

**THIRD QUARTER 2019
SITE MONITORING DATA**

MOSIER 23-12

COGCC SPILL TRACKING # 448998

COGCC REMEDIATION # 10158

Prepared for:



2115 117th Avenue
Greeley, CO 80631

Prepared by:



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**TABLE 1
GROUNDWATER ELEVATION DATA
NOBLE ENERGY, INC. - MOSIER 23-12F**

| Monitoring Well ID | Date | Top of Casing Elevation (ft. AMSL) | Total Depth (ft. BTOC) | Depth to Water (ft.) ⁽¹⁾ | Depth to LNAPL (ft.) ⁽¹⁾ | LNAPL Thickness (ft.) | Groundwater Elevation* (ft. AMSL) |
|---------------------------|-------------|---|-------------------------------|--|--|------------------------------|--|
| BH01 | 01/19/17 | NM | 13.57 | 12.57 | 8.65 | 3.92 | NM |
| BH01 | 02/21/17 | Well Destroyed During Excavation | | | | | |
| BH02 | 01/19/17 | NM | NM | 14.47 | 11.16 | 3.31 | NM |
| BH02 | 02/21/17 | Well Destroyed During Excavation | | | | | |
| BH04 | 01/19/17 | NM | NM | 15.53 | 11.41 | 4.12 | NM |
| BH04 | 02/21/17 | Well Destroyed During Excavation | | | | | |
| BH07 | 01/19/17 | NM | NM | 11.36 | 10.71 | 0.65 | NM |
| BH07 | 02/21/17 | Well Destroyed During Excavation | | | | | |
| BH09 | 01/19/17 | NM | NM | 11.65 | 11.57 | 0.08 | NM |
| BH09 | 02/21/17 | Well Destroyed During Excavation | | | | | |
| BH13 | 10/20/17 | 4729.82 | 11.29 | 6.00 | ND | ND | 4723.82 |
| BH13 | 01/19/18 | 4729.82 | 11.24 | 7.40 | ND | ND | 4722.42 |
| BH13 | 04/18/18 | 4729.82 | 11.23 | 8.95 | ND | ND | 4720.87 |
| BH13 | 07/09/18 | 4729.82 | 11.32 | 8.28 | ND | ND | 4721.54 |
| BH13 | 10/05/18 | 4729.82 | 11.31 | 7.75 | ND | ND | 4722.07 |
| BH13 | 01/03/19 | 4729.82 | 11.28 | 9.07 | ND | ND | 4720.75 |
| BH13 | 04/12/19 | 4729.82 | 11.37 | 10.44 | ND | ND | 4719.38 |
| BH13 | 07/09/19 | 4729.82 | 11.30 | 9.71 | ND | ND | 4720.25 |
| BH14 | 10/20/17 | 4729.82 | 14.76 | 6.00 | ND | ND | 4723.82 |
| BH14 | 01/19/18 | 4729.82 | 14.64 | 7.40 | ND | ND | 4722.42 |
| BH14 | 04/18/18 | 4729.82 | 14.63 | 8.94 | ND | ND | 4720.88 |
| BH14 | 07/09/18 | 4729.82 | 14.48 | 8.28 | ND | ND | 4721.54 |
| BH14 | 10/05/18 | 4729.82 | 14.44 | 7.70 | ND | ND | 4722.12 |
| BH14 | 01/03/19 | 4729.82 | 14.44 | 9.08 | ND | ND | 4720.74 |
| BH14 | 04/12/19 | 4729.82 | 14.42 | 10.47 | ND | ND | 4719.35 |
| BH14 | 07/09/19 | 4729.82 | 14.40 | 10.05 | ND | ND | 4719.86 |
| BH15 | 10/20/17 | 4730.14 | 11.22 | 6.43 | ND | ND | 4723.71 |
| BH15 | 01/19/18 | 4730.14 | 11.20 | 7.85 | ND | ND | 4722.29 |
| BH15 | 04/18/18 | 4730.14 | 11.22 | 9.37 | ND | ND | 4720.77 |
| BH15 | 07/09/18 | 4730.14 | 11.26 | 8.69 | ND | ND | 4721.45 |
| BH15 | 10/05/18 | 4730.14 | 11.24 | 8.16 | ND | ND | 4721.98 |
| BH15 | 01/03/19 | 4730.14 | 11.23 | 9.52 | ND | ND | 4720.62 |
| BH15 | 04/12/19 | 4730.14 | 11.29 | 10.91 | ND | ND | 4719.23 |
| BH15 | 07/09/19 | 4730.14 | 11.25 | 10.87 | ND | ND | 4719.69 |
| BH16 | 10/20/17 | 4729.88 | 11.21 | 6.21 | ND | ND | 4723.67 |
| BH16 | 01/19/18 | 4729.88 | 11.13 | 7.57 | ND | ND | 4722.31 |
| BH16 | 04/18/18 | 4729.88 | 11.14 | 9.15 | ND | ND | 4720.73 |
| BH16 | 07/09/18 | 4729.88 | 11.30 | 8.46 | ND | ND | 4721.42 |
| BH16 | 10/05/18 | 4729.88 | 11.27 | 7.92 | ND | ND | 4721.96 |
| BH16 | 01/03/19 | 4729.88 | 11.26 | 9.27 | ND | ND | 4720.61 |
| BH16 | 04/12/19 | 4729.88 | 11.33 | 10.71 | ND | ND | 4719.17 |
| BH16 | 07/09/19 | 4729.88 | 11.27 | 10.49 | ND | ND | 4719.7 |

**TABLE 1
GROUNDWATER ELEVATION DATA
NOBLE ENERGY, INC. - MOSIER 23-12F**

| Monitoring Well ID | Date | Top of Casing Elevation (ft. AMSL) | Total Depth (ft. BTOC) | Depth to Water (ft.) ⁽¹⁾ | Depth to LNAPL (ft.) ⁽¹⁾ | LNAPL Thickness (ft.) | Groundwater Elevation* (ft. AMSL) |
|---------------------------|-------------|---|-------------------------------|--|--|------------------------------|--|
| BH17 | 10/20/17 | 4729.71 | 11.24 | 6.02 | ND | ND | 4723.69 |
| BH17 | 01/19/18 | 4729.71 | 11.20 | 7.39 | ND | ND | 4722.32 |
| BH17 | 04/18/18 | 4729.71 | 11.20 | 8.98 | ND | ND | 4720.73 |
| BH17 | 07/09/18 | 4729.71 | 11.23 | 8.27 | ND | ND | 4721.44 |
| BH17 | 10/05/18 | 4729.71 | 11.21 | 7.74 | ND | ND | 4721.97 |
| BH17 | 01/03/19 | 4729.71 | 11.21 | 9.09 | ND | ND | 4720.62 |
| BH17 | 04/12/19 | 4729.71 | 11.25 | 10.42 | ND | ND | 4719.29 |
| BH17 | 07/09/19 | 4729.71 | 11.20 | 10.28 | ND | ND | 4719.7 |
| BH18 | 10/20/17 | 4729.50 | 11.62 | 5.77 | ND | ND | 4723.73 |
| BH18 | 01/19/18 | 4729.50 | 11.47 | 7.15 | ND | ND | 4722.35 |
| BH18 | 04/18/18 | 4729.50 | 11.39 | 8.70 | ND | ND | 4720.80 |
| BH18 | 07/09/18 | 4729.50 | 11.53 | 8.03 | ND | ND | 4721.47 |
| BH18 | 10/05/18 | 4729.50 | 11.50 | 7.48 | ND | ND | 4722.02 |
| BH18 | 01/03/19 | 4729.50 | 11.55 | 8.83 | ND | ND | 4720.67 |
| BH18 | 04/12/19 | 4729.50 | 11.56 | 10.18 | ND | ND | 4719.32 |
| BH18 | 07/09/19 | 4729.50 | 11.52 | 9.99 | ND | ND | 4719.74 |
| BH19 | 10/20/17 | 4729.73 | 11.40 | 5.94 | ND | ND | 4723.79 |
| BH19 | 01/19/18 | 4729.73 | 11.35 | 7.32 | ND | ND | 4722.41 |
| BH19 | 04/18/18 | 4729.73 | 11.35 | 8.88 | ND | ND | 4720.85 |
| BH19 | 07/09/18 | 4729.73 | 11.60 | 8.19 | ND | ND | 4721.54 |
| BH19 | 10/05/18 | 4729.73 | 11.58 | 7.66 | ND | ND | 4722.07 |
| BH19 | 01/03/19 | 4729.73 | 11.58 | 8.99 | ND | ND | 4720.74 |
| BH19 | 04/12/19 | 4729.73 | 11.64 | 10.42 | ND | ND | 4719.31 |
| BH19 | 07/09/19 | 4729.73 | 11.59 | 10.22 | ND | ND | 4719.83 |
| BH20 | 10/20/17 | 4731.78 | 13.52 | 7.96 | ND | ND | 4723.82 |
| BH20 | 01/19/18 | 4731.78 | 13.44 | 9.34 | ND | ND | 4722.44 |
| BH20 | 04/18/18 | 4731.78 | 13.43 | 10.92 | ND | ND | 4720.86 |
| BH20 | 07/09/18 | 4731.78 | 13.64 | 10.23 | ND | ND | 4721.55 |
| BH20 | 10/05/18 | 4731.78 | 13.63 | 9.69 | ND | ND | 4722.09 |
| BH20 | 01/03/19 | 4731.78 | 13.64 | 11.02 | ND | ND | 4720.76 |
| BH20 | 04/12/19 | 4731.78 | 13.73 | 12.42 | ND | ND | 4719.36 |
| BH20 | 07/09/19 | 4731.78 | 13.68 | 9.93 | ND | ND | 4719.84 |
| BH21 | 12/18/17 | 4730.34 | 14.25 | 7.78 | ND | ND | 4722.56 |
| BH21 | 01/19/18 | 4730.34 | 14.26 | 8.12 | ND | ND | 4722.22 |
| BH21 | 04/18/18 | 4730.34 | 14.18 | 9.66 | ND | ND | 4720.68 |
| BH21 | 07/09/18 | 4730.34 | 14.19 | 9.96 | ND | ND | 4720.38 |
| BH21 | 10/05/18 | 4730.34 | 14.18 | 8.42 | ND | ND | 4721.92 |
| BH21 | 01/03/19 | 4730.34 | 14.10 | 9.82 | ND | ND | 4720.52 |
| BH21 | 04/12/19 | 4730.34 | 14.15 | 11.20 | ND | ND | 4719.14 |
| BH21 | 07/09/19 | 4730.34 | 14.20 | 12.14 | ND | ND | 4718.61 |
| BH22 | 12/18/17 | 4729.78 | 15.55 | 7.16 | ND | ND | 4722.62 |
| BH22 | 01/19/18 | 4729.78 | 15.45 | 7.52 | ND | ND | 4722.26 |

