FREMONT ENVIRONMENTAL INC.

May 18, 2018

Mr. Jacob Evans
Noble Energy Inc.
2115 117th Avenue
Greeley, CO 80634

Subject: **Ground Water Data Submittal**
Libsack R G27-15
SWSE Sec 27, T4N, R65W
API # 05-123-13256
Weld County, Colorado
Fremont Project No. C013-009
Facility ID# 323601, Remediation #7871

Dear Mr. Jacobs:

Enclosed please find a copy of the above referenced Ground Water Data Submittal for the Libsack R G27-15 site in Weld County, Colorado. The enclosed report describes monitoring and sampling efforts to assess ground water quality at the site.

Please contact me at (303) 956-8714 if you require any additional information.

Fremont appreciates the opportunity to provide this service.

Sincerely,
FREMONT ENVIRONMENTAL INC.

Paul V. Henehan, P.E.
Senior Consultant

Enclosure

1759 REDWING LANE, BROOMFIELD, CO 80020
(303) 956-8714 (DIRECT)

TABLE 1
SUMMARY OF GROUND WATER ELEVATION DATA AND CHEMISTRY DATA
NOBLE ENERGY INC.
LIBSACK R G27-15, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C013-009

SAMPLE LOCATION	DATE	BENZENE (µg/L)	TOLUENE (µg/L)	ETHYL BENZENE (µg/L)	TOTAL XYLENES (µg/L)	TOC ELEVATION (feet)	DEPTH TO GROUND WATER (ft)	GROUND WATER ELEVATION (ft)	FREE PRODUCT THICKNESS (ft)
MW-1	06/14/13	<1.0	<1.0	<1.0	<1.0	99.89	2.93	96.96	NP
	06/24/13	NS	NS	NS	NS		2.66	97.23	NP
	07/09/13	NS	NS	NS	NS		2.53	97.36	NP
	07/19/13	NS	NS	NS	NS		Inundated	Inundated	Inundated
	10/18/13	<1	<1	<1	<1		1.66	98.23	NP
	01/13/14	<1	<1	<1	<1		2.25	97.64	NP
	04/02/14	<1	<1	<1	<1		2.74	97.15	NP
	07/15/14	<1.0	<1.0	<1.0	<1.0		2.52	97.37	NP
	10/07/14	<1.0	<1.0	<1.0	<1.0		1.86	98.03	NP
	01/20/15	<1.0	<1.0	<1.0	<1.0		1.87	98.02	NP
	04/20/15	<1.0	<1.0	<1.0	<1.0		2.11	97.78	NP
MW-2	06/14/13	<1.0	<1.0	<1.0	<1.0	100.00	3.01	96.99	NP
	06/24/13	NS	NS	NS	NS		2.75	97.25	NP
	07/09/13	NS	NS	NS	NS		2.62	97.38	NP
	07/19/13	NS	NS	NS	NS		1.95	98.05	NP
	10/18/13	<1	<1	<1	<1		1.75	98.25	NP
	01/13/14	<1	<1	<1	<1		2.36	97.64	NP
	04/02/14	<1	<1	<1	<1		2.82	97.18	NP
	07/15/14	<1.0	<1.0	<1.0	<1.0		2.61	97.39	NP
	10/07/14	<1.0	<1.0	<1.0	<1.0		1.97	98.03	NP
	01/20/15	<1.0	<1.0	<1.0	<1.0		1.97	98.03	NP
	04/20/15	<1.0	<1.0	<1.0	<1.0		2.20	97.80	NP
MW-3	06/14/13	<1.0	<1.0	<1.0	<1.0	99.92	3.05	96.87	NP
	06/24/13	NS	NS	NS	NS		2.78	97.14	NP
	07/09/13	NS	NS	NS	NS		2.65	97.27	NP
	07/19/13	NS	NS	NS	NS		2.02	97.90	NP
	10/18/13	1.3	<1	<1	<1		1.88	98.04	NP
	01/13/14	<1	<1	<1	<1		2.40	97.52	NP
	04/02/14	<1	<1	<1	<1		2.84	97.08	NP
	07/15/14	<1.0	<1.0	<1.0	<1.0		2.66	97.26	NP
	10/07/14	<1.0	<1.0	<1.0	<1.0		2.02	97.90	NP
	01/20/15	<1.0	<1.0	<1.0	<1.0		2.04	97.88	NP
	04/20/15	<1.0	<1.0	<1.0	<1.0		2.27	97.65	NP
MW-4	06/14/13	**4,523**	<1.0	<1.0	168	99.47	2.69	96.78	NP
	06/24/13	NS	NS	NS	NS		2.42	97.05	NP
	07/09/13	**868**	<1.0	<1.0	<1.0		2.28	97.19	NP
	07/19/13	NS	NS	NS	NS		1.61	97.86	NP
	10/18/13	<1	<1	<1	<1		1.46	98.01	NP
	01/13/14	<1	<1	<1	<1		2.07	97.40	NP
	04/02/14	**33.1**	<1	<1	<1		2.55	96.92	NP
	07/15/14	**6.4**	<1.0	<1.0	<1.0		2.31	97.16	NP
	10/07/14	<1.0	<1.0	<1.0	<1.0		1.68	97.79	NP
	01/20/15	<1.0	<1.0	<1.0	<1.0		1.71	97.76	NP
	04/20/15	1.6	<1.0	<1.0	<1.0		1.94	97.53	NP
MW-5	06/14/13	**494**	<1.0	1.8	15.7	99.29	2.68	96.61	NP
	06/24/13	NS	NS	NS	NS		2.39	96.90	NP
	07/09/13	**535**	<1.0	<1.0	<1.0		2.26	97.03	NP
	07/19/13	NS	NS	NS	NS		Inundated	Inundated	Inundated
	10/18/13	<1	<1	<1	<1		1.31	97.98	NP
	01/13/14	<1	<1	<1	<1		2.01	97.28	NP
	04/02/14	<1	<1	<1	<1		2.49	96.80	NP
	07/15/14	<1.0	<1.0	<1.0	<1.0		2.26	97.03	NP
	10/07/14	<1.0	<1.0	<1.0	<1.0		1.65	97.64	NP
	01/20/15	<1.0	<1.0	<1.0	<1.0		1.66	97.63	NP
	04/20/15	<1.0	<1.0	<1.0	<1.0		1.89	97.40	NP
MW-6	06/14/13	<1.0	<1.0	<1.0	<1.0	99.66	3.01	96.65	NP
	06/24/13	NS	NS	NS	NS		2.74	96.92	NP
	07/09/13	NS	NS	NS	NS		2.61	97.05	NP

