

FOURTH QUARTER 2019 SITE MONITORING DATA

MOSIER 23-12F

COGCC SPILL TRACKING # 448998

COGCC REMEDIATION # 10158

Prepared for:



2115 117th Avenue
Greeley, CO 80631

Prepared by:



6855 W. 119th Avenue
Broomfield, CO 80020

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
BH13	10/22/19	4729.82	11.27	8.71	ND	ND	4721.25
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
BH14	10/22/19	4729.82	14.40	8.66	ND	ND	4721.25
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
BH15	10/22/19	4730.14	11.22	9.41	ND	ND	4721.15
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
BH16	10/22/19	4729.88	11.25	9.06	ND	ND	4721.13
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

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	10/05/18	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
BH17	10/22/19	4729.71	11.20	8.84	ND	ND	4721.14
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
BH18	10/22/19	4729.50	11.50	8.54	ND	ND	4721.19
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
BH19	10/22/19	4729.73	11.59	8.78	ND	ND	4721.27
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
BH20	10/22/19	4731.78	13.63	8.48	ND	ND	4721.29
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
BH21	10/22/19	4730.34	14.12	9.74	ND	ND	4721.01
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
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
BH22	10/22/19	4729.78	15.23	8.94	ND	ND	4721.02

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)
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
BH23	10/22/19	4732.23	18.45	8.15	ND	ND	4721.06
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
BH24	10/22/19	4731.98	16.94	8.24	ND	ND	4721.17
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
BH25	10/22/19	4732.00	17.74	8.33	ND	ND	4720.98
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
BH26	10/22/19	4729.59	14.92	8.09	ND	ND	4721.03
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
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
BH27	10/22/19	4730.27	14.40	8.16	ND	ND	4720.95
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

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)
BH28	10/22/19	4731.71	14.70	8.17	ND	ND	4720.86
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
BH29	10/22/19	4732.48	14.74	8.46	ND	ND	4720.86
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
BH30	10/22/19	4732.25	14.62	8.73	ND	ND	4720.96
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
BH31	10/22/19	4732.56	17.51	8.20	ND	ND	4721.37
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
BH32	10/22/19	4732.49	17.70	8.10	ND	ND	4721.25
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
BH33	10/22/19	4730.34	15.29	9.28	ND	ND	4721.11

NOTES:

ft. = Feet

AMSL = Above mean sea level

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
BH13	10/22/19	<1.0	<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
BH14	10/22/19	<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
BH15	10/22/19	8,200	150	340	8,000
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

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
BH16	07/09/19	910	<1.0	2.1	5.8
BH16	10/22/19	<1.0	<1.0	<1.0	<2.0
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
BH17	10/22/19	3.7	<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
BH18	10/22/19	7.1	<1.0	<1.0	<2.0
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
BH19	10/22/19	62	32	1.3	28
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
BH20	10/22/19	<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

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
BH21	07/09/19	<1.0	<1.0	<1.0	<2.0
BH21	10/22/19	2.7	<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
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
BH22	10/22/19	1,100	1,800	57	1,600
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
BH23	10/22/19	<1.0	<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
BH24	10/22/19	<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
BH25	10/22/19	1,600	4.2	18	110
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

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
BH26	07/09/19	<1.0	<1.0	<1.0	<2.0
BH26	10/22/19	<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
BH27	07/09/19	1.3	<1.0	<1.0	<2.0
BH27	10/22/19	<1.0	<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
BH28	10/22/19	<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
BH29	10/22/19	<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
BH30	10/22/19	<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
BH31	10/22/19	<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

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
BH32	07/09/19	<1.0	<1.0	<1.0	<2.0
BH32	10/22/19	<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
BH33	10/22/19	<1.0	<1.0	<1.0	<2.0

Notes:

