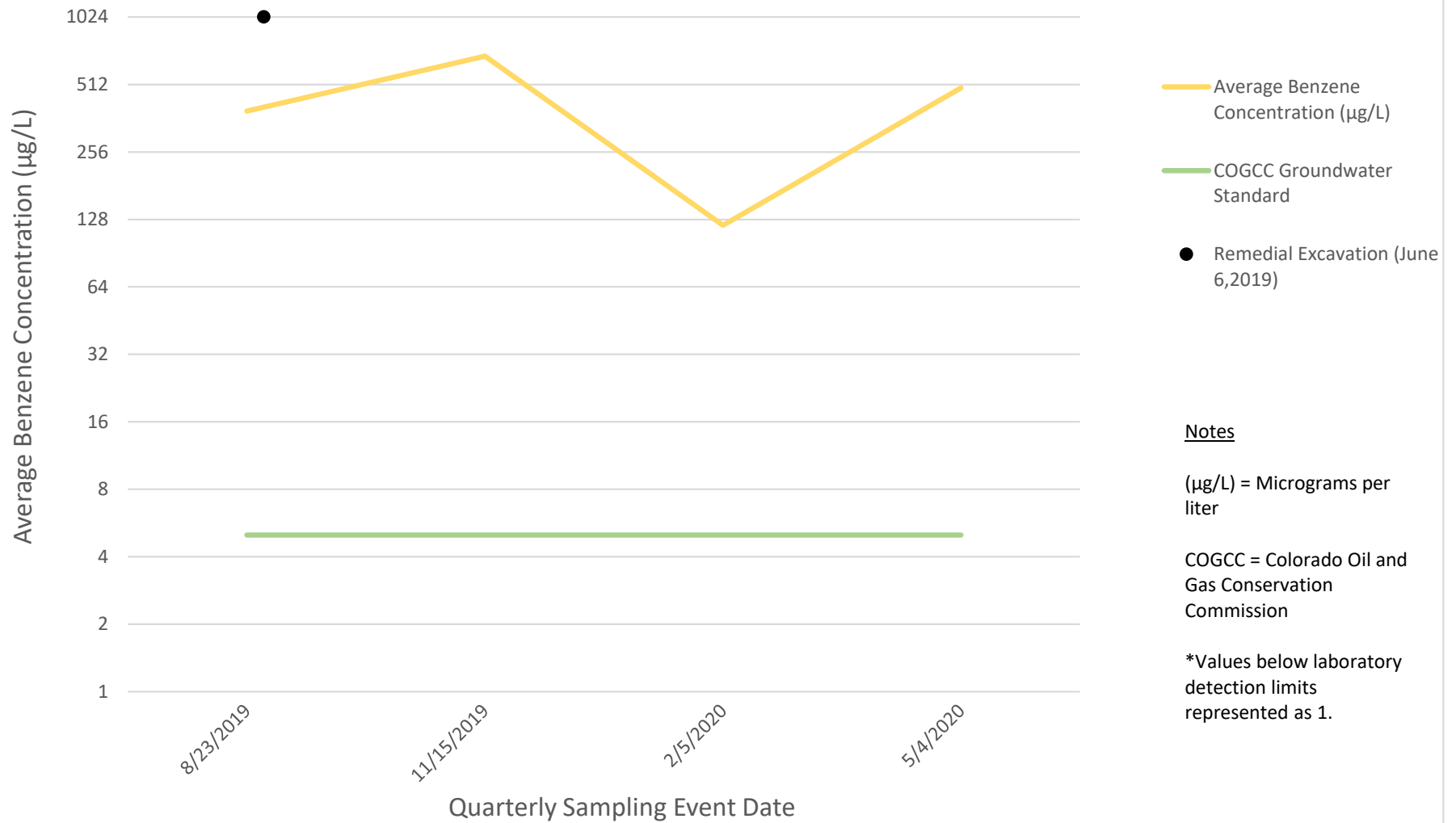


Figure 5
Duncan D20-12, 20-13
Average Quarterly Benzene Concentrations



Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

May 11, 2020

Brandon Bruns

Tasman Geosciences

6855 W. 119th Ave.

Broomfield, CO 80020

RE: Noble - Duncan D20-12, 20-13

Work Order #2005025

Enclosed are the results of analyses for samples received by Summit Scientific on 05/04/20 17:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Muri Premier", is displayed on a light purple rectangular background.

