

# THIRD QUARTER 2020 SITE MONITORING DATA

## UPRC 33-4F, 5F, HUNT FEDERAL K 33-19

COGCC SPILL TRACKING # 464229  
COGCC REMEDIATION # 13785

Prepared for:



2115 117th Avenue  
Greeley, CO 80631

Prepared by:



6855 West 119th Avenue  
Broomfield, Colorado, 80020

**TABLE 1**  
**SOIL ANALYTICAL DATA**  
**NOBLE ENERGY, INC. - UPRC 33-4F, 5F, HUNT FEDERAL K 33-19**

Soil Sample ID	Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Naphthalene (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)
<b>COGCC Standard</b>		<b>0.17</b>	<b>85</b>	<b>100</b>	<b>175</b>	<b>23</b>	<b>500</b>	
SS03@1'	04/18/19	<0.0020	<0.0050	<0.0050	<0.010	0.014	<50	<50
SS04@1 <sup>1</sup>	04/18/19	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50	<50
SS05@1'	04/18/19	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50	<50
SS06@1 <sup>1</sup>	04/18/19	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50	72
SS07@1'	04/18/19	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50	<50
SS08@1'	04/18/19	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50	<50
SS09@3'	07/02/19	<0.0020	<0.0050	0.14	0.77	0.10	100	160
SS09@4'	07/02/19	0.012	<0.0050	0.22	1.1	0.092	230	53
SS10@3'	07/02/19	<0.0020	<0.0050	<0.0050	0.013	<0.010	<50	<50
SS10@4'	07/02/19	<0.0020	<0.0050	<0.0050	0.011	<0.010	<50	<50
SS11@3 <sup>1</sup>	07/02/19	<0.0020	<0.0050	0.28	2.6	0.19	<b>660</b>	<b>110</b>
SS11@4'	07/02/19	<0.0020	<0.0050	0.044	0.17	0.045	50	<50
SS12@3'	07/02/19	<0.0020	<0.0050	<0.0050	0.027	<0.010	<50	<50
SS12@4'	07/02/19	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50	<50
FS01@2 <sup>1</sup>	07/02/19	0.060	<0.0050	0.0094	1.2	0.026	290	51
BH02@0-2'	07/16/19	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50	<50
BH03@0-2'	07/16/19	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50	<50
BH04@0-2'	07/16/19	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50	<50
BH05@0-2 <sup>1</sup>	07/16/19	0.0060	0.016	<0.0050	11	0.012	50	63
BH06@0-2'	07/16/19	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50	<50
BH07@0-2'	07/16/19	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50	<50
BH08@0-2'	07/16/19	<0.0020	<0.0050	<0.0050	<0.010	<0.010	<50	<50
SS11@3 <sup>2</sup>	06/05/20	<0.0020	<0.0050	0.044	0.15	<0.010	58	<50

Soil Sample ID	Date	SAR	pH	EC (mmhos/cm)
<b>COGCC Standard</b>		<b>&lt;12</b>	<b>6-9</b>	<b>&lt;4mmhos/cm</b>
SS09@3'	07/02/19	1.22	8.83	0.476

Notes:

COGCC = Colorado Oil and Gas Conservation Commission

TPH-GRO = Total petroleum hydrocarbons - gasoline range organics

TPH-DRO = Total petroleum hydrocarbons - diesel range organics

mg/kg = Milligrams per kilogram

SAR = Sodium Adsorption Ratio

EC = Specific Conductivity

mmhos/cm = Millimhos per centimeter

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

1. The laboratory assigned an S-02 flag to this sample, meaning the surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

2. An additional confirmation soil sample was collected on 6/5/20 via hand auger at the same location as the original SS11@3' sample collected on 7/2/19

Soil standards referenced from COGCC Table 910-1

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

**TABLE 2**  
**GROUNDWATER ELEVATION DATA**  
**NOBLE ENERGY, INC. - UPRC 33-4F, 5F, HUNT FEDERAL K 33-19**

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	07/22/19	4761.40	13.77	1.56	ND	ND	4757.34
BH01	10/24/19	4761.40	13.66	2.06	ND	ND	4756.84
BH01	01/21/20	4761.40	13.64	2.55	ND	ND	4756.35
BH01	04/08/20	4761.40	13.61	1.96	ND	ND	4756.94
BH01	07/17/20	4761.40	13.51	1.59	ND	ND	4757.31
BH02	07/22/19	4762.85	14.50	1.90	ND	ND	4757.59
BH02	10/24/19	4762.85	14.39	2.40	ND	ND	4757.09
BH02	01/21/20	4762.85	14.37	2.88	ND	ND	4756.61
BH02	04/08/20	4762.85	14.30	2.23	ND	ND	4757.26
BH02	07/17/20	4762.85	14.35	1.95	ND	ND	4757.54
BH03	07/22/19	4761.87	14.02	1.54	ND	ND	4757.23
BH03	10/24/19	4761.87	13.95	2.09	ND	ND	4756.68
BH03	01/21/20	4761.87	13.97	2.60	ND	ND	4756.17
BH03	04/08/20	4761.87	13.98	1.88	ND	ND	4756.89
BH03	07/17/20	4761.87	13.92	1.56	ND	ND	4757.21
BH04	07/22/19	4758.25	10.70	1.57	ND	ND	4756.97
BH04	10/24/19	4758.25	10.43	2.08	ND	ND	4756.46
BH04	01/21/20	4758.25	10.35	2.58	ND	ND	4755.96
BH04	04/08/20	4758.25	10.35	1.93	ND	ND	4756.61
BH04	07/17/20	4758.25	10.35	1.56	ND	ND	4756.98
BH05	07/22/19	4761.67	13.55	1.60	ND	ND	4757.39
BH05	10/24/19	4761.67	13.46	2.02	ND	ND	4756.97
BH05	01/21/20	4761.67	13.64	2.52	ND	ND	4756.47
BH05	04/08/20	4761.67	13.65	1.96	ND	ND	4757.03
BH05	07/17/20	4761.67	14.65	1.67	ND	ND	4757.32
BH06	07/22/19	4761.54	12.65	1.79	ND	ND	4757.61
BH06	10/24/19	4761.54	8.71	2.20	ND	ND	4757.20
BH06	01/21/20	4761.54	12.46	2.69	ND	ND	4756.71
BH06	04/08/20	4761.54	12.39	2.14	ND	ND	4757.26
BH06	07/17/20	4761.54	12.41	1.87	ND	ND	4757.53
BH07	07/22/19	4762.40	13.94	1.69	ND	ND	4757.40
BH07	10/24/19	4762.40	13.77	2.03	ND	ND	4757.06
BH07	01/21/20	4762.40	13.42	2.53	ND	ND	4756.56
BH07	04/08/20	4762.40	13.37	2.04	ND	ND	4757.05
BH07	07/17/20	4762.40	13.45	1.77	ND	ND	4757.32
BH08	07/22/19	4757.80	11.12	0.94	ND	ND	4757.20
BH08	10/24/19	4757.80	11.71	2.27	ND	ND	4755.87
BH08	01/21/20	4757.80	10.68	1.90	ND	ND	4756.24
BH08	04/08/20	4757.80	10.65	1.32	ND	ND	4756.82
BH08	07/17/20	4757.80	10.65	1.01	ND	ND	4757.13

**TABLE 1**  
**GROUNDWATER ELEVATION DATA**  
**NOBLE ENERGY, INC. - UPRC 33-4F, 5F, HUNT FEDERAL K 33-19**

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)
--------------------	------	------------------------------------	-----------------------	-----------------------------------	-----------------------------------	-----------------------	-----------------------------------

