

**FEATHER 31-15**  
**PRODUCED WATER TANK RELEASE**  
**API #: 05-123 -21075**  
**Spill/Release Point ID #: 444673**  
**Remediation Project #: 10120**

**FOURTH QUARTER 2017**  
**Analytical Tables, Figures,**  
**and Laboratory Reports**

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**PREPARED ON BEHALF OF**

Noble Energy, Inc.  
2115 117th Avenue  
Greeley, Colorado 80631



**PREPARED BY**

Tasman Geosciences, Inc.  
6899 Pecos Street, Unit C  
Denver, CO 80221



**TABLE 1**  
**SOIL ANALYTICAL DATA**  
**NOBLE ENERGY, INC. - FEATHER 31-15 PRODUCED WATER TANK RELEASE**

| Soil Sample ID        | Date     | Benzene (mg/kg) | Toluene (mg/kg) | Ethylbenzene (mg/kg) | Total Xylenes (mg/kg) | TPH-GRO (mg/kg) | TPH-DRO (mg/kg) | Naphthalene (mg/kg) |
|-----------------------|----------|-----------------|-----------------|----------------------|-----------------------|-----------------|-----------------|---------------------|
| <b>COGCC Standard</b> |          | <b>0.17</b>     | <b>85</b>       | <b>100</b>           | <b>175</b>            | <b>500</b>      |                 | <b>23</b>           |
| BH01@10-13            | 01/26/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | 70              | <0.010              |
| BH02@6                | 01/26/16 | 0.14            | 0.37            | <0.0050              | <b>430</b>            | <b>9,000</b>    | <b>2,200</b>    | 12                  |
| BH03@17.5-20          | 01/26/16 | <b>0.17</b>     | 0.63            | 0.14                 | 2.2                   | <50             | 85              | 0.063               |
| BH04@6-10             | 01/26/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | 53              | <0.010              |
| BH05@10-12.5          | 01/26/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH06@6-10             | 01/26/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | 68              | <0.010              |
| BH07@10-15            | 01/26/16 | <b>0.56</b>     | 1.2             | 0.12                 | 0.11                  | <50             | <50             | 0.011               |
| BH08@15-17.5          | 01/26/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | 62              | <0.010              |
| BH09@5-10             | 01/26/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| SS01@16               | 03/02/16 | <b>0.29</b>     | 0.21            | 0.082                | 2.4                   | <50             | <50             | 0.049               |
| SS02@16               | 03/02/16 | <b>0.31</b>     | 0.72            | 0.094                | 1.6                   | <50             | <50             | 0.032               |
| SS03@16               | 03/03/16 | 0.13            | 0.47            | 0.13                 | 2.0                   | <50             | <50             | 0.034               |
| SS04@16               | 03/03/16 | <b>0.19</b>     | 0.56            | 0.095                | 1.5                   | <50             | <50             | 0.042               |
| SS05@16               | 03/03/16 | <b>0.65</b>     | 2.4             | 0.31                 | 5.2                   | <b>710</b>      | <b>&lt;50</b>   | 0.11                |
| SS06@16               | 03/03/16 | <b>2.8</b>      | 8.7             | 0.61                 | 10                    | 100             | <50             | 0.20                |
| SS07@16               | 03/03/16 | <b>4.2</b>      | 16              | 3.2                  | 53                    | <b>560</b>      | <b>&lt;50</b>   | 0.80                |
| BH10@8'               | 08/25/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH11@8'               | 08/25/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH12@7'               | 08/25/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH13@8'               | 08/25/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH14@8'               | 08/25/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH15@7'               | 08/25/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH16@11'              | 08/25/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH17@6-7'             | 09/21/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH18@8-9'             | 09/21/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH19@6-7'             | 09/21/16 | <0.0020         | 0.0060          | <0.0050              | 0.013                 | <50             | <50             | <0.010              |
| BH20@7-8'             | 09/21/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH21@4-6'             | 09/21/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH22@4-6'             | 09/21/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH23@6-7'             | 09/22/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH24@4-5'             | 09/22/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH25@4-6'             | 09/22/16 | <0.0020         | <0.0050         | <0.0050              | 0.026                 | <50             | <50             | <0.010              |
| BH26@4-6'             | 09/22/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH27@4-6'             | 09/22/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH28@2-4'             | 09/22/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH29@4-6'             | 09/22/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH30@4-6'             | 10/19/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH31@6-8'             | 10/19/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH32@4-6'             | 10/19/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH33@0-2'             | 10/25/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |

**TABLE 1**  
**SOIL ANALYTICAL DATA**  
**NOBLE ENERGY, INC. - FEATHER 31-15 PRODUCED WATER TANK RELEASE**

| Soil Sample ID        | Date     | Benzene (mg/kg) | Toluene (mg/kg) | Ethylbenzene (mg/kg) | Total Xylenes (mg/kg) | TPH-GRO (mg/kg) | TPH-DRO (mg/kg) | Naphthalene (mg/kg) |
|-----------------------|----------|-----------------|-----------------|----------------------|-----------------------|-----------------|-----------------|---------------------|
| <b>COGCC Standard</b> |          | <b>0.17</b>     | <b>85</b>       | <b>100</b>           | <b>175</b>            | <b>500</b>      |                 | <b>23</b>           |
| BH34@0-2'             | 10/25/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH35@4-6'             | 10/25/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH36@0-2'             | 10/25/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH37@0-2'             | 10/25/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH38@6-8'             | 10/25/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH39@4-6'             | 10/25/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH40@4-6'             | 10/26/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH41@0-2'             | 10/26/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH42@0-2'             | 10/26/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH43@4-6'             | 10/26/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH44@8-10'            | 10/26/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH45@0-4'             | 10/26/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH46@2-4'             | 12/21/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH47@4-6'             | 12/21/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH48@6-8'             | 12/21/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH49@4-6'             | 12/21/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH50@6-8'             | 12/21/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH51@4-6'             | 12/21/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH52@2-4'             | 12/22/16 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH53@10-12'           | 05/12/17 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH54@9-11'            | 05/12/17 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |
| BH55@10-12'           | 05/12/17 | <0.0020         | <0.0050         | <0.0050              | <0.010                | <50             | <50             | <0.010              |

| Soil Sample ID | Date     | EC (mmhos/cm)     | pH         | SAR           |
|----------------|----------|-------------------|------------|---------------|
|                |          | <b>4 or 2x BG</b> | <b>6-9</b> | <b>&lt;12</b> |
| BH02@6         | 01/26/16 | 1.70              | 7.02       | 11.1          |

**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

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

EC = Specific conductance

mmhos/cm = Millimhos per centimeter

BG = Background

SAR = Sodium adsorption ratio

Soil standards referenced from COGCC Table 910-1

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

**TABLE 2**  
**GROUNDWATER ANALYTICAL DATA**  
**NOBLE ENERGY, INC. - FEATHER 31-15 PRODUCED WATER TANK RELEASE**

| Monitoring Well ID                | Date     | Benzene (µg/L)                                 | Toluene (µg/L) | Ethylbenzene (µg/L) | Total Xylenes (µg/L) |
|-----------------------------------|----------|--|----------------|---------------------|----------------------|
| COGCC Groundwater Standard (ug/L) |          | 5  | 560            | 700                 | 1,400                |
| BH03                              | 01/28/16 | 940  | 3,700          | 430                 | 7,100                |
| BH03                              | 09/01/16 | Removed from Monitoring Network-Well Destroyed |                |                     |                      |
| BH08                              | 01/28/16 | <1.0   | 1.1            | <1.0                | 3.2                  |
| BH08                              | 09/01/16 | <1.0   | <1.0           | <1.0                | <1.0                 |
| BH08                              | 11/03/16 | <1.0   | <1.0           | <1.0                | <1.0                 |
| BH08                              | 01/24/17 | <1.0   | <1.0           | <1.0                | <1.0                 |
| BH08                              | 04/05/17 | <1.0   | <1.0           | <1.0                | <2.0                 |
| BH08                              | 07/27/17 | <1.0   | <1.0           | <1.0                | <2.0                 |
| BH08                              | 10/30/17 | <1.0   | <1.0           | <1.0                | <2.0                 |
| BH10                              | 09/01/16 | <1.0   | <1.0           | <1.0                | <1.0                 |
| BH10                              | 11/03/16 | <1.0   | <1.0           | <1.0                | <1.0                 |
| BH10                              | 01/24/17 | <1.0   | <1.0           | <1.0                | <1.0                 |
| BH10                              | 04/05/17 | <1.0   | <1.0           | <1.0                | <2.0                 |
| BH10                              | 07/27/17 | <1.0   | <1.0           | <1.0                | <2.0                 |
| BH10                              | 10/30/17 | <1.0   | <1.0           | <1.0                | <2.0                 |
| BH11                              | 09/01/16 | <1.0   | <1.0           | <1.0                | 18                   |
| BH11                              | 11/03/16 | 57   | 70             | 24                  | 260                  |
| BH11                              | 01/24/17 | <1.0   | <1.0           | <1.0                | <1.0                 |
| BH11                              | 04/05/17 | 13   | <1.0           | 8.1                 | 30                   |
| BH11                              | 07/27/17 | 9.4  | <1.0           | 20                  | 13                   |
| BH11                              | 10/30/17 | <1.0   | <1.0           | <1.0                | <2.0                 |
| BH12                              | 09/01/16 | <1.0   | <1.0           | <1.0                | <1.0                 |
| BH12                              | 11/03/16 | <1.0   | <1.0           | <1.0                | <1.0                 |
| BH12                              | 01/24/17 | <1.0   | <1.0           | <1.0                | <1.0                 |
| BH12                              | 04/05/17 | <1.0   | <1.0           | <1.0                | <2.0                 |
| BH12                              | 07/27/17 | <1.0   | <1.0           | <1.0                | <2.0                 |
| BH12                              | 10/30/17 | <1.0   | <1.0           | <1.0                | <2.0                 |
| BH13                              | 09/01/16 | 5,000  | 4,700          | <1.0                | 16,000               |
| BH13                              | 11/03/16 | 4,800  | 2,900          | 690                 | 15,000               |
| BH13                              | 01/24/17 | 3,000  | 610            | 380                 | 13,000               |
| BH13                              | 04/05/17 | 2,900  | 670            | 1,100               | 11,000               |
| BH13                              | 07/27/17 | 1,000  | 190            | 470                 | 3,200                |
| BH13                              | 10/30/17 | 470  | 27             | 2.3                 | 2,600                |
| BH14                              | 09/01/16 | <1.0   | <1.0           | <1.0                | <1.0                 |
| BH14                              | 11/03/16 | <1.0   | <1.0           | <1.0                | <1.0                 |
| BH14                              | 01/24/17 | <1.0   | <1.0           | <1.0                | <1.0                 |
| BH14                              | 04/05/17 | <1.0   | <1.0           | <1.0                | <2.0                 |
| BH14                              | 07/27/17 | <1.0   | <1.0           | <1.0                | <2.0                 |
| BH14                              | 10/30/17 | <1.0   | <1.0           | <1.0                | <2.0                 |



**TABLE 2**  
**GROUNDWATER ANALYTICAL DATA**  
**NOBLE ENERGY, INC. - FEATHER 31-15 PRODUCED WATER TANK RELEASE**

| Monitoring Well ID                       | Date     | Benzene (µg/L) | Toluene (µg/L) | Ethylbenzene (µg/L) | Total Xylenes (µg/L) |
|--|----------|----------------|----------------|---------------------|----------------------|
| <b>COGCC Groundwater Standard (ug/L)</b> |          | <b>5</b>       | <b>560</b>     | <b>700</b>          | <b>1,400</b>         |
| BH15                                     | 09/01/16 | 4,300          | 8,000          | 410                 | 7,900                |
| BH15                                     | 11/03/16 | 2,300          | 4,700          | 380                 | 6,500                |
| BH15                                     | 01/24/17 | 8,400          | 2,800          | 600                 | 10,000               |
| BH15                                     | 04/05/17 | 4,000          | 170            | 510                 | 2,900                |
| BH15                                     | 07/27/17 | 4,500          | 990            | 510                 | 2,300                |
| BH15                                     | 10/30/17 | 1,700          | 210            | 320                 | 1,600                |
| BH16                                     | 09/01/16 | 32,000         | 51,000         | 1,100               | 34,000               |
| BH16                                     | 11/03/16 | 22,000         | 34,000         | 1,500               | 23,000               |
| BH16                                     | 01/24/17 | 21,000         | 31,000         | 680                 | 29,000               |
| BH16                                     | 04/05/17 | 26,000         | 20,000         | 2,200               | 33,000               |
| BH16                                     | 07/27/17 | 17,000         | 18,000         | 2,400               | 34,000               |
| BH16                                     | 10/30/17 | 18,000         | 21,000         | 1,600               | 23,000               |
| BH17                                     | 09/23/16 | <1.0           | <1.0           | <1.0                | <1.0                 |
| BH17                                     | 11/03/16 | <1.0           | <1.0           | <1.0                | <1.0                 |
| BH17                                     | 01/24/17 | <1.0           | <1.0           | <1.0                | <1.0                 |
| BH17                                     | 04/05/17 | <1.0           | <1.0           | <1.0                | <2.0                 |
| BH17                                     | 07/27/17 | <1.0           | <1.0           | <1.0                | <2.0                 |
| BH17                                     | 10/30/17 | <1.0           | <1.0           | <1.0                | <2.0                 |
| BH18                                     | 09/23/16 | <1.0           | <1.0           | <1.0                | <1.0                 |
| BH18                                     | 11/03/16 | <1.0           | <1.0           | <1.0                | <1.0                 |
| BH18                                     | 01/24/17 | <1.0           | <1.0           | <1.0                | <1.0                 |
| BH18                                     | 04/05/17 | <1.0           | <1.0           | <1.0                | <2.0                 |
| BH18                                     | 07/27/17 | <1.0           | <1.0           | <1.0                | <2.0                 |
| BH18                                     | 10/30/17 | <1.0           | <1.0           | <1.0                | <2.0                 |
| BH19                                     | 09/23/16 | 1,000          | 500            | 72                  | 1,300                |
| BH19                                     | 11/03/16 | 8,000          | 3,700          | 520                 | 9,100                |
| BH19                                     | 01/24/17 | 5,400          | 1.2            | <1.0                | 3,100                |
| BH19                                     | 04/05/17 | 5,600          | <1.0           | 560                 | 1,700                |
| BH19                                     | 07/27/17 | 280            | 44             | <1.0                | 230                  |
| BH19                                     | 10/30/17 | 1,800          | 1.6            | 140                 | 430                  |
| BH20                                     | 09/23/16 | <1.0           | <1.0           | <1.0                | 280                  |
| BH20                                     | 11/03/16 | <1.0           | <1.0           | <1.0                | <1.0                 |
| BH20                                     | 01/24/17 | <1.0           | <1.0           | <1.0                | <1.0                 |
| BH20                                     | 04/05/17 | <1.0           | <1.0           | <1.0                | <2.0                 |
| BH20                                     | 07/27/17 | <1.0           | <1.0           | <1.0                | <2.0                 |
| BH20                                     | 10/30/17 | <1.0           | <1.0           | <1.0                | <2.0                 |
| BH21                                     | 09/23/16 | 2,400          | 2,800          | 470                 | 1,500                |
| BH21                                     | 11/03/16 | 5,000          | 12,000         | 560                 | 9,600                |
| BH21                                     | 01/24/17 | 2,900          | 30             | <1.0                | 6,200                |

**TABLE 2**  
**GROUNDWATER ANALYTICAL DATA**  
**NOBLE ENERGY, INC. - FEATHER 31-15 PRODUCED WATER TANK RELEASE**

| Monitoring Well ID                       | Date     | Benzene (µg/L)                            | Toluene (µg/L) | Ethylbenzene (µg/L) | Total Xylenes (µg/L) |
|--|----------|---|----------------|---------------------|----------------------|
| <b>COGCC Groundwater Standard (ug/L)</b> |          | <b>5</b>                                  | <b>560</b>     | <b>700</b>          | <b>1,400</b>         |
| BH21                                     | 04/05/17 | 4,700                                     | <1.0           | 530                 | 3,100                |
| BH21                                     | 07/27/17 | 3,100                                     | <1.0           | 380                 | 130                  |
| BH21                                     | 10/30/17 | 1,900                                     | 150            | 40                  | 6.2                  |
| BH22                                     | 09/23/16 | 8,800                                     | 24,000         | 1,900               | 28,000               |
| BH22                                     | 11/03/16 | 5,500                                     | 10,000         | 670                 | 19,000               |
| BH22                                     | 01/24/17 | 9,100                                     | 13,000         | 2,000               | 51,000               |
| BH22                                     | 04/05/17 | 8,900                                     | 2,800          | 2,000               | 23,000               |
| BH22                                     | 07/27/17 | 4,800                                     | 330            | 750                 | 17,000               |
| BH22                                     | 10/30/17 | 1,800                                     | 91             | 770                 | 3,500                |
| BH23                                     | 09/23/16 | 11,000                                    | 21,000         | 1,400               | 21,000               |
| BH23                                     | 11/03/16 | 6,200                                     | 6,800          | 430                 | 7,900                |
| BH23                                     | 01/24/17 | 4,900                                     | 5,300          | <1.0                | 11,000               |
| BH23                                     | 04/05/17 | 3,800                                     | 4,900          | 420                 | 7,200                |
| BH23                                     | 07/27/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH23                                     | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                |                     |                      |
| BH23R                                    | 10/30/17 | 4,200                                     | 110            | 34                  | 4,000                |
| BH24                                     | 09/23/16 | 13,000                                    | 5,200          | 500                 | 4,200                |
| BH24                                     | 11/03/16 | 12,000                                    | 1,900          | 650                 | 2,400                |
| BH24                                     | 01/24/17 | 6,300                                     | 47             | <1.0                | 4,000                |
| BH24                                     | 04/05/17 | 9,100                                     | 1.0            | 910                 | 950                  |
| BH24                                     | 07/27/17 | 3,500                                     | 2.1            | 3.7                 | 1,200                |
| BH24                                     | 10/30/17 | 660                                       | 3.5            | 340                 | 110                  |
| BH25                                     | 09/23/16 | 5,400                                     | 22,000         | 1,200               | 19,000               |
| BH25                                     | 11/03/16 | 4,500                                     | 15,000         | 1,200               | 20,000               |
| BH25                                     | 01/24/17 | 2,700                                     | 2,400          | <1.0                | 16,000               |
| BH25                                     | 04/05/17 | 3,400                                     | 1,100          | 400                 | 14,000               |
| BH25                                     | 07/27/17 | 2,900                                     | 9.9            | 290                 | 11,000               |
| BH25R                                    | 10/30/17 | 88  | 3.7            | <1.0                | 1,800                |
| BH26                                     | 09/23/16 | 3,900                                     | 8,100          | 890                 | 13,000               |
| BH26                                     | 11/03/16 | 3,700                                     | 3,000          | 780                 | 13,000               |
| BH26                                     | 01/24/17 | 3,300                                     | 210            | <1.0                | 8,900                |
| BH26                                     | 04/05/17 | 3,200                                     | 160            | 250                 | 4,300                |
| BH26                                     | 07/27/17 | 1,600                                     | 13             | 95                  | 1,200                |
| BH26                                     | 10/30/17 | 400                                       | 120            | 350                 | 4,400                |
| BH27                                     | 09/23/16 | 2,100                                     | 7,900          | 660                 | 11,000               |
| BH27                                     | 11/03/16 | 2,300                                     | 7,300          | 790                 | 13,000               |
| BH27                                     | 01/24/17 | 110                                       | 3              | <1.0                | 190                  |
| BH27                                     | 04/05/17 | 1,100                                     | 19             | 120                 | 1,600                |
| BH27                                     | 07/27/17 | 810                                       | <1.0           | 330                 | 480                  |