**TABLE 1
GROUNDWATER ELEVATION DATA
NOBLE ENERGY, INC. - MOSIER 23-12F**

| Monitoring Well ID | Date | Top of Casing Elevation (ft. AMSL) | Total Depth (ft. BTOC) | Depth to Water (ft.) ⁽¹⁾ | Depth to LNAPL (ft.) ⁽¹⁾ | LNAPL Thickness (ft.) | Groundwater Elevation* (ft. AMSL) |
|---------------------------|-------------|---|-------------------------------|--|--|------------------------------|--|
| BH22 | 04/18/18 | 4729.78 | 15.35 | 9.09 | ND | ND | 4720.69 |
| BH22 | 07/09/18 | 4729.78 | 15.32 | 8.38 | ND | ND | 4721.40 |
| BH22 | 10/05/18 | 4729.78 | 15.29 | 7.84 | ND | ND | 4721.94 |
| BH22 | 01/03/19 | 4729.78 | 15.27 | 9.22 | ND | ND | 4720.56 |
| BH22 | 04/12/19 | 4729.78 | 15.33 | 10.64 | 10.59 | 0.05 | 4719.18 |
| BH22 | 07/09/19 | 4729.78 | 15.33 | 10.29 | ND | ND | 4719.67 |
| BH23 | 12/18/17 | 4732.23 | 18.86 | 9.62 | ND | ND | 4722.61 |
| BH23 | 01/19/18 | 4732.23 | 18.85 | 9.99 | ND | ND | 4722.24 |
| BH23 | 04/18/18 | 4732.23 | 18.73 | 11.57 | ND | ND | 4720.66 |
| BH23 | 07/09/18 | 4732.23 | 18.65 | 10.88 | ND | ND | 4721.35 |
| BH23 | 10/05/18 | 4732.23 | 18.63 | 10.32 | ND | ND | 4721.91 |
| BH23 | 01/03/19 | 4732.23 | 18.55 | 11.69 | ND | ND | 4720.54 |
| BH23 | 04/12/19 | 4732.23 | 18.41 | 13.11 | ND | ND | 4719.12 |
| BH23 | 07/09/19 | 4732.23 | 18.45 | 9.57 | ND | ND | 4719.64 |
| BH24 | 12/18/17 | 4732.40 | 17.75 | 9.69 | ND | ND | 4722.71 |
| BH24 | 01/19/18 | 4732.40 | 17.79 | 10.09 | ND | ND | 4722.31 |
| BH24 | 04/18/18 | 4732.40 | 17.76 | 11.69 | ND | ND | 4720.71 |
| BH24 | 07/09/18 | 4732.40 | 17.55 | 10.98 | ND | ND | 4721.42 |
| BH24 | 10/05/18 | 4732.40 | 17.50 | 10.45 | ND | ND | 4721.95 |
| BH24 | 01/03/19 | 4732.40 | 17.52 | 11.80 | ND | ND | 4720.60 |
| BH24 | 04/12/19 | 4732.40 | 17.49 | 13.24 | ND | ND | 4719.16 |
| BH24 | 07/09/19 | 4731.98 | 17.04 | 9.74 | ND | ND | 4719.67 |
| BH25 | 12/18/17 | 4732.80 | 18.84 | 10.26 | ND | ND | 4722.54 |
| BH25 | 01/19/18 | 4732.80 | 18.80 | 10.62 | ND | ND | 4722.18 |
| BH25 | 04/18/18 | 4732.80 | 18.79 | 12.16 | ND | ND | 4720.64 |
| BH25 | 07/09/18 | 4732.80 | 18.78 | 11.46 | ND | ND | 4721.34 |
| BH25 | 10/05/18 | 4732.80 | 18.82 | 10.92 | ND | ND | 4721.88 |
| BH25 | 01/03/19 | 4732.80 | 18.80 | 12.32 | ND | ND | 4720.48 |
| BH25 | 04/12/19 | 4732.80 | 18.74 | 13.70 | ND | ND | 4719.10 |
| BH25 | 07/09/19 | 4732.00 | 17.73 | 9.68 | ND | ND | 4719.63 |
| BH26 | 01/19/18 | 4729.59 | 15.41 | 7.40 | ND | ND | 4722.19 |
| BH26 | 04/18/18 | 4729.59 | 15.36 | 8.99 | ND | ND | 4720.60 |
| BH26 | 07/09/18 | 4729.59 | 10.99 | 8.27 | ND | ND | 4721.32 |
| BH26 | 10/05/18 | 4729.59 | 15.15 | 7.73 | ND | ND | 4721.86 |
| BH26 | 01/03/19 | 4729.59 | 15.15 | 9.10 | ND | ND | 4720.49 |
| BH26 | 04/12/19 | 4729.59 | 14.98 | 10.53 | ND | ND | 4719.06 |
| BH26 | 07/09/19 | 4729.59 | 14.97 | 9.53 | ND | ND | 4719.59 |
| BH27 | 01/19/18 | 4730.27 | 14.42 | 8.12 | ND | ND | 4722.15 |
| BH27 | 04/18/18 | 4730.27 | 14.40 | 9.71 | ND | ND | 4720.56 |
| BH27 | 07/09/18 | 4730.27 | 14.39 | 8.99 | ND | ND | 4721.28 |
| BH27 | 10/05/18 | 4730.27 | 14.34 | 8.45 | ND | ND | 4721.82 |
| BH27 | 01/03/19 | 4730.27 | 14.33 | 9.84 | ND | ND | 4720.43 |

**TABLE 1
GROUNDWATER ELEVATION DATA
NOBLE ENERGY, INC. - MOSIER 23-12F**

| Monitoring Well ID | Date | Top of Casing Elevation (ft. AMSL) | Total Depth (ft. BTOC) | Depth to Water (ft.) ⁽¹⁾ | Depth to LNAPL (ft.) ⁽¹⁾ | LNAPL Thickness (ft.) | Groundwater Elevation* (ft. AMSL) |
|---------------------------|-------------|---|-------------------------------|--|--|------------------------------|--|
| BH27 | 04/12/19 | 4730.27 | 14.40 | 11.25 | ND | ND | 4719.02 |
| BH27 | 07/09/19 | 4730.27 | 14.43 | 9.55 | ND | ND | 4719.56 |
| BH28 | 01/19/18 | 4731.71 | 14.01 | 9.64 | ND | ND | 4722.07 |
| BH28 | 04/18/18 | 4731.71 | 14.59 | 11.17 | ND | ND | 4720.54 |
| BH28 | 07/09/18 | 4731.71 | 14.62 | 10.47 | ND | ND | 4721.24 |
| BH28 | 10/05/18 | 4731.71 | 14.59 | 9.92 | ND | ND | 4721.79 |
| BH28 | 01/03/19 | 4731.71 | 14.57 | 11.35 | ND | ND | 4720.36 |
| BH28 | 04/12/19 | 4731.71 | 14.68 | 12.72 | ND | ND | 4718.99 |
| BH28 | 07/09/19 | 4731.71 | 14.64 | 9.50 | ND | ND | 4719.53 |
| BH29 | 01/19/18 | 4732.48 | 14.69 | 10.41 | ND | ND | 4722.07 |
| BH29 | 04/18/18 | 4732.48 | 14.66 | 11.91 | ND | ND | 4720.57 |
| BH29 | 07/09/18 | 4732.48 | 14.74 | 11.18 | ND | ND | 4721.30 |
| BH29 | 10/05/18 | 4732.48 | 14.70 | 10.65 | ND | ND | 4721.83 |
| BH29 | 01/03/19 | 4732.48 | 14.69 | 12.08 | ND | ND | 4720.40 |
| BH29 | 04/12/19 | 4732.48 | 14.79 | 13.43 | ND | ND | 4719.05 |
| BH29 | 07/09/19 | 4732.48 | 14.71 | 9.74 | ND | ND | 4719.58 |
| BH30 | 01/19/18 | 4732.25 | 14.46 | 10.07 | ND | ND | 4722.18 |
| BH30 | 04/18/18 | 4732.25 | 14.41 | 11.59 | ND | ND | 4720.66 |
| BH30 | 07/09/18 | 4732.25 | 14.49 | 10.87 | ND | ND | 4721.38 |
| BH30 | 10/05/18 | 4732.25 | 14.48 | 10.35 | ND | ND | 4721.9 |
| BH30 | 01/03/19 | 4732.25 | 14.42 | 11.78 | ND | ND | 4720.47 |
| BH30 | 04/12/19 | 4732.25 | 14.57 | 13.09 | ND | ND | 4719.16 |
| BH30 | 07/09/19 | 4732.25 | 14.57 | 10.05 | ND | ND | 4719.64 |
| BH31 | 07/09/18 | 4732.56 | 17.67 | 10.94 | ND | ND | 4721.62 |
| BH31 | 10/05/18 | 4732.56 | 17.6 | 10.41 | ND | ND | 4722.15 |
| BH31 | 01/03/19 | 4732.56 | 17.58 | 11.73 | ND | ND | 4720.83 |
| BH31 | 04/12/19 | 4732.56 | 17.50 | 13.11 | ND | ND | 4719.45 |
| BH31 | 07/09/19 | 4732.56 | 17.51 | 9.72 | ND | ND | 4719.85 |
| BH32 | 07/09/18 | 4732.49 | 17.81 | 10.93 | ND | ND | 4721.56 |
| BH32 | 10/05/18 | 4732.49 | 17.77 | 10.41 | ND | ND | 4722.08 |
| BH32 | 01/03/19 | 4732.49 | 17.75 | 11.75 | ND | ND | 4720.74 |
| BH32 | 04/12/19 | 4732.49 | 17.79 | 13.10 | ND | ND | 4719.39 |
| BH32 | 07/09/19 | 4732.49 | 17.74 | 9.47 | ND | ND | 4719.88 |
| BH33 | 07/09/18 | 4730.34 | 15.49 | 8.88 | ND | ND | 4721.46 |
| BH33 | 10/05/18 | 4730.34 | 15.44 | 8.35 | ND | ND | 4721.99 |
| BH33 | 01/03/19 | 4730.34 | 15.35 | 9.72 | ND | ND | 4720.62 |
| BH33 | 04/12/19 | 4730.34 | 15.31 | 11.07 | ND | ND | 4719.27 |
| BH33 | 07/09/19 | 4730.34 | 15.31 | 10.62 | ND | ND | 4719.77 |