**Notes:**

ft. = Feet

AMSL = Above mean sea level

BTOC = Below top of casing

LNAPL = Light non-aqueous phase liquid

ND = No LNAPL detected

\* 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

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

**TABLE 3**  
**GROUNDWATER ANALYTICAL DATA**  
**NOBLE ENERGY, INC. - UPRC 33-4F, 5F, HUNT FEDERAL K 33-19**

Monitoring Well ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
<b>COGCC Standard</b>		<b>5</b>	<b>560</b>	<b>700</b>	<b>1,400</b>
GW01	04/18/19	<b>410</b>	340	68	<b>1,500</b>
GW02	07/02/19	<b>17</b>	<1.0	35	200
BH01	07/22/19	<1.0	<1.0	<1.0	<2.0
BH01	10/24/19	<1.0	<1.0	<1.0	<2.0
BH01	01/21/20	<1.0	<1.0	<1.0	<2.0
BH01	04/08/20	<1.0	<1.0	<1.0	<2.0
BH01	07/17/20	<1.0	<1.0	<1.0	<2.0
BH02	07/22/19	<1.0	<1.0	<1.0	<2.0
BH02	10/24/19	<1.0	<1.0	<1.0	<2.0
BH02	01/21/20	<1.0	<1.0	<1.0	<2.0
BH02	04/08/20	<1.0	<1.0	<1.0	<2.0
BH02	07/17/20	<1.0	<1.0	<1.0	<2.0
BH03	07/22/19	<1.0	<1.0	<1.0	<2.0
BH03	10/24/19	<1.0	<1.0	<1.0	<2.0
BH03	01/21/20	<1.0	<1.0	<1.0	<2.0
BH03	04/08/20	<1.0	<1.0	<1.0	<2.0
BH03	07/17/20	<1.0	<1.0	<1.0	<2.0
BH04	07/22/19	<1.0	<1.0	<1.0	<2.0
BH04	10/24/19	<1.0	<1.0	<1.0	<2.0
BH04	01/21/20	<1.0	<1.0	<1.0	<2.0
BH04	04/08/20	<1.0	<1.0	<1.0	<2.0
BH04	07/17/20	<1.0	<1.0	<1.0	<2.0
BH05	07/22/19	<1.0	<1.0	<1.0	<2.0
BH05	10/24/19	<b>10</b>	<1.0	5.6	28
BH05	01/21/20	<b>31</b>	<1.0	14	120
BH05	04/08/20	<b>42</b>	<1.0	25	130
BH05	07/17/20	<1.0	<1.0	<1.0	<2.0
BH06	07/22/19	<1.0	<1.0	<1.0	<2.0
BH06	10/24/19	<1.0	<1.0	<1.0	<2.0
BH06	01/21/20	<1.0	<1.0	<1.0	<2.0
BH06	04/08/20	<1.0	<1.0	<1.0	<2.0
BH06	07/17/20	<1.0	<1.0	<1.0	<2.0
BH07	07/22/19	<1.0	<1.0	<1.0	<2.0
BH07	10/24/19	<1.0	<1.0	<1.0	<2.0
BH07	01/21/20	<1.0	<1.0	<1.0	<2.0
BH07	04/08/20	<1.0	<1.0	<1.0	<2.0
BH07	07/17/20	<1.0	<1.0	<1.0	<2.0
BH08	07/22/19	<1.0	<1.0	<1.0	<2.0
BH08	10/24/19	<1.0	<1.0	<1.0	<2.0
BH08	01/21/20	<1.0	<1.0	<1.0	<2.0
BH08	04/08/20	<1.0	<1.0	<1.0	<2.0
BH08	07/17/20	<1.0	<1.0	<1.0	<2.0

**TABLE 2**  
**GROUNDWATER ANALYTICAL DATA**  
**NOBLE ENERGY, INC. - UPRC 33-4F, 5F, HUNT FEDERAL K 33-19**

**Notes:**

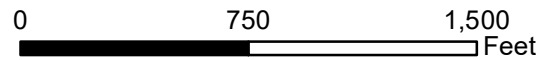
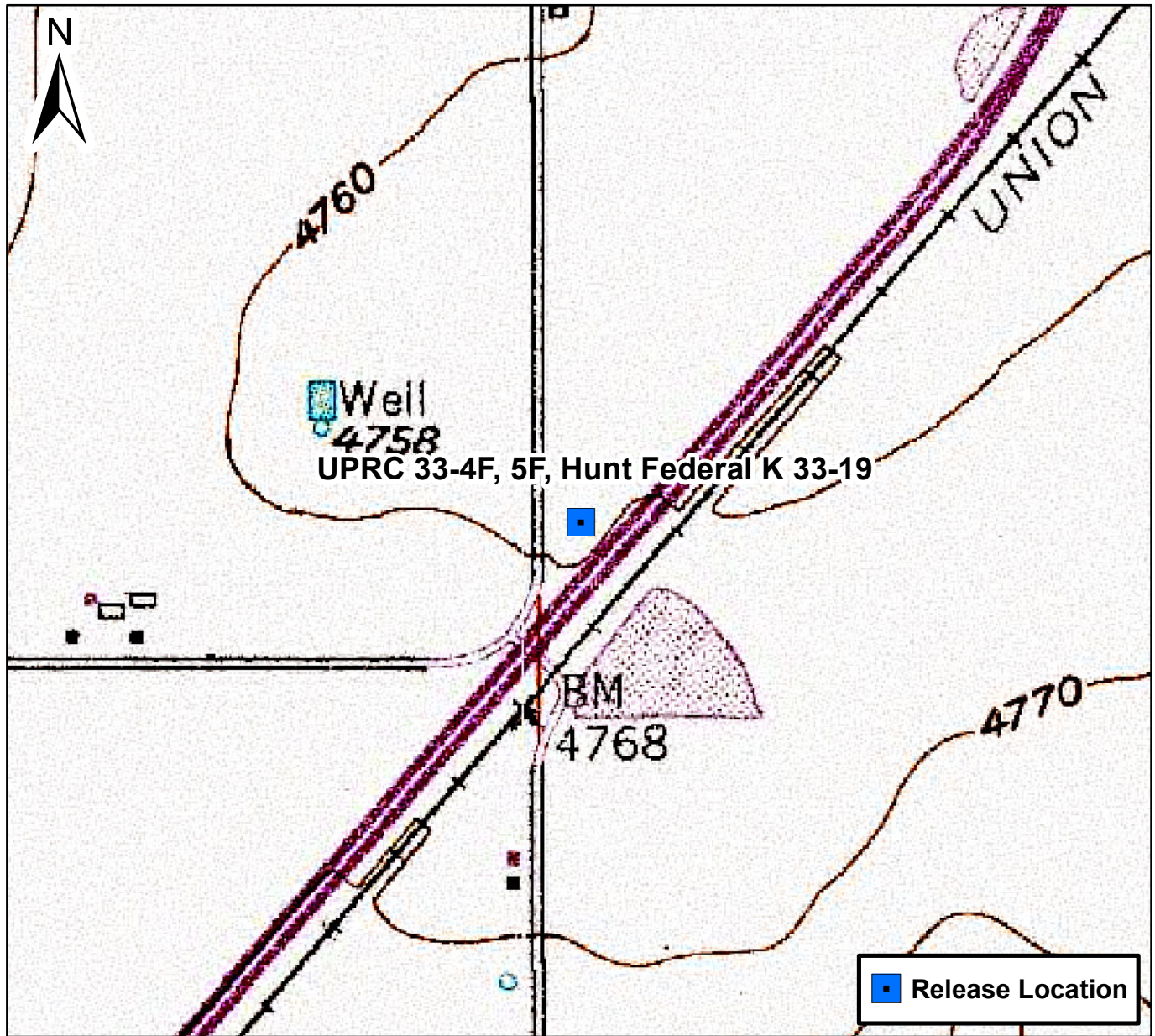
COGCC = Colorado Oil and Gas Conservation Commission