Muri Premier For Paul Shrewsbury
President



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

Project: Noble - Duncan D20-12, 20-13

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
05/11/20 16:31

ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|-----------|---------------|--------|----------------|----------------|
| BH01 | 2005025-01 | Water | 05/04/20 10:25 | 05/04/20 17:20 |
| BH02 | 2005025-02 | Water | 05/04/20 10:35 | 05/04/20 17:20 |
| BH03 | 2005025-03 | Water | 05/04/20 10:20 | 05/04/20 17:20 |
| BH04 | 2005025-04 | Water | 05/04/20 10:15 | 05/04/20 17:20 |
| BH05 | 2005025-05 | Water | 05/04/20 10:30 | 05/04/20 17:20 |
| BH06 | 2005025-06 | Water | 05/04/20 10:10 | 05/04/20 17:20 |
| BH07 | 2005025-07 | Water | 05/04/20 10:00 | 05/04/20 17:20 |
| BH08 | 2005025-08 | Water | 05/04/20 10:00 | 05/04/20 17:20 |

Summit Scientific

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

Summit Scientific

S₂

4653 Table Mountain Drive ♦ Golden, Colorado 80403

303-277-9310

2005025

Page 1 of 1

Client: Noble / Tasman Project Manager: Brandon Bruns, Invoice: Jacob Evans
 Address: 6855 W 119th Avenue E-Mail: Bbruns@tasman-geo.com
 City/State/Zip: Broomfield, CO, 80020
 Phone: 979-255-4235 Project Name: Duncan D20-12, 20-13
 Sampler Name: Max Garza Project Number: N/A

| 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 | 8260B GBTEXN | 8015 DRO | pH, EC, SAR | | |
| 1 | BH01 | 5/4/20 | 10 25 | 3 | X | | | | X | | | | | X | | | | |
| 2 | BH02 | | 10 35 | | | | | | | | | | | | | | | |
| 3 | BH03 | | 10 20 | | | | | | | | | | | | | | | |
| 4 | BH04 | | 10 15 | | | | | | | | | | | | | | | |
| 5 | BH05 | | 10 30 | | | | | | | | | | | | | | | |
| 6 | BH06 | | 10 10 | | | | | | | | | | | | | | | |
| 7 | BH07 | | 10 00 | | | | | | | | | | | | | | | |
| 8 | BH08 | | 10 00 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |

| | | | | | |
|---|---|---------------------------------------|---|---|--------|
| Relinquished by: <u>Max</u> | Date/Time: <u>5/4/20</u> <u>1400</u> | Received by: <u>Tasman's Lock Box</u> | Date/Time: <u>5/4/20</u> <u>14 00</u> | Turn Around Time (Check) Same Day <u> </u> 72 hours 24 hours <u> </u> Standard <u>✓</u> 48 hours <u> </u> | Notes: |
| Relinquished by: <u>Tasman's Lock Box</u> | Date/Time: <u>6/5/20</u> <u>1720</u> | Received by: <u>[Signature]</u> | Date/Time: <u>05/04/2020</u> <u>1720</u> | Sample Integrity: Temperature Upon Receipt: <u>3.1</u> Samples Intact: <u>Yes</u> No | |
| Relinquished by: | Date/Time: | Received by: | Date/Time: | | |