NOTES:

ft. = Feet

AMSL = Above mean sea level

TABLE 1
GROUNDWATER ELEVATION DATA
NOBLE ENERGY, INC. - MOSIER 23-12F

| Monitoring Well ID | Date | Top of Casing Elevation (ft. AMSL) | Total Depth (ft. BTOC) | Depth to Water (ft.) ⁽¹⁾ | Depth to LNAPL (ft.) ⁽¹⁾ | LNAPL Thickness (ft.) | Groundwater Elevation* (ft. AMSL) |
|--------------------|------|------------------------------------|------------------------|-------------------------------------|-------------------------------------|-----------------------|-----------------------------------|
|--------------------|------|------------------------------------|------------------------|-------------------------------------|-------------------------------------|-----------------------|-----------------------------------|

BTOC = Below top of casing

LNAPL = Light non-aqueous phase liquid

ND = Not Detected

NM = Not Measured

Soil borings BH03, BH05, BH06, BH08, BH10-BH12 were not converted to monitoring wells.

1) Depth to water measurements collected prior to third quarter 2019 were measured from top of well casing. Subsequent measurements were collected from top of casing and adjusted using survey data to reflect depth of water from ground surface.

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

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

LNAPL relative density was estimated to be 0.75

**TABLE 2
GROUNDWATER ANALYTICAL DATA
NOBLE ENERGY, INC. - MOSIER 23-12F**

| Monitoring Well ID | Date | Benzene (µg/L) | Toluene (µg/L) | Ethylbenzene (µg/L) | Total Xylenes (µg/L) |
|-----------------------|----------|--|----------------|---------------------|----------------------|
| COGCC Standard | | 5 | 560 | 700 | 1,400 |
| BH01 | 01/19/17 | Not Sampled - 3.92' LNAPL Present | | | |
| BH01 | 02/21/17 | Well Destroyed During Excavation | | | |
| BH02 | 01/19/17 | Not Sampled - 3.31' LNAPL Present | | | |
| BH02 | 02/21/17 | Well Destroyed During Excavation | | | |
| BH04 | 01/19/17 | Not Sampled - 4.12' LNAPL Present | | | |
| BH04 | 02/21/17 | Well Destroyed During Excavation | | | |
| BH07 | 01/19/17 | Not Sampled - 0.65' LNAPL Present | | | |
| BH07 | 02/21/17 | Well Destroyed During Excavation | | | |
| BH09 | 01/19/17 | Not Sampled - 0.08' LNAPL Present | | | |
| BH09 | 02/21/17 | Well Destroyed During Excavation | | | |
| BH13 | 10/20/17 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH13 | 01/19/18 | 40 | <1.0 | <1.0 | <2.0 |
| BH13 | 04/18/18 | 55 | <1.0 | <1.0 | <2.0 |
| BH13 | 07/09/18 | 6 | <1.0 | <1.0 | <2.0 |
| BH13 | 10/05/18 | 1 | <1.0 | <1.0 | <2.0 |
| BH13 | 01/03/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH13 | 04/12/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH13 | 07/09/19 | 11 | <1.0 | <1.0 | <2.0 |
| BH14 | 10/20/17 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH14 | 01/19/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH14 | 04/18/18 | 18 | <1.0 | <1.0 | <2.0 |
| BH14 | 07/09/18 | 4.5 | <1.0 | <1.0 | <2.0 |
| BH14 | 10/05/18 | 2.3 | <1.0 | <1.0 | <2.0 |
| BH14 | 01/03/19 | 1.4 | <1.0 | <1.0 | <2.0 |
| BH14 | 04/12/19 | 14 | <1.0 | <1.0 | <2.0 |
| BH14 | 07/09/19 | 1.0 | <1.0 | <1.0 | <2.0 |
| BH15 | 10/20/17 | 5,900 | 5,800 | 340 | 2,900 |
| BH15 | 01/19/18 | 6,800 | 4,300 | 440 | 5,200 |
| BH15 | 04/18/18 | 7,100 | 3,000 | 490 | 5,900 |
| BH15 | 07/09/18 | 11,000 | 520 | 710 | 7,200 |
| BH15 | 10/05/18 | 6,000 | 66 | 16 | 4,900 |
| BH15 | 01/03/19 | 15,000 | 2,200 | 21,000 | 7,600 |
| BH15 | 04/12/19 | Insufficeint Water - No sample collected | | | |
| BH15 | 07/09/19 | 960 | 5.1 | 46 | 290 |
| BH16 | 10/20/17 | 1,600 | 1.6 | 9.9 | <2.0 |
| BH16 | 01/19/18 | 1,400 | <1.0 | 7.3 | <2.0 |
| BH16 | 04/18/18 | 980 | <1.0 | <1.0 | <2.0 |
| BH16 | 07/09/18 | 900 | <1.0 | <1.0 | <2.0 |
| BH16 | 10/05/18 | 10 | <1.0 | <1.0 | <2.0 |
| BH16 | 01/03/19 | 420 | <1.0 | <1.0 | <2.0 |
| BH16 | 04/12/19 | 12 | <1.0 | <1.0 | <2.0 |
| BH16 | 07/09/19 | 910 | <1.0 | 2.1 | 5.8 |

TABLE 2
GROUNDWATER ANALYTICAL DATA
NOBLE ENERGY, INC. - MOSIER 23-12F

| Monitoring Well ID | Date | Benzene (µg/L) | Toluene (µg/L) | Ethylbenzene (µg/L) | Total Xylenes (µg/L) |
|-----------------------|----------|----------------|----------------|---------------------|----------------------|
| COGCC Standard | | 5 | 560 | 700 | 1,400 |
| BH17 | 10/20/17 | 150 | <1.0 | <1.0 | <2.0 |
| BH17 | 01/19/18 | 270 | 1.2 | 1.2 | 2.2 |
| BH17 | 04/18/18 | 210 | <1.0 | <1.0 | <2.0 |
| BH17 | 07/09/18 | 120 | <1.0 | <1.0 | <2.0 |
| BH17 | 10/05/18 | 36 | <1.0 | <1.0 | <2.0 |
| BH17 | 01/03/19 | 9.5 | 1.2 | <1.0 | <2.0 |
| BH17 | 04/12/19 | 25 | <1.0 | <1.0 | <2.0 |
| BH17 | 07/09/19 | 120 | <1.0 | <1.0 | <2.0 |
| BH18 | 10/20/17 | <1.0 | <1.0 | <1.0 | 640 |
| BH18 | 01/19/18 | 990 | 15 | 67 | 1,700 |
| BH18 | 04/18/18 | 530 | 1.1 | 2.0 | 21 |
| BH18 | 07/09/18 | 110 | <1.0 | 8.1 | 66 |
| BH18 | 10/05/18 | 19 | <1.0 | 1.5 | 16 |
| BH18 | 01/03/19 | 38 | <1.0 | <1.0 | 5.2 |
| BH18 | 04/12/19 | 870 | 140 | 80 | 830 |
| BH18 | 07/09/19 | 190 | 62 | 16 | 150 |
| BH19 | 10/20/17 | 51 | <1.0 | <1.0 | 460 |
| BH19 | 01/19/18 | 470 | 990 | 32 | 560 |
| BH19 | 04/18/18 | 87 | 340 | 9.8 | 170 |
| BH19 | 07/09/18 | 51 | 63 | 4.5 | 62 |
| BH19 | 10/05/18 | 41 | 69 | 3.3 | 57 |
| BH19 | 01/03/19 | 130 | 80 | 8.1 | 130 |
| BH19 | 04/12/19 | 130 | 240 | 8.2 | 170 |
| BH19 | 07/09/19 | 98 | 250 | 6.6 | 190 |
| BH20 | 10/20/17 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH20 | 01/19/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH20 | 04/18/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH20 | 07/09/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH20 | 10/05/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH20 | 01/03/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH20 | 04/12/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH20 | 07/09/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH21 | 12/18/17 | 31 | <1.0 | <1.0 | <2.0 |
| BH21 | 01/19/18 | 4.0 | <1.0 | <1.0 | <2.0 |
| BH21 | 04/18/18 | 27 | <1.0 | <1.0 | <2.0 |
| BH21 | 07/09/18 | 7.4 | <1.0 | <1.0 | <2.0 |
| BH21 | 10/05/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH21 | 01/03/19 | 2.8 | <1.0 | <1.0 | <2.0 |
| BH21 | 04/12/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH21 | 07/09/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH22 | 12/18/17 | 6800 | 15,000 | 510 | 8,000 |
| BH22 | 01/19/18 | 5,100 | 8,400 | 320 | 4,500 |
| BH22 | 04/18/18 | 5,900 | 7,000 | 340 | 4,200 |