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  
 UPRC 33-4F, 5F, Hunt Federal K 33-19  
 SWNW S33 T4N R66W  
 Weld County, Colorado





**Legend**

-  Monitoring Well  
(Collected via Trimble GPS)
-  Fence  
(Collected via Trimble GPS)
-  Release Location
-  Excavation Extents - 2019  
(Collected via Trimble GPS)
-  Noble Dump Line  
(Collected via Trimble GPS)
-  Noble Flowline  
(Collected via Trimble GPS)
-  DCP Line  
(Collected via Trimble GPS)

**Notes**

- 1) All locations are approximate unless otherwise noted.
- 2) Buried infrastructure has been spatially projected.
- 3) Site infrastructure has been removed; shown for illustrative purposes only

GPS – Global Positioning System

0 ft.                      20 ft.                      40 ft.

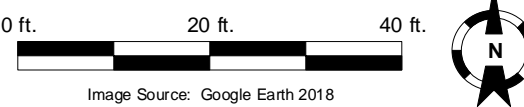


Image Source: Google Earth 2018

DATE:	04/17/2020
DESIGNED BY:	JW
DRAWN BY:	TC



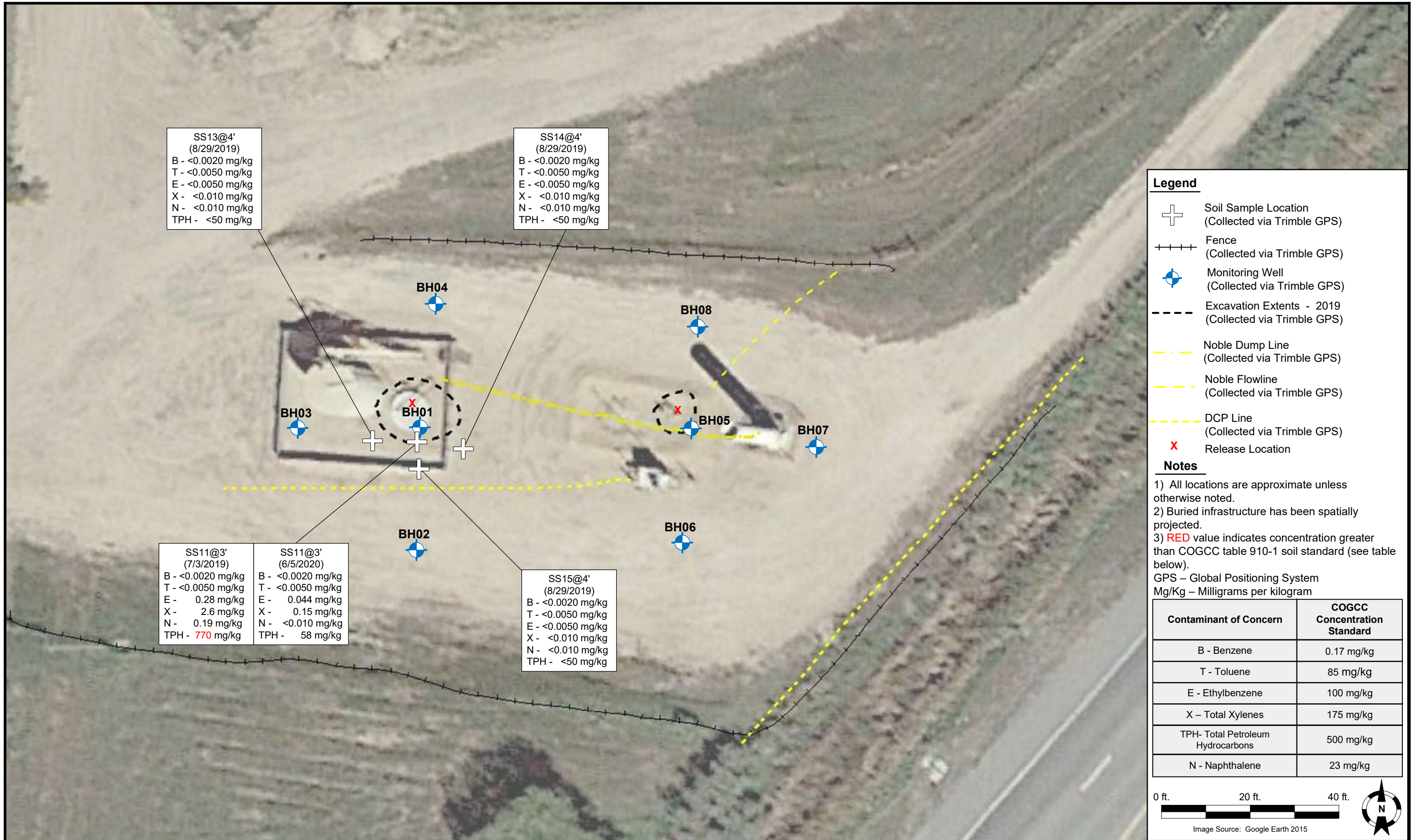
**TASMAN**  
GEOSCIENCES

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

**Noble Energy, Inc. – DJ Basin**  
**UPRC 33-4F, 5F, Hunt Federal K 33-19**  
 SWNW, Section 33, Township 4 North, Range 66 West  
 Weld County, Colorado

Site Overview Map

FIGURE  
2



**Legend**

- Soil Sample Location (Collected via Trimble GPS)
- Fence (Collected via Trimble GPS)
- Monitoring Well (Collected via Trimble GPS)
- Excavation Extents - 2019 (Collected via Trimble GPS)
- Noble Dump Line (Collected via Trimble GPS)
- Noble Flowline (Collected via Trimble GPS)
- DCP Line (Collected via Trimble GPS)
- Release Location

**Notes**

- 1) All locations are approximate unless otherwise noted.
- 2) Buried infrastructure has been spatially projected.
- 3) **RED** value indicates concentration greater than COGCC table 910-1 soil standard (see table below).

GPS – Global Positioning System  
Mg/Kg – Milligrams per kilogram

Contaminant of Concern	COGCC Concentration Standard
B - Benzene	0.17 mg/kg
T - Toluene	85 mg/kg
E - Ethylbenzene	100 mg/kg
X – Total Xylenes	175 mg/kg
TPH- Total Petroleum Hydrocarbons	500 mg/kg
N - Naphthalene	23 mg/kg

0 ft.      20 ft.      40 ft.