SAMPLE LOCATION	DATE	BENZENE (µg/L)	TOLUENE (µg/L)	ETHYL BENZENE (µg/L)	TOTAL XYLENES (µg/L)	TOC ELEVATION (feet)	DEPTH TO GROUND WATER (ft)	GROUND WATER ELEVATION (ft)	FREE PRODUCT THICKNESS (ft)
MW-6	07/19/13	NS	NS	NS	NS	99.66	2.01	97.65	NP
	10/18/13	<1	<1	<1	<1		1.79	97.87	NP
	01/13/14	2.9	<1	<1	<1		1.33	98.33	NP
	04/02/14	**258**	<1	<1	<1		2.82	96.84	NP
	07/15/14	<1.0	<1.0	<1.0	<1.0		2.61	97.05	NP
	10/07/14	<1.0	<1.0	<1.0	<1.0		1.98	97.68	NP
	01/20/15	<1.0	<1.0	<1.0	<1.0		1.99	97.67	NP
	04/20/15	<1.0	<1.0	<1.0	<1.0		2.23	97.43	NP
	07/20/15	<1.0	<1.0	<1.0	<1.0		2.38	97.28	NP
	10/28/15	<1.0	<1.0	<1.0	<1.0		1.86	97.80	NP
	01/29/16	<1.0	<1.0	<1.0	<1.0		3.07	96.59	NP
	04/28/16	<1.0	<1.0	<1.0	<1.0		1.81	97.85	NP
	07/26/16	<1.0	<1.0	<1.0	<1.0		2.74	96.92	NP
	10/18/16	<1.0	<1.0	<1.0	<1.0		1.93	97.73	NP
	01/06/17	<1.0	<1.0	<1.0	<1.0		3.01	96.65	NP
	04/05/17	<1.0	<1.0	<1.0	<1.0		3.39	96.27	NP
	07/25/17	<1.0	<1.0	<1.0	2.0		3.25	96.41	NP
	10/12/17	<1.0	<1.0	<1.0	<1.0		1.78	97.88	NP
	01/25/18	<1.0	2.0	1.3	6.8		2.36	97.30	NP
	04/06/18	<1.0	<1.0	<1.0	<2.0		2.69	96.97	NP
MW-7	06/14/13	**1,063**	27.8	<1.0	104	99.38	2.72	96.66	NP
	06/24/13	NS	NS	NS	NS		2.43	96.95	NP
	07/09/13	**2,226**	100	58.9	164		2.3	97.08	NP
	07/19/13	NS	NS	NS	NS		1.76	97.62	NP
	10/18/13	**108**	<1	3.9	1.9		1.44	97.94	NP
	01/13/14	<1	<1	<1	<1		2.02	97.36	NP
	04/02/14	<1	<1	<1	<1		2.47	96.91	NP
	07/15/14	<1.0	<1.0	<1.0	<1.0		2.28	97.10	NP
	10/07/14	<1.0	<1.0	<1.0	<1.0		1.63	97.75	NP
	01/20/15	<1.0	<1.0	<1.0	<1.0		1.64	97.74	NP
	04/20/15	NF	NF	NF	NF		NF	NF	NF
	07/20/15	<1.0	<1.0	<1.0	<1.0		1.19	98.19	NP
	10/28/15	<1.0	<1.0	<1.0	<1.0		0.67	98.71	NP
	01/29/16	Damaged	Damaged	Damaged	Damaged		Damaged	Damaged	Damaged
	03/17/16	<1.0	<1.0	<1.0	<1.0		NM	NM	NP
	04/28/16	<1.0	<1.0	<1.0	<1.0		too shallow	too shallow	NP
	07/26/16	<1.0	<1.0	<1.0	<1.0		1.80	97.58	NP
	10/18/16	<1.0	<1.0	<1.0	<1.0		0.98	98.40	NP
	01/06/17	<1.0	<1.0	<1.0	<1.0		2.07	97.31	NP
	04/05/17	<1.0	<1.0	<1.0	<1.0		2.46	96.92	NP
	07/25/17	<1.0	<1.0	<1.0	<1.0		2.34	97.04	NP
	10/12/17	<1.0	<1.0	<1.0	<1.0		0.87	99.66	NP
	01/25/18	<1.0	<1.0	<1.0	<2.0		1.90	97.48	NP
	04/06/18	<1.0	<1.0	<1.0	<2.0		2.23	97.15	NP
MW-8	06/14/13	<1.0	<1.0	<1.0	<1.0	99.46	2.69	96.77	NP
	06/24/13	NS	NS	NS	NS		2.39	97.07	NP
	07/09/13	NS	NS	NS	NS		2.27	97.19	NP
	07/19/13	NS	NS	NS	NS		Inundated	Inundated	Inundated
	10/18/13	<1	<1	<1	<1		1.79	97.67	NP
	01/13/14	<1	<1	<1	<1		2.08	97.38	NP
	04/02/14	<1	<1	<1	<1		2.46	97.00	NP
	07/15/14	<1.0	<1.0	<1.0	<1.0		2.25	97.21	NP
	10/07/14	<1.0	<1.0	<1.0	<1.0		1.69	97.77	NP
	01/20/15	<1.0	<1.0	<1.0	<1.0		1.71	97.75	NP
	04/20/15	<1.0	<1.0	<1.0	<1.0		1.93	97.53	NP
MW-9	06/14/13	<1.0	<1.0	<1.0	<1.0	99.51	3.05	96.46	NP
	06/24/13	NS	NS	NS	NS	99.03	2.25	96.78	NP
	07/09/13	NS	NS	NS	NS		2.14	96.89	NP
	07/19/13	NS	NS	NS	NS		1.18	97.85	NP
	10/18/13	<1	<1	<1	<1		1.28	97.75	NP
	01/13/14	<1	<1	<1	<1		1.82	97.69	NP
	04/02/14	<1	<1	<1	<1		2.31	96.72	NP
	07/15/14	<1.0	<1.0	<1.0	<1.0		2.11	97.40	NP
	10/07/14	<1.0	<1.0	<1.0	<1.0		1.44	98.07	NP
	01/20/15	<1.0	<1.0	<1.0	<1.0		1.46	97.57	NP
	04/20/15	<1.0	<1.0	<1.0	<1.0		1.69	97.34	NP

SAMPLE LOCATION	DATE	BENZENE (µg/L)	TOLUENE (µg/L)	ETHYL BENZENE (µg/L)	TOTAL XYLENES (µg/L)	TOC ELEVATION (feet)	DEPTH TO GROUND WATER (ft)	GROUND WATER ELEVATION (ft)	FREE PRODUCT THICKNESS (ft)
MW-10	06/14/13	<1.0	<1.0	<1.0	<1.0	100.01	3.61	96.40	NP
	06/24/13	NS	NS	NS	NS	99.44	2.7	96.74	NP
	07/09/13	NS	NS	NS	NS		2.59	96.85	NP
	07/19/13	NS	NS	NS	NS		1.89	97.55	NP
	10/18/13	<1	<1	<1	<1		1.73	97.71	NP
	01/13/14	<1	<1	<1	<1		2.29	97.72	NP
	04/02/14	<1	<1	<1	<1		2.76	96.68	NP
	07/15/14	<1.0	<1.0	<1.0	<1.0		2.54	97.47	NP
	10/07/14	<1.0	<1.0	<1.0	<1.0		1.91	98.10	NP
	01/20/15	<1.0	<1.0	<1.0	<1.0		1.92	97.52	NP
	04/20/15	<1.0	<1.0	<1.0	<1.0		2.16	97.28	NP
MW-11	06/14/13	<1.0	<1.0	<1.0	<1.0	100.50	4.1	96.40	NP
	06/24/13	NS	NS	NS	NS	99.98	3.23	96.75	NP
	07/09/13	NS	NS	NS	NS		3.12	96.86	NP
	07/19/13	NS	NS	NS	NS		2.48	97.50	NP
	10/18/13	<1	<1	<1	<1		2.24	97.74	NP
	01/13/14	<1	<1	<1	<1		2.82	97.68	NP
	04/02/14	<1	<1	<1	<1		3.31	96.67	NP
	07/15/14	<1.0	<1.0	<1.0	<1.0		3.42	97.08	NP
	10/07/14	<1.0	<1.0	<1.0	<1.0		2.43	98.07	NP
	01/20/15	<1.0	<1.0	<1.0	<1.0		2.44	97.54	NP
	04/20/15	<1.0	<1.0	<1.0	<1.0		2.67	97.31	NP
MW-12	07/09/13	<1.0	<1.0	<1.0	<1.0	99.68	2.62	97.06	NP
	07/19/13	NS	NS	NS	NS		2.14	97.54	NP
	10/18/13	<1	<1	<1	<1		1.74	97.94	NP
	01/13/14	<1	<1	<1	<1		2.32	97.36	NP
	04/02/14	<1	<1	<1	<1		2.81	96.87	NP
	07/15/14	WD	WD	WD	WD		WD	WD	WD
	01/20/15	<1.0	<1.0	<1.0	<1.0		WD	WD	NP
	04/20/15	NF	NF	NF	NF		NF	NF	NF
MW-13	07/09/13	**71.1**		160	**2,606**	99.76	2.78	96.98	NP
	07/19/13	NS	NS	NS	NS		2.28	97.48	NP
	10/18/13	**131**	<1	9.4	200		1.93	97.83	NP
	01/13/14	**112**	<1	91.7	4.3		2.51	97.25	NP
	04/02/14	**75.5**	1.7	47.9	125		3.07	96.69	NP
	07/15/14	**71.2**	<1.0	31.4	168		2.84	96.92	NP
	10/07/14	**96.9**	<1.0	56.6	2.1		1.19	98.57	NP
	01/20/15	**100**	<1.0	129	13.5		1.20	98.56	NP
	04/20/15	**130**	<1.0	92	<1.0		1.44	98.32	NP
	07/20/15	**70**	<1.0	7.2	<1.0		2.58	97.18	NP
	10/28/15	**30**	<1.0	2.4	<1.0		2.06	97.70	NP
	01/29/16	**63**	<1.0	22	<1.0		3.28	96.48	NP
	04/28/16	**34**	<1.0	7.2	<1.0		2.02	97.74	NP
	07/26/16	**13**	<1.0	<1.0	<1.0		2.95	96.81	NP
	10/18/16	**18**	<1.0	1.5	<1.0		2.14	97.62	NP
	01/06/17	**46**	<1.0	9.1	<1.0		3.22	96.54	NP
	04/05/17	**25**	<1.0	1.0	<1.0		3.62	96.14	NP
	07/25/17	<1.0	<1.0	<1.0	<1.0		3.51	96.25	NP
	10/12/17	<1.0	<1.0	<1.0	<1.0		2.04	99.66	NP
	01/25/18	<1.0	<1.0	1.1	<2.0		2.51	97.25	NP
	04/06/18	<1.0	<1.0	<1.0	<2.0		2.79	96.97	NP
MW-14	07/09/13	**9.2**		1.6	16.8	99.42	2.5	96.92	NP
	07/19/13	NS	NS	NS	NS		1.96	97.46	NP
	10/18/13	**10.6**	<1	<1	<1		1.63	97.79	NP
	01/13/14	1.2	<1	<1	<1		2.28	97.14	NP
	04/02/14	2	<1	<1	4		2.78	96.64	NP
	07/15/14	1.6	<1.0	<1.0	1.5		2.58	96.84	NP
	10/07/14	<1.0	<1.0	<1.0	<1.0		1.92	97.50	NP
	01/20/15	<1.0	<1.0	<1.0	<1.0		1.94	97.48	NP
	04/20/15	<1.0	<1.0	<1.0	<1.0		2.17	97.25	NP
	07/20/15	<1.0	<1.0	<1.0	<1.0		2.41	97.01	NP
	10/28/15	<1.0	<1.0	<1.0	<1.0		1.89	97.53	NP
	01/29/16	<1.0	<1.0	<1.0	<1.0		3.11	96.31	NP
	04/28/16	<1.0	<1.0	<1.0	<1.0		1.85	97.57	NP
	07/26/16	<1.0	<1.0	<1.0	<1.0		2.78	96.64	NP