Sample Receipt Checklist

S2 Work Order 2005025

Client: Noble / TAsman

Client Project ID: Duncan D20-12,26-13

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

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

Temp (°C) 3.1

Thermometer ID: 61857155-K

| | Yes | No | N/A | Comments (if any) |
|--|-------------------------------------|-------------------------------------|-------------------------------------|-------------------|
| If samples require cooling, was the temperature at 4°C +/- 2°C ⁽¹⁾ ? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| NOTE: If samples are delivered the same day of sampling, this requirement is met provided that there is evidence that cooling has begun. | | | | |
| 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 type="checkbox"/> | <input type="checkbox"/> | <input checked="" 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⁾ ? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | HCL |
| Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect | | | | |
| If samples are acid preserved for metals, is the pH ≤ 2 ⁽¹⁾ ? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| Record the pH in Comments. | | | | |
| 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 VB

Signature of Custodian [Signature]

Date/Time 05/04/2020



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

Project: Noble - Duncan D20-12, 20-13

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
05/11/20 16:31

BH01
2005025-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **05/04/20 10:25**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------|-------------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| Benzene | 1100 | 10 | | ug/l | 10 | 2005054 | 05/06/20 | 05/08/20 | EPA 8260B | |
| Toluene | ND | 1.0 | | " | 1 | " | " | 05/08/20 | " | |
| Ethylbenzene | 200 | 1.0 | | " | " | " | " | " | " | |
| Xylenes (total) | 1400 | 20 | | " | 10 | " | " | 05/08/20 | " | |

Date Sampled: **05/04/20 10:25**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 91.7 % | | 23-173 | | " | " | 05/08/20 | " | |
| Surrogate: Toluene-d8 | | 101 % | | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 120 % | | 21-167 | | " | " | " | " | |

Summit Scientific

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

Project: Noble - Duncan D20-12, 20-13

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
05/11/20 16:31

BH02
2005025-02 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **05/04/20 10:35**

| Analyte | Result | Reporting | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------|--------|-----------|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | |
| Benzene | ND | 1.0 | ug/l | 1 | 2005054 | 05/06/20 | 05/08/20 | EPA 8260B | |
| Toluene | ND | 1.0 | " | " | " | " | " | " | |
| Ethylbenzene | ND | 1.0 | " | " | " | " | " | " | |
| Xylenes (total) | ND | 2.0 | " | " | " | " | " | " | |

Date Sampled: **05/04/20 10:35**

| Analyte | Result | Reporting | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 90.5 % | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 103 % | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 114 % | 21-167 | | " | " | " | " | |

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

Project: Noble - Duncan D20-12, 20-13

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
05/11/20 16:31

BH03
2005025-03 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **05/04/20 10:20**

| Analyte | Result | Reporting | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------|--------|-----------|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | |
| Benzene | ND | 1.0 | ug/l | 1 | 2005054 | 05/06/20 | 05/08/20 | EPA 8260B | |
| Toluene | ND | 1.0 | " | " | " | " | " | " | |
| Ethylbenzene | ND | 1.0 | " | " | " | " | " | " | |
| Xylenes (total) | ND | 2.0 | " | " | " | " | " | " | |

Date Sampled: **05/04/20 10:20**

| Analyte | Result | Reporting | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 95.5 % | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 104 % | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 108 % | 21-167 | | " | " | " | " | |

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

Project: Noble - Duncan D20-12, 20-13

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
05/11/20 16:31

BH04
2005025-04 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **05/04/20 10:15**

| Analyte | Result | Reporting | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------|------------|-----------|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | |
| Benzene | 1.1 | 1.0 | ug/l | 1 | 2005054 | 05/06/20 | 05/08/20 | EPA 8260B | |
| Toluene | ND | 1.0 | " | " | " | " | " | " | |
| Ethylbenzene | 5.9 | 1.0 | " | " | " | " | " | " | |
| Xylenes (total) | 14 | 2.0 | " | " | " | " | " | " | |

Date Sampled: **05/04/20 10:15**

| Analyte | Result | Reporting | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 93.1 % | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 102 % | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 118 % | 21-167 | | " | " | " | " | |