Image Source: Google Earth 2015

DATE: 10/2/2020

DESIGNED BY: JW

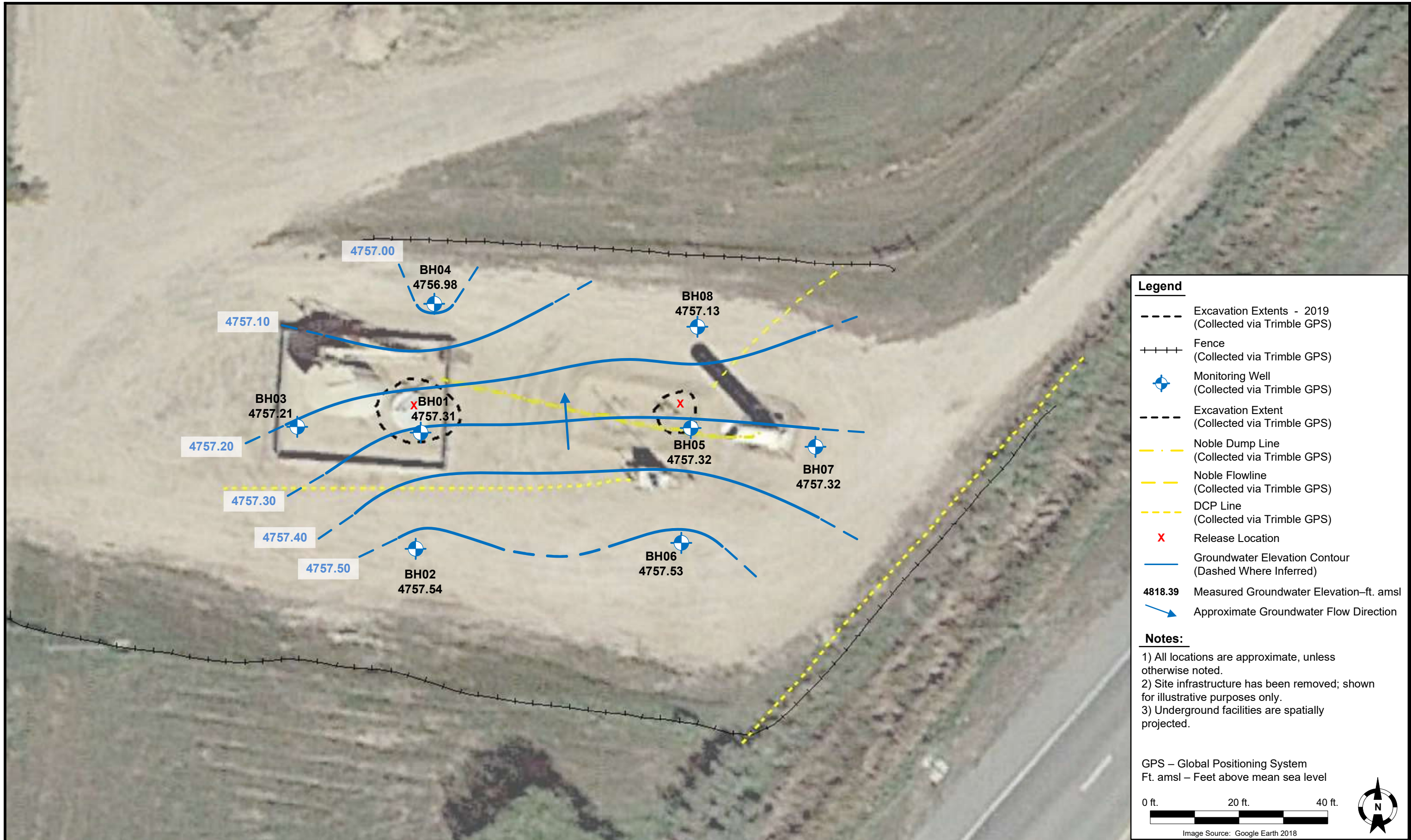
DRAWN BY: MG

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

**Noble Energy, Inc. – DJ Basin**  
**UPRC 33-4F, 5F, Hunt Federal K 33-19**  
SWNW, Section 33, Township 4 North, Range 66 West  
Weld County, Colorado

Soil Analytical Results  
(7/3/19, 8/29/19, 6/5/20)

FIGURE  
3



**Legend**

- Excavation Extents - 2019 (Collected via Trimble GPS)
- ++++ Fence (Collected via Trimble GPS)
- Monitoring Well (Collected via Trimble GPS)
- Excavation Extent (Collected via Trimble GPS)
- .-.- Noble Dump Line (Collected via Trimble GPS)
- .-.- Noble Flowline (Collected via Trimble GPS)
- .-.- DCP Line (Collected via Trimble GPS)
- X Release Location
- Groundwater Elevation Contour (Dashed Where Inferred)
- 4818.39 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.
- 3) Underground facilities are spatially projected.

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

0 ft. 20 ft. 40 ft.

Image Source: Google Earth 2018

DATE:	8/11/2020
DESIGNED BY:	JW
DRAWN BY:	MG

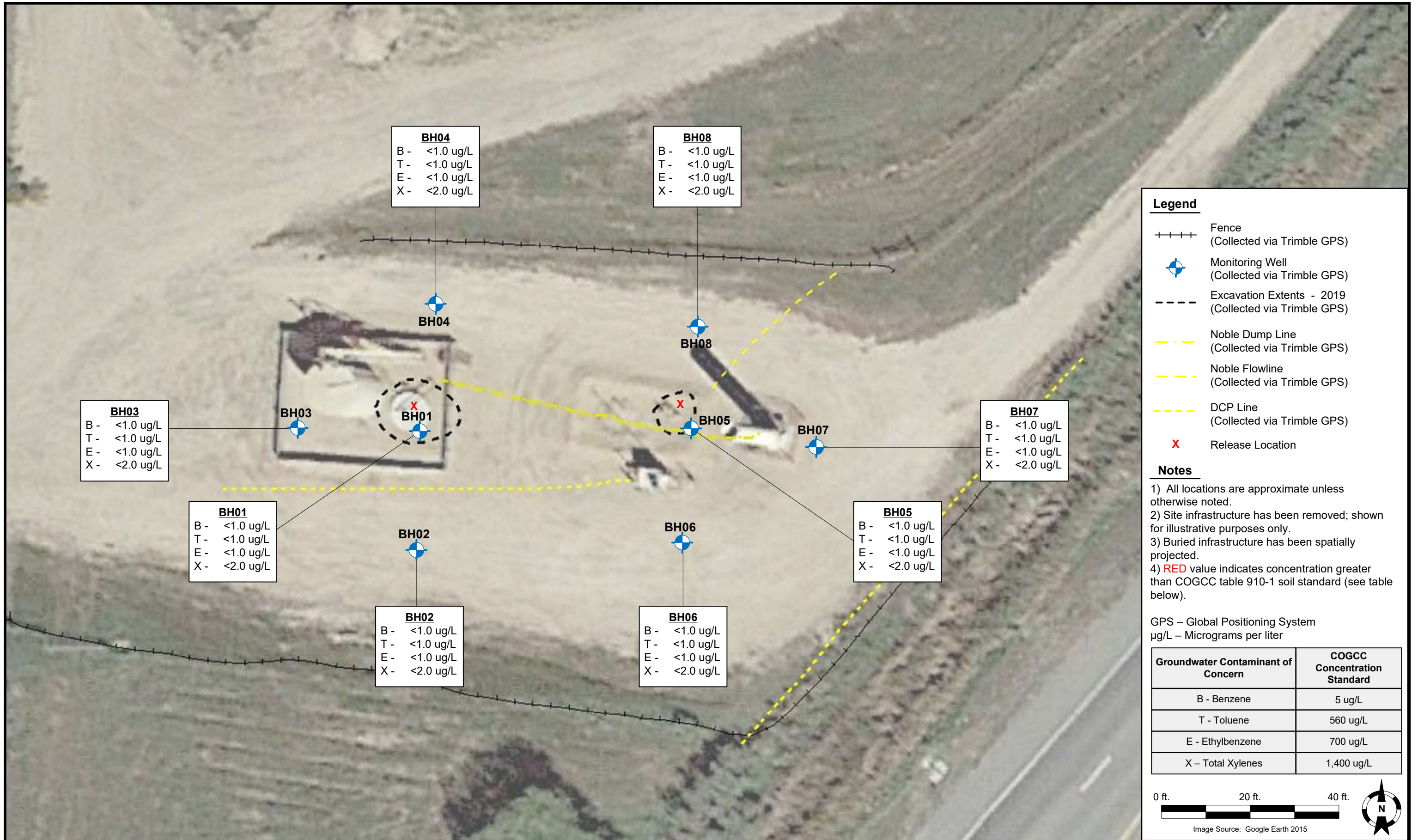
**TASMAN**  
GEOSCIENCES

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

**Noble Energy, Inc. – DJ Basin**  
**UPRC 33-4F, 5F, Hunt Federal K 33-19**  
 SWNW, Section 33, Township 4 North, Range 66 West  
 Weld County, Colorado