SAMPLE LOCATION	DATE	BENZENE (µg/L)	TOLUENE (µg/L)	ETHYL BENZENE (µg/L)	TOTAL XYLENES (µg/L)	TOC ELEVATION (feet)	DEPTH TO GROUND WATER (ft)	GROUND WATER ELEVATION (ft)	FREE PRODUCT THICKNESS (ft)
MW-14	10/18/16	<1.0	<1.0	<1.0	<1.0	99.42	1.97	97.45	NP
	01/06/17	<1.0	<1.0	<1.0	<1.0		3.05	96.37	NP
	04/05/17	<1.0	<1.0	<1.0	<1.0		3.43	95.99	NP
	07/25/17	<1.0	<1.0	<1.0	<1.0		3.24	96.18	NP
	10/12/17	<1.0	<1.0	<1.0	<1.0		1.77	99.66	NP
	01/25/18	<1.0	<1.0	<1.0	<2.0		2.38	97.04	NP
	04/06/18	<1.0	<1.0	<1.0	<2.0		2.72	96.70	NP
MW-15	07/09/13	<1.0	<1.0	<1.0	<1.0	99.59	2.68	96.91	NP
	07/19/13	NS	NS	NS	NS		2.12	97.47	NP
	10/18/13	<1	<1	<1	<1		1.82	97.77	NP
	01/13/14	<1	<1	<1	<1		2.39	97.20	NP
	04/02/14	<1	<1	<1	<1		2.88	96.71	NP
	07/15/14	<1.0	<1.0	<1.0	<1.0		2.65	96.94	NP
	10/07/14	<1.0	<1.0	<1.0	<1.0		2.01	97.58	NP
	01/20/15	<1.0	<1.0	<1.0	<1.0		2.03	97.56	NP
	04/20/15	<1.0	<1.0	<1.0	<1.0		2.26	97.33	NP
MW-16	07/09/13	**177**		394	**5,089**	99.18	2.3	96.88	NP
	07/19/13	NS	NS	NS	NS		1.74	97.44	NP
	10/18/13	**166**	<1	104	405		1.41	97.77	NP
	01/13/14	**249**	<1	268	**1733**		2.02	97.16	NP
	04/02/14	**149**	3.1	127	852		2.49	96.69	NP
	07/15/14	<1.0	<1.0	<1.0	<1.0		2.29	96.89	NP
	10/07/14	<1.0	<1.0	<1.0	<1.0		1.61	97.57	NP
	01/20/15	<1.0	<1.0	<1.0	<1.0		1.62	97.56	NP
	04/20/15	<1.0	<1.0	<1.0	<1.0		1.85	97.33	NP
	07/20/15	<1.0	<1.0	<1.0	<1.0		2.06	97.12	NP
	10/28/15	<1.0	<1.0	<1.0	<1.0		1.53	97.65	NP
	01/29/16	<1.0	<1.0	<1.0	<1.0		2.75	96.43	NP
	04/28/16	<1.0	<1.0	<1.0	<1.0		1.50	97.68	NP
	07/26/16	<1.0	<1.0	<1.0	<1.0		2.43	96.75	NP
	10/18/16	<1.0	<1.0	<1.0	<1.0		1.63	97.55	NP
	01/06/17	<1.0	<1.0	<1.0	<1.0		2.72	96.46	NP
	04/05/17	<1.0	<1.0	<1.0	<1.0		3.10	96.08	NP
	07/25/17	<1.0	<1.0	<1.0	<1.0		2.99	96.19	NP
	10/12/17	<1.0	<1.0	<1.0	<1.0		1.52	99.66	NP
	01/25/18	<1.0	<1.0	<1.0	<2.0		1.96	97.22	NP
	04/06/18	<1.0	<1.0	1.6	9.6		2.32	96.86	NP
MW-17	07/09/13	**851**		390	**9,256**	99.45	2.5	96.95	NP
	07/19/13	NS	NS	NS	NS		2.02	97.43	NP
	10/18/13	**961**	<1	82.2	**8473**		1.43	98.02	NP
	01/13/14	**455**	<1	101	**4781**		2.19	97.26	NP
	04/02/14	**435**	4.4	69.1	**5184**		2.69	96.76	NP
	07/15/14	**1081**	<1.0	106	**5741**		2.46	96.99	NP
	10/07/14	**461**	<1.0	247	**2008**		1.85	97.60	NP
	01/20/15	**212**	2.3	181	**1844**		1.86	97.59	NP
	04/20/15	**26**	<1.0	4.4	140		2.19	97.26	NP
	07/20/15	**280**	<1.0	21	130		2.27	97.18	NP
	10/28/15	**77**	<1.0	29	54		1.75	97.70	NP
	01/29/16	<1.0	<1.0	<1.0	<1.0		2.97	96.48	NP
	04/28/16	<1.0	<1.0	<1.0	<1.0		1.70	97.75	NP
	07/26/16	**16**	<1.0	1.8	18		2.64	96.81	NP
	10/18/16	**71**	<1.0	2.9	17		1.83	97.62	NP
	01/06/17	**91**	<1.0	7.2	5.5		2.91	96.54	NP
	04/05/17	**50**	<1.0	4.1	<1.0		3.28	96.17	NP
	07/25/17	3.1	<1.0	<1.0	<1.0		3.16	96.29	NP
	10/12/17	**14**	<1.0	1.3	25		1.69	99.66	NP
	01/25/18	**190**	1.1	3.8	10		2.15	97.30	NP
	04/06/18	<1.0	<1.0	<1.0	<2.0		2.46	96.99	NP
MW-18	07/09/13	<1.0	<1.0	<1.0	<1.0	98.28	1.54	96.74	NP
	07/19/13	NS	NS	NS	NS		1.02	97.26	NP
	10/18/13	<1	<1	<1	<1		0.66	97.62	NP
	01/13/14	<1	<1	<1	<1		1.15	97.13	NP
	04/02/14	<1	<1	<1	<1		1.68	96.60	NP
	07/15/14	<1.0	<1.0	<1.0	<1.0		1.49	96.79	NP
	10/07/14	<1.0	<1.0	<1.0	<1.0		0.81	97.47	NP

SAMPLE LOCATION	DATE	BENZENE (µg/L)	TOLUENE (µg/L)	ETHYL BENZENE (µg/L)	TOTAL XYLENES (µg/L)	TOC ELEVATION (feet)	DEPTH TO GROUND WATER (ft)	GROUND WATER ELEVATION (ft)	FREE PRODUCT THICKNESS (ft)
MW-18	01/20/15	<1.0	<1.0	<1.0	<1.0	98.28	0.83	97.45	NP
	04/20/15	<1.0	<1.0	<1.0	<1.0		1.06	97.22	NP
	07/20/15	<1.0	<1.0	<1.0	<1.0		1.29	96.99	NP
	10/28/15	<1.0	<1.0	<1.0	<1.0		0.76	97.52	NP
	01/29/16	<1.0	<1.0	<1.0	<1.0		1.98	96.30	NP
	04/28/16	<1.0	<1.0	<1.0	<1.0		too shallow	too shallow	NP
	07/26/16	<1.0	<1.0	<1.0	<1.0		1.81	96.47	NP
	10/18/16	<1.0	<1.0	<1.0	<1.0		1.00	97.28	NP
	01/06/17	<1.0	<1.0	<1.0	<1.0		2.09	96.19	NP
	04/05/17	<1.0	<1.0	<1.0	<1.0		2.47	95.81	NP
	07/25/17	<1.0	<1.0	<1.0	<1.0		2.36	95.92	NP
	10/12/17	<1.0	<1.0	<1.0	<1.0		0.89	99.66	NP
	01/25/18	<1.0	<1.0	<1.0	<2.0		1.12	97.16	NP
	04/06/18	<1.0	<1.0	<1.0	<2.0		1.45	96.83	NP
MW-19	07/09/13	<1.0	<1.0	<1.0	<1.0	98.47	1.71	96.76	NP
	07/19/13	NS	NS	NS	NS		1.1	97.37	NP
	10/18/13	<1	<1	<1	<1		1.78	96.69	NP
	01/13/14	<1	<1	<1	<1		1.33	97.14	NP
	04/02/14	<1	<1	<1	<1		1.84	96.63	NP
	07/15/14	<1.0	<1.0	<1.0	<1.0		1.65	96.82	NP
	10/07/14	<1.0	<1.0	<1.0	<1.0		0.99	97.48	NP
	01/20/15	<1.0	<1.0	<1.0	<1.0		1.01	97.46	NP
	04/20/15	<1.0	<1.0	<1.0	<1.0		1.24	97.23	NP
MW-20	07/19/13	<1.0	<1.0	<1.0	<1.0	99.40	1.33	98.07	NP
	10/18/13	<1	<1	<1	<1		1.51	97.89	NP
	01/13/14	<1	<1	<1	<1		2.11	97.29	NP
	04/02/14	<1	<1	<1	<1		2.57	96.83	NP
	07/15/14	**8.4**	<1.0	<1.0	<1.0		2.32	97.08	NP
	10/07/14	<1.0	<1.0	<1.0	<1.0		1.70	97.70	NP
	01/20/15	<1.0	<1.0	<1.0	<1.0		1.71	97.69	NP
	04/20/15	<1.0	<1.0	<1.0	<1.0		1.95	97.45	NP
MW-21	07/19/13	<1.0	<1.0	<1.0	<1.0	99.31	1.67	97.64	NP
	10/18/13	<1	<1	<1	<1		1.51	97.80	NP
	01/13/14	<1	<1	<1	<1		2.10	97.21	NP
	04/02/14	<1	<1	<1	<1		2.56	96.75	NP
	07/15/14	<1.0	<1.0	<1.0	<1.0		2.33	96.98	NP
	10/07/14	<1.0	<1.0	<1.0	<1.0		1.71	97.60	NP
	01/20/15	<1.0	<1.0	<1.0	<1.0		1.73	97.58	NP
	04/20/15	<1.0	<1.0	<1.0	<1.0		1.96	97.35	NP
MW-22	07/19/13	<1.0	<1.0	<1.0	<1.0	99.12	2.01	97.11	NP
	10/18/13	<1	<1	<1	<1		1.73	97.39	NP
	01/13/14	<1	<1	<1	<1		2.01	97.11	NP
	04/02/14	<1	<1	<1	<1		2.49	96.63	NP
	07/15/14	<1.0	<1.0	<1.0	<1.0		2.30	96.82	NP
	10/07/14	<1.0	<1.0	<1.0	<1.0		1.85	97.27	NP
	01/20/15	<1.0	<1.0	<1.0	<1.0		1.86	97.26	NP
	04/20/15	<1.0	<1.0	<1.0	<1.0		2.09	97.03	NP
	07/20/15	<1.0	<1.0	<1.0	<1.0		1.10	98.02	NP
	10/28/15	<1.0	<1.0	<1.0	<1.0		0.59	98.53	NP
	01/29/16	<1.0	<1.0	<1.0	<1.0		1.79	97.33	NP
	04/28/16	<1.0	<1.0	<1.0	<1.0		too shallow	too shallow	NP
	07/26/16	<1.0	<1.0	<1.0	<1.0		1.80	97.32	NP
	10/18/16	<1.0	<1.0	<1.0	<1.0		0.99	98.13	NP
	01/06/17	<1.0	<1.0	<1.0	<1.0		2.07	97.05	NP
	04/05/17	<1.0	<1.0	<1.0	<1.0		2.45	96.67	NP
	07/25/17	<1.0	<1.0	<1.0	<1.0		2.34	96.78	NP
	10/12/17	<1.0	<1.0	<1.0	<1.0		0.88	99.66	NP
	01/25/18	<1.0	<1.0	<1.0	<2.0		2.05	97.07	NP
	04/06/18	<1.0	<1.0	<1.0	<2.0		2.25	96.87	NP
MW-23	07/19/13	<1.0	<1.0	<1.0	<1.0	98.77	1.41	97.36	NP
	10/18/13	<1	<1	<1	<1		0.98	97.79	NP
	01/13/14	<1	<1	<1	<1		1.52	97.25	NP
	04/02/14	<1	<1	<1	<1		2.01	96.76	NP
	07/15/14	<1.0	<1.0	<1.0	<1.0		1.82	96.95	NP