COGCC = Colorado Oil and Gas Conservation Commission

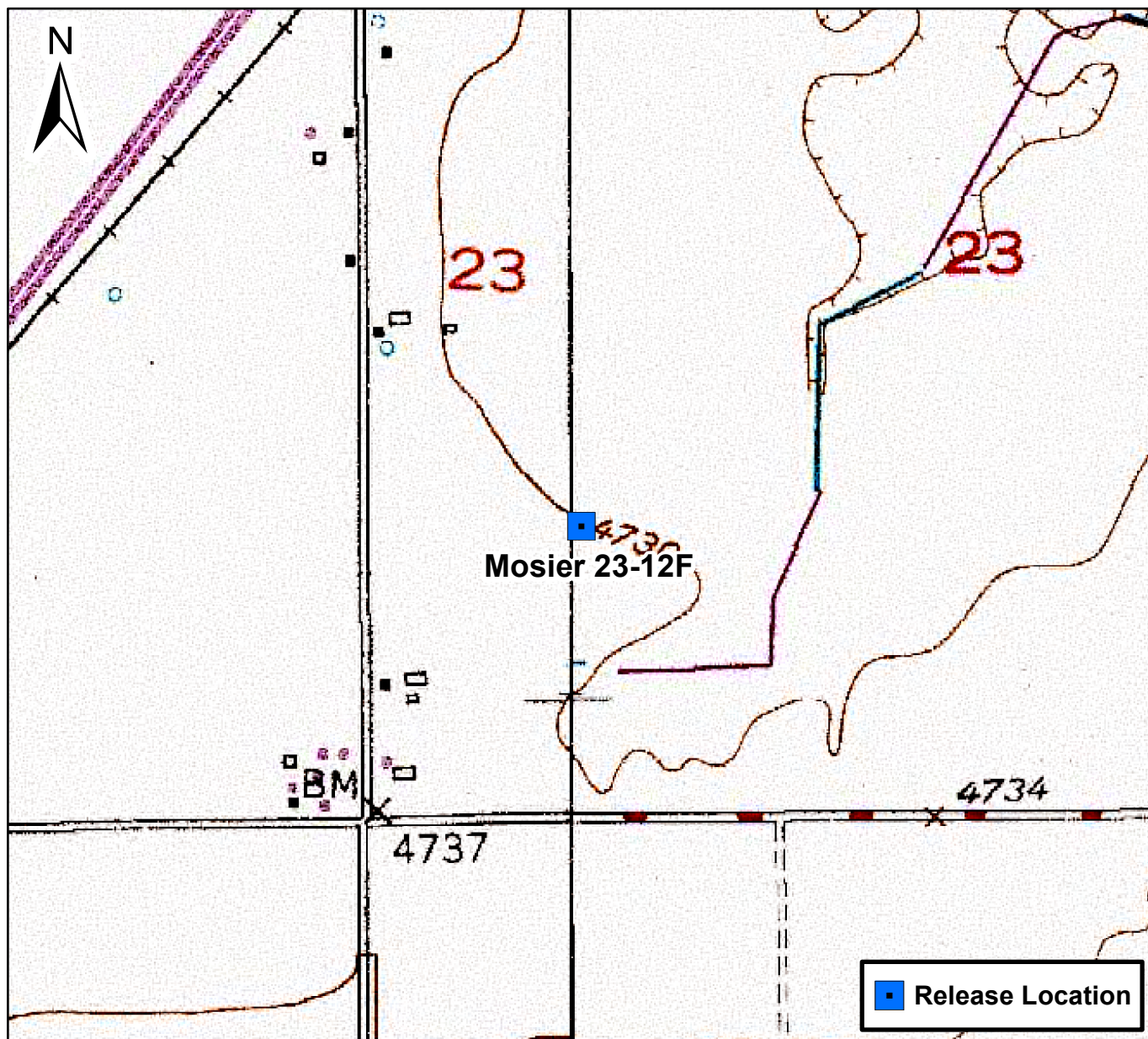
µg/L = Micrograms per liter

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

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.



0 750 1,500 Feet

Figure 1

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





Legend

X

Release Location

[Dashed Line]

Excavation Extent (March 2017) -
(Collected via Trimble GPS)

[Blue Crosshair]

Monitoring Well Location -
(Collected via Trimble GPS)

[Grey Crosshair]