Groundwater Potentiometric  
 Surface Contour Map  
 (07/17/2020)

**FIGURE**  
4



**Legend**

- ++++ Fence (Collected via Trimble GPS)
- Monitoring Well (Collected via Trimble GPS)
- Excavation Extents - 2019 (Collected via Trimble GPS)
- .-.- Noble Dump Line (Collected via Trimble GPS)
- .-.- Noble Flowline (Collected via Trimble GPS)
- .-.- DCP Line (Collected via Trimble GPS)
- X Release Location

**Notes**

- 1) All locations are approximate unless otherwise noted.
- 2) Site infrastructure has been removed; shown for illustrative purposes only.
- 3) Buried infrastructure has been spatially projected.
- 4) RED value indicates concentration greater than COGCC table 910-1 soil standard (see table below).

GPS – Global Positioning System  
 ug/L – Micrograms per liter

Groundwater 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

0 ft. 20 ft. 40 ft.

Image Source: Google Earth 2015

DATE: 8/11/2020

DESIGNED BY: JW

DRAWN BY: MG

**TASMAN**  
 GEOSCIENCES

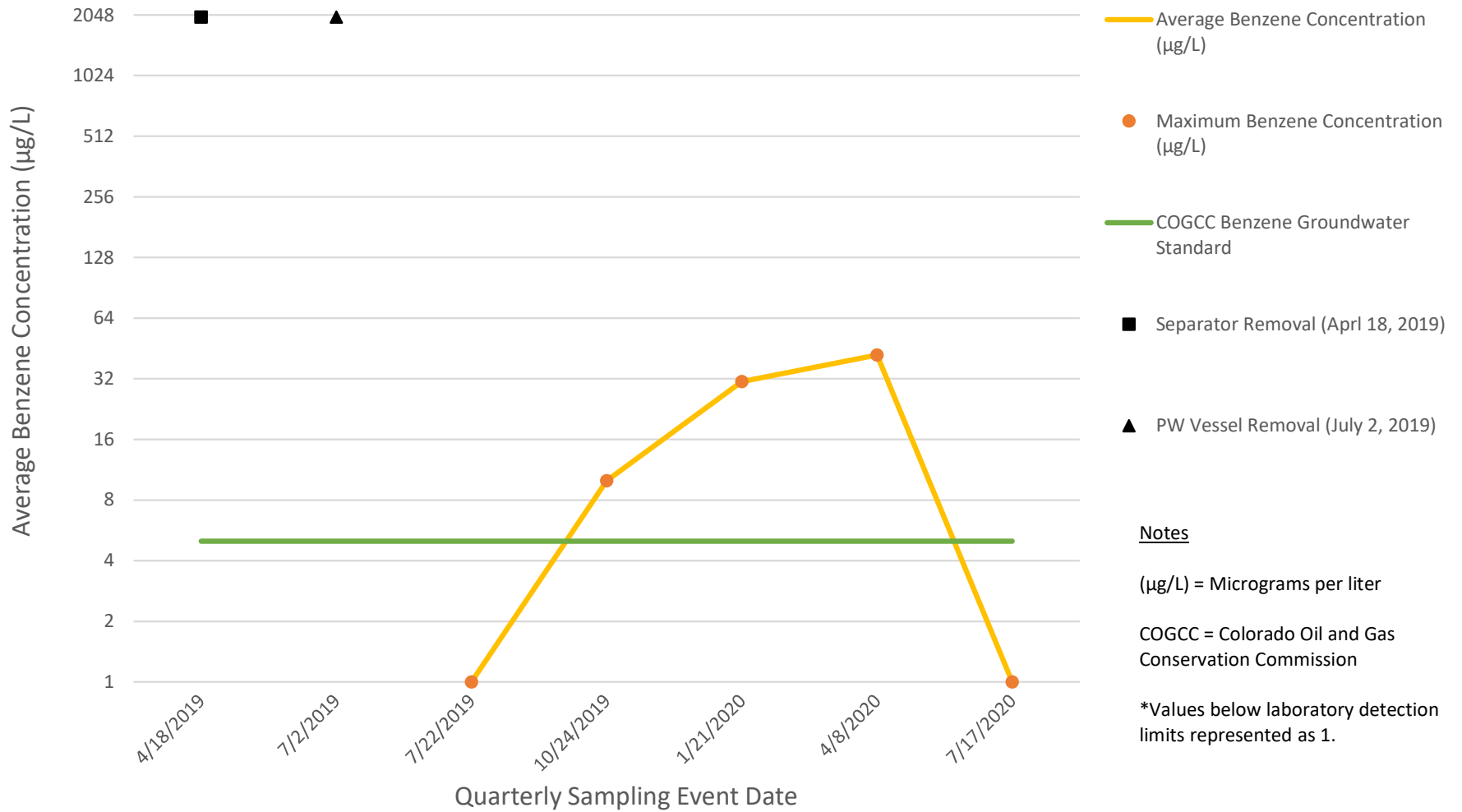
Tasman Geosciences, Inc.  
 6855 W 119<sup>th</sup> Avenue  
 Broomfield, CO 80020

**Noble Energy, Inc. – DJ Basin**  
**UPRC 33-4F, 5F, Hunt Federal K 33-19**  
 SWNW, Section 33, Township 4 North, Range 66 West  
 Weld County, Colorado

Groundwater Analytical  
 Results Map  
 (07/17/2020)