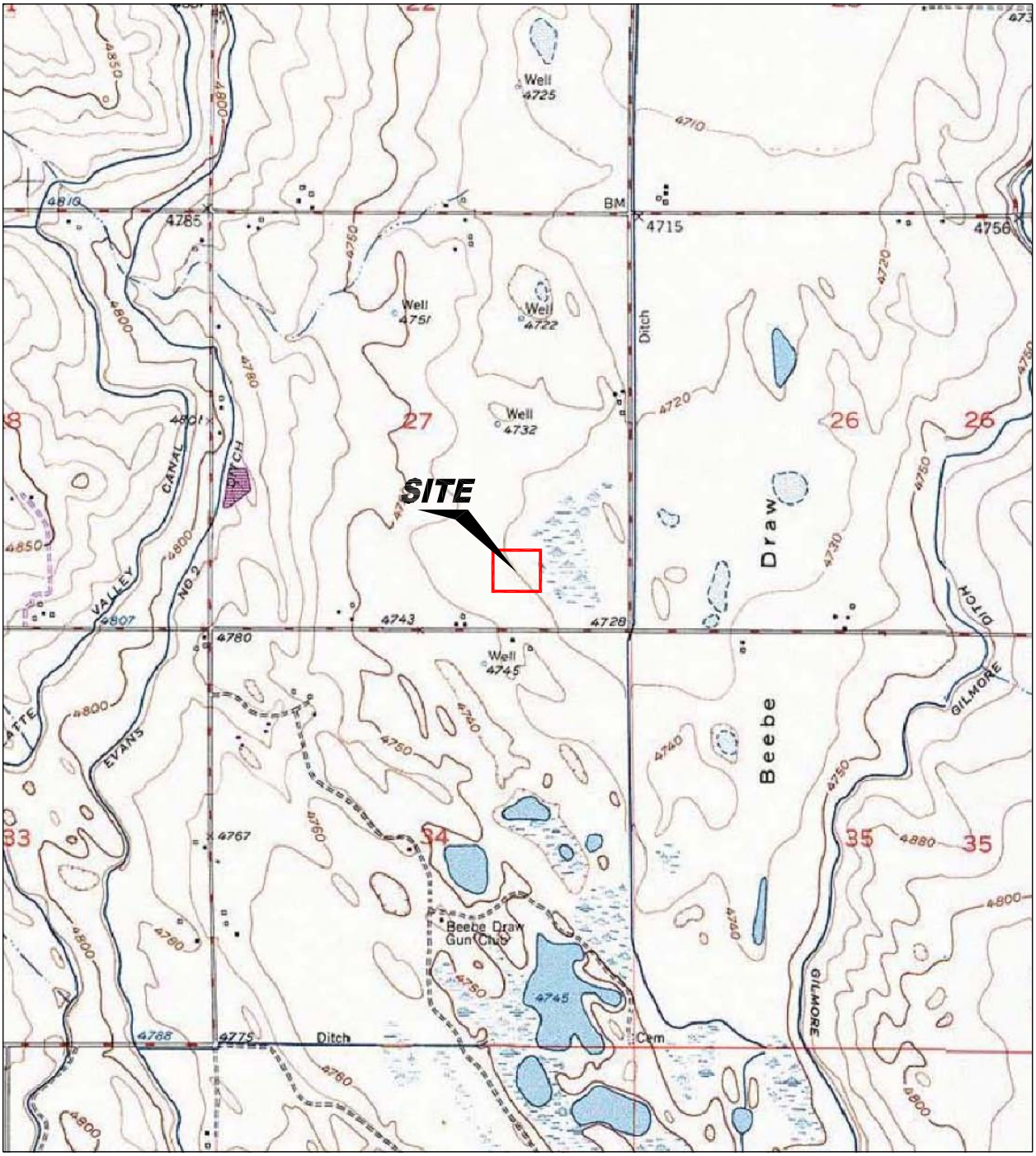
SAMPLE LOCATION	DATE	BENZENE (µg/L)	TOLUENE (µg/L)	ETHYL BENZENE (µg/L)	TOTAL XYLENES (µg/L)	TOC ELEVATION (feet)	DEPTH TO GROUND WATER (ft)	GROUND WATER ELEVATION (ft)	FREE PRODUCT THICKNESS (ft)
MW-23	10/07/14	<1.0	<1.0	<1.0	<1.0	98.77	1.16	97.61	NP
	01/20/15	<1.0	<1.0	<1.0	<1.0		1.18	97.59	NP
	04/20/15	<1.0	<1.0	<1.0	<1.0		1.42	97.35	NP
	07/20/15	<1.0	<1.0	<1.0	<1.0		1.62	97.15	NP
	10/28/15	<1.0	<1.0	<1.0	<1.0		1.10	97.67	NP
	01/29/16	<1.0	<1.0	<1.0	<1.0		2.32	96.45	NP
	04/28/16	<1.0	<1.0	<1.0	<1.0		1.06	97.71	NP
	07/26/16	<1.0	<1.0	<1.0	<1.0		1.99	96.78	NP
	10/18/16	<1.0	<1.0	<1.0	<1.0		1.19	97.58	NP
	01/06/17	<1.0	<1.0	<1.0	<1.0		2.27	96.50	NP
	04/05/17	<1.0	<1.0	<1.0	<1.0		2.63	96.14	NP
	07/25/17	<1.0	<1.0	<1.0	<1.0		2.53	96.24	NP
	10/12/17	<1.0	<1.0	<1.0	<1.0		1.07	99.66	NP
	01/25/18	<1.0	<1.0	<1.0	<2.0		1.45	97.32	NP
	04/06/18	<1.0	<1.0	<1.0	<2.0		1.75	97.02	NP
MW-24	07/19/13	2.4	<1.0	36.6	1,364	99.08	1.57	97.51	NP
	10/18/13	<1	<1	<1	<1		1.2	97.88	NP
	01/13/14	3.3	<1	23.7	64.4		1.74	97.34	NP
	04/02/14	1.9	<1	10.3	35.7		2.23	96.85	NP
	07/15/14	<1.0	<1.0	4.0	1.4		2.01	97.07	NP
	10/07/14	<1.0	<1.0	<1.0	1.5		1.40	97.68	NP
	01/20/15	<1.0	<1.0	<1.0	<1.0		1.39	97.69	NP
	04/20/15	<1.0	<1.0	<1.0	4.6		1.62	97.46	NP
	07/20/15	<1.0	<1.0	<1.0	<1.0		1.82	97.26	NP
	10/28/15	<1.0	<1.0	<1.0	<1.0		1.30	97.78	NP
	01/29/16	<1.0	<1.0	<1.0	<1.0		2.51	96.57	NP
	04/28/16	<1.0	<1.0	<1.0	<1.0		1.25	97.83	NP
	07/26/16	<1.0	<1.0	<1.0	<1.0		2.18	96.90	NP
	10/18/16	<1.0	<1.0	<1.0	<1.0		1.36	97.72	NP
	01/06/17	2.3	<1.0	<1.0	6.4		2.49	96.59	NP
	04/05/17	2.3	<1.0	3.6	30		2.84	96.24	NP
	07/25/17	<1.0	<1.0	<1.0	<1.0		2.75	96.33	NP
	10/12/17	<1.0	<1.0	<1.0	<1.0		1.27	99.66	NP
	01/25/18	<1.0	<1.0	<1.0	<2.0		1.65	97.43	NP
	04/06/18	<1.0	<1.0	<1.0	1200		2.00	97.08	NP
MW-25	07/19/13	**803**	<1.0	473	**10,322**	99.36	1.96	97.40	NP
	10/18/13	**435**	<1	119	**1572**		1.49	97.87	NP
	01/13/14	**47.8**	<1	6.3	159		2.03	97.33	NP
	04/02/14	**44.1**	<1	24.3	200		2.58	96.78	NP
	07/15/14	**115**	<1.0	39.2	120		2.35	97.01	NP
	10/07/14	**57.1**	<1.0	9.3	12.1		1.69	97.67	NP
	01/20/15	**36.2**	<1.0	5.1	44.6		1.71	97.65	NP
	04/20/15	**16**	<1.0	1.2	5.0		1.94	97.42	NP
	07/20/15	**5.8**	<1.0	<1.0	<1.0		2.15	97.21	NP
	10/28/15	**13**	<1.0	<1.0	<1.0		1.63	97.73	NP
	01/29/16	Damaged	Damaged	Damaged	Damaged		Damaged	Damaged	Damaged
	03/17/16	**83**	<1.0	2.1	24		NM	NM	NP
	04/28/16	**7.3**	<1.0	<1.0	4.0		too shallow	too shallow	NP
	07/26/16	2.7	<1.0	<1.0	<1.0		1.80	97.56	NP
	10/18/16	<1.0	<1.0	<1.0	<1.0		0.98	98.38	NP
	01/06/17	<1.0	<1.0	<1.0	<1.0		2.07	97.29	NP
	04/05/17	**51**	<1.0	2.1	18		2.46	96.90	NP
	07/25/17	1.4	<1.0	<1.0	<1.0		2.34	97.02	NP
	10/12/17	<1.0	<1.0	<1.0	<1.0		0.86	99.66	NP
	01/25/18	<1.0	<1.0	<1.0	2.3		1.96	97.40	NP
	04/06/18	**5.6**	<1.0	<1.0	**3900**		2.33	97.03	NP
MW-26	07/19/13	**198**	<1.0	344	**2,547**	99.30	1.88	97.42	NP
	10/18/13	**109**	<1	83.9	894		1.49	97.81	NP
	01/13/14	<1	<1	<1	<1		2.01	97.29	NP
	04/02/14	<1	<1	<1	<1		2.54	96.76	NP
	07/15/14	<1.0	<1.0	<1.0	<1.0		2.29	97.01	NP
	10/07/14	2.7	<1.0	<1.0	1.2		1.64	97.66	NP
	01/20/15	<1.0	<1.0	<1.0	<1.0		1.65	97.65	NP
	04/20/15	**13**	<1.0	2.0	8.0		1.88	97.42	NP
	07/20/15	3.1	<1.0	<1.0	<1.0		2.11	97.19	NP
	10/28/15	**20**	<1.0	13	49		1.60	97.70	NP