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



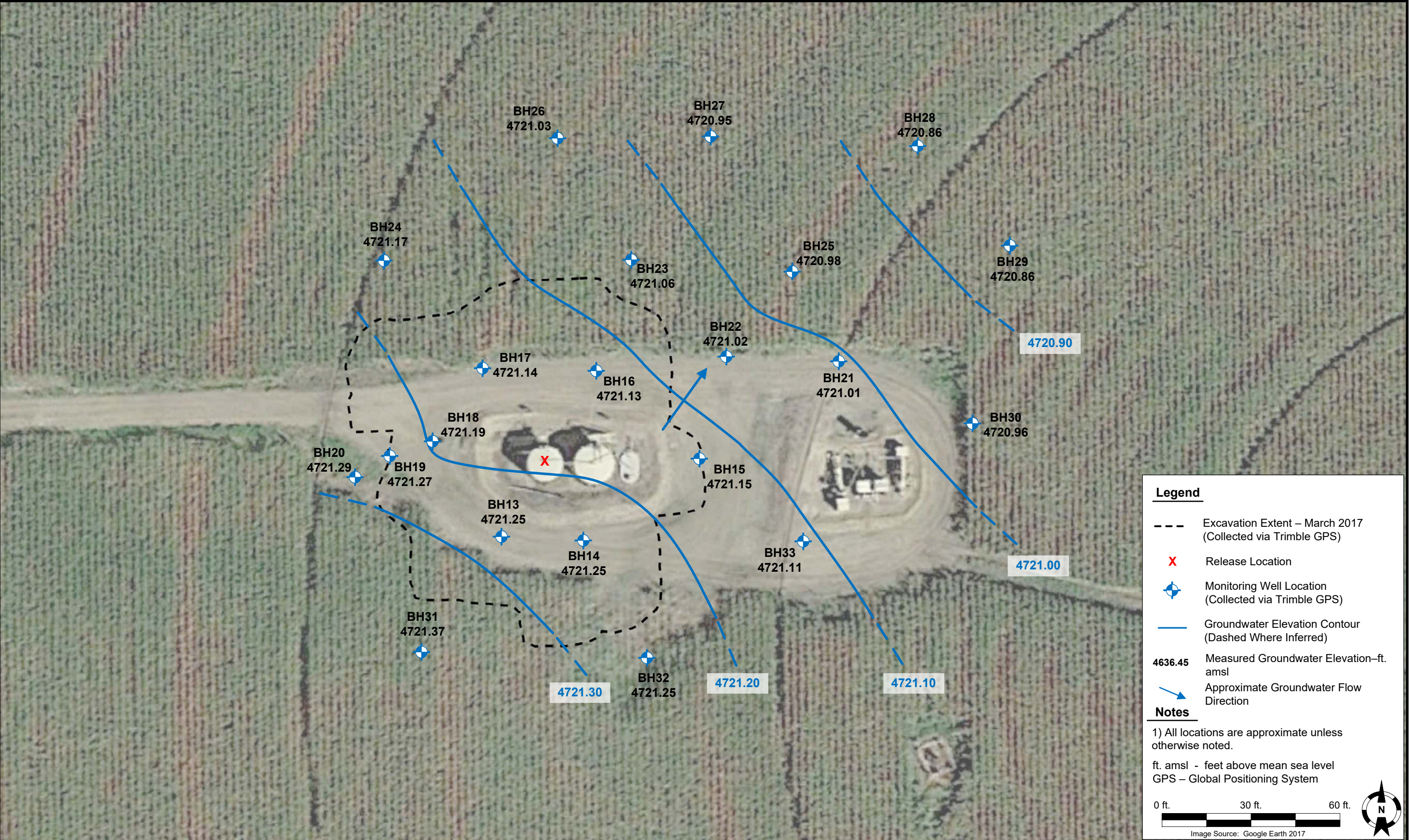
TASMAN
GEOSCIENCES

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:	11/26/2019
DESIGNED BY:	DA
DRAWN BY:	TC