FIGURE  
 5

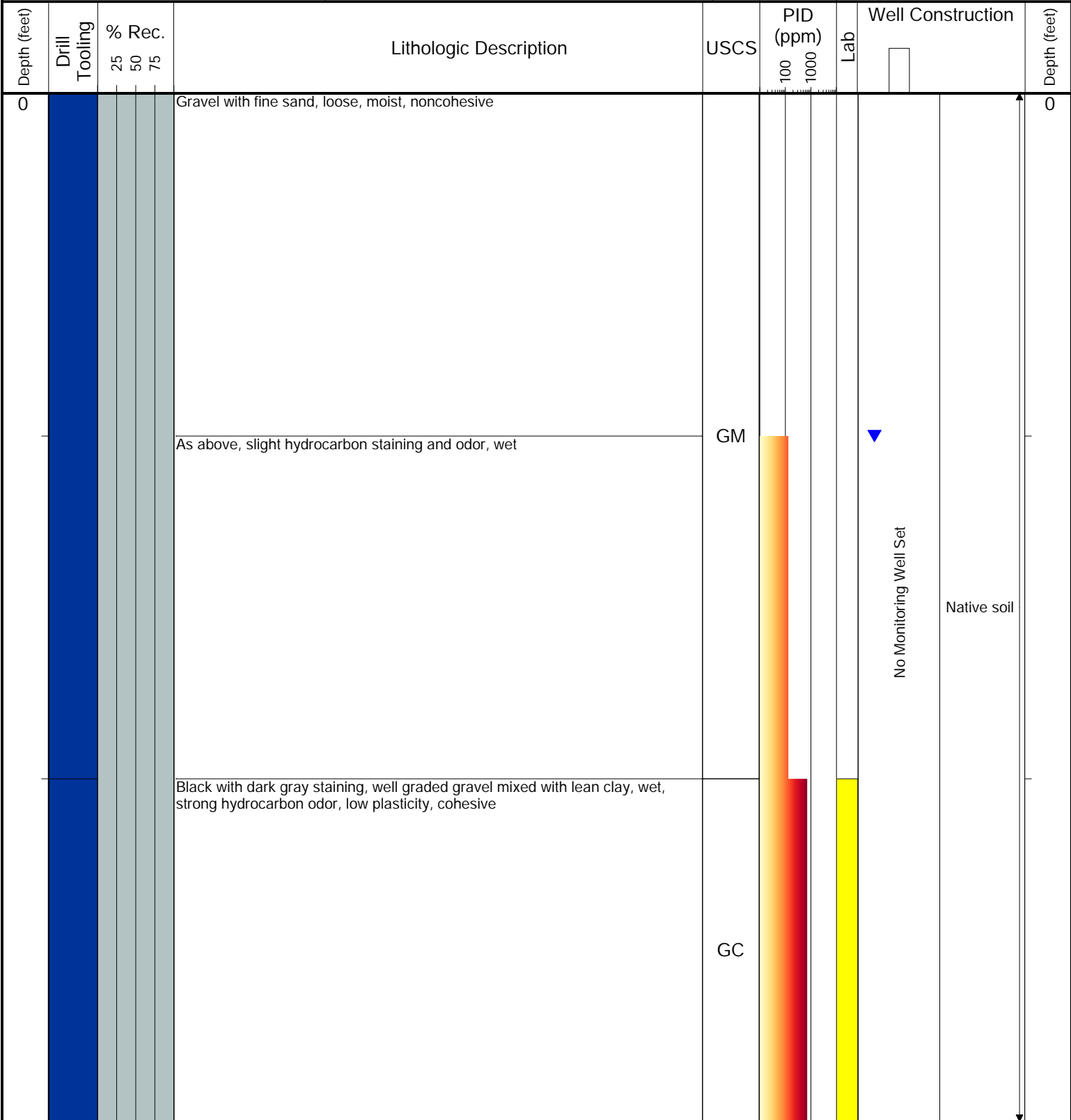
Figure 6  
 UPRC 33-4F, 5F, HUNT FEDERAL K 33-19  
 Average Concentration VS Quarterly Sampling Event Date





6855 W 119th Avenue  
Broomfield, CO, 80020

CLIENT: Noble Energy	UPRC 33-4F, 5F, Hunt Federal K 33-19
LOGGED BY: Max Garza	
PROJECT MANAGER: Brandon Bruns	BORING / WELL ID: SS11@3'
DRILLING CONTRACTOR: Tasman Geosciences	
DRILLING EQUIPMENT: Hand Auger	LOCATION: Weld County, Colorado
DRILL BIT SIZE (INCHES): 4"	LATITUDE (WGS 84): Not Measured
DATE STARTED - COMPLETED: 43987	LONGITUDE (WGS 84): Not Measured
TOTAL WELL DEPTH (FT. BGS): 3	CASING ELEVATION (FT. AMSL): N/A
DEPTH TO WATER (FT. BGS): 1	GROUND ELEVATION (FT. AMSL): N/A



**Drilling / Sample Method:**

- Macro-Core
- Solid Stem Auger
- Hand Auger

**Laboratory Sample Types:**

- Geotechnical Lab
- Analytical Chemistry Lab
- Geotechnical & Analytical Chemistry Lab

# Summit Scientific

---

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

June 16, 2020

Brandon Bruns

Tasman Geosciences

6855 W. 119th Ave.

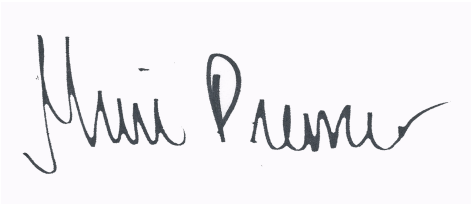
Broomfield, CO 80020

RE: Noble - UPRC 33-4F, 5F, Hunt Federal K33-19

Work Order #2006064

Enclosed are the results of analyses for samples received by Summit Scientific on 06/05/20 17:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Muri Premer". The signature is written in a cursive style with a large initial "M" and a long, sweeping underline.

Muri Premer For Paul Shrewsbury  
President



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

Project: Noble - UPRC 33-4F, 5F, Hunt Federal K33-19

Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
06/16/20 15:37

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS11@3'	2006064-01	Soil	06/05/20 11:30	06/05/20 17:00

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

2006064

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

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: UPRC 33-4F, 5F, Hunt Federal K 33-19  
 Sampler Name: Max Garza Project Number: N/A

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested				Special Instructions
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	8260 BTEX	8260B GBTEXN	8015 DRO	
1	SS1103'	6/5/20	1130	1			X			X			X	X		
2																
3																
4																
5																
6																
7																
8																
9																
10																

Relinquished by: <u>Max R</u> Date/Time: <u>6/5/20</u> <u>1330</u>	Received by: <u>Tasman's Lock Box</u> Date/Time: <u>6/5/20</u> <u>1330</u>	Turn Around Time (Check) Same Day <input type="checkbox"/> 72 hours 24 hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/> 48 hours <input type="checkbox"/>	Notes:
Relinquished by: <u>Tasman's Lock Box</u> Date/Time: <u>06/05/2020</u> <u>1700</u>	Received by: <u>[Signature]</u> Date/Time: <u>06/05/2020</u> <u>1700</u>	Sample Integrity: Temperature Upon Receipt: <u>4.8</u> Samples Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No	
Relinquished by:	Received by:		

**Sample Receipt Checklist**

S2 Work Order 2006064

Client: Noble / Abunyan

Client Project ID: ORC 33-4F, SF

AWTJ Federal  
K 33-19

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

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

Temp (°C)	<u>4.8</u>
-----------	------------

Thermometer ID: 61857155-K

	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 provided that there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact (1)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided (1)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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? <b>If yes, contact client and note in narrative.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling) (1)? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2 (1)? Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Additional Comments (if any):

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

[Signature]  
Custodian Printed Name or Initials

[Signature]  
Signature of Custodian

06/07/2020  
Date/Time



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

Project: Noble - UPRC 33-4F, 5F, Hunt Federal K33-19

Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
06/16/20 15:37

**SS11@3'**  
**2006064-01 (Soil)**

**Summit Scientific**

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

Date Sampled: **06/05/20 11:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	2006104	06/08/20	06/16/20	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>0.044</b>	0.0050		"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>0.15</b>	0.010		"	"	"	"	"	"	
Naphthalene	ND	0.010		"	"	"	"	"	"	
<b>Gasoline Range Hydrocarbons</b>	<b>58</b>	50		"	"	"	"	"	"	

Date Sampled: **06/05/20 11:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		126 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		137 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		337 %		21-167		"	"	"	"	S-02