SAMPLE LOCATION	DATE	BENZENE (µg/L)	TOLUENE (µg/L)	ETHYL BENZENE (µg/L)	TOTAL XYLENES (µg/L)	TOC ELEVATION (feet)	DEPTH TO GROUND WATER (ft)	GROUND WATER ELEVATION (ft)	FREE PRODUCT THICKNESS (ft)
MW-26	01/29/16	Damaged	Damaged	Damaged	Damaged	99.30	Damaged	Damaged	Damaged
	03/17/16	**23**	<1.0	2.2	59		NM	NM	NP
	04/28/16	**60**	<1.0	20	110		too shallow	too shallow	NP
	07/26/16	**40**	<1.0	6.3	17		1.79	97.51	NP
	10/18/16	2.8	<1.0	10	190		0.98	98.32	NP
	01/06/17	**29**	<1.0	5.2	57		2.06	97.24	NP
	04/05/17	**38**	<1.0	6.5	75		2.44	96.86	NP
	07/25/17	<1.0	<1.0	<1.0	<1.0		2.21	97.09	NP
	10/12/17	<1.0	<1.0	<1.0	<1.0		0.75	99.66	NP
	01/25/18	<1.0	<1.0	<1.0	72		2.00	97.30	NP
	04/06/18	**130**	<1.0	1.2	**6900**		2.32	96.98	NP
MW-27	07/19/13	<1.0	<1.0	<1.0	<1.0	98.40	0.91	97.49	NP
	10/18/13	<1	<1	<1	<1		0.7	97.70	NP
	01/13/14	<1	<1	<1	<1		1.23	97.17	NP
	04/02/14	<1	<1	<1	<1		1.73	96.67	NP
	07/15/14	<1.0	<1.0	<1.0	<1.0		3.41	94.99	NP
	10/07/14	<1.0	<1.0	<1.0	<1.0		0.87	97.53	NP
	01/20/15	<1.0	<1.0	<1.0	<1.0		0.89	97.51	NP
	04/20/15	<1.0	<1.0	<1.0	<1.0		1.12	97.28	NP
MW-28	07/19/13	<1.0	<1.0	<1.0	<1.0	98.64	1.14	97.50	NP
	10/18/13	<1	<1	<1	<1		0.79	97.85	NP
	01/13/14	<1	<1	<1	<1		1.28	97.36	NP
	04/02/14	<1	<1	<1	<1		1.79	96.85	NP
	07/15/14	<1.0	<1.0	<1.0	<1.0		1.59	97.05	NP
	10/07/14	<1.0	<1.0	<1.0	<1.0		0.95	97.69	NP
	01/20/15	<1.0	<1.0	<1.0	<1.0		0.96	97.68	NP
	04/20/15	<1.0	<1.0	<1.0	<1.0		1.19	97.45	NP
	07/20/15	<1.0	<1.0	<1.0	<1.0		1.38	97.26	NP
	10/28/15	<1.0	<1.0	<1.0	<1.0		0.87	97.77	NP
	01/29/16	<1.0	<1.0	<1.0	<1.0		2.07	96.57	NP
	04/28/16	<1.0	<1.0	<1.0	<1.0		too shallow	too shallow	NP
	07/26/16	<1.0	<1.0	<1.0	<1.0		1.82	96.82	NP
	10/18/16	<1.0	<1.0	<1.0	<1.0		1.81	96.83	NP
	01/06/17	<1.0	<1.0	<1.0	<1.0		2.88	95.76	NP
	04/05/17	<1.0	<1.0	<1.0	<1.0		2.49	96.15	NP
	07/25/17	<1.0	<1.0	<1.0	<1.0		2.27	96.37	NP
	10/12/17	<1.0	<1.0	<1.0	<1.0		0.81	99.66	NP
	01/25/18	<1.0	<1.0	<1.0	<2.0		1.23	97.41	NP
	04/06/18	3.6	<1.0	1.4	840		1.53	97.11	NP
MW-29	07/19/13	<1.0	<1.0	<1.0	<1.0	101.04	3.45	97.59	NP
	10/18/13	<1	<1	<1	<1		3.03	98.01	NP
	01/13/14	<1	<1	<1	<1		3.58	97.46	NP
	04/02/14	<1	<1	<1	<1		4.13	96.91	NP
	07/15/14	<1.0	<1.0	<1.0	<1.0		3.96	97.08	NP
	10/07/14	<1.0	<1.0	<1.0	<1.0		3.32	97.72	NP
	01/20/15	<1.0	<1.0	<1.0	<1.0		NF	NF	NP
	04/20/15	NF	NF	NF	NF		NF	NF	NF
MW-30	07/19/13	<1.0	<1.0	<1.0	<1.0	100.22	2.73	97.49	NP
	10/18/13	<1	<1	<1	<1		2.3	97.92	NP
	01/13/14	<1	<1	<1	<1		2.82	97.40	NP
	04/02/14	<1	<1	<1	<1		3.35	96.87	NP
	07/15/14	<1.0	<1.0	<1.0	<1.0		3.22	97.00	NP
	10/07/14	<1.0	<1.0	<1.0	<1.0		2.59	97.63	NP
	01/20/15	<1.0	<1.0	<1.0	<1.0		2.61	97.61	NP
	04/20/15	<1.0	<1.0	<1.0	<1.0		2.94	97.28	NP
Table 910-1 Limits		5	560	700	1,400				

Bold face values exceed the COGCC limits

NP - No Free Product

NS- Not Sampled



N

Scale (miles)
0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1
0 1000 2000 3000 4000 5000
Scale (feet)