TABLE 2
GROUNDWATER ANALYTICAL DATA
NOBLE ENERGY, INC. - MOSIER 23-12F

| Monitoring Well ID | Date | Benzene (µg/L) | Toluene (µg/L) | Ethylbenzene (µg/L) | Total Xylenes (µg/L) |
|-----------------------|----------|----------------|----------------|---------------------|----------------------|
| COGCC Standard | | 5 | 560 | 700 | 1,400 |
| BH22 | 07/09/18 | 2,100 | 1,900 | 110 | 6,000 |
| BH22 | 10/05/18 | 25 | 18 | 1.2 | 13 |
| BH22 | 01/03/19 | 9,800 | 7,400 | 99 | 830 |
| BH22 | 04/12/19 | 2,000 | 16,000 | 910 | 16,000 |
| BH22 | 07/09/19 | 1,400 | 2,000 | 77 | 1,900 |
| BH23 | 12/18/17 | 510 | 4.2 | <1.0 | 3.7 |
| BH23 | 01/19/18 | 310 | <1.0 | 210 | 420 |
| BH23 | 04/18/18 | 21 | 3.8 | <1.0 | 3.6 |
| BH23 | 07/09/18 | 12 | <1.0 | <1.0 | <2.0 |
| BH23 | 10/05/18 | 1.0 | 1.4 | <1.0 | <2.0 |
| BH23 | 01/03/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH23 | 04/12/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH23 | 07/09/19 | 31 | <1.0 | <1.0 | <2.0 |
| BH24 | 12/18/17 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH24 | 01/19/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH24 | 04/18/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH24 | 07/09/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH24 | 10/05/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH24 | 01/03/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH24 | 04/12/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH24 | 07/09/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH25 | 12/18/17 | 29 | <1.0 | <1.0 | <2.0 |
| BH25 | 01/19/18 | 240 | <1.0 | <1.0 | <2.0 |
| BH25 | 04/18/18 | 1,100 | <1.0 | <1.0 | <2.0 |
| BH25 | 07/09/18 | 3,800 | <1.0 | <1.0 | 13 |
| BH25 | 10/05/18 | 3,800 | 1.1 | <1.0 | 52 |
| BH25 | 01/03/19 | 3,900 | <1.0 | 860 | 7,600 |
| BH25 | 04/12/19 | 910 | 180 | 18 | 160 |
| BH25 | 07/09/19 | 5,800 | 3,000 | 150 | 2,200 |
| BH26 | 01/19/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH26 | 04/18/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH26 | 07/09/18 | 1.0 | <1.0 | <1.0 | <2.0 |
| BH26 | 10/05/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH26 | 01/03/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH26 | 04/12/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH26 | 07/09/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH27 | 01/19/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH27 | 04/18/18 | 14 | <1.0 | <1.0 | <2.0 |
| BH27 | 07/09/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH27 | 10/05/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH27 | 01/03/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH27 | 04/12/19 | <1.0 | <1.0 | <1.0 | <2.0 |

TABLE 2
GROUNDWATER ANALYTICAL DATA
NOBLE ENERGY, INC. - MOSIER 23-12F

| Monitoring Well ID | Date | Benzene (µg/L) | Toluene (µg/L) | Ethylbenzene (µg/L) | Total Xylenes (µg/L) |
|--------------------|----------|----------------|----------------|---------------------|----------------------|
| COGCC Standard | | 5 | 560 | 700 | 1,400 |
| BH27 | 07/09/19 | 1.3 | <1.0 | <1.0 | <2.0 |
| BH28 | 01/19/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH28 | 04/18/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH28 | 07/09/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH28 | 10/05/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH28 | 01/03/19 | 3.2 | <1.0 | <1.0 | <2.0 |
| BH28 | 04/12/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH28 | 07/09/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH29 | 01/19/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH29 | 04/18/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH29 | 07/09/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH29 | 10/05/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH29 | 01/03/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH29 | 04/12/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH29 | 07/09/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH30 | 01/19/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH30 | 04/18/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH30 | 07/09/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH30 | 10/05/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH30 | 01/03/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH30 | 04/12/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH30 | 07/09/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH31 | 07/09/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH31 | 10/05/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH31 | 01/03/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH31 | 04/12/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH31 | 07/09/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH32 | 07/09/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH32 | 10/05/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH32 | 01/03/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH32 | 04/12/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH32 | 07/09/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH33 | 07/09/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH33 | 10/05/18 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH33 | 01/03/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH33 | 04/12/19 | <1.0 | <1.0 | <1.0 | <2.0 |
| BH33 | 07/09/19 | <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

TABLE 2
GROUNDWATER ANALYTICAL DATA
NOBLE ENERGY, INC. - MOSIER 23-12F

| Monitoring Well ID | Date | Benzene (µg/L) | Toluene (µg/L) | Ethylbenzene (µg/L) | Total Xylenes (µg/L) |
|-----------------------|------|----------------|----------------|---------------------|----------------------|
| COGCC Standard | | 5 | 560 | 700 | 1,400 |

Groundwater standards referenced from COGCC Table 910-1

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

Soil borings BH03, BH05, BH06, BH08, BH10-BH12 were not converted to monitoring wells.

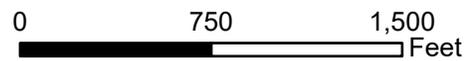
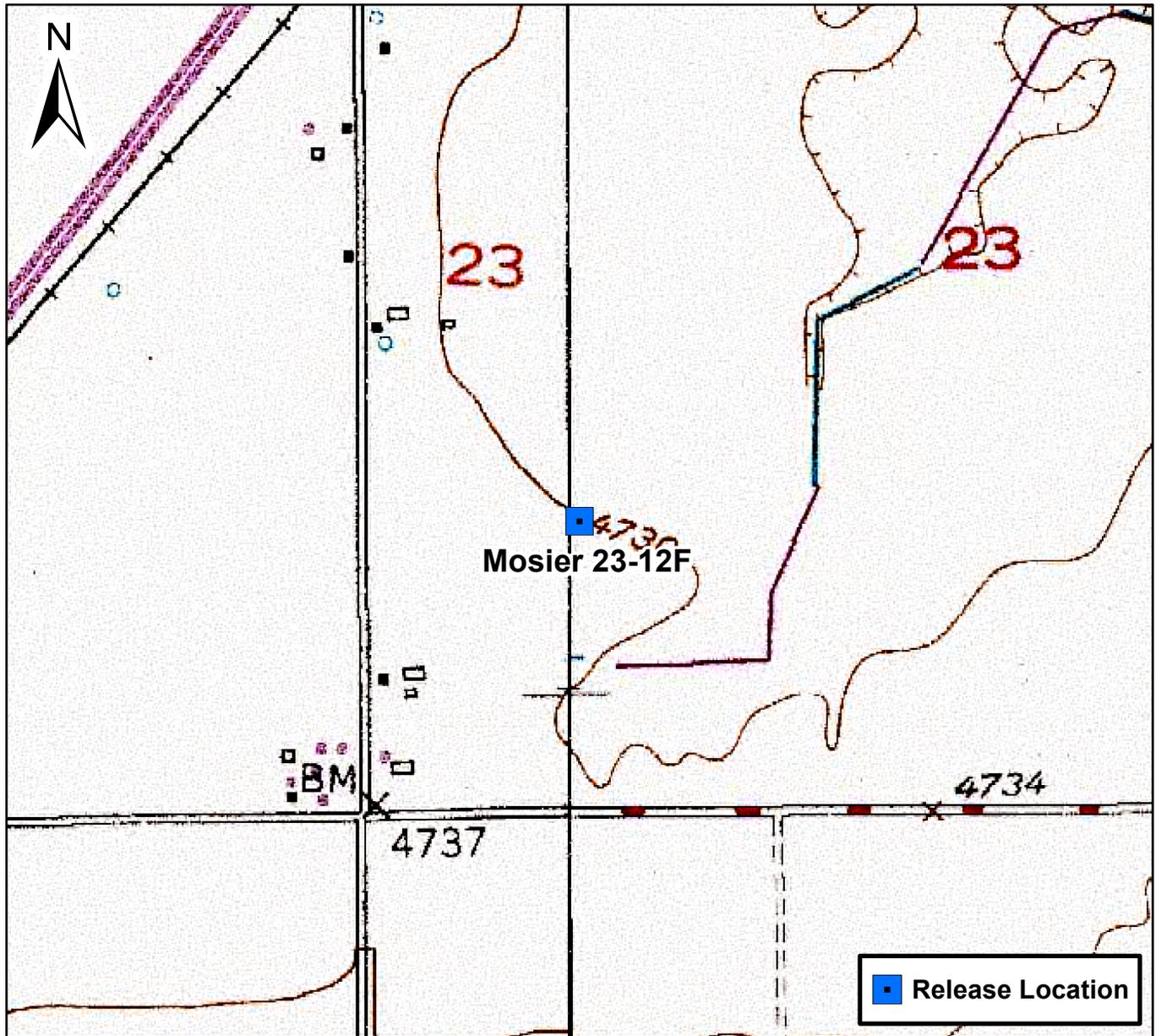


Figure 1
 Site Location Map
 Mosier 23-12F
 NWSW S23 T4N R66W
 Weld County, Colorado





Legend

- X Release Location
- Excavation Extent (March 2017) - (Collected via Trimble GPS)
- ◆ Monitoring Well Location - (Collected via Trimble GPS)
- ◆ Monitoring Well – Destroyed

Notes

1) All locations are approximate unless otherwise noted.