Summit Scientific

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

Project: Noble - Duncan D20-12, 20-13

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
05/11/20 16:31

BH05
2005025-05 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **05/04/20 10:30**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------|------------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| Benzene | 380 | 10 | | ug/l | 10 | 2005054 | 05/06/20 | 05/08/20 | EPA 8260B | |
| Toluene | ND | 1.0 | | " | 1 | " | " | 05/08/20 | " | |
| Ethylbenzene | 190 | 1.0 | | " | " | " | " | " | " | |
| Xylenes (total) | 480 | 2.0 | | " | " | " | " | " | " | |

Date Sampled: **05/04/20 10:30**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 90.8 % | | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 101 % | | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 112 % | | 21-167 | | " | " | " | " | |

Summit Scientific

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

Project: Noble - Duncan D20-12, 20-13

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
05/11/20 16:31

BH06
2005025-06 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **05/04/20 10:10**

| Analyte | Result | Reporting | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------|--------|-----------|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | |
| Benzene | ND | 1.0 | ug/l | 1 | 2005054 | 05/06/20 | 05/08/20 | EPA 8260B | |
| Toluene | ND | 1.0 | " | " | " | " | " | " | |
| Ethylbenzene | ND | 1.0 | " | " | " | " | " | " | |
| Xylenes (total) | ND | 2.0 | " | " | " | " | " | " | |

Date Sampled: **05/04/20 10:10**

| Analyte | Result | Reporting | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 94.1 % | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 105 % | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 110 % | 21-167 | | " | " | " | " | |

Summit Scientific

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

Project: Noble - Duncan D20-12, 20-13

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
05/11/20 16:31

BH07
2005025-07 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **05/04/20 10:00**

| Analyte | Result | Reporting | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------|--------|-----------|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | |
| Benzene | ND | 1.0 | ug/l | 1 | 2005054 | 05/06/20 | 05/08/20 | EPA 8260B | |
| Toluene | ND | 1.0 | " | " | " | " | " | " | |
| Ethylbenzene | ND | 1.0 | " | " | " | " | " | " | |
| Xylenes (total) | ND | 2.0 | " | " | " | " | " | " | |

Date Sampled: **05/04/20 10:00**

| Analyte | Result | Reporting | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 86.6 % | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 104 % | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 107 % | 21-167 | | " | " | " | " | |

Summit Scientific

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

Project: Noble - Duncan D20-12, 20-13

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
05/11/20 16:31

BH08
2005025-08 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **05/04/20 10:00**

| Analyte | Result | Reporting | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------|--------|-----------|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | |
| Benzene | ND | 1.0 | ug/l | 1 | 2005054 | 05/06/20 | 05/08/20 | EPA 8260B | |
| Toluene | ND | 1.0 | " | " | " | " | " | " | |
| Ethylbenzene | ND | 1.0 | " | " | " | " | " | " | |
| Xylenes (total) | ND | 2.0 | " | " | " | " | " | " | |

Date Sampled: **05/04/20 10:00**

| Analyte | Result | Reporting | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 90.8 % | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 103 % | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 110 % | 21-167 | | " | " | " | " | |

Summit Scientific

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

Project: Noble - Duncan D20-12, 20-13

Project Number: [none]
Project Manager: Brandon Brunns

Reported:
05/11/20 16:31

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 2005054 - EPA 5030 Water MS

Blank (2005054-BLK1)

Prepared: 05/06/20 Analyzed: 05/08/20

| | | | | | | | | | | |
|----------------------------------|------|-----|------|------|--|------|--------|--|--|--|
| Benzene | ND | 1.0 | ug/l | | | | | | | |
| Toluene | ND | 1.0 | " | | | | | | | |
| Ethylbenzene | ND | 1.0 | " | | | | | | | |
| Xylenes (total) | ND | 2.0 | " | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 11.9 | | " | 13.3 | | 89.0 | 23-173 | | | |
| Surrogate: Toluene-d8 | 13.8 | | " | 13.3 | | 104 | 20-170 | | | |
| Surrogate: 4-Bromofluorobenzene | 13.8 | | " | 13.3 | | 103 | 21-167 | | | |