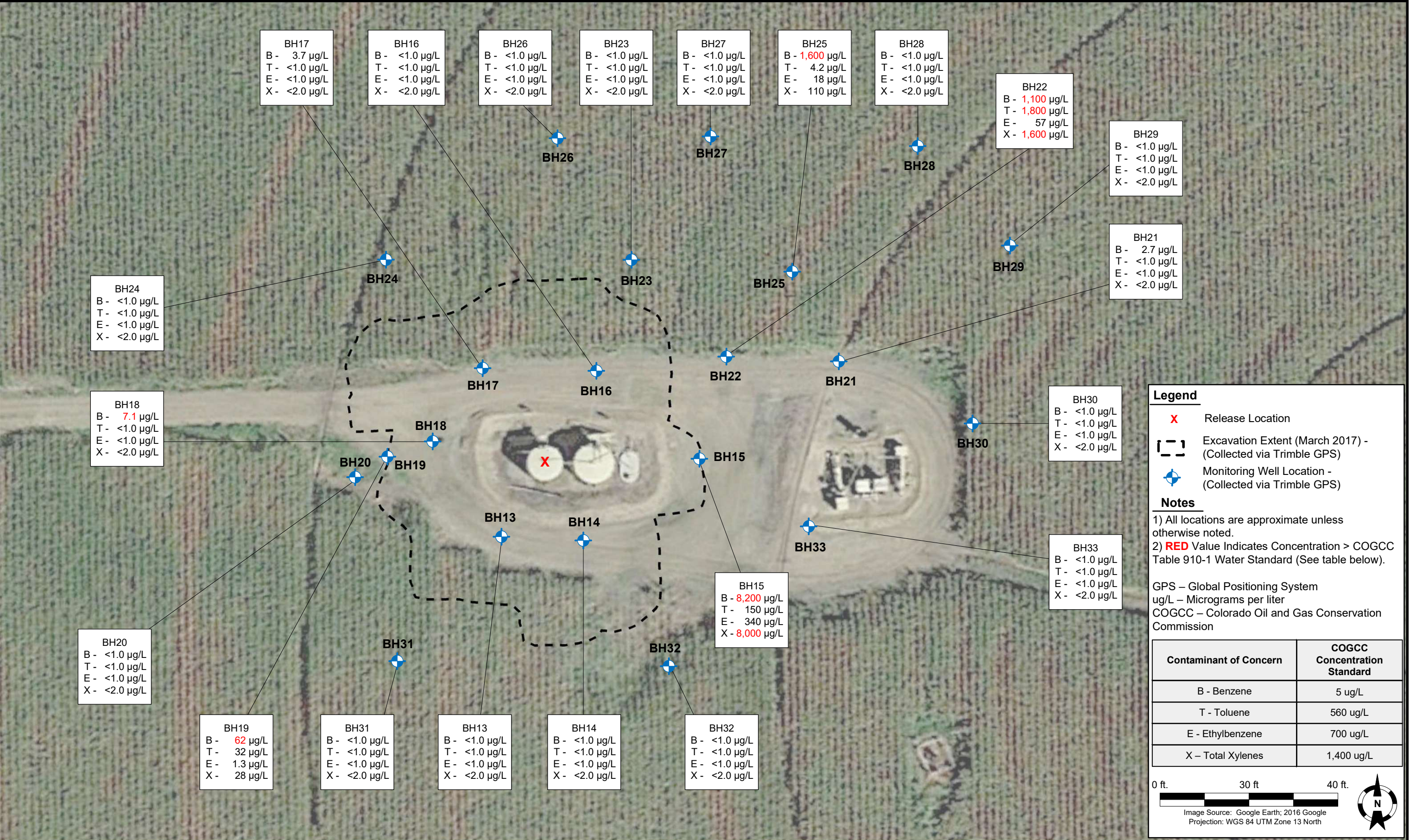
TASMAN
GEOSCIENCES

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

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

Groundwater Potentiometric
Surface Contour Map
(10/22/19)

FIGURE
3



DATE: 11/26/2019

DESIGNED BY: JW

DRAWN BY: TC



TASMAN
GEOSCIENCES

Tasman Geosciences, Inc.
6855 W. 119TH Avenue
Broomfield, CO 80020

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

Groundwater Analytical
Results Map
(10/22/19)

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

November 01, 2019

Brandon Bruns

Tasman Geosciences

6855 W. 119th Ave.

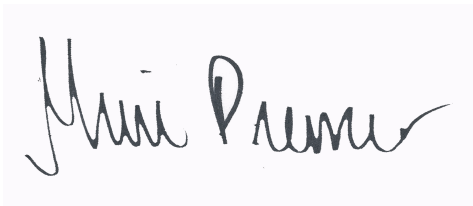
Broomfield, CO 80020

RE: Noble - Mosier 23-12F

Work Order # 1910271

Enclosed are the results of analyses for samples received by Summit Scientific on 10/22/19 17:40. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink on a light blue background. The signature is cursive and reads "Muri Premier".

Muri Premier For Paul Shrewsbury

President



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

Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
11/01/19 10:26

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH13	1910271-01	Water	10/22/19 12:06	10/22/19 17:40
BH14	1910271-02	Water	10/22/19 11:30	10/22/19 17:40
BH15	1910271-03	Water	10/22/19 12:21	10/22/19 17:40
BH16	1910271-04	Water	10/22/19 12:29	10/22/19 17:40
BH17	1910271-05	Water	10/22/19 12:33	10/22/19 17:40
BH18	1910271-06	Water	10/22/19 12:38	10/22/19 17:40
BH19	1910271-07	Water	10/22/19 12:25	10/22/19 17:40
BH20	1910271-08	Water	10/22/19 11:07	10/22/19 17:40
BH21	1910271-09	Water	10/22/19 12:03	10/22/19 17:40
BH22	1910271-10	Water	10/22/19 12:13	10/22/19 17:40
BH23	1910271-11	Water	10/22/19 12:17	10/22/19 17:40
BH24	1910271-12	Water	10/22/19 11:58	10/22/19 17:40
BH25	1910271-13	Water	10/22/19 12:43	10/22/19 17:40
BH26	1910271-14	Water	10/22/19 11:48	10/22/19 17:40
BH27	1910271-15	Water	10/22/19 11:39	10/22/19 17:40
BH28	1910271-16	Water	10/22/19 11:17	10/22/19 17:40
BH29	1910271-17	Water	10/22/19 11:27	10/22/19 17:40
BH30	1910271-18	Water	10/22/19 11:55	10/22/19 17:40
BH31	1910271-19	Water	10/22/19 11:18	10/22/19 17:40
BH32	1910271-20	Water	10/22/19 11:38	10/22/19 17:40
BH33	1910271-21	Water	10/22/19 11:47	10/22/19 17:40