GPS – Global Positioning System

0 ft. 30 ft 40 ft.

Image Source: Google Earth; 2016 Google
Projection: WGS 84 UTM Zone 13 North

| | |
|--------------|------------|
| DATE: | 08/21/2018 |
| DESIGNED BY: | DA |
| DRAWN BY: | TL |

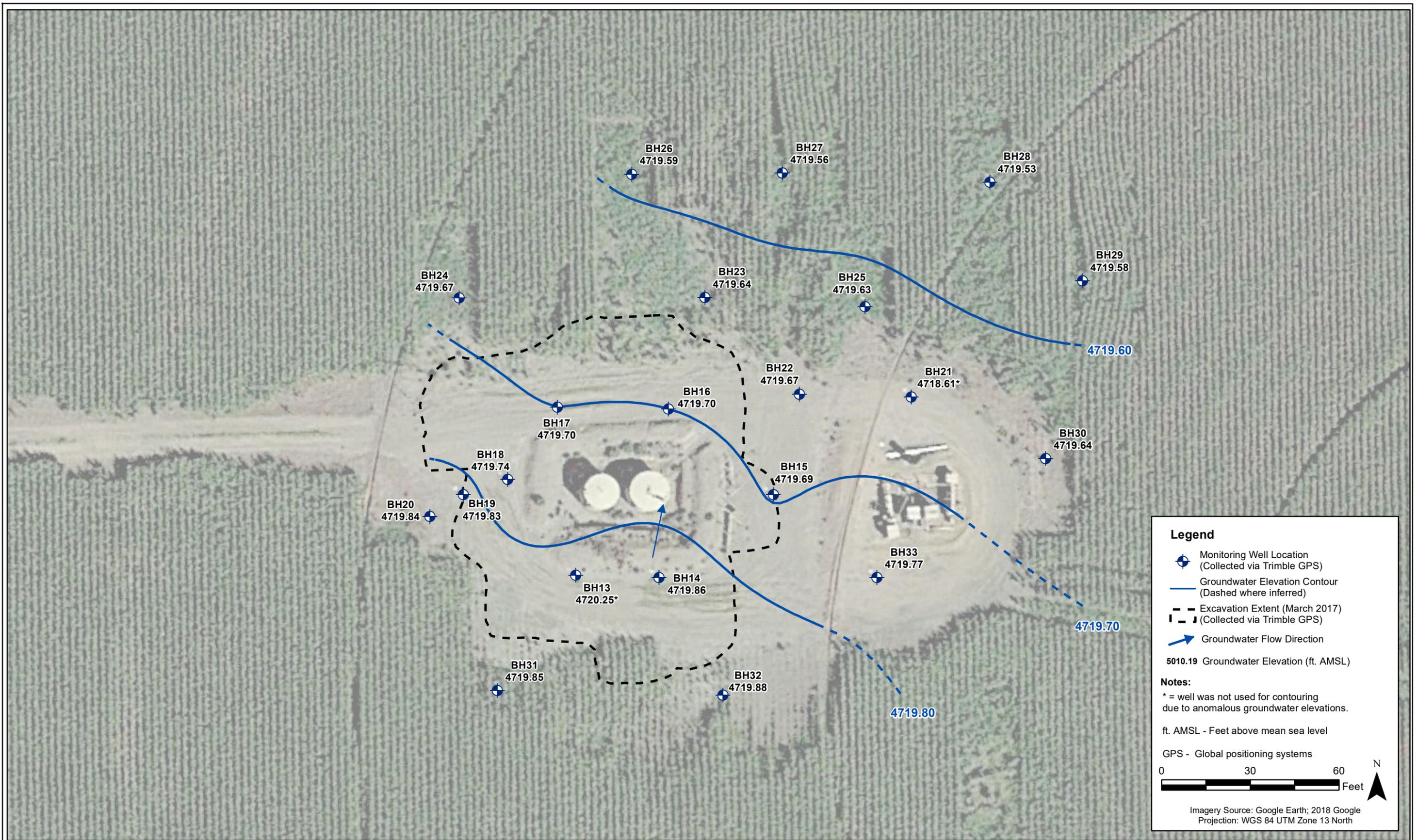
TASMAN
GEOSCIENCES

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

Noble Energy, Inc. – DJ Basin
Mosier 23-12F
NWSW, Section 23, Township 4 North, Range 66 West
Weld County, Colorado

Site Overview Map

FIGURE
2



| | |
|--------------|----------------|
| DATE: | September 2019 |
| DESIGNED BY: | J. Whritenour |
| DRAWN BY: | L. Martin |

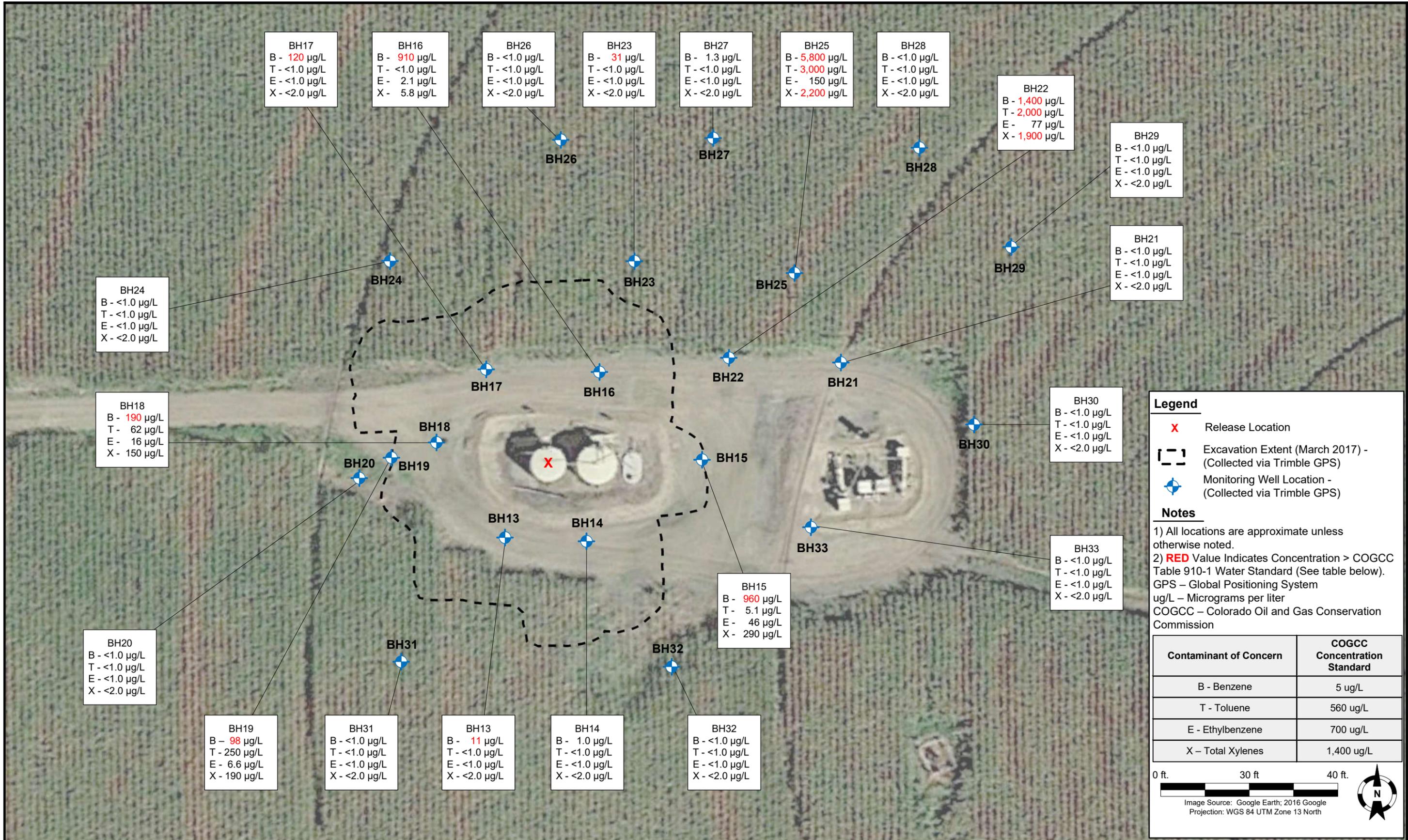


TASMAN Tasman Geosciences, Inc.
6855 W. 119th Avenue
Broomfield, Colorado 80020

Noble Energy, Inc. - DJ Basin
Mosier 23-12F Tank Battery
 NWSW, Section 23, Township 4 North, Range 66 West
 Weld County, Colorado

Groundwater Elevation
 Contour Map (07/09/2019)

Figure
 3



DATE: 08/02/2019

DESIGNED BY: JW

DRAWN BY: KC

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

Noble Energy, Inc. – DJ Basin
Mosier 23-12F
NWSW, Section 23, Township 4 North, Range 66 West
Weld County, Colorado

Groundwater Analytical
Results Figure
(07/09/19)

FIGURE
4

Figure 5
 Mosier 23-12 F
 Average Benzene Concentration VS Quarterly Sampling Event Date



Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

July 19, 2019

Brandon Bruns

Tasman Geosciences

6855 W. 119th Ave.

Broomfield, CO 80020

RE: Noble - Mosier 23-12F

Work Order # 1907091

Enclosed are the results of analyses for samples received by Summit Scientific on 07/09/19 17:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Muri Premer". The signature is written in a cursive style with a large, stylized initial 'M'.