**TABLE 2**  
**GROUNDWATER ANALYTICAL DATA**  
**NOBLE ENERGY, INC. - FEATHER 31-15 PRODUCED WATER TANK RELEASE**

| Monitoring Well ID                       | Date     | Benzene (µg/L)                            | Toluene (µg/L) | Ethylbenzene (µg/L) | Total Xylenes (µg/L) |
|--|----------|---|----------------|---------------------|----------------------|
| <b>COGCC Groundwater Standard (ug/L)</b> |          | <b>5</b>                                  | <b>560</b>     | <b>700</b>          | <b>1,400</b>         |
| BH27                                     | 10/30/17 | 130                                       | <1.0           | 1.1                 | 46                   |
| BH28                                     | 09/23/16 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH28                                     | 11/03/16 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH28                                     | 01/24/17 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH28                                     | 04/05/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH28                                     | 07/27/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH28                                     | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                |                     |                      |
| BH28R                                    | 10/30/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH29                                     | 09/23/16 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH29                                     | 11/03/16 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH29                                     | 01/24/17 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH29                                     | 04/05/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH29                                     | 07/27/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH29                                     | 10/30/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH30                                     | 10/25/16 | 4,300                                     | 24,000         | 1,100               | 18,000               |
| BH30                                     | 11/03/16 | 3,900                                     | 18,000         | 1,100               | 19,000               |
| BH30                                     | 01/24/17 | 2,200                                     | 11,000         | 670                 | 12,000               |
| BH30                                     | 04/05/17 | 1,400                                     | 4,900          | 640                 | 6,000                |
| BH30                                     | 07/27/17 | 21  | 17             | 3.7                 | 59                   |
| BH30                                     | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                |                     |                      |
| BH30R                                    | 10/30/17 | 1,200                                     | 1,000          | 67                  | 11,000               |
| BH31                                     | 10/25/16 | 4,100                                     | 2,700          | 170                 | 3,900                |
| BH31                                     | 11/03/16 | 3,700                                     | 3,700          | 250                 | 4,800                |
| BH31                                     | 01/24/17 | 1,300                                     | <1.0           | <1.0                | 2,100                |
| BH31                                     | 04/05/17 | 1,500                                     | <1.0           | 99                  | 120                  |
| BH31                                     | 07/27/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH31                                     | 10/30/17 | 1.2                                       | 1.4            | 46                  | 28                   |
| BH32                                     | 10/25/16 | <1.0                                      | 2.8            | <1.0                | 2.7                  |
| BH32                                     | 11/03/16 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH32                                     | 01/24/17 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH32                                     | 04/05/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH32                                     | 07/27/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH32                                     | 10/30/17 | 1.2                                       | <1.0           | <1.0                | 8.3                  |
| BH33                                     | 10/25/16 | 11,000                                    | 17,000         | 790                 | 12,000               |
| BH33                                     | 11/03/16 | 10,000                                    | 18,000         | 870                 | 15,000               |
| BH33                                     | 01/24/17 | <1.0                                      | 17             | 1.3                 | 4,400                |
| BH33                                     | 04/05/17 | 4,300                                     | 19             | 550                 | 1,100                |
| BH33                                     | 07/27/17 | <1.0                                      | <1.0           | 200                 | 1,100                |
| BH33                                     | 10/30/17 | 4,300                                     | 69             | 2.2                 | 160                  |

**TABLE 2**  
**GROUNDWATER ANALYTICAL DATA**  
**NOBLE ENERGY, INC. - FEATHER 31-15 PRODUCED WATER TANK RELEASE**

| Monitoring Well ID                       | Date     | Benzene (µg/L)                            | Toluene (µg/L) | Ethylbenzene (µg/L) | Total Xylenes (µg/L) |
|--|----------|---|----------------|---------------------|----------------------|
| <b>COGCC Groundwater Standard (ug/L)</b> |          | <b>5</b>                                  | <b>560</b>     | <b>700</b>          | <b>1,400</b>         |
| BH34                                     | 10/25/16 | Not Sampled - Insufficient Water          |                |                     |                      |
| BH34                                     | 11/03/16 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH34                                     | 01/24/17 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH34                                     | 04/05/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH34                                     | 07/27/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH34                                     | 10/30/17 | 3.0                                       | <1.0           | <1.0                | 3.0                  |
| BH35                                     | 10/25/16 | Not Sampled - Insufficient Water          |                |                     |                      |
| BH35                                     | 11/03/16 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH35                                     | 01/24/17 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH35                                     | 04/05/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH35                                     | 07/27/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH35                                     | 10/30/17 | 1.0                                       | <1.0           | <1.0                | 2.1                  |
| BH36                                     | 10/25/16 | 6,800                                     | 9,800          | 520                 | 8,500                |
| BH36                                     | 11/03/16 | 4,300                                     | 2,200          | 320                 | 4,700                |
| BH36                                     | 01/24/17 | 2,200                                     | 24             | <1.0                | 150                  |
| BH36                                     | 04/05/17 | 2,600                                     | 510            | 260                 | 1,200                |
| BH36                                     | 07/27/17 | 2,200                                     | 56             | 250                 | 480                  |
| BH36                                     | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                |                     |                      |
| BH36R                                    | 10/30/17 | 2,800                                     | 290            | 15                  | 4,300                |
| BH37                                     | 10/25/16 | 4,700                                     | 4,800          | 170                 | 4,300                |
| BH37                                     | 11/03/16 | 4,900                                     | 3,200          | 210                 | 4,400                |
| BH37                                     | 01/24/17 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH37                                     | 04/05/17 | 2,500                                     | 1,100          | 210                 | 960                  |
| BH37                                     | 07/27/17 | 1,000                                     | <1.0           | 27                  | 44                   |
| BH37                                     | 10/30/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH38                                     | 10/25/16 | 3.8                                       | 7.1            | <1.0                | 12                   |
| BH38                                     | 11/03/16 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH38                                     | 01/24/17 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH38                                     | 04/05/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH38                                     | 07/27/17 | 1.2                                       | <1.0           | <1.0                | <2.0                 |
| BH38                                     | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                |                     |                      |
| BH38R                                    | 10/30/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH39                                     | 11/03/16 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH39                                     | 01/24/17 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH39                                     | 04/05/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH39                                     | 07/27/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH39                                     | 10/30/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH40                                     | 11/03/16 | <1.0                                      | <1.0           | <1.0                | 2.2                  |
| BH40                                     | 01/24/17 | <1.0                                      | <1.0           | <1.0                | <1.0                 |

**TABLE 2**  
**GROUNDWATER ANALYTICAL DATA**  
**NOBLE ENERGY, INC. - FEATHER 31-15 PRODUCED WATER TANK RELEASE**

| Monitoring Well ID                       | Date     | Benzene (µg/L)                            | Toluene (µg/L) | Ethylbenzene (µg/L) | Total Xylenes (µg/L) |
|--|----------|---|----------------|---------------------|----------------------|
| <b>COGCC Groundwater Standard (ug/L)</b> |          | <b>5</b>                                  | <b>560</b>     | <b>700</b>          | <b>1,400</b>         |
| BH40                                     | 04/05/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH40                                     | 07/27/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH40                                     | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                |                     |                      |
| BH40R                                    | 10/30/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH41                                     | 11/03/16 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH41                                     | 01/24/17 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH41                                     | 04/05/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH41                                     | 07/27/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH41                                     | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                |                     |                      |
| BH41R                                    | 10/30/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH42                                     | 11/03/16 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH42                                     | 01/24/17 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH42                                     | 04/05/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH42                                     | 07/27/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH42                                     | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                |                     |                      |
| BH42R                                    | 10/30/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH43                                     | 11/03/16 | <1.0                                      | 1.2            | <1.0                | 27                   |
| BH43                                     | 01/24/17 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH43                                     | 04/05/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH43                                     | 07/27/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH43                                     | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                |                     |                      |
| BH43R                                    | 10/30/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH44                                     | 11/03/16 | 4,200                                     | 20             | 2.3                 | 590                  |
| BH44                                     | 01/24/17 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH44                                     | 04/05/17 | 580                                       | <1.0           | <1.0                | <2.0                 |
| BH44                                     | 07/27/17 | 100                                       | <1.0           | <1.0                | <2.0                 |
| BH44                                     | 10/30/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH45                                     | 11/03/16 | <1.0                                      | 9.3            | <1.0                | 3.9                  |
| BH45                                     | 01/24/17 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH45                                     | 04/05/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH45                                     | 07/27/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH45                                     | 10/30/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH46                                     | 01/24/17 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH46                                     | 04/05/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH46                                     | 07/27/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH46                                     | 10/30/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH47                                     | 01/24/17 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH47                                     | 04/05/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH47                                     | 07/27/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |

**TABLE 2**  
**GROUNDWATER ANALYTICAL DATA**  
**NOBLE ENERGY, INC. - FEATHER 31-15 PRODUCED WATER TANK RELEASE**

| Monitoring Well ID                | Date     | Benzene (µg/L)                            | Toluene (µg/L) | Ethylbenzene (µg/L) | Total Xylenes (µg/L) |
|-----------------------------------|----------|---|----------------|---------------------|----------------------|
| COGCC Groundwater Standard (ug/L) |          | 5   | 560            | 700                 | 1,400                |
| BH47                              | 10/30/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH48                              | 01/24/17 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH48                              | 04/05/17 | 1,300                                     | <1.0           | <1.0                | 8.4                  |
| BH48                              | 07/27/17 | 300                                       | <1.0           | <1.0                | <2.0                 |
| BH48                              | 10/30/17 | 1.2                                       | <1.0           | <1.0                | <2.0                 |
| BH49                              | 01/24/17 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH49                              | 04/05/17 | 250                                       | <1.0           | <1.0                | <2.0                 |
| BH49                              | 07/27/17 | 64  | <1.0           | <1.0                | <2.0                 |
| BH49                              | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                |                     |                      |
| BH49R                             | 10/30/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH50                              | 01/24/17 | 1,600                                     | 3,400          | 280                 | 5,100                |
| BH50                              | 04/05/17 | 820                                       | 1.2            | 160                 | 330                  |
| BH50                              | 07/27/17 | 740                                       | <1.0           | 170                 | 340                  |
| BH50                              | 10/30/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH51                              | 01/24/17 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH51                              | 04/05/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH51                              | 07/27/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH51                              | 10/30/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH52                              | 01/24/17 | <1.0                                      | <1.0           | <1.0                | <1.0                 |
| BH52                              | 04/05/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH52                              | 07/27/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH52                              | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                |                     |                      |
| BH52R                             | 10/30/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH53                              | 07/27/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH53                              | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                |                     |                      |
| BH53R                             | 10/30/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH54                              | 07/27/17 | Not Sampled - Insufficient Water          |                |                     |                      |
| BH54                              | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                |                     |                      |
| BH54R                             | 10/30/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH55                              | 07/27/17 | <1.0                                      | <1.0           | <1.0                | <2.0                 |
| BH55                              | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                |                     |                      |
| BH55R                             | 10/30/17 | <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**



**TABLE 3**  
**GROUNDWATER ELEVATION DATA**  
**NOBLE ENERGY, INC. - FEATHER 31-15**  
**PRODUCED WATER TANK RELEASE**



| Monitoring Well ID | Date     | Top of Casing Elevation (ft. AMSL)             | Total Depth (ft. BTOC) | Depth to Water (ft. BTOC) | Depth to LNAPL (ft. BTOC) | LNAPL Thickness (ft.) | Groundwater Elevation* (ft. AMSL) |
|--------------------|----------|--|------------------------|---------------------------|---------------------------|-----------------------|-----------------------------------|
| BH03               | 01/28/16 | NS   | 22.98                  | 15.17                     | ND                        | ND                    | NS                                |
| BH03               | 09/01/16 | Removed from Monitoring Network-Well Destroyed |                        |                           |                           |                       |                                   |
| BH08               | 01/28/16 | NS   | 24.95                  | 13.15                     | ND                        | ND                    | NS                                |
| BH08               | 09/01/16 | 4960.47  | 22.60                  | 6.16                      | ND                        | ND                    | 4954.31                           |
| BH08               | 11/03/16 | 4960.47  | 22.57                  | 6.79                      | ND                        | ND                    | 4953.68                           |
| BH08               | 01/24/17 | 4960.47  | 22.63                  | 7.21                      | ND                        | ND                    | 4953.26                           |
| BH08               | 04/05/17 | 4960.47  | 22.60                  | 7.54                      | ND                        | ND                    | 4952.93                           |
| BH08               | 07/27/17 | 4960.47  | 22.53                  | 7.26                      | ND                        | ND                    | 4953.21                           |
| BH08               | 10/30/17 | 4960.47  | 22.52                  | 7.92                      | ND                        | ND                    | 4952.55                           |
| BH10               | 09/01/16 | 4964.48  | 21.98                  | 10.36                     | ND                        | ND                    | 4954.12                           |
| BH10               | 11/03/16 | 4964.48  | 21.95                  | 10.98                     | ND                        | ND                    | 4953.50                           |
| BH10               | 01/24/17 | 4964.48  | 22.03                  | 11.37                     | ND                        | ND                    | 4953.11                           |
| BH10               | 04/05/17 | 4964.48  | 21.98                  | 11.72                     | ND                        | ND                    | 4952.76                           |
| BH10               | 07/27/17 | 4964.48  | 21.95                  | 11.49                     | ND                        | ND                    | 4952.99                           |
| BH10               | 10/30/17 | 4964.48  | 21.94                  | 12.06                     | ND                        | ND                    | 4952.42                           |
| BH11               | 09/01/16 | 4960.77  | 16.86                  | 6.73                      | ND                        | ND                    | 4954.04                           |
| BH11               | 11/03/16 | 4960.77  | 18.32                  | 7.29                      | ND                        | ND                    | 4953.48                           |
| BH11               | 01/24/17 | 4960.77  | 17.93                  | 7.72                      | ND                        | ND                    | 4953.05                           |
| BH11               | 04/05/17 | 4960.77  | 17.79                  | 8.04                      | ND                        | ND                    | 4952.73                           |
| BH11               | 07/27/17 | 4960.77  | 17.69                  | 7.78                      | ND                        | ND                    | 4952.99                           |
| BH11               | 10/30/17 | 4960.77  | 17.63                  | 8.40                      | ND                        | ND                    | 4952.37                           |
| BH12               | 09/01/16 | 4960.63  | 18.90                  | 7.05                      | ND                        | ND                    | 4953.58                           |
| BH12               | 11/03/16 | 4960.63  | 18.81                  | 7.71                      | ND                        | ND                    | 4952.92                           |
| BH12               | 01/24/17 | 4960.63  | 18.70                  | 8.15                      | ND                        | ND                    | 4952.48                           |
| BH12               | 04/05/17 | 4960.63  | 18.84                  | 8.47                      | ND                        | ND                    | 4952.16                           |
| BH12               | 07/27/17 | 4960.63  | 18.59                  | 8.20                      | ND                        | ND                    | 4952.43                           |
| BH12               | 10/30/17 | 4960.63  | 18.54                  | 8.83                      | ND                        | ND                    | 4951.80                           |
| BH13               | 09/01/16 | 4963.84  | 21.95                  | 10.92                     | ND                        | ND                    | 4952.92                           |
| BH13               | 11/03/16 | 4963.84  | 21.62                  | 11.54                     | ND                        | ND                    | 4952.30                           |
| BH13               | 01/24/17 | 4963.84  | 21.17                  | 11.94                     | ND                        | ND                    | 4951.90                           |
| BH13               | 04/05/17 | 4963.84  | 21.14                  | 12.23                     | ND                        | ND                    | 4951.61                           |
| BH13               | 07/27/17 | 4963.84  | 20.99                  | 11.93                     | ND                        | ND                    | 4951.91                           |
| BH13               | 10/30/17 | 4963.84  | 20.83                  | 12.56                     | ND                        | ND <sup>1</sup>       | 4951.28                           |
| BH14               | 09/01/16 | 4960.84  | 19.50                  | 8.60                      | ND                        | ND                    | 4952.24                           |
| BH14               | 11/03/16 | 4960.84  | 19.39                  | 9.22                      | ND                        | ND                    | 4951.62                           |
| BH14               | 01/24/17 | 4960.84  | 19.10                  | 9.57                      | ND                        | ND                    | 4951.27                           |
| BH14               | 04/05/17 | 4960.84  | 19.02                  | 9.84                      | ND                        | ND                    | 4951.00                           |
| BH14               | 07/27/17 | 4960.84  | 19.03                  | 9.54                      | ND                        | ND                    | 4951.30                           |
| BH14               | 10/30/17 | 4960.84  | 18.90                  | 10.10                     | ND                        | ND                    | 4950.74                           |
| BH15               | 09/01/16 | 4961.83  | 21.04                  | 10.90                     | ND                        | ND                    | 4950.93                           |
| BH15               | 11/03/16 | 4961.83  | 22.32                  | 11.39                     | ND                        | ND                    | 4950.44                           |