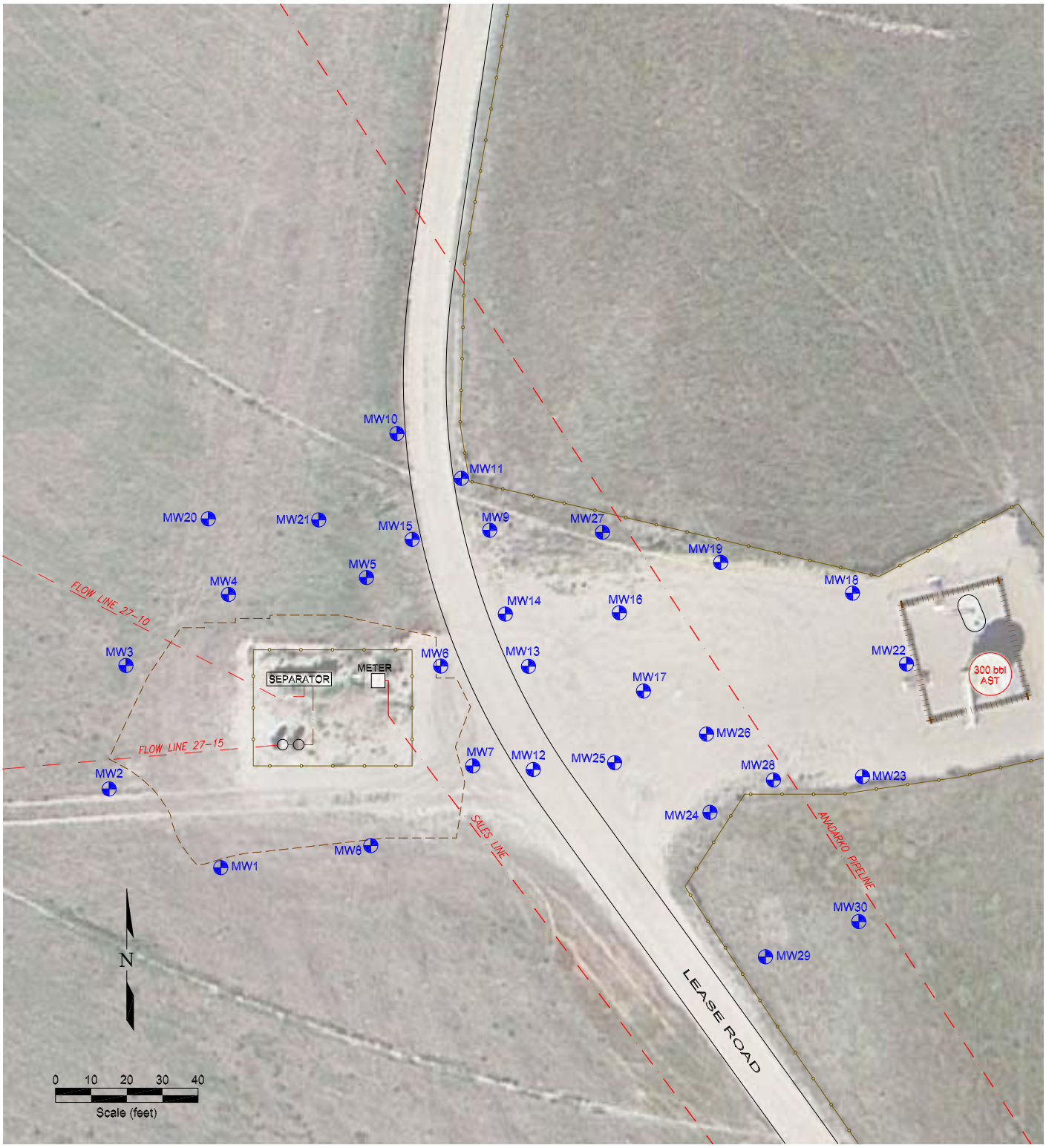
USGS 7.5 MINUTE SERIES (TOPOGRAPHIC)

Figure 1
SITE LOCATION MAP

Noble Lipsack R G27-15
SW SE Section 27, T4N, R65W
Weld County, Colorado

Project No.	Prepared by	Drawn by
C013-009		JMA
Date	Reviewed by	Filename
5/21/13		13009T

FREMONT ENVIRONMENTAL



LEGEND

- MONITORING WELL
- FENCE LINE
- PIPELINE
- CONTAINMENT BERM
- ABOVE GROUND STORAGE TANK

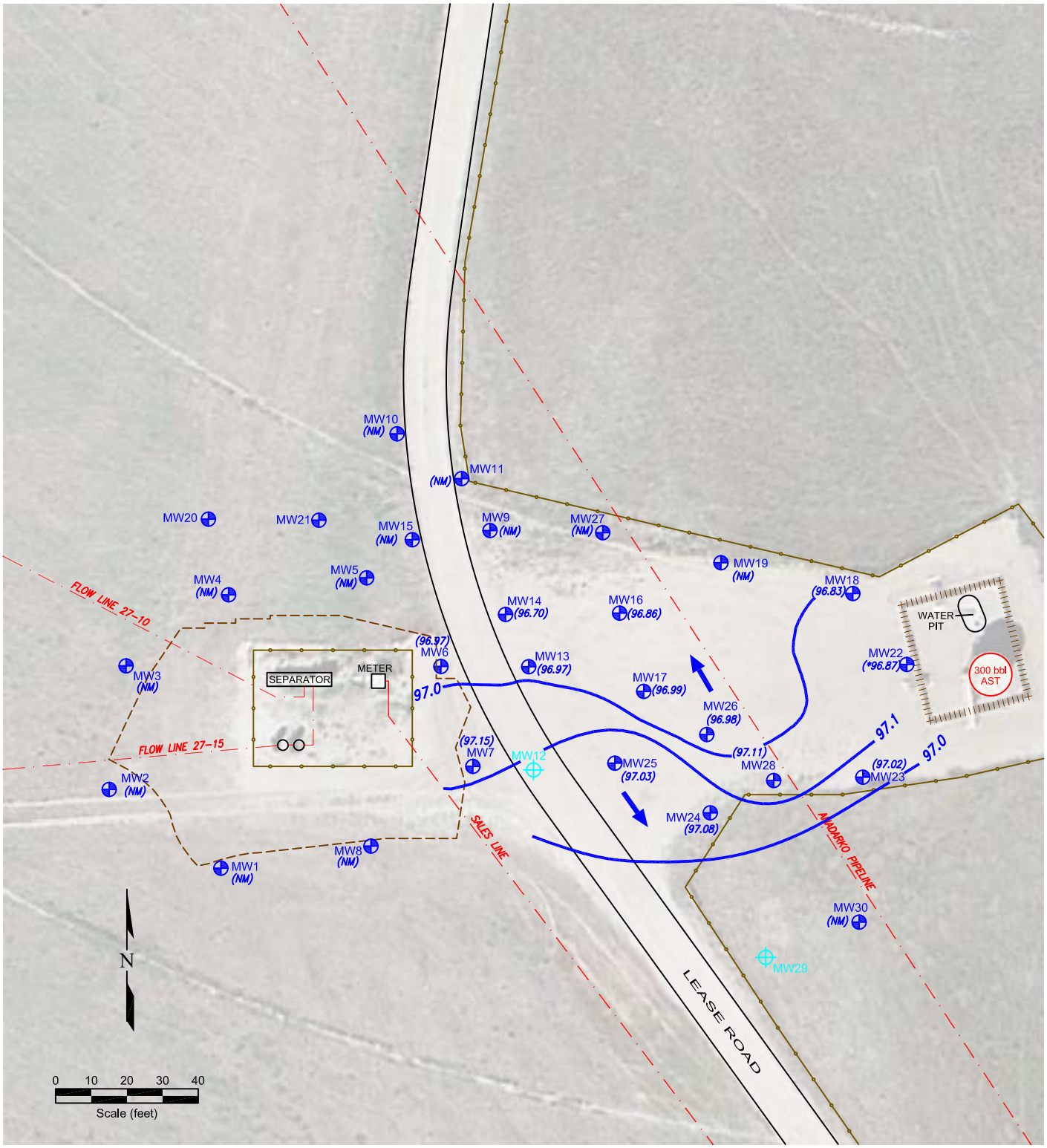
Figure 2

SITE MAP

Noble Libsack R G27-15
SW SE Section 27, T4N, R65W
Weld County, Colorado

Project No.	Prepared by	Drawn by
C013-009		JMA
Date	Reviewed by	Filename
7/24/13		13009R

FREMONT ENVIRONMENTAL



LEGEND

- MONITORING WELL
- DESTROYED MONITORING WELL
- FENCE LINE
- PIPELINE
- CONTAINMENT BERM
- ABOVE GROUND STORAGE TANK
- (98.05) GROUND WATER ELEVATION (ft above arbitrary datum)
- S TOO SHALLOW
- NM NOT MEASURED
- 97.6 WATER TABLE CONTOUR
- GROUND WATER FLOW DIRECTION
- * NOT USED FOR CONTOURING