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **06/05/20 11:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	2006105	06/08/20	06/09/20	EPA 8015M	

Date Sampled: **06/05/20 11:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl		114 %		30-150		"	"	"	"	

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 - UPRC 33-4F, 5F, Hunt Federal K33-19

Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
06/16/20 15:37

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

#### Summit Scientific

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

#### Batch 2006104 - EPA 5030 Soil MS

##### Blank (2006104-BLK1)

Prepared & Analyzed: 06/08/20

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
Naphthalene	ND	0.010	"							
Gasoline Range Hydrocarbons	ND	50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0311		"	0.0400		77.8	23-173			
Surrogate: Toluene-d8	0.0340		"	0.0400		84.9	20-170			
Surrogate: 4-Bromofluorobenzene	0.0406		"	0.0400		102	21-167			

##### LCS (2006104-BS1)

Prepared & Analyzed: 06/08/20

Benzene	0.0762	0.0020	mg/kg	0.100		76.2	70-130			
Toluene	0.0942	0.0050	"	0.100		94.2	70-130			
Ethylbenzene	0.102	0.0050	"	0.100		102	70-130			
m,p-Xylene	0.193	0.010	"	0.200		96.7	70-130			
o-Xylene	0.0982	0.0050	"	0.100		98.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0247		"	0.0400		61.7	23-173			
Surrogate: Toluene-d8	0.0400		"	0.0400		99.9	20-170			
Surrogate: 4-Bromofluorobenzene	0.0357		"	0.0400		89.3	21-167			

##### Matrix Spike (2006104-MS1)

Source: 2006082-01

Prepared & Analyzed: 06/08/20

Benzene	0.0811	0.0020	mg/kg	0.100	ND	81.1	70-130			
Toluene	0.0748	0.0050	"	0.100	ND	74.8	70-130			
Ethylbenzene	0.0862	0.0050	"	0.100	ND	86.2	70-130			
m,p-Xylene	0.155	0.010	"	0.200	ND	77.4	70-130			
o-Xylene	0.0781	0.0050	"	0.100	ND	78.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0271		"	0.0400		67.8	23-173			
Surrogate: Toluene-d8	0.0415		"	0.0400		104	20-170			
Surrogate: 4-Bromofluorobenzene	0.0389		"	0.0400		97.4	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 - UPRC 33-4F, 5F, Hunt Federal K33-19

Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
06/16/20 15:37

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

**Summit Scientific**

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

**Batch 2006104 - EPA 5030 Soil MS**

Matrix Spike Dup (2006104-MSD1)	Source: 2006082-01			Prepared & Analyzed: 06/08/20						
Benzene	0.0763	0.0020	mg/kg	0.100	ND	76.3	70-130	6.14	30	
Toluene	0.0924	0.0050	"	0.100	ND	92.4	70-130	21.0	30	
Ethylbenzene	0.0766	0.0050	"	0.100	ND	76.6	70-130	11.8	30	
m,p-Xylene	0.145	0.010	"	0.200	ND	72.3	70-130	6.93	30	
o-Xylene	0.0723	0.0050	"	0.100	ND	72.3	70-130	7.70	30	
Surrogate: 1,2-Dichloroethane-d4	0.0244		"	0.0400		61.1	23-173			
Surrogate: Toluene-d8	0.0389		"	0.0400		97.3	20-170			
Surrogate: 4-Bromofluorobenzene	0.0375		"	0.0400		93.8	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 - UPRC 33-4F, 5F, Hunt Federal K33-19

Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
06/16/20 15:37

**Extractable Petroleum Hydrocarbons by 8015 - Quality Control**  
**Summit Scientific**

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

**Batch 2006105 - EPA 3550A**

**Blank (2006105-BLK1)**

Prepared & Analyzed: 06/08/20

C10-C28 (DRO) ND 50 mg/kg

**LCS (2006105-BS1)**

Prepared & Analyzed: 06/08/20

C10-C28 (DRO) 623 50 mg/kg 500 125 70-130

**Matrix Spike (2006105-MS1)**

Source: 2006052-01

Prepared & Analyzed: 06/08/20

C10-C28 (DRO) 600 50 mg/kg 500 28.6 114 70-130

**Matrix Spike Dup (2006105-MSD1)**

Source: 2006052-01

Prepared & Analyzed: 06/08/20

C10-C28 (DRO) 587 50 mg/kg 500 28.6 112 70-130 2.16 20

Summit Scientific

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



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

Project: Noble - UPRC 33-4F, 5F, Hunt Federal K33-19

Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
06/16/20 15:37

### 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.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

# Summit Scientific

---

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

July 23, 2020

Brandon Bruns

Tasman Geosciences

6855 W. 119th Ave.

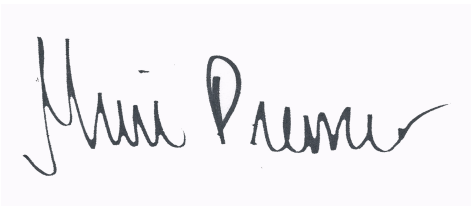
Broomfield, CO 80020

RE: Noble - UPRC 33-4F, 5F, Hunt Federal K33-19

Work Order #2007166

Enclosed are the results of analyses for samples received by Summit Scientific on 07/17/20 17:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Muri Premer". The signature is written in a cursive style with a large initial "M" and a long, sweeping underline.

Muri Premer For Paul Shrewsbury

President



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

Project: Noble - UPRC 33-4F, 5F, Hunt Federal K33-19

Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
07/23/20 16:17

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH01	2007166-01	Water	07/17/20 13:35	07/17/20 17:00
BH02	2007166-02	Water	07/17/20 13:20	07/17/20 17:00
BH03	2007166-03	Water	07/17/20 13:30	07/17/20 17:00
BH04	2007166-04	Water	07/17/20 13:20	07/17/20 17:00
BH05	2007166-05	Water	07/17/20 13:50	07/17/20 17:00
BH06	2007166-06	Water	07/17/20 13:40	07/17/20 17:00
BH07	2007166-07	Water	07/17/20 12:50	07/17/20 17:00
BH08	2007166-08	Water	07/17/20 13:10	07/17/20 17:00

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

S<sub>2</sub>

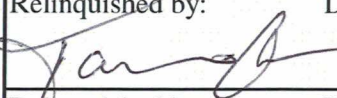

2007166

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

Page 1 of 1

Client: Noble / Tasman Project Manager: Brandon Bruns, Invoice: Jacob Evans  
Address: 6855 W. 119<sup>th</sup> Avenue E-Mail: Bbruns@tasman-geo.com  
City/State/Zip: Broomfield / CO/ 80020  
Phone: 303-487-1228 Project Name: UPRC 33-4F, 5F, Hunt Federal K33-19  
Sampler Name: Tanner Cook Project Number:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested				Special Instructions
					HCl	HNO <sub>3</sub>	None	Other	Water	Soil	Air-Canister #	Other	8260 BTEX	8260B GBTEXN	8015 DRO	pH, EC, SAR	
1	BH01	7/17/20	1335	3			X		X				X				
2	BH02	↓	1320	↓													
3	BH03	↓	1330	↓													
4	BH04	↓	1320	↓													
5	BH05	↓	1350	↓													
6	BH06	↓	1340	↓													
7	BH07	↓	1250	↓													
8	BH08	↓	1310	↓													
9	~~~~~																
10	~~~~~																