**TABLE 3**  
**GROUNDWATER ELEVATION DATA**  
**NOBLE ENERGY, INC. - FEATHER 31-15**  
**PRODUCED WATER TANK RELEASE**



| Monitoring Well ID | Date     | Top of Casing Elevation (ft. AMSL)    | Total Depth (ft. BTOC) | Depth to Water (ft. BTOC) | Depth to LNAPL (ft. BTOC) | LNAPL Thickness (ft.) | Groundwater Elevation* (ft. AMSL) |
|--------------------|----------|---------------------------------------|------------------------|---------------------------|---------------------------|-----------------------|-----------------------------------|
| BH15               | 01/24/17 | 4961.83                               | 22.32                  | 11.67                     | ND                        | ND                    | 4950.16                           |
| BH15               | 04/05/17 | 4961.83                               | 22.40                  | 11.92                     | ND                        | ND                    | 4949.91                           |
| BH15               | 07/27/17 | 4961.83                               | 22.35                  | 11.57                     | ND                        | ND                    | 4950.26                           |
| BH15               | 10/30/17 | 4961.83                               | 22.36                  | 12.03                     | ND                        | ND                    | 4949.80                           |
| BH16               | 09/01/16 | 4960.67                               | 19.54                  | 8.85                      | ND                        | ND                    | 4951.82                           |
| BH16               | 11/03/16 | 4960.67                               | 19.50                  | 9.44                      | ND                        | ND                    | 4951.23                           |
| BH16               | 01/24/17 | 4960.67                               | 19.55                  | 9.77                      | ND                        | ND                    | 4950.90                           |
| BH16               | 04/05/17 | 4960.67                               | 19.60                  | 10.04                     | ND                        | ND                    | 4950.63                           |
| BH16               | 07/27/17 | 4960.67                               | 19.49                  | 9.68                      | ND                        | ND <sup>1</sup>       | 4950.99                           |
| BH16               | 10/30/17 | 4960.67                               | 19.50                  | 10.27                     | ND                        | ND                    | 4950.40                           |
| BH17               | 09/23/16 | 4961.27                               | 18.52                  | 8.53                      | ND                        | ND                    | 4952.74                           |
| BH17               | 11/03/16 | 4961.27                               | 18.26                  | 8.97                      | ND                        | ND                    | 4952.30                           |
| BH17               | 01/24/17 | 4961.27                               | 17.72                  | 9.36                      | ND                        | ND                    | 4951.91                           |
| BH17               | 04/05/17 | 4961.27                               | 17.71                  | 9.66                      | ND                        | ND                    | 4951.61                           |
| BH17               | 07/27/17 | 4961.27                               | 17.68                  | 9.40                      | ND                        | ND                    | 4951.87                           |
| BH17               | 10/30/17 | 4961.27                               | 17.55                  | 9.91                      | ND                        | ND                    | 4951.36                           |
| BH18               | 09/23/16 | 4962.91                               | 21.43                  | 11.30                     | ND                        | ND                    | 4951.61                           |
| BH18               | 11/03/16 | 4962.91                               | 22.26                  | 11.72                     | ND                        | ND                    | 4951.19                           |
| BH18               | 01/24/17 | 4962.91                               | 22.33                  | 12.06                     | ND                        | ND                    | 4950.85                           |
| BH18               | 04/05/17 | 4961.27                               | 22.30                  | 12.34                     | ND                        | ND                    | 4948.93                           |
| BH18               | 07/27/17 | 4961.27                               | 22.18                  | 12.06                     | ND                        | ND                    | 4949.21                           |
| BH18               | 10/30/17 | 4961.27                               | 22.29                  | 12.51                     | ND                        | ND                    | 4948.76                           |
| BH19               | 09/23/16 | 4961.23                               | 18.11                  | 9.11                      | ND                        | ND                    | 4952.12                           |
| BH19               | 11/03/16 | 4961.23                               | 18.59                  | 9.53                      | ND                        | ND                    | 4951.70                           |
| BH19               | 01/24/17 | 4961.23                               | 18.58                  | 9.87                      | ND                        | ND                    | 4951.36                           |
| BH19               | 04/05/17 | 4961.23                               | 18.57                  | 10.16                     | ND                        | ND                    | 4951.07                           |
| BH19               | 07/27/17 | 4961.23                               | 18.49                  | 9.82                      | ND                        | ND                    | 4951.41                           |
| BH19               | 10/30/17 | 4961.23                               | 18.46                  | 10.38                     | ND                        | ND                    | 4950.85                           |
| BH20               | 09/23/16 | 4959.06                               | 19.43                  | 8.72                      | ND                        | ND                    | 4950.34                           |
| BH20               | 11/03/16 | 4959.06                               | 19.34                  | 9.05                      | ND                        | ND                    | 4950.01                           |
| BH20               | 01/24/17 | 4959.06                               | 19.14                  | 9.29                      | ND                        | ND                    | 4949.77                           |
| BH20               | 04/05/17 | 4959.06                               | 19.05                  | 9.52                      | ND                        | ND                    | 4949.54                           |
| BH20               | 07/27/17 | 4959.06                               | 19.06                  | 9.13                      | ND                        | ND                    | 4949.93                           |
| BH20               | 10/30/17 | 4959.06                               | 18.91                  | 9.62                      | ND                        | ND                    | 4949.44                           |
| BH21               | 09/23/16 | 4960.89                               | 21.22                  | 14.49                     | ND                        | ND                    | 4946.40                           |
| BH21               | 11/03/16 | 4960.89                               | 21.22                  | 12.18                     | ND                        | ND                    | 4948.71                           |
| BH21               | 01/24/17 | 4960.89                               | 21.20                  | 12.27                     | ND                        | ND                    | 4948.62                           |
| BH21               | 04/05/17 | 4960.89                               | 21.30                  | 12.57                     | ND                        | ND                    | 4948.32                           |
| BH21 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost |                        |                           | ND                        | ND                    | NM                                |
| BH21               | 10/30/17 | 4960.90                               | 21.24                  | 12.59                     | ND                        | ND                    | 4948.31                           |
| BH22               | 09/23/16 | 4961.11                               | 20.94                  | 11.49                     | ND                        | ND                    | 4949.62                           |

**TABLE 3**  
**GROUNDWATER ELEVATION DATA**  
**NOBLE ENERGY, INC. - FEATHER 31-15**  
**PRODUCED WATER TANK RELEASE**



| Monitoring Well ID | Date     | Top of Casing Elevation (ft. AMSL)        | Total Depth (ft. BTOC) | Depth to Water (ft. BTOC) | Depth to LNAPL (ft. BTOC) | LNAPL Thickness (ft.) | Groundwater Elevation* (ft. AMSL) |
|--------------------|----------|---|------------------------|---------------------------|---------------------------|-----------------------|-----------------------------------|
| BH22               | 11/03/16 | 4961.11                                   | 20.90                  | 11.79                     | ND                        | ND                    | 4949.32                           |
| BH22               | 01/24/17 | 4961.11                                   | 20.70                  | 11.94                     | ND                        | ND                    | 4949.17                           |
| BH22               | 04/05/17 | 4961.11                                   | 20.80                  | 12.20                     | ND                        | ND                    | 4948.91                           |
| BH22 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH22 <sup>1</sup>  | 10/30/17 | 4961.11                                   | 20.51                  | 12.29                     | ND                        | ND                    | 4948.82                           |
| BH23               | 09/23/16 | 4960.67                                   | 22.71                  | 11.91                     | ND                        | ND                    | 4948.76                           |
| BH23               | 11/03/16 | 4960.67                                   | 22.68                  | 12.21                     | ND                        | ND                    | 4948.46                           |
| BH23               | 01/24/17 | 4960.67                                   | 22.50                  | 12.29                     | ND                        | ND                    | 4948.38                           |
| BH23               | 04/05/17 | 4960.67                                   | 22.57                  | 12.58                     | ND                        | ND                    | 4948.09                           |
| BH23 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH23               | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                        |                           |                           |                       |                                   |
| BH23R              | 10/30/17 | 4960.74                                   | 22.91                  | 12.65                     | ND                        | ND                    | 4948.09                           |
| BH24               | 09/23/16 | 4960.30                                   | 21.75                  | 11.63                     | ND                        | ND                    | 4948.67                           |
| BH24               | 11/03/16 | 4960.30                                   | 22.38                  | 11.87                     | ND                        | ND                    | 4948.43                           |
| BH24               | 01/24/17 | 4960.30                                   | 22.70                  | 11.95                     | ND                        | ND                    | 4948.35                           |
| BH24               | 04/05/17 | 4960.30                                   | 22.82                  | 12.22                     | ND                        | ND                    | 4948.08                           |
| BH24               | 07/27/17 | 4960.30                                   | 22.75                  | 11.91                     | ND                        | ND                    | 4948.39                           |
| BH24               | 10/30/17 | 4960.30                                   | 22.77                  | 12.23                     | ND                        | ND                    | 4948.07                           |
| BH25               | 09/23/16 | 4960.28                                   | 22.91                  | 11.98                     | ND                        | ND                    | 4948.30                           |
| BH25               | 11/03/16 | 4960.28                                   | 22.91                  | 12.23                     | ND                        | ND                    | 4948.05                           |
| BH25               | 01/24/17 | 4960.28                                   | 22.88                  | 12.36                     | ND                        | ND                    | 4947.92                           |
| BH25               | 04/05/17 | 4960.28                                   | 22.94                  | 12.63                     | ND                        | ND                    | 4947.65                           |
| BH25 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH25               | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                        |                           |                           |                       |                                   |
| BH25R              | 10/30/17 | 4960.31                                   | 22.87                  | 16.03                     | ND                        | ND                    | 4944.28                           |
| BH26               | 09/23/16 | 4959.46                                   | 22.85                  | 12.76                     | ND                        | ND                    | 4946.70                           |
| BH26               | 11/03/16 | 4959.46                                   | 22.60                  | 12.96                     | ND                        | ND                    | 4946.50                           |
| BH26               | 01/24/17 | 4959.46                                   | 22.51                  | 12.89                     | ND                        | ND                    | 4946.57                           |
| BH26               | 04/05/17 | 4959.46                                   | 22.60                  | 13.07                     | ND                        | ND                    | 4946.39                           |
| BH26               | 07/27/17 | 4959.46                                   | 22.51                  | 12.72                     | ND                        | ND                    | 4946.74                           |
| BH26               | 10/30/17 | 4959.46                                   | 22.50                  | 13.01                     | ND                        | ND                    | 4946.45                           |
| BH27               | 09/23/16 | 4958.65                                   | 22.47                  | 13.43                     | ND                        | ND                    | 4945.22                           |
| BH27               | 11/03/16 | 4958.65                                   | 22.38                  | 13.59                     | ND                        | ND                    | 4945.06                           |
| BH27               | 01/24/17 | 4958.65                                   | 22.32                  | 13.53                     | ND                        | ND                    | 4945.12                           |
| BH27               | 04/05/17 | 4958.65                                   | 22.44                  | 13.72                     | ND                        | ND                    | 4944.93                           |
| BH27 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH27               | 10/30/17 | 4958.64                                   | 22.37                  | 13.51                     | ND                        | ND                    | 4945.13                           |
| BH28               | 09/23/16 | 4957.57                                   | 22.68                  | 14.01                     | ND                        | ND                    | 4943.56                           |
| BH28               | 11/03/16 | 4957.57                                   | 22.56                  | 14.05                     | ND                        | ND                    | 4943.52                           |
| BH28               | 01/24/17 | 4957.57                                   | 22.38                  | 13.91                     | ND                        | ND                    | 4943.66                           |
| BH28               | 04/05/17 | 4957.57                                   | 22.46                  | 14.01                     | ND                        | ND                    | 4943.56                           |

**TABLE 3**  
**GROUNDWATER ELEVATION DATA**  
**NOBLE ENERGY, INC. - FEATHER 31-15**  
**PRODUCED WATER TANK RELEASE**



| Monitoring Well ID | Date     | Top of Casing Elevation (ft. AMSL)        | Total Depth (ft. BTOC) | Depth to Water (ft. BTOC) | Depth to LNAPL (ft. BTOC) | LNAPL Thickness (ft.) | Groundwater Elevation* (ft. AMSL) |
|--------------------|----------|---|------------------------|---------------------------|---------------------------|-----------------------|-----------------------------------|
| BH28 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH28               | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                        |                           |                           |                       |                                   |
| BH28R              | 10/30/17 | 4957.35                                   | 22.51                  | 17.64                     | ND                        | ND                    | 4939.71                           |
| BH29               | 09/23/16 | 4958.73                                   | 21.53                  | 13.07                     | ND                        | ND                    | 4945.66                           |
| BH29               | 11/03/16 | 4958.73                                   | 21.86                  | 13.30                     | ND                        | ND                    | 4945.43                           |
| BH29               | 01/24/17 | 4958.73                                   | 21.93                  | 13.26                     | ND                        | ND                    | 4945.47                           |
| BH29               | 04/05/17 | 4958.73                                   | 21.92                  | 13.45                     | ND                        | ND                    | 4945.28                           |
| BH29 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH29               | 10/30/17 | 4958.73                                   | 22.05                  | 13.32                     | ND                        | ND                    | 4945.41                           |
| BH30               | 11/03/16 | 4957.11                                   | 22.22                  | 13.75                     | ND                        | ND                    | 4943.36                           |
| BH30               | 01/24/17 | 4957.11                                   | 22.16                  | 13.62                     | ND                        | ND                    | 4943.49                           |
| BH30               | 04/05/17 | 4957.11                                   | 22.27                  | 13.71                     | ND                        | ND                    | 4943.40                           |
| BH30 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH30               | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                        |                           |                           |                       |                                   |
| BH30R              | 10/30/17 | 4957.80                                   | 26.58                  | 19.18                     | ND                        | ND                    | 4938.62                           |
| BH31               | 11/03/16 | 4958.22                                   | 20.43                  | 13.14                     | ND                        | ND                    | 4945.08                           |
| BH31               | 01/24/17 | 4958.22                                   | 20.35                  | 13.09                     | ND                        | ND                    | 4945.13                           |
| BH31               | 04/05/17 | 4958.22                                   | 24.20                  | 13.25                     | ND                        | ND                    | 4944.97                           |
| BH31 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH31               | 10/30/17 | 4958.23                                   | 20.50                  | 13.08                     | ND                        | ND                    | 4945.15                           |
| BH32               | 11/03/16 | 4959.15                                   | 22.97                  | 13.61                     | ND                        | ND                    | 4945.54                           |
| BH32               | 01/24/17 | 4959.15                                   | 22.98                  | 13.61                     | ND                        | ND                    | 4945.54                           |
| BH32               | 04/05/17 | 4959.15                                   | 23.05                  | 13.82                     | ND                        | ND                    | 4945.33                           |
| BH32 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH32               | 10/30/17 | 4959.15                                   | 23.02                  | 14.77                     | ND                        | ND                    | 4944.38                           |
| BH33               | 11/03/16 | 4956.82                                   | 22.78                  | 14.91                     | ND                        | ND                    | 4941.91                           |
| BH33               | 01/24/17 | 4956.82                                   | 22.71                  | 14.66                     | ND                        | ND                    | 4942.16                           |
| BH33               | 04/05/17 | 4956.82                                   | 22.83                  | 14.76                     | ND                        | ND                    | 4942.06                           |
| BH33 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH33               | 10/30/17 | 4956.84                                   | 22.69                  | 14.38                     | ND                        | ND                    | 4942.46                           |
| BH34               | 11/03/16 | 4957.08                                   | 21.84                  | 19.37                     | ND                        | ND                    | 4937.71                           |
| BH34               | 01/24/17 | 4957.08                                   | 21.82                  | 13.08                     | ND                        | ND                    | 4944.00                           |
| BH34               | 04/05/17 | 4957.08                                   | 21.88                  | 13.22                     | ND                        | ND                    | 4943.86                           |
| BH34 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH34               | 10/30/17 | 4958.32                                   | 23.09                  | 14.19                     | ND                        | ND                    | 4944.13                           |
| BH35               | 11/03/16 | 4957.41                                   | 22.52                  | 17.90                     | ND                        | ND                    | 4939.51                           |
| BH35               | 01/24/17 | 4957.41                                   | 22.49                  | 15.03                     | ND                        | ND                    | 4942.38                           |
| BH35               | 04/05/17 | 4957.41                                   | 17.56                  | 15.17                     | ND                        | ND                    | 4942.24                           |
| BH35               | 07/27/17 | 4957.41                                   | 22.51                  | 14.74                     | ND                        | ND                    | 4942.67                           |
| BH35               | 10/30/17 | 4957.41                                   | 22.52                  | 14.79                     | ND                        | ND                    | 4942.62                           |

**TABLE 3**  
**GROUNDWATER ELEVATION DATA**  
**NOBLE ENERGY, INC. - FEATHER 31-15**  
**PRODUCED WATER TANK RELEASE**



| Monitoring Well ID | Date     | Top of Casing Elevation (ft. AMSL)        | Total Depth (ft. BTOC) | Depth to Water (ft. BTOC) | Depth to LNAPL (ft. BTOC) | LNAPL Thickness (ft.) | Groundwater Elevation* (ft. AMSL) |
|--------------------|----------|---|------------------------|---------------------------|---------------------------|-----------------------|-----------------------------------|
| BH36               | 11/03/16 | 4955.19                                   | 22.02                  | 14.64                     | ND                        | ND                    | 4940.55                           |
| BH36               | 01/24/17 | 4955.19                                   | 21.96                  | 14.34                     | ND                        | ND                    | 4940.85                           |
| BH36               | 04/05/17 | 4955.19                                   | 22.06                  | 14.36                     | ND                        | ND                    | 4940.83                           |
| BH36 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH36               | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                        |                           |                           |                       |                                   |
| BH36R              | 10/30/17 | 4955.91                                   | 26.68                  | 14.61                     | ND                        | ND                    | 4941.30                           |
| BH37               | 11/03/16 | 4954.95                                   | 22.13                  | 15.97                     | ND                        | ND                    | 4938.98                           |
| BH37               | 01/24/17 | 4954.95                                   | 22.14                  | 15.56                     | ND                        | ND                    | 4939.39                           |
| BH37               | 04/05/17 | 4954.95                                   | 22.17                  | 15.61                     | ND                        | ND                    | 4939.34                           |
| BH37 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH37               | 10/30/17 | 4954.98                                   | 22.29                  | 15.15                     | ND                        | ND                    | 4939.83                           |
| BH38               | 11/03/16 | 4955.15                                   | 22.05                  | 15.13                     | ND                        | ND                    | 4940.02                           |
| BH38               | 01/24/17 | 4955.15                                   | 22.02                  | 14.80                     | ND                        | ND                    | 4940.35                           |
| BH38               | 04/05/17 | 4955.15                                   | 22.07                  | 14.84                     | ND                        | ND                    | 4940.31                           |
| BH38 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH38               | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                        |                           |                           |                       |                                   |
| BH38R              | 10/30/17 | 4955.69                                   | 26.66                  | 14.86                     | ND                        | ND                    | 4940.83                           |
| BH39               | 11/03/16 | 4955.83                                   | 22.46                  | 14.25                     | ND                        | ND                    | 4941.58                           |
| BH39               | 01/24/17 | 4955.83                                   | 22.42                  | 13.98                     | ND                        | ND                    | 4941.85                           |
| BH39               | 04/05/17 | 4955.83                                   | 22.49                  | 14.06                     | ND                        | ND                    | 4941.77                           |
| BH39 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH39               | 10/30/17 | 4955.85                                   | 22.41                  | 13.70                     | ND                        | ND                    | 4942.15                           |
| BH40               | 11/03/16 | 4960.60                                   | 21.72                  | 11.08                     | ND                        | ND                    | 4949.52                           |
| BH40               | 01/24/17 | 4960.60                                   | 21.43                  | 11.24                     | ND                        | ND                    | 4949.36                           |
| BH40               | 04/05/17 | 4960.60                                   | 21.31                  | 11.56                     | ND                        | ND                    | 4949.04                           |
| BH40 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH40               | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                        |                           |                           |                       |                                   |
| BH40R              | 10/30/17 | 4961.06                                   | 22.73                  | 12.09                     | ND                        | ND                    | 4948.97                           |
| BH41               | 11/03/16 | 4959.08                                   | 21.13                  | 11.14                     | ND                        | ND                    | 4947.94                           |
| BH41               | 01/24/17 | 4959.08                                   | 20.94                  | 11.27                     | ND                        | ND                    | 4947.81                           |
| BH41               | 04/05/17 | 4959.08                                   | 20.92                  | 11.52                     | ND                        | ND                    | 4947.56                           |
| BH41 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH41               | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                        |                           |                           |                       |                                   |
| BH41R              | 10/30/17 | 4959.22                                   | 21.59                  | 11.66                     | ND                        | ND                    | 4947.56                           |
| BH42               | 11/03/16 | 4959.24                                   | 22.18                  | 12.44                     | ND                        | ND                    | 4946.80                           |
| BH42               | 01/24/17 | 4959.24                                   | 22.07                  | 12.25                     | ND                        | ND                    | 4946.99                           |
| BH42               | 04/05/17 | 4959.24                                   | 22.17                  | 12.50                     | ND                        | ND                    | 4946.74                           |
| BH42 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH42               | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                        |                           |                           |                       |                                   |
| BH42R              | 10/30/17 | 4959.01                                   | 22.03                  | 20.57                     | ND                        | ND                    | 4938.44                           |