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

1910271.1

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

Page 1 of 3

Client: Noble/Tasman

Address: 6855 W 19th Ave

City/State/Zip: Broomfield CO 80020

Phone: 303-487-1228 Fax:

Sampler Name: J Marcus Blanton

Project Manager: Brandon Bruns, Invoice: Jacob Evans

E-Mail: Bbruns@tasman-geo.com

Project Name: Mosier 23-1ZF

Project Number: N/A

Sample Description	Date Sampled	Time Sampled	Number of Containers	Preservative				Matrix			Analyze For:										Special Instructions							
				HCl	HNO ₃	None	Other (Specify)	Groundwater	Soil	Air - Canister Serial #	Other (Specify)	BTEX																
BH13	10/22/19	1206	3	X				X				X																
BH14	10/22/19	1130	3	X				X				X																
BH15	10/22/19	1221	3			X		X				X																
BH16	10/22/19	1229	3	X				X				X																
BH17	10/22/19	1233	3	X				X				X																
BH18	10/22/19	1238	3	X				X				X																
BH19	10/22/19	1225	3	X				X				X																
BH20	10/22/19	1107	3	X				X				X																
BH21	10/22/19	1203	3	X				X				X																
BH22	10/22/19	1213	3	X				X				X																

Relinquished by: <u>[Signature]</u>	Date/Time: <u>10/22/19 1420</u>	Received by: <u>Tasman Lock Box</u>	Date/Time: <u>10/22/19 1420</u>	Turn Around Time (Check)	Notes:
Relinquished by: <u>Tasman Lock Box</u>	Date/Time: <u>10/22/19 1740</u>	Received by: <u>[Signature]</u>	Date/Time: <u>10/22/19 1740</u>	Same Day <input type="checkbox"/> 72 Hours <input type="checkbox"/> 24 Hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/> 48 Hours <input type="checkbox"/>	
Relinquished by:	Date/Time:	Received in Lab by:	Date/Time:	Sample Integrity: Temperature Upon Receipt: <u>3.2</u> Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Summit Scientific

Page 2 of 3

Sampler Name: J Marcus B Van Horn

Project Number: 019

www.s2scientific.com

Summit Scientific

Page 3 of 3

Sampler Name: J Marcus B Van Horn

Project Number: n/a

www.s2scientific.com

Sample Receipt Checklist

S2 Work Order

1910271

Client:

Noble Kismun

Client Project ID:

Mosier 23-2F

Shipped Via: H.D./P.O./FedEx/UPS/USPS/Other

Airbill #:

Matrix (check all that apply):

Air

Soil/Solid

☒ Water

Other:

(Describe)

Temp (°C)

3.2

Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
NOTE: If samples are delivered the same day of sampling, this requirement is met provided that there is evidence that cooling has begun.				
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
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⁾ ?	<input checked="" type="checkbox"/>			HCl
Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect				
If samples are acid preserved for metals, is the pH ≤ 2 ⁽¹⁾ ?			<input checked="" type="checkbox"/>	
Record the pH in Comments.				
If dissolved metals are requested, were samples field filtered?			<input checked="" type="checkbox"/>	
Additional Comments (if any):				
<p>⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.</p>				

Custodian Printed Name or Initials

Signature of Custodian

Date/Time

11/22/12 1811



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

Project: Noble - Mosier 23-12F

Project Number: [none]

Project Manager: Brandon Bruns

Reported:

11/01/19 10:26

BH13
1910271-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/22/19 12:06**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	1910392	10/25/19	10/29/19	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	

Date Sampled: **10/22/19 12:06**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		116 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		106 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.7 %		21-167		"	"	"	"	

Summit Scientific

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



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

Project: Noble - Mosier 23-12F

Project Number: [none]

Project Manager: Brandon Bruns

Reported:

11/01/19 10:26

BH14

1910271-02 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 10/22/19 11:30

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	1910392	10/25/19	10/29/19	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: 10/22/19 11:30

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		121 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		108 %	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:
11/01/19 10:26