Muri Premer For Ben Shrewsbury

Laboratory Manager



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

Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
07/19/19 15:43

ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|-----------|---------------|--------|----------------|----------------|
| BH13 | 1907091-01 | Water | 07/09/19 11:42 | 07/09/19 17:30 |
| BH14 | 1907091-02 | Water | 07/09/19 12:14 | 07/09/19 17:30 |
| BH15 | 1907091-03 | Water | 07/09/19 12:19 | 07/09/19 17:30 |
| BH16 | 1907091-04 | Water | 07/09/19 12:43 | 07/09/19 17:30 |
| BH17 | 1907091-05 | Water | 07/09/19 12:34 | 07/09/19 17:30 |
| BH18 | 1907091-06 | Water | 07/09/19 12:32 | 07/09/19 17:30 |
| BH19 | 1907091-07 | Water | 07/09/19 12:22 | 07/09/19 17:30 |
| BH20 | 1907091-08 | Water | 07/09/19 11:53 | 07/09/19 17:30 |
| BH21 | 1907091-09 | Water | 07/09/19 12:09 | 07/09/19 17:30 |
| BH22 | 1907091-10 | Water | 07/09/19 12:46 | 07/09/19 17:30 |
| BH23 | 1907091-11 | Water | 07/09/19 12:03 | 07/09/19 17:30 |
| BH24 | 1907091-12 | Water | 07/09/19 12:08 | 07/09/19 17:30 |
| BH25 | 1907091-13 | Water | 07/09/19 12:27 | 07/09/19 17:30 |
| BH26 | 1907091-14 | Water | 07/09/19 12:01 | 07/09/19 17:30 |
| BH27 | 1907091-15 | Water | 07/09/19 11:53 | 07/09/19 17:30 |
| BH28 | 1907091-16 | Water | 07/09/19 11:46 | 07/09/19 17:30 |
| BH29 | 1907091-17 | Water | 07/09/19 11:23 | 07/09/19 17:30 |
| BH30 | 1907091-18 | Water | 07/09/19 11:15 | 07/09/19 17:30 |
| BH31 | 1907091-19 | Water | 07/09/19 11:51 | 07/09/19 17:30 |
| BH32 | 1907091-20 | Water | 07/09/19 11:41 | 07/09/19 17:30 |
| BH33 | 1907091-21 | Water | 07/09/19 11:41 | 07/09/19 17:30 |

Summit Scientific

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

Summit Scientific

1907091.1

S₂

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

| | |
|------------------------------------|--|
| Client: Noble / Tasman | Project Manager: Brandon Bruns, Invoice: Jacob Evans |
| Address: 6899 Pecos Street | E-Mail: Bbruns@tasman-geo.com |
| City/State/Zip: Denver / CO/ 80221 | |
| Phone: 303-487-1228 | Project Name: Mosier 23-12F |
| Sampler Name: Alison Dahl | Project Number: — |

| ID | Sample Description | Date Sampled | Time Sampled | # of containers | Preservative | | | | Matrix | | | | Analysis Requested | | | | Special Instructions |
|----|--------------------|--------------|--------------|-----------------|--------------|------|------|-------|--------|------|----------------|-------|--------------------|--------------|----------|-------------|----------------------|
| | | | | | HCl | HNO3 | None | Other | Water | Soil | Air-Canister # | Other | 8260 BTEX | 8260B GBTEXN | 8015 DRO | pH, EC, SAR | |
| 1 | BH 13 | 7/9/19 | 1142 | 3 | X | | | | X | | | | X | | | | |
| 2 | BH 14 | | 1214 | 3 | | | | | | | | | | | | | |
| 3 | BH 15 | | 1219 | 2 | | | | | | | | | | | | | |
| 4 | BH 16 | | 1243 | 3 | | | | | | | | | | | | | |
| 5 | BH 17 | | 1234 | | | | | | | | | | | | | | |
| 6 | BH 18 | | 1232 | | | | | | | | | | | | | | |
| 7 | BH 19 | | 1222 | | | | | | | | | | | | | | |
| 8 | BH 20 | | 1153 | | | | | | | | | | | | | | |
| 9 | BH 21 | | 1209 | | | | | | | | | | | | | | |
| 10 | BH 22 | | 1246 | | | | | | | | | | | | | | |

| | | | | | |
|------------------------------------|--------------------------|--------------------------------|--------------------------|---|--------|
| Relinquished by: Tanner Cook | Date/Time: 7/9/2019 1304 | Received by: Tasman's Lock Box | Date/Time: 7/9/2019 1304 | Turn Around Time (Check) Same Day — 72 hours 24 hours — Standard <input checked="" type="checkbox"/> 48 hours — Sample Integrity: Temperature Upon Receipt: 3.4 Samples Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No | Notes: |
| Relinquished by: Tasman's Lock Box | Date/Time: 07/09/19 1730 | Received by: | Date/Time: 07/09/19 1730 | | |
| Relinquished by: | Date/Time: | Received by: | Date/Time: | | |

Summit Scientific

S₂

1907091.2

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

Page 2 of 3

| | |
|------------------------------------|--|
| Client: Noble / Tasman | Project Manager: Brandon Bruns, Invoice: Jacob Evans |
| Address: 6899 Pecos Street | E-Mail: Bbruns@tasman-geo.com |
| City/State/Zip: Denver / CO/ 80221 | |
| Phone: 303-487-1228 | Project Name: <u>Mosier 23-12F</u> |
| Sampler Name: <u>Alison Dahl</u> | Project Number: <u> </u> |

| ID | Sample Description | Date Sampled | Time Sampled | # of containers | Preservative | | | | Matrix | | | | Analysis Requested | | | | Special Instructions | |
|----|--------------------|--------------|--------------|-----------------|--------------|------|------|-------|--------|------|----------------|-------|--------------------|--------------|----------|-------------|----------------------|--|
| | | | | | HCl | HNO3 | None | Other | Water | Soil | Air-Canister # | Other | 8260 BTEX | 8260B GBTEXN | 8015 DRO | pH, EC, SAR | | |
| 1 | BH 23 | 7/9/19 | 1203 | 3 | X | | | | X | | | | X | | | | | |
| 2 | BH 24 | | 1208 | | | | | | | | | | | | | | | |
| 3 | BH 25 | | 1227 | | | | | | | | | | | | | | | |
| 4 | BH 26 | | 1201 | | | | | | | | | | | | | | | |
| 5 | BH 27 | | 1153 | | | | | | | | | | | | | | | |
| 6 | BH 28 | | 1246 | | | | | | | | | | | | | | | |
| 7 | BH 29 | | 1123 | | | | | | | | | | | | | | | |
| 8 | BH 30 | | 1158 | | | | | | | | | | | | | | | |
| 9 | BH 31 | | 1151 | | | | | | | | | | | | | | | |
| 10 | BH 32 | | 1141 | | | | | | | | | | | | | | | |

| | | | |
|---|---|---|--------|
| Relinquished by: <u>Tanner Cook</u> Date/Time: <u>7/9/19 1304</u> | Received by: <u>Tasman's Lock Box</u> Date/Time: <u>7/9/2019 1304</u> | Turn Around Time (Check) Same Day <u> </u> 72 hours <u> </u> 24 hours <u> </u> Standard <u>X</u> 48 hours <u> </u> Sample Integrity: Temperature Upon Receipt: <u>3.4</u> Samples Intact: <u>(Yes)</u> No | Notes: |
| Relinquished by: <u>Tasman's Lock Box</u> Date/Time: <u>07/09/19 1730</u> | Received by: <u>[Signature]</u> Date/Time: <u>07/09/19 1730</u> | | |
| Relinquished by: <u> </u> Date/Time: <u> </u> | Received by: <u> </u> Date/Time: <u> </u> | | |

Summit Scientific

1907091.3

S₂

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

| | |
|------------------------------------|--|
| Client: Noble / Tasman | Project Manager: Brandon Bruns, Invoice: Jacob Evans |
| Address: 6899 Pecos Street | E-Mail: Bbruns@tasman-geo.com |
| City/State/Zip: Denver / CO/ 80221 | |
| Phone: 303-487-1228 | Project Name: <u>Mosier 23-12F</u> |
| Sampler Name: <u>Alison Dahl</u> | Project Number: <u>-</u> |

| ID | Sample Description | Date Sampled | Time Sampled | # of containers | Preservative | | | | Matrix | | | | Analysis Requested | | | | Special Instructions | |
|----|--------------------|---------------|--------------|-----------------|-------------------------------------|------|------|-------|-------------------------------------|------|----------------|-------|--------------------|--------------|----------|-------------|----------------------|--|
| | | | | | HCl | HNO3 | None | Other | Water | Soil | Air-Canister # | Other | 8260 BTEX | 8260B GBTEXN | 8015 DRO | pH, EC, SAR | | |
| 1 | <u>BH33</u> | <u>7/9/19</u> | <u>1141</u> | <u>3</u> | <input checked="" type="checkbox"/> | | | | <input checked="" type="checkbox"/> | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |

| | | | | | |
|---|---------------------------------|---------------------------------------|---------------------------------|---|--------|
| Relinquished by: <u>Tanner Cook</u> | Date/Time: <u>7/19/19 1304</u> | Received by: <u>Tasman's Lock Box</u> | Date/Time: _____ | Turn Around Time (Check) | Notes: |
| | | | | Same Day _____ 72 hours _____ | |
| | | | | 24 hours _____ Standard <input checked="" type="checkbox"/> | |
| | | | | 48 hours _____ | |
| Relinquished by: <u>Tasman's Lock Box</u> | Date/Time: <u>07/09/19 1730</u> | Received by: | Date/Time: <u>07/09/19 1730</u> | Sample Integrity: | |
| | | | | Temperature Upon Receipt: <u>3.4</u> | |
| Relinquished by: _____ | Date/Time: _____ | Received by: | Date/Time: _____ | Samples Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |

Sample Receipt Checklist

S2 Work Order 1907091

Client: Noble/Tasman Client Project ID: Mosier 23-12F

Shipped Via: H.D./FD/FedEx/UPS/USPS/Other _____ Airbill #: _____

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

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

Thermometer ID: 61857155-K

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

RZ
Custodian Printed Name or Initials

[Signature]
Signature of Custodian

07/09/19
Date/Time 1802



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

Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
07/19/19 15:43

BH13
1907091-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/09/19 11:42**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------|-----------|-----------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene | 11 | 1.0 | ug/l | 1 | 1907124 | 07/10/19 | 07/18/19 | EPA 8260B | |
| Toluene | ND | 1.0 | " | " | " | " | " | " | |
| Ethylbenzene | ND | 1.0 | " | " | " | " | " | " | |
| Xylenes (total) | ND | 2.0 | " | " | " | " | " | " | |

Date Sampled: **07/09/19 11:42**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 | | 123 % | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 95.3 % | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 95.2 % | 21-167 | | " | " | " | " | |

Summit Scientific

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



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

Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
07/19/19 15:43

BH14
1907091-02 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/09/19 12:14**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------|------------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| Benzene | 1.0 | 1.0 | | ug/l | 1 | 1907124 | 07/10/19 | 07/12/19 | EPA 8260B | |
| Toluene | ND | 1.0 | | " | " | " | " | " | " | |
| Ethylbenzene | ND | 1.0 | | " | " | " | " | " | " | |
| Xylenes (total) | ND | 2.0 | | " | " | " | " | " | " | |

Date Sampled: **07/09/19 12:14**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 88.4 % | | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 91.8 % | | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 91.8 % | | 21-167 | | " | " | " | " | |

Summit Scientific

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

Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
07/19/19 15:43

BH15
1907091-03 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/09/19 12:19**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------|------------|-----------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene | 960 | 100 | ug/l | 100 | 1907124 | 07/10/19 | 07/13/19 | EPA 8260B | |
| Toluene | 5.1 | 1.0 | " | 1 | " | " | " | " | |
| Ethylbenzene | 46 | 1.0 | " | " | " | " | " | " | |
| Xylenes (total) | 290 | 2.0 | " | " | " | " | " | " | |

Date Sampled: **07/09/19 12:19**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------------|-------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 | | 108 % | | 23-173 | " | " | " | " | |
| Surrogate: Toluene-d8 | | 140 % | | 20-170 | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 97.7 % | | 21-167 | " | " | " | " | |

Summit Scientific

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

Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Brun

Reported:
07/19/19 15:43

BH16
1907091-04 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/09/19 12:43**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------|------------|-----------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene | 910 | 10 | ug/l | 10 | 1907124 | 07/10/19 | 07/13/19 | EPA 8260B | |
| Toluene | ND | 1.0 | " | 1 | " | " | " | " | |
| Ethylbenzene | 2.1 | 1.0 | " | " | " | " | " | " | |
| Xylenes (total) | 5.8 | 2.0 | " | " | " | " | " | " | |

Date Sampled: **07/09/19 12:43**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------------|-------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 | | 103 % | | 23-173 | " | " | " | " | |
| Surrogate: Toluene-d8 | | 98.7 % | | 20-170 | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 101 % | | 21-167 | " | " | " | " | |

Summit Scientific

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

Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
07/19/19 15:43

BH17
1907091-05 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/09/19 12:34**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------|------------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| Benzene | 120 | 1.0 | | ug/l | 1 | 1907124 | 07/10/19 | 07/12/19 | EPA 8260B | |
| Toluene | ND | 1.0 | | " | " | " | " | " | " | |
| Ethylbenzene | ND | 1.0 | | " | " | " | " | " | " | |
| Xylenes (total) | ND | 2.0 | | " | " | " | " | " | " | |

Date Sampled: **07/09/19 12:34**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 100 % | | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 95.0 % | | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 94.5 % | | 21-167 | | " | " | " | " | |

Summit Scientific

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

Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Brun

Reported:
07/19/19 15:43

BH18
1907091-06 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/09/19 12:32**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------|------------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| Benzene | 190 | 1.0 | | ug/l | 1 | 1907124 | 07/10/19 | 07/12/19 | EPA 8260B | |
| Toluene | 62 | 1.0 | | " | " | " | " | " | " | |
| Ethylbenzene | 16 | 1.0 | | " | " | " | " | " | " | |
| Xylenes (total) | 150 | 2.0 | | " | " | " | " | " | " | |

Date Sampled: **07/09/19 12:32**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 98.4 % | | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 116 % | | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 94.2 % | | 21-167 | | " | " | " | " | |

Summit Scientific

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



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

Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
07/19/19 15:43

BH19
1907091-07 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/09/19 12:22**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------|------------|-----------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene | 98 | 10 | ug/l | 10 | 1907124 | 07/10/19 | 07/12/19 | EPA 8260B | |
| Toluene | 250 | 10 | " | " | " | " | " | " | |
| Ethylbenzene | 6.6 | 1.0 | " | 1 | " | " | " | " | |
| Xylenes (total) | 190 | 20 | " | 10 | " | " | " | " | |

Date Sampled: **07/09/19 12:22**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------------|-------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 | | 102 % | | 23-173 | " | " | " | " | |
| Surrogate: Toluene-d8 | | 101 % | | 20-170 | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 123 % | | 21-167 | " | " | " | " | |

Summit Scientific

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

Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
07/19/19 15:43

BH20
1907091-08 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/09/19 11:53**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------|--------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| Benzene | ND | 1.0 | | ug/l | 1 | 1907124 | 07/10/19 | 07/12/19 | EPA 8260B | |
| Toluene | ND | 1.0 | | " | " | " | " | " | " | |
| Ethylbenzene | ND | 1.0 | | " | " | " | " | " | " | |
| Xylenes (total) | ND | 2.0 | | " | " | " | " | " | " | |

Date Sampled: **07/09/19 11:53**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 114 % | | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 93.2 % | | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 94.1 % | | 21-167 | | " | " | " | " | |

Summit Scientific

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



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

Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
07/19/19 15:43

BH21
1907091-09 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/09/19 12:09**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------|--------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| Benzene | ND | 1.0 | | ug/l | 1 | 1907124 | 07/10/19 | 07/12/19 | EPA 8260B | |
| Toluene | ND | 1.0 | | " | " | " | " | " | " | |
| Ethylbenzene | ND | 1.0 | | " | " | " | " | " | " | |
| Xylenes (total) | ND | 2.0 | | " | " | " | " | " | " | |

Date Sampled: **07/09/19 12:09**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 115 % | | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 94.2 % | | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 91.4 % | | 21-167 | | " | " | " | " | |

Summit Scientific

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



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

Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
07/19/19 15:43

BH22
1907091-10 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/09/19 12:46**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------|-------------|-----------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene | 1400 | 100 | ug/l | 100 | 1907124 | 07/10/19 | 07/12/19 | EPA 8260B | |
| Toluene | 2000 | 100 | " | " | " | " | " | " | |
| Ethylbenzene | 77 | 1.0 | " | 1 | " | " | " | " | |
| Xylenes (total) | 1900 | 200 | " | 100 | " | " | " | " | |

Date Sampled: **07/09/19 12:46**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------------|-------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 | | 107 % | | 23-173 | " | " | " | " | |
| Surrogate: Toluene-d8 | | 93.9 % | | 20-170 | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 126 % | | 21-167 | " | " | " | " | |

Summit Scientific

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



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

Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
07/19/19 15:43

BH23
1907091-11 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/09/19 12:03**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------|-----------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| Benzene | 31 | 1.0 | | ug/l | 1 | 1907124 | 07/10/19 | 07/13/19 | EPA 8260B | |
| Toluene | ND | 1.0 | | " | " | " | " | " | " | |
| Ethylbenzene | ND | 1.0 | | " | " | " | " | " | " | |
| Xylenes (total) | ND | 2.0 | | " | " | " | " | " | " | |

Date Sampled: **07/09/19 12:03**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 118 % | | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 94.5 % | | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 94.8 % | | 21-167 | | " | " | " | " | |

Summit Scientific

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



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

Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
07/19/19 15:43

BH24
1907091-12 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/09/19 12:08**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------|--------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| Benzene | ND | 1.0 | | ug/l | 1 | 1907124 | 07/10/19 | 07/13/19 | EPA 8260B | |
| Toluene | ND | 1.0 | | " | " | " | " | " | " | |
| Ethylbenzene | ND | 1.0 | | " | " | " | " | " | " | |
| Xylenes (total) | ND | 2.0 | | " | " | " | " | " | " | |

Date Sampled: **07/09/19 12:08**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 126 % | | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 116 % | | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 93.2 % | | 21-167 | | " | " | " | " | |

Summit Scientific

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



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

Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
07/19/19 15:43

BH25
1907091-13 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/09/19 12:27**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------|-------------|-----------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene | 5800 | 100 | ug/l | 100 | 1907124 | 07/10/19 | 07/12/19 | EPA 8260B | |
| Toluene | 3000 | 100 | " | " | " | " | " | " | |
| Ethylbenzene | 150 | 100 | " | " | " | " | " | " | |
| Xylenes (total) | 2200 | 200 | " | " | " | " | " | " | |

Date Sampled: **07/09/19 12:27**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 | | 105 % | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 109 % | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 125 % | 21-167 | | " | " | " | " | |