**TABLE 3**  
**GROUNDWATER ELEVATION DATA**  
**NOBLE ENERGY, INC. - FEATHER 31-15**  
**PRODUCED WATER TANK RELEASE**



| Monitoring Well ID | Date     | Top of Casing Elevation (ft. AMSL)        | Total Depth (ft. BTOC) | Depth to Water (ft. BTOC) | Depth to LNAPL (ft. BTOC) | LNAPL Thickness (ft.) | Groundwater Elevation* (ft. AMSL) |
|--------------------|----------|---|------------------------|---------------------------|---------------------------|-----------------------|-----------------------------------|
| BH43               | 11/03/16 | 4959.74                                   | 21.72                  | 11.53                     | ND                        | ND                    | 4948.21                           |
| BH43               | 01/24/17 | 4959.74                                   | 21.26                  | 11.64                     | ND                        | ND                    | 4948.10                           |
| BH43               | 04/05/17 | 4959.74                                   | 21.10                  | 11.82                     | ND                        | ND                    | 4947.92                           |
| BH43 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH43               | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                        |                           |                           |                       |                                   |
| BH43R              | 10/30/17 | 4960.58                                   | 22.53                  | 20.23                     | ND                        | ND                    | 4940.35                           |
| BH44               | 11/03/16 | 4955.00                                   | 21.68                  | 17.75                     | ND                        | ND                    | 4937.25                           |
| BH44               | 01/24/17 | 4955.00                                   | 21.64                  | 17.29                     | ND                        | ND                    | 4937.71                           |
| BH44               | 04/05/17 | 4955.00                                   | 21.71                  | 17.24                     | ND                        | ND                    | 4937.76                           |
| BH44 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH44               | 10/30/17 | 4955.00                                   | 21.67                  | 16.70                     | ND                        | ND                    | 4938.30                           |
| BH45               | 11/03/16 | 4954.87                                   | 22.21                  | 21.08                     | ND                        | ND                    | 4933.79                           |
| BH45               | 01/24/17 | 4954.87                                   | 22.19                  | 17.14                     | ND                        | ND                    | 4937.73                           |
| BH45               | 04/05/17 | 4954.87                                   | 22.25                  | 17.06                     | ND                        | ND                    | 4937.81                           |
| BH45 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH45               | 10/30/17 | 4954.89                                   | 22.23                  | 16.49                     | ND                        | ND                    | 4938.40                           |
| BH46               | 01/24/17 | 4955.31                                   | 22.25                  | 15.64                     | ND                        | ND                    | 4939.67                           |
| BH46               | 04/05/17 | 4955.31                                   | 22.30                  | 15.64                     | ND                        | ND                    | 4939.67                           |
| BH46 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH46               | 10/30/17 | 4955.32                                   | 22.27                  | 15.24                     | ND                        | ND                    | 4940.08                           |
| BH47               | 01/24/17 | 4954.60                                   | 22.25                  | 18.91                     | ND                        | ND                    | 4935.69                           |
| BH47               | 04/05/17 | 4954.60                                   | 22.31                  | 18.51                     | ND                        | ND                    | 4936.09                           |
| BH47 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH47               | 10/30/17 | 4954.63                                   | 22.31                  | 17.90                     | ND                        | ND                    | 4936.73                           |
| BH48               | 01/24/17 | 4954.71                                   | 22.30                  | 18.58                     | ND                        | ND                    | 4936.13                           |
| BH48               | 04/05/17 | 4954.71                                   | 22.36                  | 18.54                     | ND                        | ND                    | 4936.17                           |
| BH48 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH48               | 10/30/17 | 4954.72                                   | 22.35                  | 17.97                     | ND                        | ND                    | 4936.75                           |
| BH49               | 01/24/17 | 4954.51                                   | 22.22                  | 18.39                     | ND                        | ND                    | 4936.12                           |
| BH49               | 04/05/17 | 4954.51                                   | 22.29                  | 18.23                     | ND                        | ND                    | 4936.28                           |
| BH49 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH49               | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                        |                           |                           |                       |                                   |
| BH49R              | 10/30/17 | 4954.53                                   | 25.93                  | 17.48                     | ND                        | ND                    | 4937.05                           |
| BH50               | 01/24/17 | 4955.18                                   | 22.26                  | 16.87                     | ND                        | ND                    | 4938.31                           |
| BH50               | 04/05/17 | 4955.18                                   | 22.40                  | 16.68                     | ND                        | ND                    | 4938.50                           |
| BH50 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH50               | 10/30/17 | 4955.18                                   | 22.27                  | 16.06                     | ND                        | ND                    | 4939.12                           |
| BH51               | 01/24/17 | 4955.85                                   | 22.10                  | 19.59                     | ND                        | ND                    | 4936.26                           |
| BH51               | 04/05/17 | 4955.85                                   | 22.17                  | 19.26                     | ND                        | ND                    | 4936.59                           |
| BH51 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |



**TABLE 3**  
**GROUNDWATER ELEVATION DATA**  
**NOBLE ENERGY, INC. - FEATHER 31-15**  
**PRODUCED WATER TANK RELEASE**



| Monitoring Well ID | Date     | Top of Casing Elevation (ft. AMSL)        | Total Depth (ft. BTOC) | Depth to Water (ft. BTOC) | Depth to LNAPL (ft. BTOC) | LNAPL Thickness (ft.) | Groundwater Elevation* (ft. AMSL) |
|--------------------|----------|---|------------------------|---------------------------|---------------------------|-----------------------|-----------------------------------|
| BH51               | 10/30/17 | 4955.87                                   | 22.16                  | 18.43                     | ND                        | ND                    | 4937.44                           |
| BH52               | 01/24/17 | 4955.46                                   | 22.31                  | 19.45                     | ND                        | ND                    | 4936.01                           |
| BH52               | 04/05/17 | 4955.46                                   | 22.36                  | 17.34                     | ND                        | ND                    | 4938.12                           |
| BH52 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH52               | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                        |                           |                           |                       |                                   |
| BH52R              | 10/30/17 | 4954.68                                   | 29.59                  | 16.46                     | ND                        | ND                    | 4938.22                           |
| BH53 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH53               | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                        |                           |                           |                       |                                   |
| BH53R              | 10/30/17 | 4956.07                                   | 33.21                  | 20.83                     | ND                        | ND                    | 4935.24                           |
| BH54 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | DRY                               |
| BH54               | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                        |                           |                           |                       |                                   |
| BH54R              | 10/30/17 | 4957.29                                   | 32.62                  | 22.13                     | ND                        | ND                    | 4935.16                           |
| BH55 <sup>2</sup>  | 07/27/17 | Well Damaged - Elevation Control Lost     |                        |                           | ND                        | ND                    | NM                                |
| BH55               | 07/27/17 | Broken Casing - Monitoring Well Destroyed |                        |                           |                           |                       |                                   |
| BH55R              | 10/30/17 | 4957.03                                   | 36.46                  | 20.82                     | ND                        | ND                    | 4936.21                           |

**Notes:**

ft. = Feet

AMSL = Above mean sea level

BTOC = Below top of casing

LNAPL = Light non-aqueous phase liquid

ND = No LNAPL detected

NM = Not measured

NS = Not surveyed

Monitoring wells MW-01 through MW-06 were destroyed during site excavations

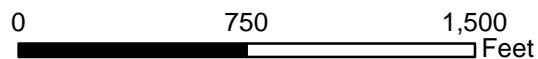
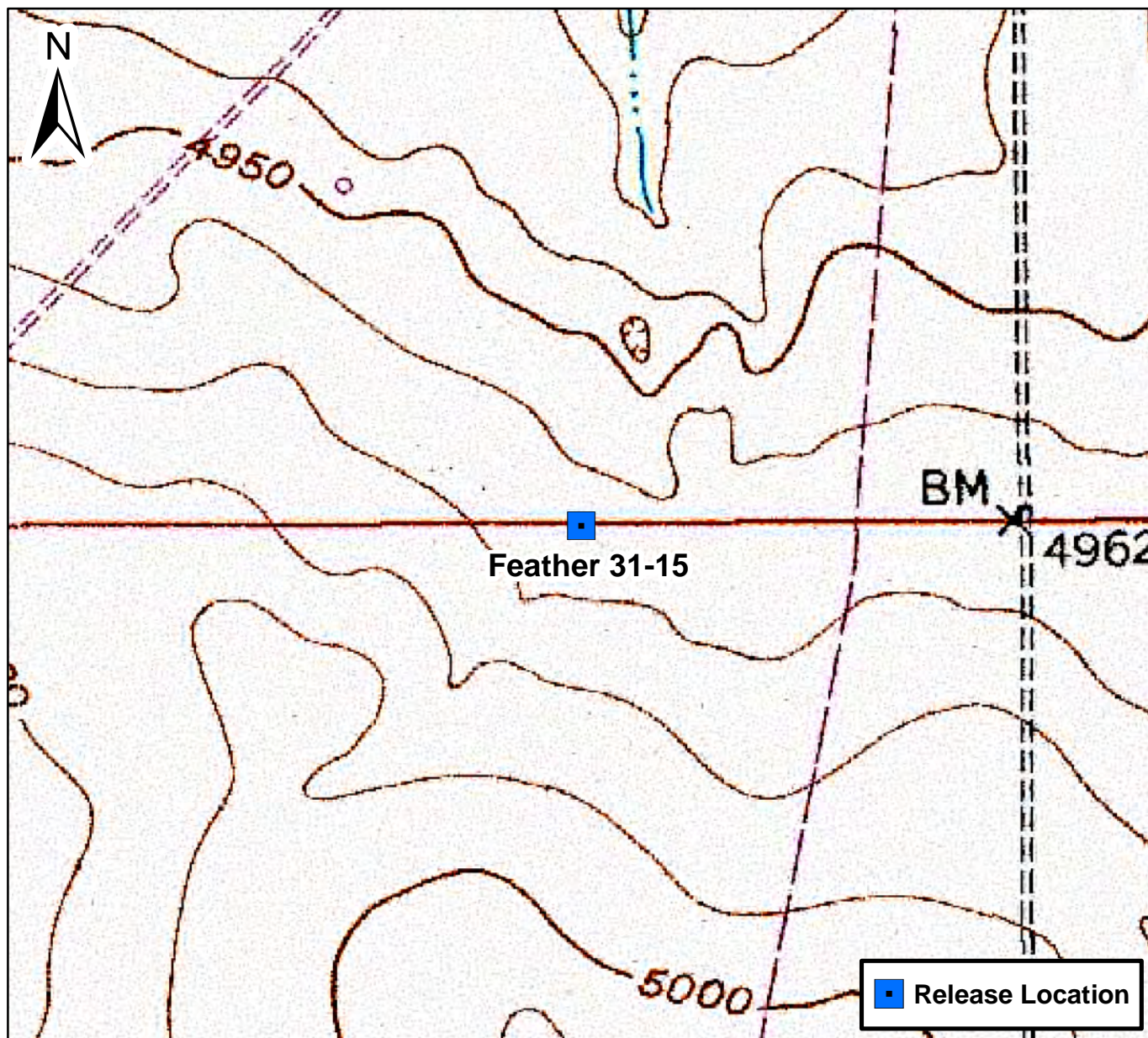
\* Groundwater elevation was corrected for product thickness (when present) using the following calculation:

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

LNAPL relative density was assumed to be approximately 0.75

1. Sheen present on groundwater.

2. Cattle damaged monitoring well prior to the 3Q2017 sampling event, resulting in lost casing elevation.

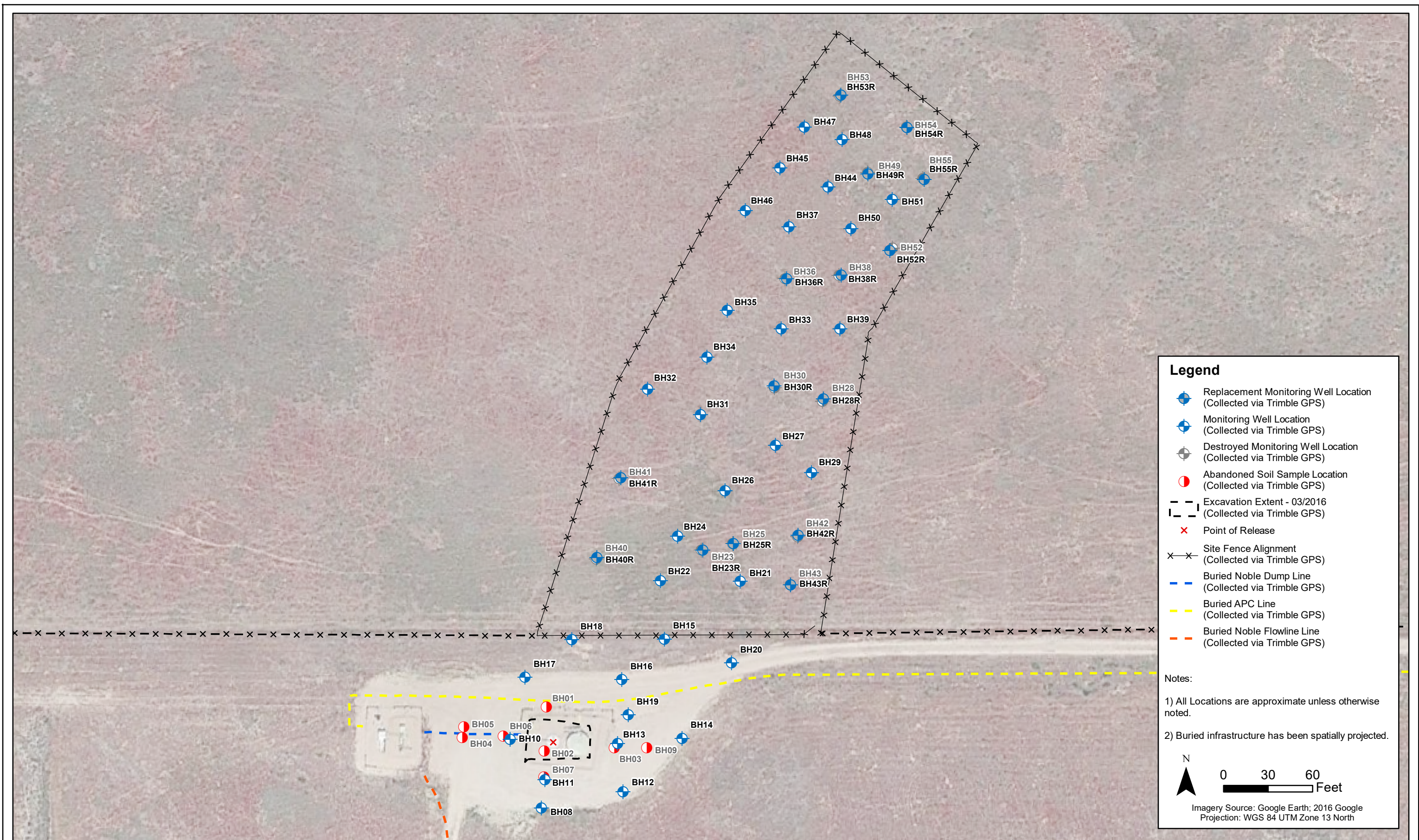


## Figure 1

Site Location Map  
 Feather 31-15 Produced Water Tank Release  
 NWNE S15 T2N R64W  
 Weld County, Colorado







DATE:  
November 2017

DESIGNED BY:  
B. Bruns

DRAWN BY:  
D. Arnold



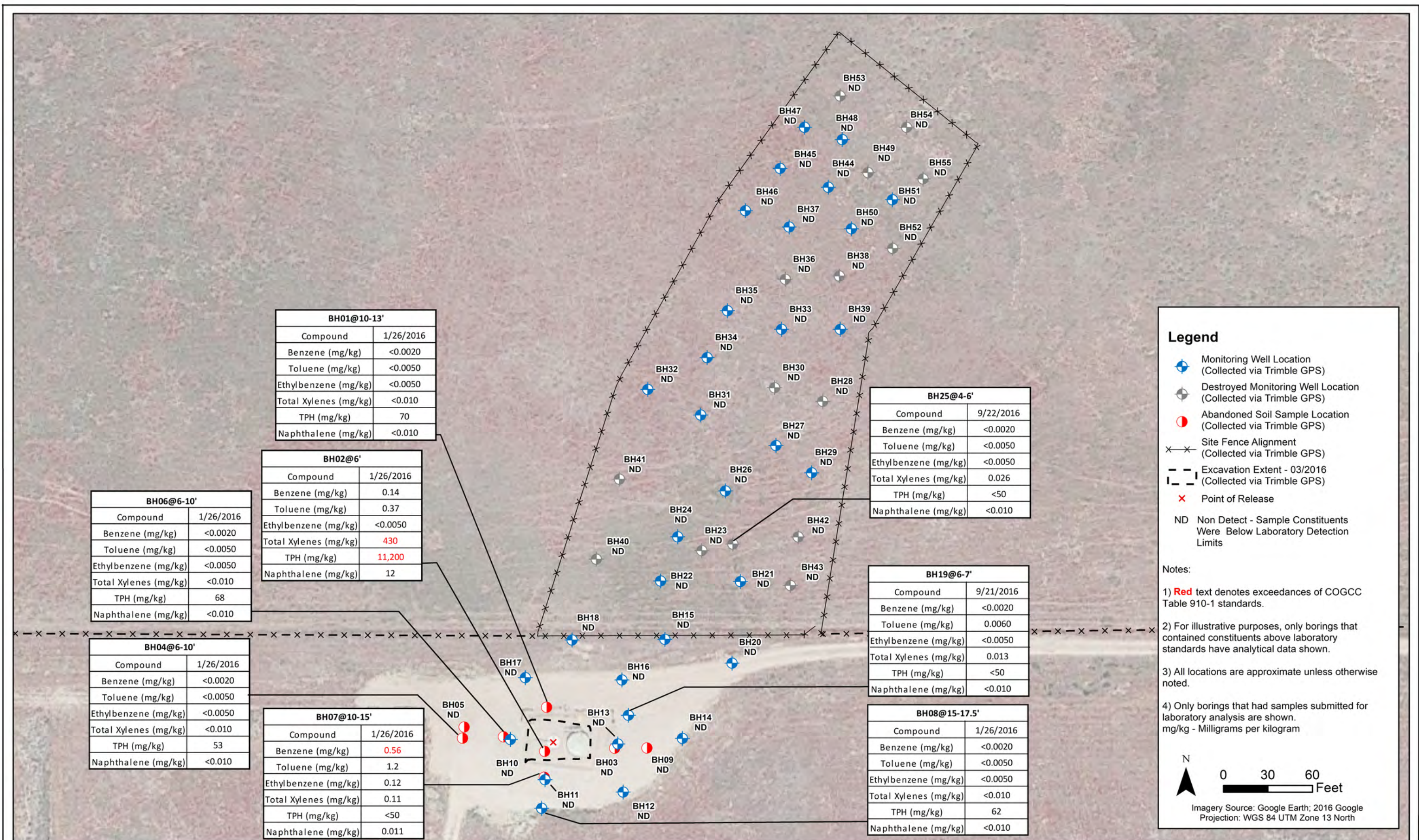
Tasman Geosciences, Inc.  
6899 Pecos Street - Unit C  
Denver, CO 80221