Figure 3

INFERRED GROUNDWATER CONTOUR

April 6, 2018

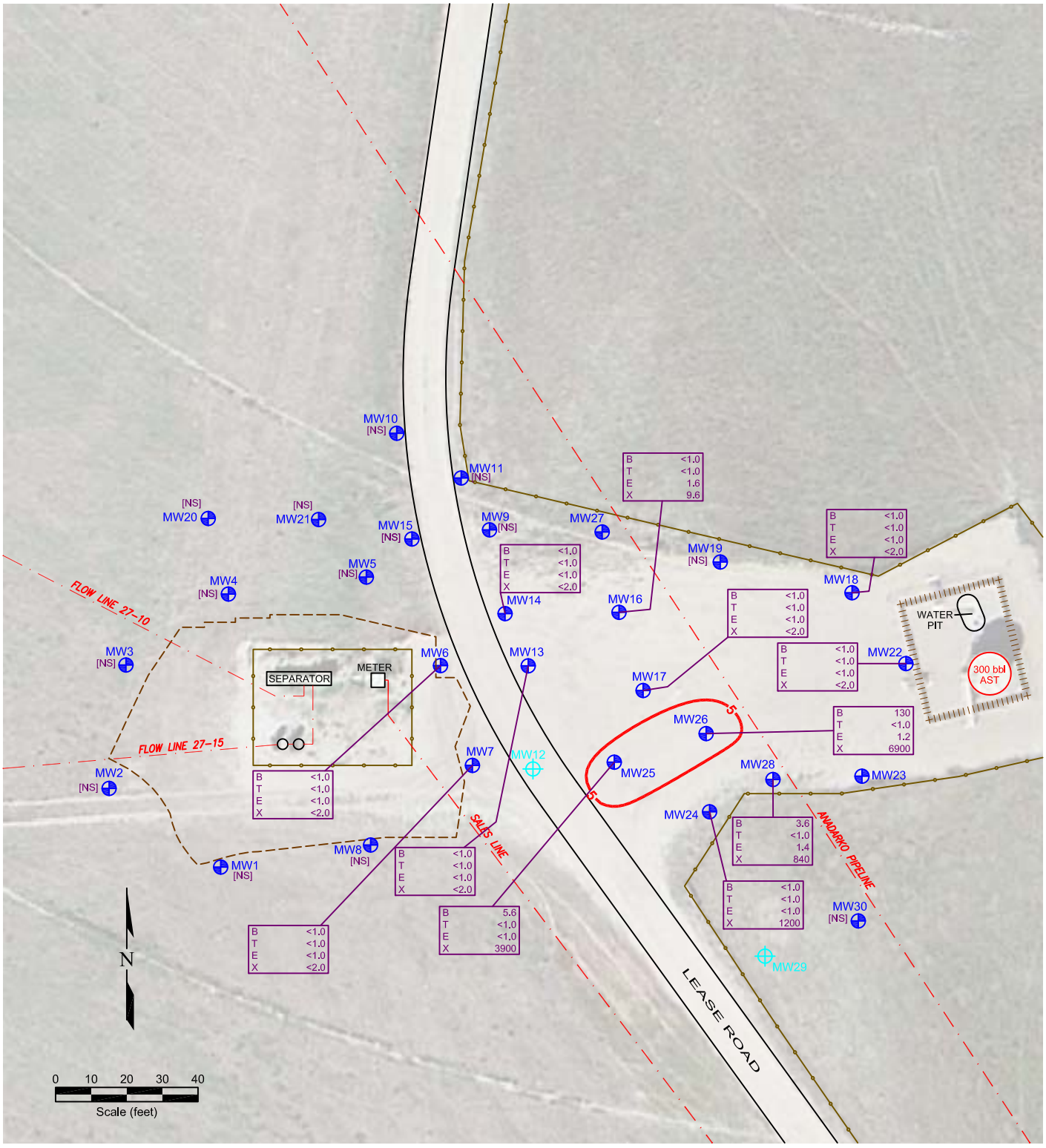
Noble Libsack R G27-15

SW SE Section 27, T4N, R65W

Weld County, Colorado

Project No.	Prepared by	Drawn by
C013-009		**TDA**
Date	Reviewed by	Filename
5/16/2018		**13009R**

FREMONT ENVIRONMENTAL



LEGEND

- MONITORING WELL
- DESTROYED MONITORING WELL
- FENCE LINE
- PIPELINE
- CONTAINMENT BERM
- ABOVE GROUND STORAGE TANK
- B <1.0 / T <1.0 / E <1.0 / X <1.0 — BENZENE (ug/L) / TOLUENE (ug/L) / ETHYLBENZENE (ug/L) / TOTAL XYLENES (ug/L)
- D / NS — WELL DAMAGED / NOT SAMPLED
- 5 — BENZENE ISOCONCENTRATION (ug/L)

Figure 4

GROUND WATER CHEMISTRY MAP

April 6, 2018

Noble Libsack R G27-15

SW SE Section 27, T4N, R65W

Weld County, Colorado

Project No.	Prepared by	Drawn by
C013-009		**TDA**
Date	Reviewed by	Filename
5/04/18		**13009R**

FREMONT ENVIRONMENTAL

Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

April 15, 2018

Paul Henehan
Fremont Environmental
PO Box 1289
Wellington, CO 80549

RE: Noble - Libsack

Enclosed are the results of analyses for samples received by Summit Scientific on 04/06/18 15:54. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Paul Shrewsbury For Ben Shrewsbury
President / Laboratory Director

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Libsack Project Number: C013-009 Project Manager: Paul Henehan	**Reported:** 04/15/18 20:21

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-6	1804150-01	Water	04/06/18 09:00	04/06/18 15:54
MW-7	1804150-02	Water	04/06/18 09:10	04/06/18 15:54
MW-13	1804150-03	Water	04/06/18 09:20	04/06/18 15:54
MW-14	1804150-04	Water	04/06/18 09:30	04/06/18 15:54
MW-16	1804150-05	Water	04/06/18 10:40	04/06/18 15:54
MW-17	1804150-06	Water	04/06/18 11:00	04/06/18 15:54
MW-18	1804150-07	Water	04/06/18 09:40	04/06/18 15:54
MW-22	1804150-08	Water	04/06/18 10:00	04/06/18 15:54
MW-23	1804150-09	Water	04/06/18 09:50	04/06/18 15:54
MW-24	1804150-10	Water	04/06/18 10:10	04/06/18 15:54
MW-25	1804150-11	Water	04/06/18 10:20	04/06/18 15:54
MW-26	1804150-12	Water	04/06/18 10:50	04/06/18 15:54
MW-28	1804150-13	Water	04/06/18 10:30	04/06/18 15:54

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.

1804150-1

Summit Scientific

741 Corporate Circle, Suite J • Golden, Colorado 80401
303-277-9310 • 303-374-5933

Client: Fremont Environmental
Address: P.O. Box 1289
City/State/Zip: PO Box 1829 Wellington, CO 80549
Phone: 303-956-8714 Fax:
Sampler Name: ROGOWSKI

Project Manager: Paul Henchan
E-Mail: paulh@fremontenv.com
Project Name: NOBLE LIBSACK
Project Number: C013-009

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative: HCl	Preservative: HNO3	Preservative: None	Preservative: Other (Specify)	Matrix: Groundwater	Matrix: Soil	Matrix: Air Canister #	Matrix: Other (Specify)	Analysis Requested: BTEX	GRO/DRO	Naphthalene	SAR	EC	Fh	Special Instructions
1	MW-6	4.6.18	900	2			X		X				X						
2	MW-7		910																
3	MW-13		920																
4	MW-14		930																
5	MW-16		1040																
6	MW-17		1100																
7	MW-18		940																
8	MW-22		1000																
9	MW-23		950																
10	MW-24	4.6.18	1010	2			X		X				X						

Relinquished by: Date/Time: 4.6.18 / 1554
Received by: Date/Time: 4/6/18 1554
Relinquished by: Date/Time:
Received by: Date/Time:
Relinquished by: Date/Time:
Received by: Date/Time:

Turn Around Time (Check)
Same Day ___ 72 hours ___
24 hours ___ Standard (X)
48 hours ___

Sample Integrity:
Temperature Upon Receipt: 8.5°C
Intact: (Yes) No

Notes:

1804150.2

Summit Scientific

741 Corporate Circle, Suite J • Golden, Colorado 80401
303-277-9310 • 303-374-5933

Client: Fremont Environmental
Address: P.O. Box 1289
City/State/Zip: PO Box 1829 Wellington, CO 80549
Phone: 303-956-8714 Fax:
Sampler Name: Rogowski

Project Manager: Paul Hanchar
E-Mail: paulh@fremontenv.com
Project Name: NOBLE LIBSACK
Project Number: C013-009

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative: HCl	Preservative: HNO3	Preservative: None	Preservative: Other (Specify)	Matrix: Groundwater	Matrix: Soil	Matrix: Air-Canister #	Matrix: Other (Specify)	Analysis Requested: BTEX	GRO/DRO	Napthalene	SAR	EC	Ph			Special Instructions
1	MW-25	4.6.18	1020	2			X		X				X								
2	MW-26	4.6.18	1050	2			X		X				X								
3	MW-28	4.6.18	1030	2			X		X				X								
4																					
5																					
6																					
7																					
8																					
9																					
10																					

Relinquished by: Date/Time: 4/6/18 1557
Received by: Date/Time: 4/6/18 1554
Relinquished by: Date/Time:
Received by: Date/Time:
Relinquished by: Date/Time:
Received by: Date/Time:

Turn Around Time (Check)
Same Day ___ 72 hours
___ 24 hours ___ Standard
___ 48 hours ___

Sample Integrity:
Temperature Upon Receipt:
8.5°C Intact: (Yes) No

Notes:

Sample Receipt Checklist

S2 Work Order: 1804150

Client: Fremont Env. Client Project ID: Noble Libsack

Shipped Via: PU (UPS, FedEx, Hand Delivered, Pick-up, etc.) Airbill #: _____

Matrix (check all that apply): ____Air ____Soil/Solid ✓ Water ____Other: _____ (Describe)

Cooler ID					
Temp (°C)	8.5				

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

[1] **If NO, then contact the client before proceeding with analysis and note in case narrative.**

Nakita — **Custodian Printed Name**

Signature or Initials of Custodian

4/6/18 1630 — **Date/Time**

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Libsack Project Number: C013-009 Project Manager: Paul Henehan	**Reported:** 04/15/18 20:21

MW-6
1804150-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/06/18 09:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1804046	04/11/18	04/14/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **04/06/18 09:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*83.1 %*	*37-154*		"	"	"	"	
Surrogate: Toluene-d8		*89.5 %*	*45-149*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.6 %*	*45-146*		"	"	"	"	

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.