Relinquished by:  Date/Time: 7/17/20 1500	Received by: Tasman's Lock Box Date/Time: 7/17/20 1500	<b>Turn Around Time</b> (Check) Same Day ___ 72 hours ___ 24 hours ___ Standard <input checked="" type="checkbox"/> 48 hours ___ <b>Sample Integrity:</b> Temperature Upon Receipt: 3.4 Samples Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No	<b>Notes:</b>
Relinquished by: Tasman's Lock Box Date/Time: 07/17/2020 1700	Received by:  Date/Time: 07/17/2020 1700		
Relinquished by:	Received by:		

**Sample Receipt Checklist**

S2 Work Order 2007166

Client: Wobegit/Asman Client Project ID: UPRC 33-4F, SF Human Federal

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other \_\_\_\_\_ Airbill #: 1C33-19

Matrix (check all that apply): \_\_\_\_\_ Air \_\_\_\_\_ Soil/Solid \_\_\_\_\_ X Water \_\_\_\_\_ Other: \_\_\_\_\_  
(Describe)

Temp (°C)	<u>3.4</u>
-----------	------------

Thermometer ID: 61857155-K

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

Additional Comments (if any):

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

BB  
Custodian Printed Name or Initials

[Signature]  
Signature of Custodian

09/17/2020  
Date/Time



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

Project: Noble - UPRC 33-4F, 5F, Hunt Federal K33-19

Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
07/23/20 16:17

**BH01**  
**2007166-01 (Water)**

**Summit Scientific**

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

Date Sampled: **07/17/20 13:35**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	1.0	ug/l	1	2007210	07/21/20	07/22/20	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **07/17/20 13:35**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		55.1 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		104 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		137 %	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 - UPRC 33-4F, 5F, Hunt Federal K33-19

Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
07/23/20 16:17

**BH02**  
**2007166-02 (Water)**

**Summit Scientific**

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

Date Sampled: **07/17/20 13:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	2007210	07/21/20	07/22/20	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	

Date Sampled: **07/17/20 13:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		53.7 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		110 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		91.8 %		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 - UPRC 33-4F, 5F, Hunt Federal K33-19

Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
07/23/20 16:17

**BH03**  
**2007166-03 (Water)**

**Summit Scientific**

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

Date Sampled: **07/17/20 13:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	2007210	07/21/20	07/22/20	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	

Date Sampled: **07/17/20 13:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		55.4 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		108 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		92.6 %		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 - UPRC 33-4F, 5F, Hunt Federal K33-19

Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
07/23/20 16:17

**BH04**  
**2007166-04 (Water)**

**Summit Scientific**

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

Date Sampled: **07/17/20 13:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	2007210	07/21/20	07/22/20	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	

Date Sampled: **07/17/20 13:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		52.2 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		107 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.0 %		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 - UPRC 33-4F, 5F, Hunt Federal K33-19

Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
07/23/20 16:17

**BH05**  
**2007166-05 (Water)**

**Summit Scientific**

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

Date Sampled: **07/17/20 13:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	2007210	07/21/20	07/22/20	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	

Date Sampled: **07/17/20 13:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		53.4 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		107 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.7 %		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 - UPRC 33-4F, 5F, Hunt Federal K33-19

Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
07/23/20 16:17

**BH06**  
**2007166-06 (Water)**

**Summit Scientific**

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

Date Sampled: **07/17/20 13:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	2007210	07/21/20	07/22/20	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	

Date Sampled: **07/17/20 13:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		53.0 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		104 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		92.6 %		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 - UPRC 33-4F, 5F, Hunt Federal K33-19

Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
07/23/20 16:17

**BH07**  
**2007166-07 (Water)**

**Summit Scientific**

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

Date Sampled: **07/17/20 12:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	2007210	07/21/20	07/22/20	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	

Date Sampled: **07/17/20 12:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		51.2 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		107 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		91.9 %		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 - UPRC 33-4F, 5F, Hunt Federal K33-19

Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
07/23/20 16:17

**BH08**  
**2007166-08 (Water)**

**Summit Scientific**

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

Date Sampled: **07/17/20 13:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	2007210	07/21/20	07/22/20	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	

Date Sampled: **07/17/20 13:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		52.6 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		98.0 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.1 %		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 - UPRC 33-4F, 5F, Hunt Federal K33-19

Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
07/23/20 16:17

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

#### Summit Scientific

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

#### Batch 2007210 - EPA 5030 Water MS

##### Blank (2007210-BLK1)

Prepared: 07/21/20 Analyzed: 07/22/20

Benzene	ND	1.0	ug/l								
Toluene	ND	1.0	"								
Ethylbenzene	ND	1.0	"								
Xylenes (total)	ND	2.0	"								
Surrogate: 1,2-Dichloroethane-d4	8.79		"	13.3		65.9	23-173				
Surrogate: Toluene-d8	13.8		"	13.3		103	20-170				
Surrogate: 4-Bromofluorobenzene	12.4		"	13.3		92.9	21-167				

##### LCS (2007210-BS1)

Prepared: 07/21/20 Analyzed: 07/22/20

Benzene	29.1	1.0	ug/l	33.3		87.4	51-132				
Toluene	35.7	1.0	"	33.3		107	51-138				
Ethylbenzene	37.8	1.0	"	33.3		114	58-146				
m,p-Xylene	75.3	2.0	"	66.7		113	57-144				
o-Xylene	35.8	1.0	"	33.3		107	53-146				
Surrogate: 1,2-Dichloroethane-d4	7.69		"	13.3		57.7	23-173				
Surrogate: Toluene-d8	13.6		"	13.3		102	20-170				
Surrogate: 4-Bromofluorobenzene	12.6		"	13.3		94.7	21-167				

##### Matrix Spike (2007210-MS1)

Source: 2007165-01

Prepared: 07/21/20 Analyzed: 07/22/20

Benzene	30.2	1.0	ug/l	33.3	ND	90.6	34-141				
Toluene	32.8	1.0	"	33.3	ND	98.5	27-151				
Ethylbenzene	39.7	1.0	"	33.3	ND	119	29-160				
m,p-Xylene	77.6	2.0	"	66.7	ND	116	20-166				
o-Xylene	36.8	1.0	"	33.3	ND	110	33-159				
Surrogate: 1,2-Dichloroethane-d4	8.27		"	13.3		62.0	23-173				
Surrogate: Toluene-d8	12.8		"	13.3		96.3	20-170				
Surrogate: 4-Bromofluorobenzene	12.8		"	13.3		96.1	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 - UPRC 33-4F, 5F, Hunt Federal K33-19

Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
07/23/20 16:17

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

**Summit Scientific**

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

**Batch 2007210 - EPA 5030 Water MS**

**Matrix Spike Dup (2007210-MSD1)**

Source: 2007165-01

Prepared: 07/21/20 Analyzed: 07/22/20

Benzene	30.0	1.0	ug/l	33.3	ND	90.1	34-141	0.531	30	
Toluene	31.8	1.0	"	33.3	ND	95.4	27-151	3.22	30	
Ethylbenzene	36.9	1.0	"	33.3	ND	111	29-160	7.13	30	
m,p-Xylene	72.5	2.0	"	66.7	ND	109	20-166	6.70	30	
o-Xylene	35.1	1.0	"	33.3	ND	105	33-159	4.62	30	
Surrogate: 1,2-Dichloroethane-d4	10.4		"	13.3		78.4	23-173			
Surrogate: Toluene-d8	12.3		"	13.3		92.6	20-170			
Surrogate: 4-Bromofluorobenzene	12.4		"	13.3		93.3	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 - UPRC 33-4F, 5F, Hunt Federal K33-19

Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
07/23/20 16:17

### 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