**Noble Energy - DJ Basin**  
**Feather 31-15 Produced Water Tank Release**  
 NWN Section 15, Township 2 North, Range 64 West  
 Weld County, Colorado

Site Overview  
Map

Figure  
2





DATE:  
September 2017

DESIGNED BY:  
B.Bruns

DRAWN BY:  
D. Arnold



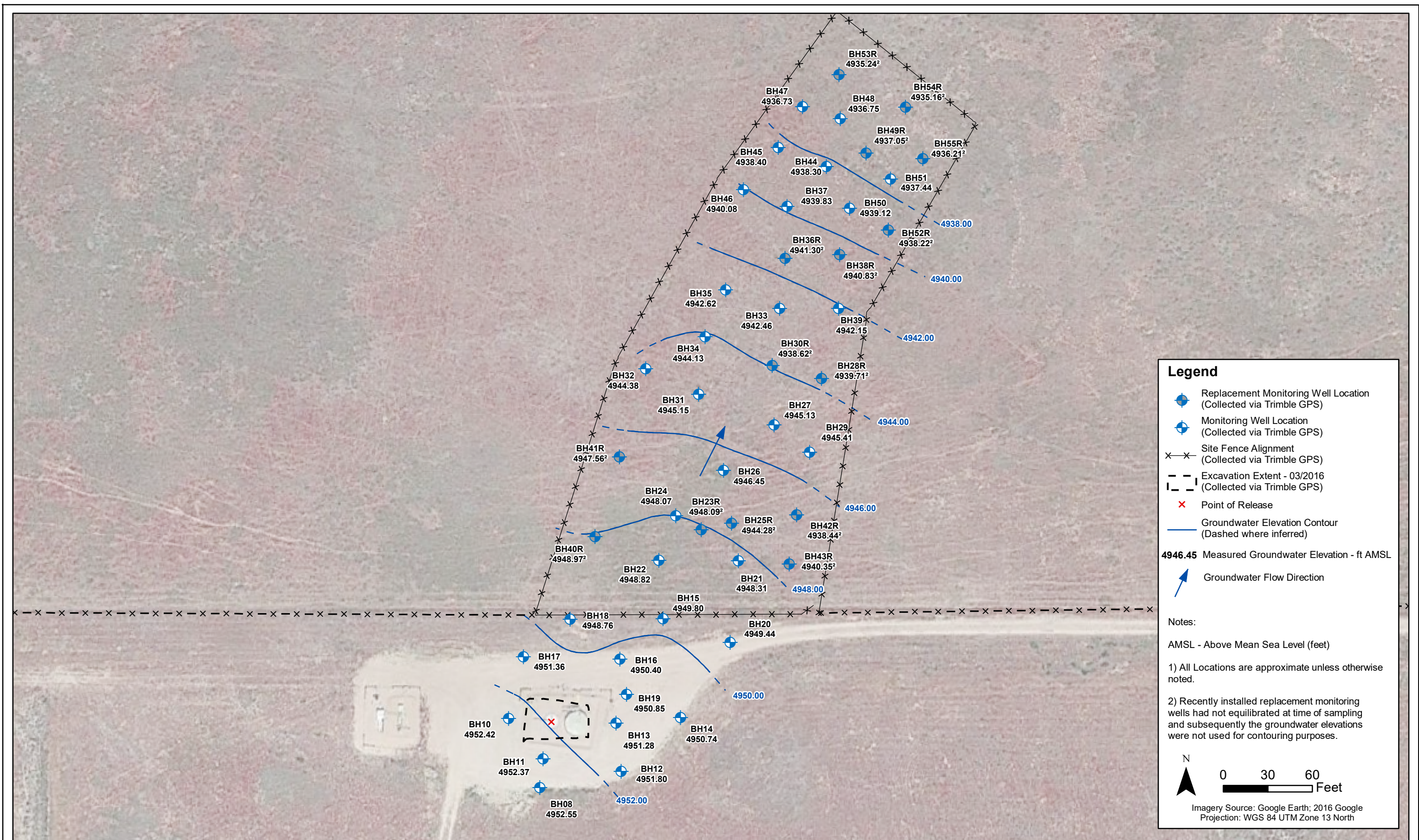
Tasman Geosciences, Inc.  
6899 Pecos Street - Unit C  
Denver, CO 80221

**Noble Energy - DJ Basin**  
**Feather 31-15 Produced Water Tank Release**  
NWNE Section 15, Township 2 North, Range 64 West  
Weld County, Colorado

Soil Analytical Results  
Figure

Figure  
3





DATE:  
November 2017

DESIGNED BY:  
B. Bruns

DRAWN BY:  
D. Arnold



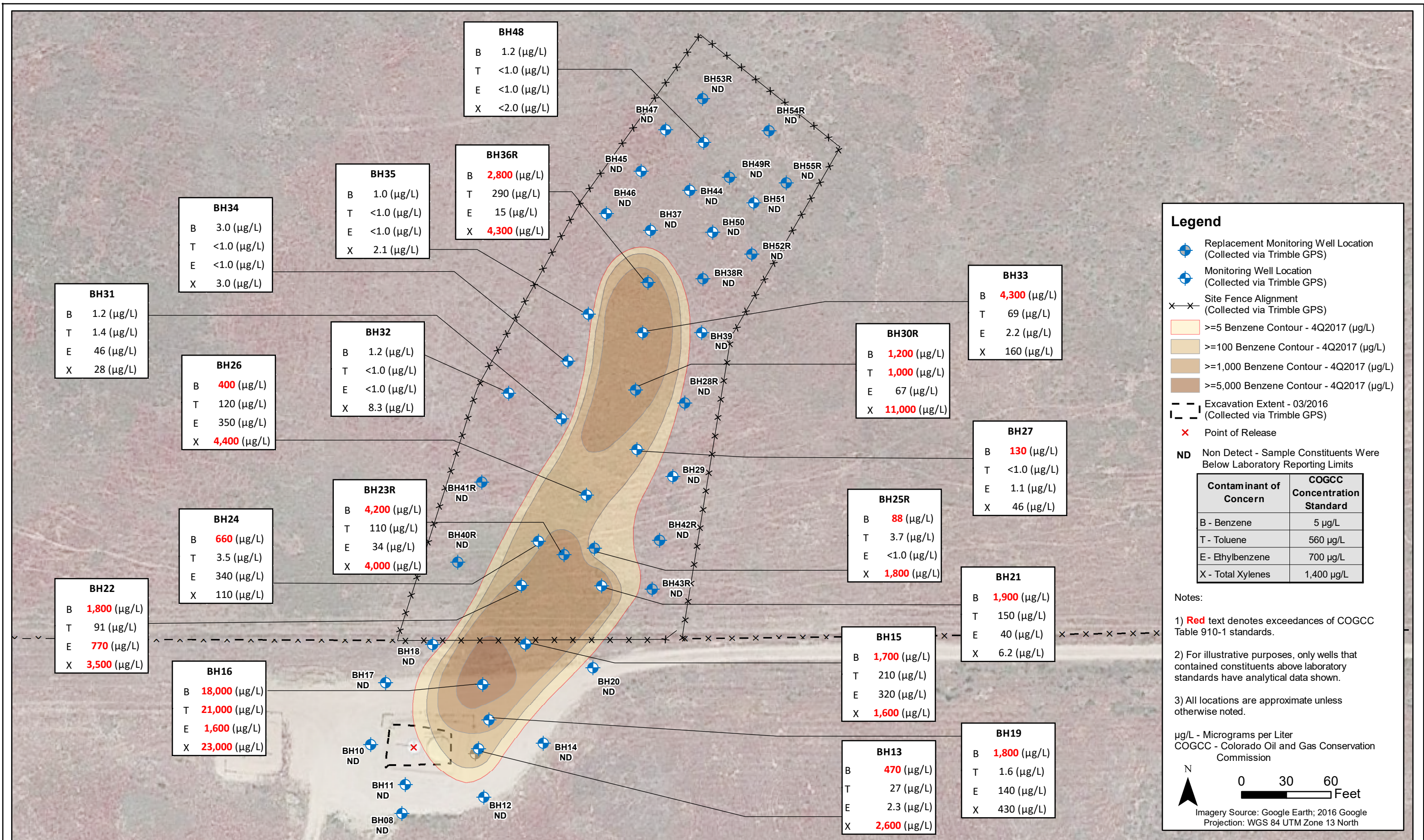
Tasman Geosciences, Inc.  
6899 Pecos Street - Unit C  
Denver, CO 80221

**Noble Energy - DJ Basin**  
**Feather 31-15 Produced Water Tank Release**  
NWNE Section 15, Township 2 North, Range 64 West  
Weld County, Colorado

Groundwater Potentiometric  
Surface Map  
(10/30/17)

**Figure**  
**4**





DATE: November 2017

DESIGNED BY: B. Bruns

DRAWN BY: D. Arnold



**Noble Energy - DJ Basin**  
**Feather 31-15 Produced Water Tank Release**  
NWNE Section 15, Township 2 North, Range 64 West  
Weld County, Colorado

Groundwater Analytical  
Results Map  
(10/30/17)

Figure  
5



# Summit Scientific

---

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

November 09, 2017

Brandon Bruns  
Tasman Geosciences  
6899 Pecos Street  
Denver, CO 80221  
RE: Feather 31-15

Enclosed are the results of analyses for samples received by Summit Scientific on 10/30/17 16:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

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

Paul Shrewsbury For Ben Shrewsbury  
Laboratory Manager



Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15

Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

### ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled   | Date Received  |
|-----------|---------------|--------|----------------|----------------|
| BH08      | 1710326-01    | Water  | 10/30/17 10:25 | 10/30/17 16:30 |
| BH10      | 1710326-02    | Water  | 10/30/17 10:40 | 10/30/17 16:30 |
| BH11      | 1710326-03    | Water  | 10/30/17 11:15 | 10/30/17 16:30 |
| BH12      | 1710326-04    | Water  | 10/30/17 10:05 | 10/30/17 16:30 |
| BH13      | 1710326-05    | Water  | 10/30/17 11:40 | 10/30/17 16:30 |
| BH14      | 1710326-06    | Water  | 10/30/17 10:40 | 10/30/17 16:30 |
| BH15      | 1710326-07    | Water  | 10/30/17 13:55 | 10/30/17 16:30 |
| BH16      | 1710326-08    | Water  | 10/30/17 12:35 | 10/30/17 16:30 |
| BH17      | 1710326-09    | Water  | 10/30/17 10:55 | 10/30/17 16:30 |
| BH18      | 1710326-10    | Water  | 10/30/17 11:05 | 10/30/17 16:30 |
| BH19      | 1710326-11    | Water  | 10/30/17 11:45 | 10/30/17 16:30 |
| BH20      | 1710326-12    | Water  | 10/30/17 10:20 | 10/30/17 16:30 |
| BH21      | 1710326-13    | Water  | 10/30/17 13:25 | 10/30/17 16:30 |
| BH22      | 1710326-14    | Water  | 10/30/17 12:55 | 10/30/17 16:30 |
| BH23R     | 1710326-15    | Water  | 10/30/17 13:45 | 10/30/17 16:30 |
| BH24      | 1710326-16    | Water  | 10/30/17 13:55 | 10/30/17 16:30 |
| BH25R     | 1710326-17    | Water  | 10/30/17 13:30 | 10/30/17 16:30 |
| BH26      | 1710326-18    | Water  | 10/30/17 14:25 | 10/30/17 16:30 |
| BH27      | 1710326-19    | Water  | 10/30/17 13:40 | 10/30/17 16:30 |
| BH28R     | 1710326-20    | Water  | 10/30/17 11:35 | 10/30/17 16:30 |
| BH29      | 1710326-21    | Water  | 10/30/17 11:15 | 10/30/17 16:30 |
| BH30R     | 1710326-22    | Water  | 10/30/17 13:25 | 10/30/17 16:30 |
| BH31      | 1710326-23    | Water  | 10/30/17 13:45 | 10/30/17 16:30 |
| BH32      | 1710326-24    | Water  | 10/30/17 12:20 | 10/30/17 16:30 |
| BH33      | 1710326-25    | Water  | 10/30/17 14:10 | 10/30/17 16:30 |
| BH34      | 1710326-26    | Water  | 10/30/17 12:50 | 10/30/17 16:30 |
| BH35      | 1710326-27    | Water  | 10/30/17 13:00 | 10/30/17 16:30 |

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*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  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15

Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

### ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled   | Date Received  |
|-----------|---------------|--------|----------------|----------------|
| BH36R     | 1710326-28    | Water  | 10/30/17 14:05 | 10/30/17 16:30 |
| BH37      | 1710326-29    | Water  | 10/30/17 14:35 | 10/30/17 16:30 |
| BH38R     | 1710326-30    | Water  | 10/30/17 12:15 | 10/30/17 16:30 |
| BH39      | 1710326-31    | Water  | 10/30/17 11:55 | 10/30/17 16:30 |
| BH40R     | 1710326-32    | Water  | 10/30/17 12:30 | 10/30/17 16:30 |
| BH41R     | 1710326-33    | Water  | 10/30/17 12:40 | 10/30/17 16:30 |
| BH42R     | 1710326-34    | Water  | 10/30/17 14:26 | 10/30/17 16:30 |
| BH43R     | 1710326-35    | Water  | 10/30/17 14:35 | 10/30/17 16:30 |
| BH44      | 1710326-36    | Water  | 10/30/17 14:15 | 10/30/17 16:30 |
| BH45      | 1710326-37    | Water  | 10/30/17 14:00 | 10/30/17 16:30 |
| BH46      | 1710326-38    | Water  | 10/30/17 13:10 | 10/30/17 16:30 |
| BH47      | 1710326-39    | Water  | 10/30/17 13:40 | 10/30/17 16:30 |
| BH48      | 1710326-40    | Water  | 10/30/17 13:45 | 10/30/17 16:30 |
| BH49R     | 1710326-41    | Water  | 10/30/17 13:22 | 10/30/17 16:30 |
| BH50      | 1710326-42    | Water  | 10/30/17 14:15 | 10/30/17 16:30 |
| BH51      | 1710326-43    | Water  | 10/30/17 13:00 | 10/30/17 16:30 |
| BH52R     | 1710326-44    | Water  | 10/30/17 12:40 | 10/30/17 16:30 |
| BH53R     | 1710326-45    | Water  | 10/30/17 13:20 | 10/30/17 16:30 |
| BH54R     | 1710326-46    | Water  | 10/30/17 13:08 | 10/30/17 16:30 |
| BH55R     | 1710326-47    | Water  | 10/30/17 12:45 | 10/30/17 16:30 |

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*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.*

1710326.1

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303-277-9310 ♦ 303-374-5933 Fax

Page 1 of 5

|                  |                                     |
|------------------|-------------------------------------|
| Project Manager: | Brandon Bruns, Invoice: Jacob Evans |
| E-Mail:          | Bbruns@tasman-geo.com               |
| Project Name:    | Feather 31-15                       |
| Project Number:  | —                                   |

| Sample Description   | Date Sampled | Time Sampled | Number of Containers | Preservative                   |                     |      |                 | Matrix      |                                |   |                 | Analyze For: |              |          |             |  |  |  |  |  |  |                      |
|----------------------|--------------|--------------|----------------------|--------------------------------|---------------------|------|-----------------|-------------|--------------------------------|---|-----------------|--------------|--------------|----------|-------------|--|--|--|--|--|--|----------------------|
|                      |              |              |                      | HCl                            | HNO <sub>3</sub>    | None | Other (Specify) | Groundwater | Soil                           | Air - Canister Serial #   | Other (Specify) | 8260 BTEX    | 8260B GBTEXN | 8015 DRO | pH, EC, SAR |  |  |  |  |  |  |                      |
| BH08                 | 10/30/17     | 1025         | 3                    |                                |                     | X    |                 | X           |                                |   |                 |              | X            |          |             |  |  |  |  |  |  |                      |
| BH10                 |              | 1040         | 3                    |                                |                     | X    |                 | X           |                                |   |                 |              | X            |          |             |  |  |  |  |  |  |                      |
| BH11                 |              | 1115         | 3                    |                                |                     | X    |                 | X           |                                |   |                 |              | X            |          |             |  |  |  |  |  |  |                      |
| BH12                 |              | 1005         | 3                    |                                |                     | X    |                 | X           |                                |   |                 |              | X            |          |             |  |  |  |  |  |  |                      |
| BH13                 |              | 1140         | 3                    |                                |                     | X    |                 | X           |                                |   |                 |              | X            |          |             |  |  |  |  |  |  |                      |
| BH14                 |              | 1040         | 3                    |                                |                     | X    |                 | X           |                                |   |                 |              | X            |          |             |  |  |  |  |  |  |                      |
| BH15                 |              | 1355         | 3                    |                                |                     | X    |                 | X           |                                |   |                 |              | X            |          |             |  |  |  |  |  |  |                      |
| BH16                 |              | 1235         | 3                    |                                |                     | X    |                 | X           |                                |   |                 |              | X            |          |             |  |  |  |  |  |  |                      |
| BH17                 |              | 1055         | 3                    |                                |                     | X    |                 | X           |                                |   |                 |              | X            |          |             |  |  |  |  |  |  |                      |
| BH18                 | ✓            | 1105         | 3                    |                                |                     | X    |                 | X           |                                |   |                 |              | X            |          |             |  |  |  |  |  |  |                      |
| Relinquished by:<br> |              |              |                      | Date/Time:<br>1630<br>10/30/17 | Received by:<br>    |      |                 |             | Date/Time:<br>1630<br>10/30/17 | <b>Turn Around Time (Check)</b><br>Same Day <input type="checkbox"/> 72 Hours <input type="checkbox"/><br>24 Hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/><br>48 Hours <input type="checkbox"/> |                 |              |              |          |             |  |  |  |  |  |  | Notes:<br><br>on ice |
| Relinquished by:     |              |              |                      | Date/Time:                     | Received by:        |      |                 |             | Date/Time:                     |   |                 |              |              |          |             |  |  |  |  |  |  |                      |
| Relinquished by:     |              |              |                      | Date/Time:                     | Received in Lab by: |      |                 |             | Date/Time:                     | <b>Sample Integrity:</b><br>Temperature Upon Receipt: 5.8°C<br>Intact: Yes <input checked="" type="radio"/> No <input type="radio"/>  |                 |              |              |          |             |  |  |  |  |  |  |                      |