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Libsack Project Number: C013-009 Project Manager: Paul Henehan	**Reported:** 04/15/18 20:21

MW-7
1804150-02 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/06/18 09:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1804046	04/11/18	04/14/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **04/06/18 09:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*85.1 %*	*37-154*		"	"	"	"	
Surrogate: Toluene-d8		*91.4 %*	*45-149*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.3 %*	*45-146*		"	"	"	"	

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.

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Libsack Project Number: C013-009 Project Manager: Paul Henehan	**Reported:** 04/15/18 20:21

MW-13
1804150-03 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/06/18 09:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1804046	04/11/18	04/14/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **04/06/18 09:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*84.3 %*	*37-154*		"	"	"	"	
Surrogate: Toluene-d8		*90.2 %*	*45-149*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.8 %*	*45-146*		"	"	"	"	

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.

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Libsack Project Number: C013-009 Project Manager: Paul Henehan	**Reported:** 04/15/18 20:21

MW-14
1804150-04 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/06/18 09:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1804046	04/11/18	04/14/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **04/06/18 09:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*86.1 %*	*37-154*		"	"	"	"	
Surrogate: Toluene-d8		*90.2 %*	*45-149*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.0 %*	*45-146*		"	"	"	"	

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.

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Libsack Project Number: C013-009 Project Manager: Paul Henehan	**Reported:** 04/15/18 20:21

MW-16
1804150-05 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/06/18 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1804046	04/11/18	04/14/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	**1.6**	1.0	"	"	"	"	"	"	
Xylenes (total)	**9.6**	2.0	"	"	"	"	"	"	

Date Sampled: **04/06/18 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*83.3 %*	*37-154*		"	"	"	"	
Surrogate: Toluene-d8		*88.8 %*	*45-149*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.0 %*	*45-146*		"	"	"	"	

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.

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Libsack Project Number: C013-009 Project Manager: Paul Henehan	**Reported:** 04/15/18 20:21

MW-17
1804150-06 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/06/18 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1804046	04/11/18	04/14/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **04/06/18 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*79.5 %*	*37-154*		"	"	"	"	
Surrogate: Toluene-d8		*92.4 %*	*45-149*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.5 %*	*45-146*		"	"	"	"	

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.

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Libsack Project Number: C013-009 Project Manager: Paul Henehan	**Reported:** 04/15/18 20:21

MW-18
1804150-07 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/06/18 09:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1804046	04/11/18	04/14/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **04/06/18 09:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*87.9 %*	*37-154*		"	"	"	"	
Surrogate: Toluene-d8		*91.8 %*	*45-149*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.5 %*	*45-146*		"	"	"	"	

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.

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Libsack Project Number: C013-009 Project Manager: Paul Henehan	**Reported:** 04/15/18 20:21

MW-22
1804150-08 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/06/18 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1804046	04/11/18	04/14/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **04/06/18 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*85.9 %*	*37-154*		"	"	"	"	
Surrogate: Toluene-d8		*90.7 %*	*45-149*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.1 %*	*45-146*		"	"	"	"	

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.

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Libsack Project Number: C013-009 Project Manager: Paul Henehan	**Reported:** 04/15/18 20:21

MW-23
1804150-09 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/06/18 09:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1804046	04/11/18	04/14/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **04/06/18 09:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*91.1 %*	*37-154*		"	"	"	"	
Surrogate: Toluene-d8		*92.6 %*	*45-149*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.8 %*	*45-146*		"	"	"	"	

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.

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Libsack Project Number: C013-009 Project Manager: Paul Henehan	**Reported:** 04/15/18 20:21

MW-24
1804150-10 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/06/18 10:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1804046	04/11/18	04/15/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	**1200**	200	"	100	"	"	04/14/18	"	

Date Sampled: **04/06/18 10:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*84.7 %*	*37-154*		"	"	*04/15/18*	"	
Surrogate: Toluene-d8		*92.6 %*	*45-149*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.5 %*	*45-146*		"	"	"	"	

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.

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Libsack Project Number: C013-009 Project Manager: Paul Henehan	**Reported:** 04/15/18 20:21

MW-25
1804150-11 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/06/18 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	**5.6**	1.0	ug/l	1	1804046	04/11/18	04/15/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	**3900**	200	"	100	"	"	04/14/18	"	

Date Sampled: **04/06/18 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*78.6 %*	*37-154*		"	"	"	"	
Surrogate: Toluene-d8		*90.9 %*	*45-149*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.1 %*	*45-146*		"	"	*04/15/18*	"	

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.

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Libsack Project Number: C013-009 Project Manager: Paul Henehan	**Reported:** 04/15/18 20:21

MW-26
1804150-12 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/06/18 10:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	**130**	100	ug/l	100	1804046	04/11/18	04/14/18	EPA 8260B	
Toluene	ND	1.0	"	1	"	"	04/15/18	"	
Ethylbenzene	**1.2**	1.0	"	"	"	"	"	"	
Xylenes (total)	**6900**	200	"	100	"	"	"	"	

Date Sampled: **04/06/18 10:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*83.0 %*	*37-154*		"	"	"	"	
Surrogate: Toluene-d8		*89.0 %*	*45-149*		"	"	*04/14/18*	"	
Surrogate: 4-Bromofluorobenzene		*89.3 %*	*45-146*		"	"	"	"	

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.

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Libsack Project Number: C013-009 Project Manager: Paul Henehan	**Reported:** 04/15/18 20:21

MW-28
1804150-13 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/06/18 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	**3.6**	1.0	ug/l	1	1804046	04/11/18	04/14/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	**1.4**	1.0	"	"	"	"	"	"	
Xylenes (total)	**840**	200	"	100	"	"	"	"	

Date Sampled: **04/06/18 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*87.5 %*	*37-154*		"	"	"	"	
Surrogate: Toluene-d8		*98.3 %*	*45-149*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.1 %*	*45-146*		"	"	"	"	

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.

Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Libsack Project Number: C013-009 Project Manager: Paul Henehan	**Reported:** 04/15/18 20:21

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1804046 - EPA 5030 Water MS										
Blank (1804046-BLK1)				Prepared: 04/11/18 Analyzed: 04/14/18						
Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	2.0	"							
Surrogate: 1,2-Dichloroethane-d4	*13.9*		*"*	*13.2*		*105*	*37-154*			
Surrogate: Toluene-d8	*13.3*		*"*	*13.3*		*99.7*	*45-149*			
Surrogate: 4-Bromofluorobenzene	*13.0*		*"*	*13.3*		*97.9*	*45-146*			
LCS (1804046-BS1)				Prepared: 04/11/18 Analyzed: 04/14/18						
Benzene	49.5	1.0	ug/l	50.0		98.9	60.1-131			
Toluene	50.8	1.0	"	50.0		102	65.9-127			
Ethylbenzene	48.2	1.0	"	50.0		96.4	65.1-129			
m,p-Xylene	98.0	2.0	"	100		98.0	66.8-127			
o-Xylene	50.4	1.0	"	50.0		101	61.2-120			
Xylenes (total)	148	2.0	"				63-131			
Surrogate: 1,2-Dichloroethane-d4	*13.8*		*"*	*13.2*		*105*	*37-154*			
Surrogate: Toluene-d8	*13.6*		*"*	*13.3*		*102*	*45-149*			
Surrogate: 4-Bromofluorobenzene	*13.1*		*"*	*13.3*		*98.5*	*45-146*			
Matrix Spike (1804046-MS1)	**Source: 1804157-01**			Prepared: 04/11/18 Analyzed: 04/14/18						
Benzene	51.8	1.0	ug/l	50.0	ND	104	52.7-130			
Toluene	54.0	1.0	"	50.0	ND	108	57-127			
Ethylbenzene	52.5	1.0	"	50.0	ND	105	59.2-127			
m,p-Xylene	95.0	2.0	"	100	ND	95.0	53.2-132			
o-Xylene	54.5	1.0	"	50.0	ND	109	56.3-117			
Xylenes (total)	159	2.0	"		ND		63-131			
Surrogate: 1,2-Dichloroethane-d4	*12.8*		*"*	*13.2*		*97.3*	*37-154*			
Surrogate: Toluene-d8	*13.7*		*"*	*13.3*		*103*	*45-149*			
Surrogate: 4-Bromofluorobenzene	*12.8*		*"*	*13.3*		*95.7*	*45-146*			

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.

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1804046 - EPA 5030 Water MS										
Matrix Spike Dup (1804046-MSD1)	**Source: 1804157-01**			Prepared: 04/11/18	Analyzed: 04/14/18					
Benzene	52.4	1.0	ug/l	50.0	ND	105	52.7-130	1.21	19.3	
Toluene	53.8	1.0	"	50.0	ND	108	57-127	0.186	18.7	
Ethylbenzene	53.9	1.0	"	50.0	ND	108	59.2-127	2.56	20	
m,p-Xylene	98.9	2.0	"	100	ND	98.9	53.2-132	4.01	20	
o-Xylene	49.7	1.0	"	50.0	ND	99.3	56.3-117	9.25	20	
Xylenes (total)	163	2.0	"		ND		63-131	2.31	20	
Surrogate: 1,2-Dichloroethane-d4	*12.3*		*"*	*13.2*		*93.3*	*37-154*			
Surrogate: Toluene-d8	*13.1*		*"*	*13.3*		*98.0*	*45-149*			
Surrogate: 4-Bromofluorobenzene	*12.4*		*"*	*13.3*		*93.4*	*45-146*			

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Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Noble - Libsack Project Number: C013-009 Project Manager: Paul Henehan	**Reported:** 04/15/18 20:21

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