BH15
1910271-03 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/22/19 12:21**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	8200	100	ug/l	100	1910392	10/25/19	10/29/19	EPA 8260B	
Toluene	150	100	"	"	"	"	"	"	
Ethylbenzene	340	100	"	"	"	"	"	"	
Xylenes (total)	8000	200	"	"	"	"	"	"	

Date Sampled: **10/22/19 12:21**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		128 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		106 %	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 Bruns

Reported:

11/01/19 10:26

BH16

1910271-04 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 10/22/19 12:29

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	1910392	10/25/19	10/30/19	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: 10/22/19 12:29

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		85.9 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		82.7 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.2 %	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:

11/01/19 10:26

BH17

1910271-05 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/22/19 12:33**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	3.7	1.0	ug/l	1	1910392	10/25/19	10/29/19	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **10/22/19 12:33**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		106 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		87.3 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.0 %	21-167		"	"	"	"	

Summit Scientific

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Noble - Mosier 23-12F

Project Number: [none]

Project Manager: Brandon Bruns

Reported:

11/01/19 10:26

BH18

1910271-06 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 10/22/19 12:38

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	7.1	1.0		ug/l	1	1910392	10/25/19	10/30/19	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	

Date Sampled: 10/22/19 12:38

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		96.5 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		84.0 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.4 %		21-167		"	"	"	"	

Summit Scientific

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6855 W. 119th Ave.
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Project: Noble - Mosier 23-12F

Project Number: [none]

Project Manager: Brandon Bruns

Reported:

11/01/19 10:26

BH19

1910271-07 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/22/19 12:25**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	62	1.0		ug/l	1	1910392	10/25/19	10/30/19	EPA 8260B	
Toluene	32	1.0		"	"	"	"	"	"	
Ethylbenzene	1.3	1.0		"	"	"	"	"	"	
Xylenes (total)	28	2.0		"	"	"	"	"	"	

Date Sampled: **10/22/19 12:25**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		104 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		80.6 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.2 %		21-167		"	"	"	"	

Summit Scientific

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Noble - Mosier 23-12F

Project Number: [none]

Project Manager: Brandon Bruns

Reported:
11/01/19 10:26

BH20
1910271-08 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/22/19 11:07**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	1910392	10/25/19	10/30/19	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **10/22/19 11:07**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		107 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		78.4 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.1 %	21-167		"	"	"	"	

Summit Scientific

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6855 W. 119th Ave.
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Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
11/01/19 10:26

BH21
1910271-09 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/22/19 12:03**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	2.7	1.0	ug/l	1	1910392	10/25/19	10/30/19	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **10/22/19 12:03**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		102 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		87.9 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.7 %	21-167		"	"	"	"	

Summit Scientific

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Project: Noble - Mosier 23-12F

Project Number: [none]

Project Manager: Brandon Bruns

Reported:

11/01/19 10:26

BH22

1910271-10 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/22/19 12:13**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	1100	100		ug/l	100	1910392	10/25/19	10/30/19	EPA 8260B	
Toluene	1800	100		"	"	"	"	"	"	
Ethylbenzene	57	1.0		"	1	"	"	10/30/19	"	
Xylenes (total)	1600	200		"	100	"	"	10/30/19	"	

Date Sampled: **10/22/19 12:13**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		82.1 %		23-173		"	"	10/30/19	"	
Surrogate: Toluene-d8		94.3 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %		21-167		"	"	"	"	

Summit Scientific

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Project: Noble - Mosier 23-12F

Project Number: [none]

Project Manager: Brandon Bruns

Reported:

11/01/19 10:26

BH23

1910271-11 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 10/22/19 12:17

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	1910392	10/25/19	10/30/19	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: 10/22/19 12:17

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		93.8 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		78.6 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.4 %	21-167		"	"	"	"	

Summit Scientific

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Project: Noble - Mosier 23-12F

Project Number: [none]

Project Manager: Brandon Bruns

Reported:

11/01/19 10:26

BH24

1910271-12 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 10/22/19 11:58

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	1910392	10/25/19	10/30/19	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: 10/22/19 11:58

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		95.6 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		78.2 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.8 %	21-167		"	"	"	"	

Summit Scientific

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6855 W. 119th Ave.
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Project: Noble - Mosier 23-12F

Project Number: [none]

Project Manager: Brandon Bruns

Reported:

11/01/19 10:26

BH25

1910271-13 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/22/19 12:43**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	1600	100	ug/l	100	1910392	10/25/19	10/30/19	EPA 8260B	
Toluene	4.2	1.0	"	1	"	"	10/30/19	"	
Ethylbenzene	18	1.0	"	"	"	"	"	"	
Xylenes (total)	110	2.0	"	"	"	"	"	"	