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1710326.2

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303-277-9310 ♦ 303-374-5933 Fax

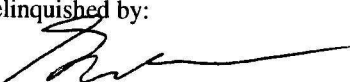
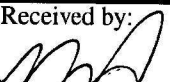
Page 2 of 5

Client: Noble/Tasman  
Address: —  
City/State/Zip: —  
Phone: 303-487-1228 Fax: —  
Sampler Name: GB. JW, BF, DC

Project Manager: Brandon Bruns, Invoice: Jacob Evans  
E-Mail: Bbruns@tasman-geo.com  
Project Name: Feather 31-15  
Project Number: —

| Sample Description | Date Sampled | Time Sampled | Number of Containers | Preservative |                  |      |                 | Matrix      |      |                         |                 | Analyze For: |              |          |             |  |  |  |  | Special Instructions |  |
|--------------------|--------------|--------------|----------------------|--------------|------------------|------|-----------------|-------------|------|-------------------------|-----------------|--------------|--------------|----------|-------------|--|--|--|--|----------------------|--|
|                    |              |              |                      | HCl          | HNO <sub>3</sub> | None | Other (Specify) | Groundwater | Soil | Air - Canister Serial # | Other (Specify) | 8260 BTEX    | 8260B GBTEXN | 8015 DRO | pH, EC, SAR |  |  |  |  |                      |  |
| BH19               | 10/30/17     | 1145         | 3                    |              |                  | X    |                 | X           |      |                         |                 |              | X            |          |             |  |  |  |  |                      |  |
| BH20               |              | 1020         | 3                    |              |                  | X    |                 | X           |      |                         |                 |              | X            |          |             |  |  |  |  |                      |  |
| BH21               |              | 1325         | 3                    |              |                  | X    |                 | X           |      |                         |                 |              | X            |          |             |  |  |  |  |                      |  |
| BH22               |              | 1255         | 3                    |              |                  | X    |                 | X           |      |                         |                 |              | X            |          |             |  |  |  |  |                      |  |
| BH23 R             |              | 1345         | 3                    |              |                  | X    |                 | X           |      |                         |                 |              | X            |          |             |  |  |  |  |                      |  |
| BH24               |              | 1355         | 3                    |              |                  | X    |                 | X           |      |                         |                 |              | X            |          |             |  |  |  |  |                      |  |
| BH25               |              | 1330         | 3                    |              |                  | X    |                 | X           |      |                         |                 |              | X            |          |             |  |  |  |  |                      |  |
| BH26               |              | 1425         | 3                    |              |                  | X    |                 | X           |      |                         |                 |              | X            |          |             |  |  |  |  |                      |  |
| BH27               |              | 1340         | 3                    |              |                  | X    |                 | X           |      |                         |                 |              | X            |          |             |  |  |  |  |                      |  |
| BH28 R             | ✓            | 1135         | 3                    |              |                  | X    |                 | X           |      |                         |                 |              | X            |          |             |  |  |  |  |                      |  |


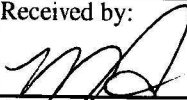
  

|  |                          |  |                          |  |                      |
|--|--------------------------|--|--------------------------|--|----------------------|
| Relinquished by:  | Date/Time: 10/30/17 1630 | Received by:  | Date/Time: 10/30/17 1630 | Turn Around Time (Check)<br>Same Day <input type="checkbox"/> 72 Hours <input type="checkbox"/><br>24 Hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/><br>48 Hours <input type="checkbox"/> | Notes:<br><br>on ice |
| Relinquished by:   | Date/Time:               | Received by:   | Date/Time:               | Sample Integrity:<br>Temperature Upon Receipt: 5.8°C<br>Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No  |                      |
| Relinquished by:   | Date/Time:               | Received in Lab by:  | Date/Time:               |  |                      |

## 1710326.3

Page 3 of 5

|                  |                                     |
|------------------|-------------------------------------|
| Project Manager: | Brandon Bruns, Invoice: Jacob Evans |
| E-Mail:          | Bbruns@tasman-geo.com               |
| Project Name:    | Feather 31-15                       |
| Project Number:  | —                                   |

|  |              |              |                      | Preservative                |                  |      |                 | Matrix   |      |                         |                 | Analyze For:                |              |          |             |  |  |  |  |                      |  |
|--|--------------|--------------|----------------------|-----------------------------|------------------|------|-----------------|--|------|-------------------------|-----------------|-----------------------------|--------------|----------|-------------|--|--|--|--|----------------------|--|
| Sample Description   | Date Sampled | Time Sampled | Number of Containers | HCl                         | HNO <sub>3</sub> | None | Other (Specify) | Groundwater  | Soil | Air - Canister Serial # | Other (Specify) | 8260 BTEX                   | 8260B GBTEXN | 8015 DRO | pH, EC, SAR |  |  |  |  | Special Instructions |  |
| BH29   | 10/30/17     | 1115         | 3                    |                             |                  | X    |                 | X  |      |                         |                 | X                           |              |          |             |  |  |  |  |                      |  |
| BH30 R   |              | 1325         | 3                    |                             |                  | X    |                 | X  |      |                         |                 | X                           |              |          |             |  |  |  |  |                      |  |
| BH31   |              | 1345         | 3                    |                             |                  | X    |                 | X  |      |                         |                 | X                           |              |          |             |  |  |  |  |                      |  |
| BH32   |              | 1220         | 3                    |                             |                  | X    |                 | X  |      |                         |                 | X                           |              |          |             |  |  |  |  |                      |  |
| BH33   |              | 1410         | 3                    |                             |                  | X    |                 | X  |      |                         |                 | X                           |              |          |             |  |  |  |  |                      |  |
| BH34   |              | 1250         | 3                    |                             |                  | X    |                 | X  |      |                         |                 | X                           |              |          |             |  |  |  |  |                      |  |
| BH35   |              | 1300         | 3                    |                             |                  | X    |                 | X  |      |                         |                 | X                           |              |          |             |  |  |  |  |                      |  |
| BH36 R   |              | 1405         | 3                    |                             |                  | X    |                 | X  |      |                         |                 | X                           |              |          |             |  |  |  |  |                      |  |
| BH37   |              | 1435         | 3                    |                             |                  | X    |                 | X  |      |                         |                 | X                           |              |          |             |  |  |  |  |                      |  |
| BH38 R   |              | 1215         | 3                    |                             |                  | X    |                 | X  |      |                         |                 | X                           |              |          |             |  |  |  |  |                      |  |
| Relinquished by:  |              |              |                      | Date/Time: 1630<br>10/30/17 |                  |      |                 | Received by:  |      |                         |                 | Date/Time: 1630<br>10/30/17 |              |          |             | Turn Around Time (Check)<br>Same Day <input type="checkbox"/> 72 Hours <input type="checkbox"/><br>24 Hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/><br>48 Hours <input type="checkbox"/> |  |  |  | Notes:<br><br>on ice |  |
| Relinquished by:   |              |              |                      | Date/Time:                  |                  |      |                 | Received by:   |      |                         |                 | Date/Time:                  |              |          |             | Sample Integrity:<br>Temperature Upon Receipt: 5.8°C<br>Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>  |  |  |  |                      |  |
| Relinquished by:   |              |              |                      | Date/Time:                  |                  |      |                 | Received in Lab by:  |      |                         |                 | Date/Time:                  |              |          |             |  |  |  |  |                      |  |



# Summit Scientific

1710326.4

741 Corporate Circle Suite I ♦ Golden, Colorado 80401  
303-277-9310 ♦ 303-374-5933 Fax


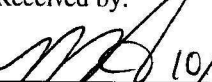
Page 4 of 5

Client: Noble/Tasman  
Address: —  
City/State/Zip: —  
Phone: 303-487-1228 Fax: —  
Sampler Name: GB. JW, BF, DC

Project Manager: Brandon Bruns, Invoice: Jacob Evans  
E-Mail: Bbruns@tasman-geo.com  
Project Name: Feather 31-15  
Project Number: —

| Sample Description | Date Sampled | Time Sampled | Number of Containers | Preservative |                  |      |                 | Matrix      |      |                         |                 | Analyze For: |              |          |             |  |  |  |  | Special Instructions |  |  |
|--------------------|--------------|--------------|----------------------|--------------|------------------|------|-----------------|-------------|------|-------------------------|-----------------|--------------|--------------|----------|-------------|--|--|--|--|----------------------|--|--|
|                    |              |              |                      | HCl          | HNO <sub>3</sub> | None | Other (Specify) | Groundwater | Soil | Air - Canister Serial # | Other (Specify) | 8260 BTEX    | 8260B GBTEXN | 8015 DRO | pH, EC, SAR |  |  |  |  |                      |  |  |
| BH39               | 10/30/17     | 1155         | 3                    |              |                  | X    |                 | X           |      |                         |                 |              | X            |          |             |  |  |  |  |                      |  |  |
| BH40 R             |              | 1230         | 3                    |              |                  | X    |                 | X           |      |                         |                 |              | X            |          |             |  |  |  |  |                      |  |  |
| BH41 R             |              | 1240         | 3                    |              |                  | X    |                 | X           |      |                         |                 |              | X            |          |             |  |  |  |  |                      |  |  |
| BH42 R             |              | 1426         | 1                    |              |                  | X    |                 | X           |      |                         |                 |              | X            |          |             |  |  |  |  |                      |  |  |
| BH43 R             |              | 1435         | 2                    |              |                  | X    |                 | X           |      |                         |                 |              | X            |          |             |  |  |  |  |                      |  |  |
| BH44               |              | 1415         | 3                    |              |                  | X    |                 | X           |      |                         |                 |              | X            |          |             |  |  |  |  |                      |  |  |
| BH45               |              | 1400         | 3                    |              |                  | X    |                 | X           |      |                         |                 |              | X            |          |             |  |  |  |  |                      |  |  |
| BH46               |              | 1310         | 3                    |              |                  | X    |                 | X           |      |                         |                 |              | X            |          |             |  |  |  |  |                      |  |  |
| BH47               |              | 1340         | 3                    |              |                  | X    |                 | X           |      |                         |                 |              | X            |          |             |  |  |  |  |                      |  |  |
| BH48               |              | 1345         | 3                    |              |                  | X    |                 | X           |      |                         |                 |              | X            |          |             |  |  |  |  |                      |  |  |

|  |                                 |  |                                 |  |                                    |
|--|---------------------------------|--|---------------------------------|--|------------------------------------|
| Relinquished by:  | Date/Time: <u>10/30/17 1630</u> | Received by:  | Date/Time: <u>10/30/17 1630</u> | <b>Turn Around Time (Check)</b><br>Same Day <input type="checkbox"/> 72 Hours <input type="checkbox"/><br>24 Hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/><br>48 Hours <input type="checkbox"/><br><br><b>Sample Integrity:</b><br>Temperature Upon Receipt: <u>5.5°C</u><br>Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | <b>Notes:</b><br><br><u>on ice</u> |
| Relinquished by:   | Date/Time:                      | Received by:   | Date/Time:                      |  |                                    |
| Relinquished by:   | Date/Time:                      | Received in Lab by:  | Date/Time:                      |  |                                    |

1710326.5

303-277-9310 ♦ 303-374-5933 Fax

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|                  |                                     |
|------------------|-------------------------------------|
| Project Manager: | Brandon Bruns, Invoice: Jacob Evans |
| E-Mail:          | Bbruns@tasman-geo.com               |
| Project Name:    | Feather 31-15                       |
| Project Number:  | —                                   |

[www.s2scientific.com](http://www.s2scientific.com)

1710326

## Sample Receipt Checklist

S2 Work Order: \_\_\_\_\_

Client: Noble/TasmanClient Project ID: Feather 31-15Shipped Via: P/U

(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Airbill #: \_\_\_\_\_

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

|           |     |  |  |  |  |
|-----------|-----|--|--|--|--|
| Cooler ID |     |  |  |  |  |
| Temp (°C) | 5.8 |  |  |  |  |

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. | ✓   |    |     |                   |
| Were all samples received intact <sup>(1)</sup> ?  | ✓   |    |     |                   |
| Was adequate sample volume provided <sup>(1)</sup> ?   | ✓   |    |     |                   |
| If custody seals are present, are they intact <sup>(1)</sup> ?   |     |    | ✓   |                   |
| Are short holding time analytes or samples with HTs due within 48 hours present?   |     |    | ✓   |                   |
| Is a chain-of-custody (COC) form present and filled out completely <sup>(1)</sup> ?  | ✓   |    |     |                   |
| Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?  | ✓   |    |     |                   |
| Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?  | ✓   |    |     |                   |
| Is the COC properly relinquished by the client w/ date and time recorded <sup>(1)</sup> ?  | ✓   |    |     |                   |
| For volatiles in water – is there headspace present? If yes, contact client and note in narrative.                                       |     | ✓  |     |                   |
| 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   |     |    | ✓   |                   |
| If samples are acid preserved for metals, is the pH ≤ 2 <sup>(1)</sup> ?   |     |    | ✓   |                   |
| Record the pH in Comments.   |     |    |     |                   |
| If dissolved metals are requested, were samples field filtered?  |     |    | ✓   |                   |

Additional Comments (if any):

<sup>(1)</sup> If NO, then contact the client before proceeding with analysis and note in case narrative.Custodian Printed Name: NakitaSignature or Initials of Custodian: [Signature]Date/Time: 10/30/17 1730



Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
11/09/17 09:10

**BH08**  
**1710326-01 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 10:25**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711015 | 11/02/17 | 11/02/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 10:25**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 88.5 %             | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 98.9 %             | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 101 %              | 45-146 |          | "     | "        | "        | "      |       |

Summit Scientific

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6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
11/09/17 09:10

**BH10**  
**1710326-02 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 10:40**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711015 | 11/02/17 | 11/02/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 10:40**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 84.8 %             | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 98.6 %             | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 97.1 %             | 45-146 |          | "     | "        | "        | "      |       |

Summit Scientific

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

**BH11**  
**1710326-03 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 11:15**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711015 | 11/02/17 | 11/02/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 11:15**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 87.7 %             | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 101 %              | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 98.0 %             | 45-146 |          | "     | "        | "        | "      |       |

Summit Scientific

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
11/09/17 09:10

**BH12**  
**1710326-04 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 10:05**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711015 | 11/02/17 | 11/02/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 10:05**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 89.6 %             | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 100 %              | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 97.5 %             | 45-146 |          | "     | "        | "        | "      |       |

Summit Scientific

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
11/09/17 09:10

**BH13**  
**1710326-05 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 11:40**

| Analyte                | Result      | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|------------------------|-------------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| <b>Benzene</b>         | <b>470</b>  | 100                | ug/l  | 100      | 1711015 | 11/01/17 | 11/03/17 | EPA 8260B |       |
| <b>Toluene</b>         | <b>27</b>   | 1.0                | "     | 1        | "       | "        | 11/03/17 | "         |       |
| <b>Ethylbenzene</b>    | <b>2.3</b>  | 1.0                | "     | "        | "       | "        | "        | "         |       |
| <b>Xylenes (total)</b> | <b>2600</b> | 200                | "     | 100      | "       | "        | 11/03/17 | "         |       |

Date Sampled: **10/30/17 11:40**

| Analyte                                 | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| <i>Surrogate: 1,2-Dichloroethane-d4</i> |        | 113 %              | 37-154 |          | "     | "        | 11/03/17 | "      |       |
| <i>Surrogate: Toluene-d8</i>            |        | 103 %              | 45-149 |          | "     | "        | "        | "      |       |
| <i>Surrogate: 4-Bromofluorobenzene</i>  |        | 117 %              | 45-146 |          | "     | "        | "        | "      |       |

Summit Scientific

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

**BH14**  
**1710326-06 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 10:40**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711015 | 11/02/17 | 11/02/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 10:40**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 89.5 %             | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 98.7 %             | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 92.4 %             | 45-146 |          | "     | "        | "        | "      |       |

Summit Scientific

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
11/09/17 09:10

**BH15**  
**1710326-07 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 13:55**

| Analyte                | Result      | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|------------------------|-------------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| <b>Benzene</b>         | <b>1700</b> | 100                | ug/l  | 100      | 1711015 | 11/01/17 | 11/03/17 | EPA 8260B |       |
| <b>Toluene</b>         | <b>210</b>  | 100                | "     | "        | "       | "        | "        | "         |       |
| <b>Ethylbenzene</b>    | <b>320</b>  | 100                | "     | "        | "       | "        | 11/03/17 | "         |       |
| <b>Xylenes (total)</b> | <b>1600</b> | 200                | "     | "        | "       | "        | 11/03/17 | "         |       |

Date Sampled: **10/30/17 13:55**

| Analyte                                 | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| <i>Surrogate: 1,2-Dichloroethane-d4</i> |        | 115 %              | 37-154 |          | "     | "        | 11/03/17 | "      |       |
| <i>Surrogate: Toluene-d8</i>            |        | 102 %              | 45-149 |          | "     | "        | "        | "      |       |
| <i>Surrogate: 4-Bromofluorobenzene</i>  |        | 106 %              | 45-146 |          | "     | "        | "        | "      |       |

Summit Scientific

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

**BH16**  
**1710326-08 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 12:35**

| Analyte                | Result       | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|------------------------|--------------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| <b>Benzene</b>         | <b>18000</b> | 100                | ug/l  | 100      | 1711015 | 11/03/17 | 11/03/17 | EPA 8260B |       |
| <b>Toluene</b>         | <b>21000</b> | 100                | "     | "        | "       | "        | "        | "         |       |
| <b>Ethylbenzene</b>    | <b>1600</b>  | 100                | "     | "        | "       | "        | "        | "         |       |
| <b>Xylenes (total)</b> | <b>23000</b> | 200                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 12:35**

| Analyte                                 | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| <i>Surrogate: 1,2-Dichloroethane-d4</i> |        | 117 %              | 37-154 |          | "     | "        | "        | "      |       |
| <i>Surrogate: Toluene-d8</i>            |        | 103 %              | 45-149 |          | "     | "        | "        | "      |       |
| <i>Surrogate: 4-Bromofluorobenzene</i>  |        | 106 %              | 45-146 |          | "     | "        | "        | "      |       |