Summit Scientific

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



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

Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
07/19/19 15:43

BH26
1907091-14 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/09/19 12:01**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------|--------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| Benzene | ND | 1.0 | | ug/l | 1 | 1907124 | 07/10/19 | 07/13/19 | EPA 8260B | |
| Toluene | ND | 1.0 | | " | " | " | " | " | " | |
| Ethylbenzene | ND | 1.0 | | " | " | " | " | " | " | |
| Xylenes (total) | ND | 2.0 | | " | " | " | " | " | " | |

Date Sampled: **07/09/19 12:01**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 118 % | | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 95.0 % | | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 93.2 % | | 21-167 | | " | " | " | " | |

Summit Scientific

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

Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
07/19/19 15:43

BH27
1907091-15 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/09/19 11:53**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------|------------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| Benzene | 1.3 | 1.0 | | ug/l | 1 | 1907124 | 07/10/19 | 07/13/19 | EPA 8260B | |
| Toluene | ND | 1.0 | | " | " | " | " | " | " | |
| Ethylbenzene | ND | 1.0 | | " | " | " | " | " | " | |
| Xylenes (total) | ND | 2.0 | | " | " | " | " | " | " | |

Date Sampled: **07/09/19 11:53**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 123 % | | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 94.5 % | | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 92.0 % | | 21-167 | | " | " | " | " | |

Summit Scientific

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

Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
07/19/19 15:43

BH28
1907091-16 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/09/19 11:46**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------|--------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| Benzene | ND | 1.0 | | ug/l | 1 | 1907124 | 07/10/19 | 07/13/19 | EPA 8260B | |
| Toluene | ND | 1.0 | | " | " | " | " | " | " | |
| Ethylbenzene | ND | 1.0 | | " | " | " | " | " | " | |
| Xylenes (total) | ND | 2.0 | | " | " | " | " | " | " | |

Date Sampled: **07/09/19 11:46**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 111 % | | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 94.6 % | | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 94.6 % | | 21-167 | | " | " | " | " | |

Summit Scientific

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

Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
07/19/19 15:43

BH29
1907091-17 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/09/19 11:23**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------|--------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| Benzene | ND | 1.0 | | ug/l | 1 | 1907124 | 07/10/19 | 07/13/19 | EPA 8260B | |
| Toluene | ND | 1.0 | | " | " | " | " | " | " | |
| Ethylbenzene | ND | 1.0 | | " | " | " | " | " | " | |
| Xylenes (total) | ND | 2.0 | | " | " | " | " | " | " | |

Date Sampled: **07/09/19 11:23**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 109 % | | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 89.8 % | | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 90.1 % | | 21-167 | | " | " | " | " | |

Summit Scientific

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

Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
07/19/19 15:43

BH30
1907091-18 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/09/19 11:15**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------|--------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| Benzene | ND | 1.0 | | ug/l | 1 | 1907124 | 07/10/19 | 07/13/19 | EPA 8260B | |
| Toluene | ND | 1.0 | | " | " | " | " | " | " | |
| Ethylbenzene | ND | 1.0 | | " | " | " | " | " | " | |
| Xylenes (total) | ND | 2.0 | | " | " | " | " | " | " | |

Date Sampled: **07/09/19 11:15**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 108 % | | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 92.9 % | | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 94.7 % | | 21-167 | | " | " | " | " | |

Summit Scientific

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

Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
07/19/19 15:43

BH31
1907091-19 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/09/19 11:51**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------|--------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| Benzene | ND | 1.0 | | ug/l | 1 | 1907124 | 07/10/19 | 07/13/19 | EPA 8260B | |
| Toluene | ND | 1.0 | | " | " | " | " | " | " | |
| Ethylbenzene | ND | 1.0 | | " | " | " | " | " | " | |
| Xylenes (total) | ND | 2.0 | | " | " | " | " | " | " | |

Date Sampled: **07/09/19 11:51**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 81.8 % | | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 96.2 % | | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 92.3 % | | 21-167 | | " | " | " | " | |

Summit Scientific

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

Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
07/19/19 15:43

BH32
1907091-20 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/09/19 11:41**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------|--------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| Benzene | ND | 1.0 | | ug/l | 1 | 1907124 | 07/10/19 | 07/13/19 | EPA 8260B | |
| Toluene | ND | 1.0 | | " | " | " | " | " | " | |
| Ethylbenzene | ND | 1.0 | | " | " | " | " | " | " | |
| Xylenes (total) | ND | 2.0 | | " | " | " | " | " | " | |

Date Sampled: **07/09/19 11:41**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 99.5 % | | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 92.6 % | | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 94.7 % | | 21-167 | | " | " | " | " | |

Summit Scientific

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

Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
07/19/19 15:43

BH33
1907091-21 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/09/19 11:41**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------|--------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| Benzene | ND | 1.0 | | ug/l | 1 | 1907125 | 07/10/19 | 07/11/19 | EPA 8260B | |
| Toluene | ND | 1.0 | | " | " | " | " | " | " | |
| Ethylbenzene | ND | 1.0 | | " | " | " | " | " | " | |
| Xylenes (total) | ND | 2.0 | | " | " | " | " | " | " | |

Date Sampled: **07/09/19 11:41**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 112 % | | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 93.4 % | | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 92.0 % | | 21-167 | | " | " | " | " | |

Summit Scientific

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

Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
07/19/19 15:43

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch 1907125 - EPA 5030 Water MS

Blank (1907125-BLK1)

Prepared: 07/10/19 Analyzed: 07/11/19

| | | | | | | | | | | |
|----------------------------------|------|-----|------|------|--|------|--------|--|--|--|
| Benzene | ND | 1.0 | ug/l | | | | | | | |
| Toluene | ND | 1.0 | " | | | | | | | |
| Ethylbenzene | ND | 1.0 | " | | | | | | | |
| Xylenes (total) | ND | 2.0 | " | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 14.4 | | " | 13.3 | | 108 | 23-173 | | | |
| Surrogate: Toluene-d8 | 12.3 | | " | 13.3 | | 92.3 | 20-170 | | | |
| Surrogate: 4-Bromofluorobenzene | 12.3 | | " | 13.3 | | 92.1 | 21-167 | | | |

LCS (1907125-BS1)

Prepared: 07/10/19 Analyzed: 07/11/19

| | | | | | | | | | | |
|----------------------------------|------|-----|------|------|--|------|--------|--|--|--|
| Benzene | 33.0 | 1.0 | ug/l | 33.3 | | 99.0 | 51-132 | | | |
| Toluene | 38.0 | 1.0 | " | 33.3 | | 114 | 51-138 | | | |
| Ethylbenzene | 39.0 | 1.0 | " | 33.3 | | 117 | 58-146 | | | |
| m,p-Xylene | 74.8 | 2.0 | " | 66.7 | | 112 | 57-144 | | | |
| o-Xylene | 38.1 | 1.0 | " | 33.3 | | 114 | 53-146 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 13.0 | | " | 13.3 | | 97.8 | 23-173 | | | |
| Surrogate: Toluene-d8 | 13.1 | | " | 13.3 | | 98.5 | 20-170 | | | |
| Surrogate: 4-Bromofluorobenzene | 12.4 | | " | 13.3 | | 93.1 | 21-167 | | | |

Matrix Spike (1907125-MS1)

Source: 1907089-01

Prepared: 07/10/19 Analyzed: 07/11/19

| | | | | | | | | | | |
|----------------------------------|------|-----|------|------|----|------|--------|--|--|--|
| Benzene | 36.1 | 1.0 | ug/l | 33.3 | ND | 108 | 34-141 | | | |
| Toluene | 35.4 | 1.0 | " | 33.3 | ND | 106 | 27-151 | | | |
| Ethylbenzene | 38.0 | 1.0 | " | 33.3 | ND | 114 | 29-160 | | | |
| m,p-Xylene | 72.7 | 2.0 | " | 66.7 | ND | 109 | 20-166 | | | |
| o-Xylene | 37.0 | 1.0 | " | 33.3 | ND | 111 | 33-159 | | | |
| Surrogate: 1,2-Dichloroethane-d4 | 14.5 | | " | 13.3 | | 109 | 23-173 | | | |
| Surrogate: Toluene-d8 | 12.8 | | " | 13.3 | | 96.2 | 20-170 | | | |
| Surrogate: 4-Bromofluorobenzene | 12.8 | | " | 13.3 | | 96.1 | 21-167 | | | |

Summit Scientific

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

Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
07/19/19 15:43

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

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

Batch 1907125 - EPA 5030 Water MS

| Matrix Spike Dup (1907125-MSD1) | Source: 1907089-01 | | | Prepared: 07/10/19 Analyzed: 07/11/19 | | | | | | |
|---|---------------------------|-----|----------|---------------------------------------|----|-------------|---------------|------|----|--|
| Benzene | 43.6 | 1.0 | ug/l | 33.3 | ND | 131 | 34-141 | 18.8 | 30 | |
| Toluene | 40.2 | 1.0 | " | 33.3 | ND | 121 | 27-151 | 12.7 | 30 | |
| Ethylbenzene | 45.3 | 1.0 | " | 33.3 | ND | 136 | 29-160 | 17.6 | 30 | |
| m,p-Xylene | 86.4 | 2.0 | " | 66.7 | ND | 130 | 20-166 | 17.2 | 30 | |
| o-Xylene | 44.4 | 1.0 | " | 33.3 | ND | 133 | 33-159 | 18.4 | 30 | |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | <i>14.9</i> | | <i>"</i> | <i>13.3</i> | | <i>112</i> | <i>23-173</i> | | | |
| <i>Surrogate: Toluene-d8</i> | <i>12.1</i> | | <i>"</i> | <i>13.3</i> | | <i>90.6</i> | <i>20-170</i> | | | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | <i>12.5</i> | | <i>"</i> | <i>13.3</i> | | <i>93.5</i> | <i>21-167</i> | | | |

Summit Scientific

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

Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
07/19/19 15:43

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