LCS (2005054-BS1)

Prepared: 05/06/20 Analyzed: 05/08/20

| | | | | | | | | | | |
|----------------------------------|------|-----|------|------|--|------|--------|--|--|--|
| Benzene | 18.3 | 1.0 | ug/l | 33.3 | | 55.0 | 51-132 | | | |
| Toluene | 28.3 | 1.0 | " | 33.3 | | 84.8 | 51-138 | | | |
| Ethylbenzene | 22.1 | 1.0 | " | 33.3 | | 66.4 | 58-146 | | | |
| m,p-Xylene | 43.3 | 2.0 | " | 66.7 | | 64.9 | 57-144 | | | |
| o-Xylene | 22.7 | 1.0 | " | 33.3 | | 68.1 | 53-146 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 12.0 | | " | 13.3 | | 89.7 | 23-173 | | | |
| Surrogate: Toluene-d8 | 14.4 | | " | 13.3 | | 108 | 20-170 | | | |
| Surrogate: 4-Bromofluorobenzene | 14.2 | | " | 13.3 | | 106 | 21-167 | | | |

Matrix Spike (2005054-MS1)

Source: 2005036-01

Prepared: 05/06/20 Analyzed: 05/08/20

| | | | | | | | | | | |
|----------------------------------|------|-----|------|------|------|------|--------|--|--|--|
| Benzene | 29.6 | 1.0 | ug/l | 33.3 | ND | 88.7 | 34-141 | | | |
| Toluene | 27.9 | 1.0 | " | 33.3 | ND | 83.6 | 27-151 | | | |
| Ethylbenzene | 25.5 | 1.0 | " | 33.3 | ND | 76.6 | 29-160 | | | |
| m,p-Xylene | 63.9 | 2.0 | " | 66.7 | 1.02 | 94.3 | 20-166 | | | |
| o-Xylene | 25.9 | 1.0 | " | 33.3 | 3.30 | 67.7 | 33-159 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 12.3 | | " | 13.3 | | 92.0 | 23-173 | | | |
| Surrogate: Toluene-d8 | 14.3 | | " | 13.3 | | 107 | 20-170 | | | |
| Surrogate: 4-Bromofluorobenzene | 14.0 | | " | 13.3 | | 105 | 21-167 | | | |

Summit Scientific

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

Project: Noble - Duncan D20-12, 20-13

Project Number: [none]
Project Manager: Brandon Brunns

Reported:
05/11/20 16:31

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 2005054 - EPA 5030 Water MS

| Matrix Spike Dup (2005054-MSD1) | Source: 2005036-01 | | | Prepared: 05/06/20 Analyzed: 05/08/20 | | | | | | |
|----------------------------------|--------------------|-----|------|---------------------------------------|------|------|--------|-------|----|--|
| Benzene | 29.4 | 1.0 | ug/l | 33.3 | ND | 88.1 | 34-141 | 0.577 | 30 | |
| Toluene | 27.1 | 1.0 | " | 33.3 | ND | 81.2 | 27-151 | 2.95 | 30 | |
| Ethylbenzene | 22.0 | 1.0 | " | 33.3 | ND | 66.0 | 29-160 | 14.8 | 30 | |
| m,p-Xylene | 62.9 | 2.0 | " | 66.7 | 1.02 | 92.8 | 20-166 | 1.51 | 30 | |
| o-Xylene | 25.2 | 1.0 | " | 33.3 | 3.30 | 65.8 | 33-159 | 2.47 | 30 | |
| Surrogate: 1,2-Dichloroethane-d4 | 12.8 | | " | 13.3 | | 95.8 | 23-173 | | | |
| Surrogate: Toluene-d8 | 13.2 | | " | 13.3 | | 98.9 | 20-170 | | | |
| Surrogate: 4-Bromofluorobenzene | 14.4 | | " | 13.3 | | 108 | 21-167 | | | |

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Noble - Duncan D20-12, 20-13

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
05/11/20 16:31

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 |