Summit Scientific

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

**BH17**  
**1710326-09 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 10:55**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711015 | 11/02/17 | 11/02/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 10:55**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 92.0 %             | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 102 %              | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 98.1 %             | 45-146 |          | "     | "        | "        | "      |       |

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

**BH18**  
**1710326-10 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 11:05**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711015 | 11/02/17 | 11/02/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 11:05**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 89.9 %             | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 99.5 %             | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 99.9 %             | 45-146 |          | "     | "        | "        | "      |       |

Summit Scientific

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
11/09/17 09:10

**BH19**  
**1710326-11 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 11:45**

| Analyte                | Result      | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|------------------------|-------------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| <b>Benzene</b>         | <b>1800</b> | 100                | ug/l  | 100      | 1711015 | 11/01/17 | 11/03/17 | EPA 8260B |       |
| <b>Toluene</b>         | <b>1.6</b>  | 1.0                | "     | 1        | "       | "        | 11/03/17 | "         |       |
| <b>Ethylbenzene</b>    | <b>140</b>  | 1.0                | "     | "        | "       | "        | "        | "         |       |
| <b>Xylenes (total)</b> | <b>430</b>  | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 11:45**

| Analyte                                 | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| <i>Surrogate: 1,2-Dichloroethane-d4</i> |        | 116 %              | 37-154 |          | "     | "        | "        | "      |       |
| <i>Surrogate: Toluene-d8</i>            |        | 99.3 %             | 45-149 |          | "     | "        | "        | "      |       |
| <i>Surrogate: 4-Bromofluorobenzene</i>  |        | 105 %              | 45-146 |          | "     | "        | "        | "      |       |

Summit Scientific

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
11/09/17 09:10

**BH20**  
**1710326-12 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 10:20**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711015 | 11/03/17 | 11/03/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 10:20**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 93.6 %             | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 101 %              | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 105 %              | 45-146 |          | "     | "        | "        | "      |       |

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
11/09/17 09:10

**BH21**  
**1710326-13 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 13:25**

| Analyte                | Result      | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|------------------------|-------------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| <b>Benzene</b>         | <b>1900</b> | 100                | ug/l  | 100      | 1711015 | 11/01/17 | 11/03/17 | EPA 8260B |       |
| <b>Toluene</b>         | <b>150</b>  | 100                | "     | "        | "       | "        | "        | "         |       |
| <b>Ethylbenzene</b>    | <b>40</b>   | 1.0                | "     | 1        | "       | "        | 11/03/17 | "         |       |
| <b>Xylenes (total)</b> | <b>6.2</b>  | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 13:25**

| Analyte                                 | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| <i>Surrogate: 1,2-Dichloroethane-d4</i> |        | 114 %              | 37-154 |          | "     | "        | "        | "      |       |
| <i>Surrogate: Toluene-d8</i>            |        | 100 %              | 45-149 |          | "     | "        | "        | "      |       |
| <i>Surrogate: 4-Bromofluorobenzene</i>  |        | 101 %              | 45-146 |          | "     | "        | "        | "      |       |

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
11/09/17 09:10

**BH22**  
**1710326-14 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 12:55**

| Analyte                | Result      | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|------------------------|-------------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| <b>Benzene</b>         | <b>1800</b> | 100                | ug/l  | 100      | 1711015 | 11/01/17 | 11/03/17 | EPA 8260B |       |
| <b>Toluene</b>         | <b>91</b>   | 1.0                | "     | 1        | "       | "        | 11/03/17 | "         |       |
| <b>Ethylbenzene</b>    | <b>770</b>  | 100                | "     | 100      | "       | "        | "        | "         |       |
| <b>Xylenes (total)</b> | <b>3500</b> | 200                | "     | "        | "       | "        | 11/03/17 | "         |       |

Date Sampled: **10/30/17 12:55**

| Analyte                                 | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| <i>Surrogate: 1,2-Dichloroethane-d4</i> |        | 106 %              | 37-154 |          | "     | "        | 11/03/17 | "      |       |
| <i>Surrogate: Toluene-d8</i>            |        | 110 %              | 45-149 |          | "     | "        | "        | "      |       |
| <i>Surrogate: 4-Bromofluorobenzene</i>  |        | 115 %              | 45-146 |          | "     | "        | "        | "      |       |

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
11/09/17 09:10

**BH23R**  
**1710326-15 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 13:45**

| Analyte                | Result      | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|------------------------|-------------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| <b>Benzene</b>         | <b>4200</b> | 100                | ug/l  | 100      | 1711015 | 11/01/17 | 11/03/17 | EPA 8260B |       |
| <b>Toluene</b>         | <b>110</b>  | 1.0                | "     | 1        | "       | "        | 11/03/17 | "         |       |
| <b>Ethylbenzene</b>    | <b>34</b>   | 1.0                | "     | "        | "       | "        | "        | "         |       |
| <b>Xylenes (total)</b> | <b>4000</b> | 200                | "     | 100      | "       | "        | 11/03/17 | "         |       |

Date Sampled: **10/30/17 13:45**

| Analyte                                 | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| <i>Surrogate: 1,2-Dichloroethane-d4</i> |        | 111 %              | 37-154 |          | "     | "        | 11/03/17 | "      |       |
| <i>Surrogate: Toluene-d8</i>            |        | 102 %              | 45-149 |          | "     | "        | "        | "      |       |
| <i>Surrogate: 4-Bromofluorobenzene</i>  |        | 109 %              | 45-146 |          | "     | "        | "        | "      |       |

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

**BH24**  
**1710326-16 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 13:55**

| Analyte                | Result     | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|------------------------|------------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| <b>Benzene</b>         | <b>660</b> | 100                | ug/l  | 100      | 1711015 | 11/01/17 | 11/03/17 | EPA 8260B |       |
| <b>Toluene</b>         | <b>3.5</b> | 1.0                | "     | 1        | "       | "        | 11/03/17 | "         |       |
| <b>Ethylbenzene</b>    | <b>340</b> | 100                | "     | 100      | "       | "        | "        | "         |       |
| <b>Xylenes (total)</b> | <b>110</b> | 2.0                | "     | 1        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 13:55**

| Analyte                                 | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| <i>Surrogate: 1,2-Dichloroethane-d4</i> |        | 113 %              | 37-154 |          | "     | "        | "        | "      |       |
| <i>Surrogate: Toluene-d8</i>            |        | 101 %              | 45-149 |          | "     | "        | "        | "      |       |
| <i>Surrogate: 4-Bromofluorobenzene</i>  |        | 103 %              | 45-146 |          | "     | "        | "        | "      |       |

Summit Scientific

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

**BH25R**  
**1710326-17 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 13:30**

| Analyte                | Result      | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|------------------------|-------------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| <b>Benzene</b>         | <b>88</b>   | 1.0                | ug/l  | 1        | 1711015 | 11/01/17 | 11/03/17 | EPA 8260B |       |
| <b>Toluene</b>         | <b>3.7</b>  | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene           | ND          | 1.0                | "     | "        | "       | "        | "        | "         |       |
| <b>Xylenes (total)</b> | <b>1800</b> | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 13:30**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 112 %              | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 102 %              | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 111 %              | 45-146 |          | "     | "        | "        | "      |       |

Summit Scientific

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
11/09/17 09:10

**BH26**  
**1710326-18 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 14:25**

| Analyte                | Result      | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|------------------------|-------------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| <b>Benzene</b>         | <b>400</b>  | 100                | ug/l  | 100      | 1711015 | 11/01/17 | 11/03/17 | EPA 8260B |       |
| <b>Toluene</b>         | <b>120</b>  | 1.0                | "     | 1        | "       | "        | 11/03/17 | "         |       |
| <b>Ethylbenzene</b>    | <b>350</b>  | 100                | "     | 100      | "       | "        | "        | "         |       |
| <b>Xylenes (total)</b> | <b>4400</b> | 200                | "     | "        | "       | "        | 11/03/17 | "         |       |

Date Sampled: **10/30/17 14:25**

| Analyte                                 | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| <i>Surrogate: 1,2-Dichloroethane-d4</i> |        | 108 %              | 37-154 |          | "     | "        | 11/03/17 | "      |       |
| <i>Surrogate: Toluene-d8</i>            |        | 110 %              | 45-149 |          | "     | "        | "        | "      |       |
| <i>Surrogate: 4-Bromofluorobenzene</i>  |        | 108 %              | 45-146 |          | "     | "        | "        | "      |       |

Summit Scientific

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

**BH27**  
**1710326-19 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 13:40**

| Analyte                | Result     | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|------------------------|------------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| <b>Benzene</b>         | <b>130</b> | 1.0                | ug/l  | 1        | 1711015 | 11/01/17 | 11/03/17 | EPA 8260B |       |
| Toluene                | ND         | 1.0                | "     | "        | "       | "        | "        | "         |       |
| <b>Ethylbenzene</b>    | <b>1.1</b> | 1.0                | "     | "        | "       | "        | "        | "         |       |
| <b>Xylenes (total)</b> | <b>46</b>  | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 13:40**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 117 %              | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 101 %              | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 102 %              | 45-146 |          | "     | "        | "        | "      |       |

Summit Scientific

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
11/09/17 09:10

**BH28R**  
**1710326-20 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 11:35**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711015 | 11/03/17 | 11/03/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 11:35**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 95.8 %             | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 101 %              | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 102 %              | 45-146 |          | "     | "        | "        | "      |       |

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  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

**BH29**  
**1710326-21 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 11:15**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711016 | 11/03/17 | 11/03/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 11:15**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 114 %              | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 98.0 %             | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 99.2 %             | 45-146 |          | "     | "        | "        | "      |       |

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

**BH30R**  
**1710326-22 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 13:25**

| Analyte                | Result       | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|------------------------|--------------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| <b>Benzene</b>         | <b>1200</b>  | 100                | ug/l  | 100      | 1711016 | 11/03/17 | 11/03/17 | EPA 8260B |       |
| <b>Toluene</b>         | <b>1000</b>  | 100                | "     | "        | "       | "        | "        | "         |       |
| <b>Ethylbenzene</b>    | <b>67</b>    | 1.0                | "     | 1        | "       | "        | 11/03/17 | "         |       |
| <b>Xylenes (total)</b> | <b>11000</b> | 200                | "     | 100      | "       | "        | 11/03/17 | "         |       |

Date Sampled: **10/30/17 13:25**

| Analyte                                 | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| <i>Surrogate: 1,2-Dichloroethane-d4</i> |        | 112 %              | 37-154 |          | "     | "        | 11/03/17 | "      |       |
| <i>Surrogate: Toluene-d8</i>            |        | 103 %              | 45-149 |          | "     | "        | "        | "      |       |
| <i>Surrogate: 4-Bromofluorobenzene</i>  |        | 121 %              | 45-146 |          | "     | "        | "        | "      |       |

Summit Scientific

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
11/09/17 09:10

**BH31**  
**1710326-23 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 13:45**

| Analyte                | Result     | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|------------------------|------------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| <b>Benzene</b>         | <b>1.2</b> | 1.0                | ug/l  | 1        | 1711016 | 11/03/17 | 11/03/17 | EPA 8260B |       |
| <b>Toluene</b>         | <b>1.4</b> | 1.0                | "     | "        | "       | "        | "        | "         |       |
| <b>Ethylbenzene</b>    | <b>46</b>  | 1.0                | "     | "        | "       | "        | 11/04/17 | "         |       |
| <b>Xylenes (total)</b> | <b>28</b>  | 2.0                | "     | "        | "       | "        | 11/03/17 | "         |       |

Date Sampled: **10/30/17 13:45**

| Analyte                                 | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| <i>Surrogate: 1,2-Dichloroethane-d4</i> |        | 116 %              | 37-154 |          | "     | "        | "        | "      |       |
| <i>Surrogate: Toluene-d8</i>            |        | 98.5 %             | 45-149 |          | "     | "        | "        | "      |       |
| <i>Surrogate: 4-Bromofluorobenzene</i>  |        | 103 %              | 45-146 |          | "     | "        | "        | "      |       |

Summit Scientific

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

**BH32**  
**1710326-24 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 12:20**

| Analyte                | Result     | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|------------------------|------------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| <b>Benzene</b>         | <b>1.2</b> | 1.0                | ug/l  | 1        | 1711016 | 11/03/17 | 11/04/17 | EPA 8260B |       |
| Toluene                | ND         | 1.0                | "     | "        | "       | "        | 11/03/17 | "         |       |
| Ethylbenzene           | ND         | 1.0                | "     | "        | "       | "        | "        | "         |       |
| <b>Xylenes (total)</b> | <b>8.3</b> | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 12:20**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 116 %              | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 98.1 %             | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 101 %              | 45-146 |          | "     | "        | "        | "      |       |

Summit Scientific

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

**BH33**  
**1710326-25 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 14:10**

| Analyte                | Result      | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|------------------------|-------------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| <b>Benzene</b>         | <b>4300</b> | 100                | ug/l  | 100      | 1711016 | 11/03/17 | 11/04/17 | EPA 8260B |       |
| <b>Toluene</b>         | <b>69</b>   | 1.0                | "     | 1        | "       | "        | 11/03/17 | "         |       |
| <b>Ethylbenzene</b>    | <b>2.2</b>  | 1.0                | "     | "        | "       | "        | "        | "         |       |
| <b>Xylenes (total)</b> | <b>160</b>  | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 14:10**

| Analyte                                 | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| <i>Surrogate: 1,2-Dichloroethane-d4</i> |        | 114 %              | 37-154 |          | "     | "        | "        | "      |       |
| <i>Surrogate: Toluene-d8</i>            |        | 102 %              | 45-149 |          | "     | "        | "        | "      |       |
| <i>Surrogate: 4-Bromofluorobenzene</i>  |        | 103 %              | 45-146 |          | "     | "        | "        | "      |       |

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
11/09/17 09:10

**BH34**  
**1710326-26 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 12:50**

| Analyte                | Result     | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|------------------------|------------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| <b>Benzene</b>         | <b>3.0</b> | 1.0                | ug/l  | 1        | 1711016 | 11/03/17 | 11/03/17 | EPA 8260B |       |
| Toluene                | ND         | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene           | ND         | 1.0                | "     | "        | "       | "        | "        | "         |       |
| <b>Xylenes (total)</b> | <b>3.0</b> | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 12:50**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 112 %              | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 97.8 %             | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 101 %              | 45-146 |          | "     | "        | "        | "      |       |

Summit Scientific

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

**BH35**  
**1710326-27 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 13:00**

| Analyte                | Result     | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|------------------------|------------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| <b>Benzene</b>         | <b>1.0</b> | 1.0                | ug/l  | 1        | 1711016 | 11/03/17 | 11/03/17 | EPA 8260B |       |
| Toluene                | ND         | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene           | ND         | 1.0                | "     | "        | "       | "        | "        | "         |       |
| <b>Xylenes (total)</b> | <b>2.1</b> | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 13:00**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 112 %              | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 96.5 %             | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 100 %              | 45-146 |          | "     | "        | "        | "      |       |

Summit Scientific

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

**BH36R**  
**1710326-28 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 14:05**

| Analyte                | Result      | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|------------------------|-------------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| <b>Benzene</b>         | <b>2800</b> | 100                | ug/l  | 100      | 1711016 | 11/03/17 | 11/04/17 | EPA 8260B |       |
| <b>Toluene</b>         | <b>290</b>  | 1.0                | "     | 1        | "       | "        | 11/03/17 | "         |       |
| <b>Ethylbenzene</b>    | <b>15</b>   | 1.0                | "     | "        | "       | "        | "        | "         |       |
| <b>Xylenes (total)</b> | <b>4300</b> | 200                | "     | 100      | "       | "        | 11/04/17 | "         |       |

Date Sampled: **10/30/17 14:05**

| Analyte                                 | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| <i>Surrogate: 1,2-Dichloroethane-d4</i> |        | 106 %              | 37-154 |          | "     | "        | 11/03/17 | "      |       |
| <i>Surrogate: Toluene-d8</i>            |        | 101 %              | 45-149 |          | "     | "        | "        | "      |       |
| <i>Surrogate: 4-Bromofluorobenzene</i>  |        | 111 %              | 45-146 |          | "     | "        | "        | "      |       |

Summit Scientific

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
11/09/17 09:10

**BH37**  
**1710326-29 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 14:35**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711016 | 11/05/17 | 11/05/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 14:35**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 117 %              | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 99.1 %             | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 107 %              | 45-146 |          | "     | "        | "        | "      |       |

Summit Scientific

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
11/09/17 09:10

**BH38R**  
**1710326-30 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 12:15**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711016 | 11/05/17 | 11/05/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 12:15**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 110 %              | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 96.3 %             | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 99.8 %             | 45-146 |          | "     | "        | "        | "      |       |

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

**BH39**  
**1710326-31 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 11:55**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711016 | 11/05/17 | 11/05/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 11:55**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 113 %              | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 98.0 %             | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 101 %              | 45-146 |          | "     | "        | "        | "      |       |

Summit Scientific

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
11/09/17 09:10

**BH40R**  
**1710326-32 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 12:30**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711016 | 11/05/17 | 11/05/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 12:30**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 117 %              | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 99.0 %             | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 101 %              | 45-146 |          | "     | "        | "        | "      |       |

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

**BH41R**  
**1710326-33 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 12:40**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711016 | 11/05/17 | 11/05/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 12:40**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 116 %              | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 98.5 %             | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 103 %              | 45-146 |          | "     | "        | "        | "      |       |

Summit Scientific

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

**BH42R**  
**1710326-34 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 14:26**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711016 | 11/05/17 | 11/05/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 14:26**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 114 %              | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 98.9 %             | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 103 %              | 45-146 |          | "     | "        | "        | "      |       |

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

**BH43R**  
**1710326-35 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 14:35**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711016 | 11/05/17 | 11/05/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 14:35**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 113 %              | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 98.5 %             | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 102 %              | 45-146 |          | "     | "        | "        | "      |       |

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

**BH44**  
**1710326-36 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 14:15**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711016 | 11/05/17 | 11/05/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 14:15**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 114 %              | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 99.1 %             | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 103 %              | 45-146 |          | "     | "        | "        | "      |       |

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

**BH45**  
**1710326-37 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 14:00**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711016 | 11/01/17 | 11/04/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 14:00**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 137 %              | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 97.4 %             | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 103 %              | 45-146 |          | "     | "        | "        | "      |       |

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6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
11/09/17 09:10