Date Sampled: **10/22/19 12:43**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		88.1 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		74.7 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.1 %	21-167		"	"	"	"	

Summit Scientific

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6855 W. 119th Ave.
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Project: Noble - Mosier 23-12F

Project Number: [none]

Project Manager: Brandon Bruns

Reported:

11/01/19 10:26

BH26

1910271-14 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 10/22/19 11:48

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	1910392	10/25/19	10/30/19	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: 10/22/19 11:48

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		111 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		89.5 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.2 %	21-167		"	"	"	"	

Summit Scientific

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Tasman Geosciences
6855 W. 119th Ave.
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Project: Noble - Mosier 23-12F

Project Number: [none]

Project Manager: Brandon Bruns

Reported:

11/01/19 10:26

BH27

1910271-15 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/22/19 11:39**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	1910392	10/25/19	10/30/19	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **10/22/19 11:39**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		123 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		100 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.8 %	21-167		"	"	"	"	

Summit Scientific

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Noble - Mosier 23-12F

Project Number: [none]

Project Manager: Brandon Bruns

Reported:

11/01/19 10:26

BH28

1910271-16 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 10/22/19 11:17

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	1910392	10/25/19	10/30/19	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: 10/22/19 11:17

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		111 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		98.9 %	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:

11/01/19 10:26

BH29

1910271-17 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 10/22/19 11:27

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	1910392	10/25/19	10/30/19	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: 10/22/19 11:27

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		106 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		78.5 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.1 %	21-167		"	"	"	"	

Summit Scientific

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Noble - Mosier 23-12F

Project Number: [none]

Project Manager: Brandon Bruns

Reported:

11/01/19 10:26

BH30

1910271-18 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 10/22/19 11:55

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	1910392	10/25/19	10/30/19	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: 10/22/19 11:55

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		80.7 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		81.2 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.0 %	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:

11/01/19 10:26

BH31

1910271-19 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/22/19 11:18**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	1910392	10/25/19	10/30/19	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **10/22/19 11:18**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		88.2 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		80.3 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.4 %	21-167		"	"	"	"	

Summit Scientific

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Noble - Mosier 23-12F

Project Number: [none]

Project Manager: Brandon Bruns

Reported:

11/01/19 10:26

BH32

1910271-20 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 10/22/19 11:38

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	1910392	10/25/19	10/30/19	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: 10/22/19 11:38

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		106 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		103 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.1 %	21-167		"	"	"	"	

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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:

11/01/19 10:26

BH33

1910271-21 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 10/22/19 11:47

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	1910391	10/28/19	10/28/19	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: 10/22/19 11:47

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		107 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		86.2 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	21-167		"	"	"	"	

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Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
11/01/19 10:26

Volatile Organic Compounds by EPA Method 8260B - Quality Control

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

Batch 1910391 - EPA 5030 Water MS

Blank (1910391-BLK1)

Prepared: 10/25/19 Analyzed: 10/28/19

Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	2.0	"							
Surrogate: 1,2-Dichloroethane-d4	13.7		"	13.3		103	23-173			
Surrogate: Toluene-d8	11.4		"	13.3		85.4	20-170			
Surrogate: 4-Bromofluorobenzene	13.2		"	13.3		98.8	21-167			

LCS (1910391-BS1)

Prepared: 10/25/19 Analyzed: 10/28/19

Benzene	39.0	1.0	ug/l	33.3		117	51-132			
Toluene	35.6	1.0	"	33.3		107	51-138			
Ethylbenzene	36.7	1.0	"	33.3		110	58-146			
m,p-Xylene	70.1	2.0	"	66.7		105	57-144			
o-Xylene	35.6	1.0	"	33.3		107	53-146			
Surrogate: 1,2-Dichloroethane-d4	15.6		"	13.3		117	23-173			
Surrogate: Toluene-d8	13.6		"	13.3		102	20-170			
Surrogate: 4-Bromofluorobenzene	13.1		"	13.3		98.2	21-167			

Matrix Spike (1910391-MS1)

Source: 1910250-07

Prepared: 10/25/19 Analyzed: 10/28/19

Benzene	29.8	1.0	ug/l	33.3	ND	89.5	34-141			
Toluene	32.5	1.0	"	33.3	ND	97.4	27-151			
Ethylbenzene	35.6	1.0	"	33.3	ND	107	29-160			
m,p-Xylene	68.3	2.0	"	66.7	ND	102	20-166			
o-Xylene	34.6	1.0	"	33.3	ND	104	33-159			
Surrogate: 1,2-Dichloroethane-d4	12.9		"	13.3		96.7	23-173			
Surrogate: Toluene-d8	12.5		"	13.3		93.7	20-170			
Surrogate: 4-Bromofluorobenzene	12.8		"	13.3		96.2	21-167			