**BH46**  
**1710326-38 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 13:10**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711016 | 11/01/17 | 11/04/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 13:10**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 134 %              | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 97.3 %             | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 104 %              | 45-146 |          | "     | "        | "        | "      |       |

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6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
11/09/17 09:10

**BH47**  
**1710326-39 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 13:40**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711016 | 11/01/17 | 11/04/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 13:40**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 133 %              | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 98.9 %             | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 101 %              | 45-146 |          | "     | "        | "        | "      |       |

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6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
11/09/17 09:10

**BH48**  
**1710326-40 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 13:45**

| Analyte         | Result     | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|------------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| <b>Benzene</b>  | <b>1.2</b> | 1.0                | ug/l  | 1        | 1711016 | 11/01/17 | 11/04/17 | EPA 8260B |       |
| Toluene         | ND         | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND         | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND         | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 13:45**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 136 %              | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 97.4 %             | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 101 %              | 45-146 |          | "     | "        | "        | "      |       |

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

**BH49R**  
**1710326-41 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 13:22**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711027 | 11/04/17 | 11/04/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 13:22**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 82.8 %             | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 98.5 %             | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 97.7 %             | 45-146 |          | "     | "        | "        | "      |       |

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

**BH50**  
**1710326-42 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 14:15**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711027 | 11/04/17 | 11/04/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 14:15**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 79.4 %             | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 97.7 %             | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 98.2 %             | 45-146 |          | "     | "        | "        | "      |       |

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

**BH51**  
**1710326-43 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 13:00**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711027 | 11/04/17 | 11/04/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 13:00**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 81.8 %             | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 94.1 %             | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 97.6 %             | 45-146 |          | "     | "        | "        | "      |       |

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

**BH52R**  
**1710326-44 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 12:40**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711027 | 11/04/17 | 11/04/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 12:40**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 81.1 %             | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 96.8 %             | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 98.7 %             | 45-146 |          | "     | "        | "        | "      |       |

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Brunns

**Reported:**  
11/09/17 09:10

**BH53R**  
**1710326-45 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 13:20**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711027 | 11/04/17 | 11/04/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 13:20**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 83.1 %             | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 98.0 %             | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 95.9 %             | 45-146 |          | "     | "        | "        | "      |       |

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

**BH54R**  
**1710326-46 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 13:08**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711027 | 11/04/17 | 11/04/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 13:08**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 81.5 %             | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 96.1 %             | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 93.9 %             | 45-146 |          | "     | "        | "        | "      |       |

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

**BH55R**  
**1710326-47 (Water)**

**Summit Scientific**

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

Date Sampled: **10/30/17 12:45**

| Analyte         | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene         | ND     | 1.0                | ug/l  | 1        | 1711027 | 11/04/17 | 11/04/17 | EPA 8260B |       |
| Toluene         | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Ethylbenzene    | ND     | 1.0                | "     | "        | "       | "        | "        | "         |       |
| Xylenes (total) | ND     | 2.0                | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **10/30/17 12:45**

| Analyte                          | Result | Reporting<br>Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|--------------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 84.8 %             | 37-154 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 98.9 %             | 45-149 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 97.0 %             | 45-146 |          | "     | "        | "        | "      |       |

Summit Scientific

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

## 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 1711015 - EPA 5030 Water MS

##### Blank (1711015-BLK1)

Prepared & Analyzed: 11/02/17

|                                  |      |     |      |      |  |      |        |  |  |  |
|----------------------------------|------|-----|------|------|--|------|--------|--|--|--|
| Benzene                          | ND   | 1.0 | ug/l |      |  |      |        |  |  |  |
| Toluene                          | ND   | 1.0 | "    |      |  |      |        |  |  |  |
| Ethylbenzene                     | ND   | 1.0 | "    |      |  |      |        |  |  |  |
| Xylenes (total)                  | ND   | 2.0 | "    |      |  |      |        |  |  |  |
| Surrogate: 1,2-Dichloroethane-d4 | 12.2 |     | "    | 13.3 |  | 91.7 | 37-154 |  |  |  |
| Surrogate: Toluene-d8            | 13.6 |     | "    | 13.3 |  | 102  | 45-149 |  |  |  |
| Surrogate: 4-Bromofluorobenzene  | 13.8 |     | "    | 13.3 |  | 103  | 45-146 |  |  |  |

##### LCS (1711015-BS1)

Prepared & Analyzed: 11/02/17

|                                  |      |     |      |      |  |      |        |  |  |  |
|----------------------------------|------|-----|------|------|--|------|--------|--|--|--|
| Benzene                          | 23.0 | 1.0 | ug/l | 33.3 |  | 68.9 | 51-132 |  |  |  |
| Toluene                          | 26.5 | 1.0 | "    | 33.3 |  | 79.6 | 51-138 |  |  |  |
| Ethylbenzene                     | 31.1 | 1.0 | "    | 33.1 |  | 94.0 | 58-146 |  |  |  |
| m,p-Xylene                       | 61.0 | 2.0 | "    | 66.5 |  | 91.7 | 57-144 |  |  |  |
| o-Xylene                         | 30.6 | 1.0 | "    | 32.7 |  | 93.7 | 53-146 |  |  |  |
| Surrogate: 1,2-Dichloroethane-d4 | 12.1 |     | "    | 13.3 |  | 91.1 | 37-154 |  |  |  |
| Surrogate: Toluene-d8            | 12.8 |     | "    | 13.3 |  | 96.4 | 45-149 |  |  |  |
| Surrogate: 4-Bromofluorobenzene  | 12.9 |     | "    | 13.3 |  | 96.5 | 45-146 |  |  |  |

##### Matrix Spike (1711015-MS1)

Source: 1710326-01

Prepared & Analyzed: 11/02/17

|                                  |      |     |      |      |    |      |        |  |  |  |
|----------------------------------|------|-----|------|------|----|------|--------|--|--|--|
| Benzene                          | 23.0 | 1.0 | ug/l | 33.3 | ND | 68.9 | 34-141 |  |  |  |
| Toluene                          | 27.0 | 1.0 | "    | 33.3 | ND | 81.1 | 27-151 |  |  |  |
| Ethylbenzene                     | 31.1 | 1.0 | "    | 33.1 | ND | 94.1 | 29-160 |  |  |  |
| m,p-Xylene                       | 61.7 | 2.0 | "    | 66.5 | ND | 92.7 | 20-166 |  |  |  |
| o-Xylene                         | 30.3 | 1.0 | "    | 32.7 | ND | 92.8 | 33-159 |  |  |  |
| Surrogate: 1,2-Dichloroethane-d4 | 12.3 |     | "    | 13.3 |    | 92.2 | 37-154 |  |  |  |
| Surrogate: Toluene-d8            | 13.1 |     | "    | 13.3 |    | 98.2 | 45-149 |  |  |  |
| Surrogate: 4-Bromofluorobenzene  | 13.3 |     | "    | 13.3 |    | 99.6 | 45-146 |  |  |  |

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

Reported:  
11/09/17 09:10

**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 1711015 - EPA 5030 Water MS**

| Matrix Spike Dup (1711015-MSD1)  |      |     |      | Source: 1710326-01 |    | Prepared & Analyzed: 11/02/17 |        |       |    |  |
|----------------------------------|------|-----|------|--------------------|----|-------------------------------|--------|-------|----|--|
| Benzene                          | 23.4 | 1.0 | ug/l | 33.3               | ND | 70.1                          | 34-141 | 1.64  | 32 |  |
| Toluene                          | 27.3 | 1.0 | "    | 33.3               | ND | 81.8                          | 27-151 | 0.884 | 25 |  |
| Ethylbenzene                     | 32.1 | 1.0 | "    | 33.1               | ND | 97.1                          | 29-160 | 3.13  | 50 |  |
| m,p-Xylene                       | 63.0 | 2.0 | "    | 66.5               | ND | 94.7                          | 20-166 | 2.17  | 36 |  |
| o-Xylene                         | 31.1 | 1.0 | "    | 32.7               | ND | 95.2                          | 33-159 | 2.51  | 26 |  |
| Surrogate: 1,2-Dichloroethane-d4 | 13.4 |     | "    | 13.3               |    | 100                           | 37-154 |       |    |  |
| Surrogate: Toluene-d8            | 13.3 |     | "    | 13.3               |    | 99.5                          | 45-149 |       |    |  |
| Surrogate: 4-Bromofluorobenzene  | 13.7 |     | "    | 13.3               |    | 103                           | 45-146 |       |    |  |

**Batch 1711016 - EPA 5030 Water MS**

| Blank (1711016-BLK1)             |      |     |      | Prepared & Analyzed: 11/03/17 |  |      |        |  |  |  |
|----------------------------------|------|-----|------|-------------------------------|--|------|--------|--|--|--|
| Benzene                          | ND   | 1.0 | ug/l |                               |  |      |        |  |  |  |
| Toluene                          | ND   | 1.0 | "    |                               |  |      |        |  |  |  |
| Ethylbenzene                     | ND   | 1.0 | "    |                               |  |      |        |  |  |  |
| Xylenes (total)                  | ND   | 2.0 | "    |                               |  |      |        |  |  |  |
| Surrogate: 1,2-Dichloroethane-d4 | 14.9 |     | "    | 13.3                          |  | 112  | 37-154 |  |  |  |
| Surrogate: Toluene-d8            | 13.0 |     | "    | 13.3                          |  | 97.8 | 45-149 |  |  |  |
| Surrogate: 4-Bromofluorobenzene  | 13.6 |     | "    | 13.3                          |  | 102  | 45-146 |  |  |  |

| LCS (1711016-BS1)                |      |     |      | Prepared & Analyzed: 11/03/17 |  |     |        |  |  |  |
|----------------------------------|------|-----|------|-------------------------------|--|-----|--------|--|--|--|
| Benzene                          | 37.8 | 1.0 | ug/l | 33.3                          |  | 113 | 51-132 |  |  |  |
| Toluene                          | 36.8 | 1.0 | "    | 33.3                          |  | 110 | 51-138 |  |  |  |
| Ethylbenzene                     | 42.0 | 1.0 | "    | 33.1                          |  | 127 | 58-146 |  |  |  |
| m,p-Xylene                       | 80.6 | 2.0 | "    | 66.5                          |  | 121 | 57-144 |  |  |  |
| o-Xylene                         | 40.3 | 1.0 | "    | 32.7                          |  | 123 | 53-146 |  |  |  |
| Surrogate: 1,2-Dichloroethane-d4 | 15.5 |     | "    | 13.3                          |  | 116 | 37-154 |  |  |  |
| Surrogate: Toluene-d8            | 13.5 |     | "    | 13.3                          |  | 101 | 45-149 |  |  |  |
| Surrogate: 4-Bromofluorobenzene  | 13.5 |     | "    | 13.3                          |  | 102 | 45-146 |  |  |  |

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

**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 1711016 - EPA 5030 Water MS**

**Matrix Spike (1711016-MS1)**

**Source: 1710326-21**

**Prepared & Analyzed: 11/03/17**

|                                  |      |     |      |      |    |     |        |  |  |
|----------------------------------|------|-----|------|------|----|-----|--------|--|--|
| Benzene                          | 38.5 | 1.0 | ug/l | 33.3 | ND | 116 | 34-141 |  |  |
| Toluene                          | 37.4 | 1.0 | "    | 33.3 | ND | 112 | 27-151 |  |  |
| Ethylbenzene                     | 42.9 | 1.0 | "    | 33.1 | ND | 130 | 29-160 |  |  |
| m,p-Xylene                       | 81.9 | 2.0 | "    | 66.5 | ND | 123 | 20-166 |  |  |
| o-Xylene                         | 40.7 | 1.0 | "    | 32.7 | ND | 125 | 33-159 |  |  |
| Surrogate: 1,2-Dichloroethane-d4 | 15.8 |     | "    | 13.3 |    | 118 | 37-154 |  |  |
| Surrogate: Toluene-d8            | 13.4 |     | "    | 13.3 |    | 100 | 45-149 |  |  |
| Surrogate: 4-Bromofluorobenzene  | 13.8 |     | "    | 13.3 |    | 103 | 45-146 |  |  |

**Matrix Spike Dup (1711016-MSD1)**

**Source: 1710326-21**

**Prepared & Analyzed: 11/03/17**

|                                  |      |     |      |      |    |     |        |       |    |
|----------------------------------|------|-----|------|------|----|-----|--------|-------|----|
| Benzene                          | 38.6 | 1.0 | ug/l | 33.3 | ND | 116 | 34-141 | 0.156 | 32 |
| Toluene                          | 37.8 | 1.0 | "    | 33.3 | ND | 114 | 27-151 | 1.14  | 25 |
| Ethylbenzene                     | 43.9 | 1.0 | "    | 33.1 | ND | 133 | 29-160 | 2.24  | 50 |
| m,p-Xylene                       | 83.6 | 2.0 | "    | 66.5 | ND | 126 | 20-166 | 2.10  | 36 |
| o-Xylene                         | 42.0 | 1.0 | "    | 32.7 | ND | 128 | 33-159 | 3.07  | 26 |
| Surrogate: 1,2-Dichloroethane-d4 | 15.9 |     | "    | 13.3 |    | 119 | 37-154 |       |    |
| Surrogate: Toluene-d8            | 13.3 |     | "    | 13.3 |    | 100 | 45-149 |       |    |
| Surrogate: 4-Bromofluorobenzene  | 13.8 |     | "    | 13.3 |    | 103 | 45-146 |       |    |

**Batch 1711027 - EPA 5030 Water MS**

**Blank (1711027-BLK1)**

**Prepared & Analyzed: 11/04/17**

|                                  |      |     |      |      |  |      |        |  |  |
|----------------------------------|------|-----|------|------|--|------|--------|--|--|
| Benzene                          | ND   | 1.0 | ug/l |      |  |      |        |  |  |
| Toluene                          | ND   | 1.0 | "    |      |  |      |        |  |  |
| Ethylbenzene                     | ND   | 1.0 | "    |      |  |      |        |  |  |
| Xylenes (total)                  | ND   | 2.0 | "    |      |  |      |        |  |  |
| Surrogate: 1,2-Dichloroethane-d4 | 14.7 |     | "    | 13.3 |  | 110  | 37-154 |  |  |
| Surrogate: Toluene-d8            | 12.6 |     | "    | 13.3 |  | 94.4 | 45-149 |  |  |
| Surrogate: 4-Bromofluorobenzene  | 13.3 |     | "    | 13.3 |  | 99.6 | 45-146 |  |  |

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15  
Project Number: [none]  
Project Manager: Brandon Bruns

Reported:  
11/09/17 09:10

**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 1711027 - EPA 5030 Water MS**

**LCS (1711027-BS1)**

Prepared & Analyzed: 11/04/17

|                                  |      |     |      |      |  |      |        |  |  |  |
|----------------------------------|------|-----|------|------|--|------|--------|--|--|--|
| Benzene                          | 21.7 | 1.0 | ug/l | 33.3 |  | 65.1 | 51-132 |  |  |  |
| Toluene                          | 26.2 | 1.0 | "    | 33.3 |  | 78.5 | 51-138 |  |  |  |
| Ethylbenzene                     | 31.8 | 1.0 | "    | 33.1 |  | 96.3 | 58-146 |  |  |  |
| m,p-Xylene                       | 64.6 | 2.0 | "    | 66.5 |  | 97.0 | 57-144 |  |  |  |
| o-Xylene                         | 31.6 | 1.0 | "    | 32.7 |  | 96.6 | 53-146 |  |  |  |
| Surrogate: 1,2-Dichloroethane-d4 | 13.9 |     | "    | 13.3 |  | 104  | 37-154 |  |  |  |
| Surrogate: Toluene-d8            | 12.8 |     | "    | 13.3 |  | 95.9 | 45-149 |  |  |  |
| Surrogate: 4-Bromofluorobenzene  | 9.57 |     | "    | 13.3 |  | 71.8 | 45-146 |  |  |  |

**Matrix Spike (1711027-MS1)**

Source: 1711013-01

Prepared & Analyzed: 11/04/17

|                                  |      |     |      |      |    |      |        |  |  |  |
|----------------------------------|------|-----|------|------|----|------|--------|--|--|--|
| Benzene                          | 21.3 | 1.0 | ug/l | 33.3 | ND | 63.8 | 34-141 |  |  |  |
| Toluene                          | 26.2 | 1.0 | "    | 33.3 | ND | 78.7 | 27-151 |  |  |  |
| Ethylbenzene                     | 30.6 | 1.0 | "    | 33.1 | ND | 92.5 | 29-160 |  |  |  |
| m,p-Xylene                       | 62.2 | 2.0 | "    | 66.5 | ND | 93.5 | 20-166 |  |  |  |
| o-Xylene                         | 31.4 | 1.0 | "    | 32.7 | ND | 96.0 | 33-159 |  |  |  |
| Surrogate: 1,2-Dichloroethane-d4 | 11.0 |     | "    | 13.3 |    | 82.9 | 37-154 |  |  |  |
| Surrogate: Toluene-d8            | 12.6 |     | "    | 13.3 |    | 94.5 | 45-149 |  |  |  |
| Surrogate: 4-Bromofluorobenzene  | 12.2 |     | "    | 13.3 |    | 91.4 | 45-146 |  |  |  |

**Matrix Spike Dup (1711027-MSD1)**

Source: 1711013-01

Prepared & Analyzed: 11/04/17

|                                  |      |     |      |      |    |      |        |       |    |  |
|----------------------------------|------|-----|------|------|----|------|--------|-------|----|--|
| Benzene                          | 21.8 | 1.0 | ug/l | 33.3 | ND | 65.3 | 34-141 | 2.28  | 32 |  |
| Toluene                          | 26.1 | 1.0 | "    | 33.3 | ND | 78.3 | 27-151 | 0.573 | 25 |  |
| Ethylbenzene                     | 30.2 | 1.0 | "    | 33.1 | ND | 91.2 | 29-160 | 1.45  | 50 |  |
| m,p-Xylene                       | 60.9 | 2.0 | "    | 66.5 | ND | 91.5 | 20-166 | 2.14  | 36 |  |
| o-Xylene                         | 30.8 | 1.0 | "    | 32.7 | ND | 94.3 | 33-159 | 1.71  | 26 |  |
| Surrogate: 1,2-Dichloroethane-d4 | 12.1 |     | "    | 13.3 |    | 90.5 | 37-154 |       |    |  |
| Surrogate: Toluene-d8            | 12.8 |     | "    | 13.3 |    | 96.2 | 45-149 |       |    |  |
| Surrogate: 4-Bromofluorobenzene  | 12.6 |     | "    | 13.3 |    | 94.2 | 45-146 |       |    |  |

Summit Scientific

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Tasman Geosciences  
6899 Pecos Street  
Denver CO, 80221

Project: Feather 31-15

Project Number: [none]  
Project Manager: Brandon Bruns

**Reported:**  
11/09/17 09:10

### 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                          |