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Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
11/01/19 10:26

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 1910391 - EPA 5030 Water MS

Matrix Spike Dup (1910391-MSD1)

Source: 1910250-07

Prepared: 10/25/19 Analyzed: 10/28/19

Benzene	28.8	1.0	ug/l	33.3	ND	86.5	34-141	3.41	30	
Toluene	32.6	1.0	"	33.3	ND	97.8	27-151	0.430	30	
Ethylbenzene	32.7	1.0	"	33.3	ND	98.1	29-160	8.60	30	
m,p-Xylene	62.5	2.0	"	66.7	ND	93.7	20-166	8.93	30	
o-Xylene	32.0	1.0	"	33.3	ND	96.0	33-159	7.89	30	
Surrogate: 1,2-Dichloroethane-d4	13.4		"	13.3		100	23-173			
Surrogate: Toluene-d8	13.5		"	13.3		101	20-170			
Surrogate: 4-Bromofluorobenzene	12.8		"	13.3		95.7	21-167			

Batch 1910392 - EPA 5030 Water MS

Blank (1910392-BLK1)

Prepared: 10/25/19 Analyzed: 10/29/19

Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	2.0	"							
Surrogate: 1,2-Dichloroethane-d4	16.4		"	13.3		123	23-173			
Surrogate: Toluene-d8	15.0		"	13.3		112	20-170			
Surrogate: 4-Bromofluorobenzene	12.2		"	13.3		91.4	21-167			

LCS (1910392-BS1)

Prepared: 10/25/19 Analyzed: 10/29/19

Benzene	27.0	1.0	ug/l	33.3		80.9	51-132			
Toluene	29.2	1.0	"	33.3		87.5	51-138			
Ethylbenzene	30.2	1.0	"	33.3		90.6	58-146			
m,p-Xylene	58.5	2.0	"	66.7		87.7	57-144			
o-Xylene	29.7	1.0	"	33.3		89.0	53-146			
Surrogate: 1,2-Dichloroethane-d4	17.8		"	13.3		133	23-173			
Surrogate: Toluene-d8	14.8		"	13.3		111	20-170			
Surrogate: 4-Bromofluorobenzene	13.0		"	13.3		97.6	21-167			

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Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
11/01/19 10:26

Volatile Organic Compounds by EPA Method 8260B - Quality Control
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Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 1910392 - EPA 5030 Water MS

Matrix Spike (1910392-MS1)		Source: 1910271-01			Prepared: 10/25/19 Analyzed: 10/29/19					
Benzene	26.1	1.0	ug/l	33.3	ND	78.2	34-141			
Toluene	26.5	1.0	"	33.3	ND	79.4	27-151			
Ethylbenzene	27.5	1.0	"	33.3	ND	82.4	29-160			
m,p-Xylene	54.0	2.0	"	66.7	ND	81.0	20-166			
o-Xylene	27.8	1.0	"	33.3	ND	83.6	33-159			
<hr/>										
Surrogate: 1,2-Dichloroethane-d4	16.3		"	13.3		123	23-173			
Surrogate: Toluene-d8	13.4		"	13.3		100	20-170			
Surrogate: 4-Bromofluorobenzene	12.5		"	13.3		93.8	21-167			
<hr/>										
Matrix Spike Dup (1910392-MSD1)		Source: 1910271-01			Prepared: 10/25/19 Analyzed: 10/29/19					
Benzene	28.0	1.0	ug/l	33.3	ND	84.0	34-141	7.14	30	
Toluene	28.2	1.0	"	33.3	ND	84.5	27-151	6.30	30	
Ethylbenzene	27.5	1.0	"	33.3	ND	82.6	29-160	0.218	30	
m,p-Xylene	52.9	2.0	"	66.7	ND	79.4	20-166	1.98	30	
o-Xylene	26.6	1.0	"	33.3	ND	79.8	33-159	4.63	30	
<hr/>										
Surrogate: 1,2-Dichloroethane-d4	16.8		"	13.3		126	23-173			
Surrogate: Toluene-d8	14.5		"	13.3		109	20-170			
Surrogate: 4-Bromofluorobenzene	12.5		"	13.3		93.6	21-167			

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Project: Noble - Mosier 23-12F

Project Number: [none]
Project Manager: Brandon Bruns

Reported:
11/01/19 10:26

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