



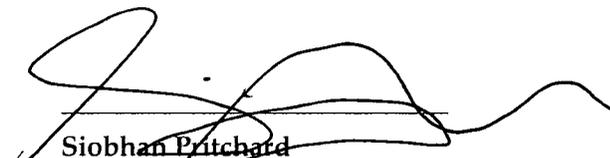
SECOND QUARTER 2010 GROUNDWATER MONITORING REPORT

DCP APEX COMPRESSOR STATION
GW-163

LATITUDE: N 32.708700° LONGITUDE: W 103.3089°
LEA COUNTY, NEW MEXICO

Prepared For:

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DECEMBER 3, 2010
REF. NO. 058660 (6)
This report is printed on recycled paper.

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**CONESTOGA-ROVERS
& ASSOCIATES**

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& ASSOCIATES**

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1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA) is submitting this *Second Quarter 2010 Groundwater Monitoring Report* to DCP Midstream, LP (DCP) for the Apex Compressor Station in Lea County, New Mexico. This report summarizes the June 9 and 10, 2010 groundwater sampling event. Groundwater monitoring and sampling details, analytical results and conclusions are presented below.

Site Background

The site is located in Lea County, New Mexico approximately nine miles west of Hobbs, New Mexico (Figure 1). The site occupies approximately 1.8 acres in an undeveloped area. Petroleum hydrocarbons were discovered in soil and groundwater beneath a former tank battery during a 2004 property transaction. There are 24 groundwater monitoring and recovery wells onsite.

Hydrogeology

Historical static groundwater depths have ranged between 51.69 (RW-06) and 65.87 feet below ground surface (ft bgs) (MW-10). Static groundwater depths ranged from 59.64 (MW-06) to 66.02 ft bgs (MW-10) on June 9, 2010. Groundwater flows to the south-southeast with a gradient of 0.013 ft/ft (Figure 2).

2.0 GROUNDWATER MONITORING AND SAMPLING

CRA gauged groundwater monitoring wells MW-01 through MW-07, MW-09, MW-10, MW-B through MW-D, and recovery wells RW-1 through RW-12 on June 9, 2010 and collected samples from MW-02 through MW-07, MW-09, MW-10, MW-B through MW-D, RW-01, RW-02, and RW-05 through RW-12 on June 10, 2010. Light non-aqueous phase liquids (LNAPL) were measured in wells MW-01, RW-03, and RW-04; groundwater samples were not collected. Each well cap was removed to allow groundwater levels to stabilize and equilibrate prior to gauging. All sampled wells were purged of approximately three well-casing volumes while temperature, pH, and conductivity were measured. Groundwater samples, including duplicate samples, were collected using clean disposable bailers and decanted into clean containers supplied by the analytical laboratory. Groundwater samples were submitted under chain-of-custody to Accutest Laboratories of Texas. CRA well sampling forms are presented as Appendix A. CRA's standard operating procedures for groundwater monitoring and sampling are presented as Appendix B. Groundwater analytical results are summarized in Table 1.



LNAPL Recovery

CRA manually removed LNAPL from wells MW-01, RW-03, and RW-04 on April 27, May 27, and June 10, 2010. LNAPL thickness ranged from approximately 0.05 (MW-01) to 3.20 ft (RW-04) during the second quarter 2010. LNAPL recovery is summarized in Table 2.

Purged Groundwater and LNAPL

Purged groundwater and LNAPL from site monitoring wells were stored in separate sealed United States Department of Transportation drums. The drums were labeled with contents, date of generation, generator identification, and consultant contact information. Purged groundwater was transported to the DCP Linam Ranch facility for disposal. Purged LNAPL is stored onsite and is waiting for disposal.

3.0 ANALYTICAL RESULTS

Groundwater Analytical Methods

Groundwater samples collected from MW-02 through MW-10, MW-B through MW-D, RW-01, RW-02, and RW-05 through RW-12 were analyzed for:

- Benzene, toluene, ethylbenzene, and xylenes (BTEX) by SW-846 8260B.

Constituents of Concern and Cleanup Levels

The New Mexico Oil Conservation Division (NMOCD) guidelines require groundwater to be analyzed for potential constituents of concern (COC) as defined by the New Mexico Water Quality Control Commission (NMWQCC) regulations. The COC in site groundwater is LNAPL in the form of natural gas condensate. NMWQCC human health standards for groundwater (*Title 20, Chapter 6, Part 2, Subsection A*) are:

Analyte	NMWQCC Standard for Groundwater micrograms per liter (µg/l)
Benzene	10
Toluene	750
Ethylbenzene	750
Total xylenes	620

Groundwater Sampling Results

No BTEX was detected above NMWQCC standards in wells MW-4, MW-05, MW-09, MW-10, MW-C, and RW-09 through RW-12. The maximum benzene concentration was



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5,690 micrograms per liter ($\mu\text{g}/\text{l}$) in sample RW-05. Sample RW-08 contained the maximum xylene concentration 3,870 $\mu\text{g}/\text{l}$. Groundwater analytical results are summarized in Table 1. The laboratory analytical report is presented as Appendix C.

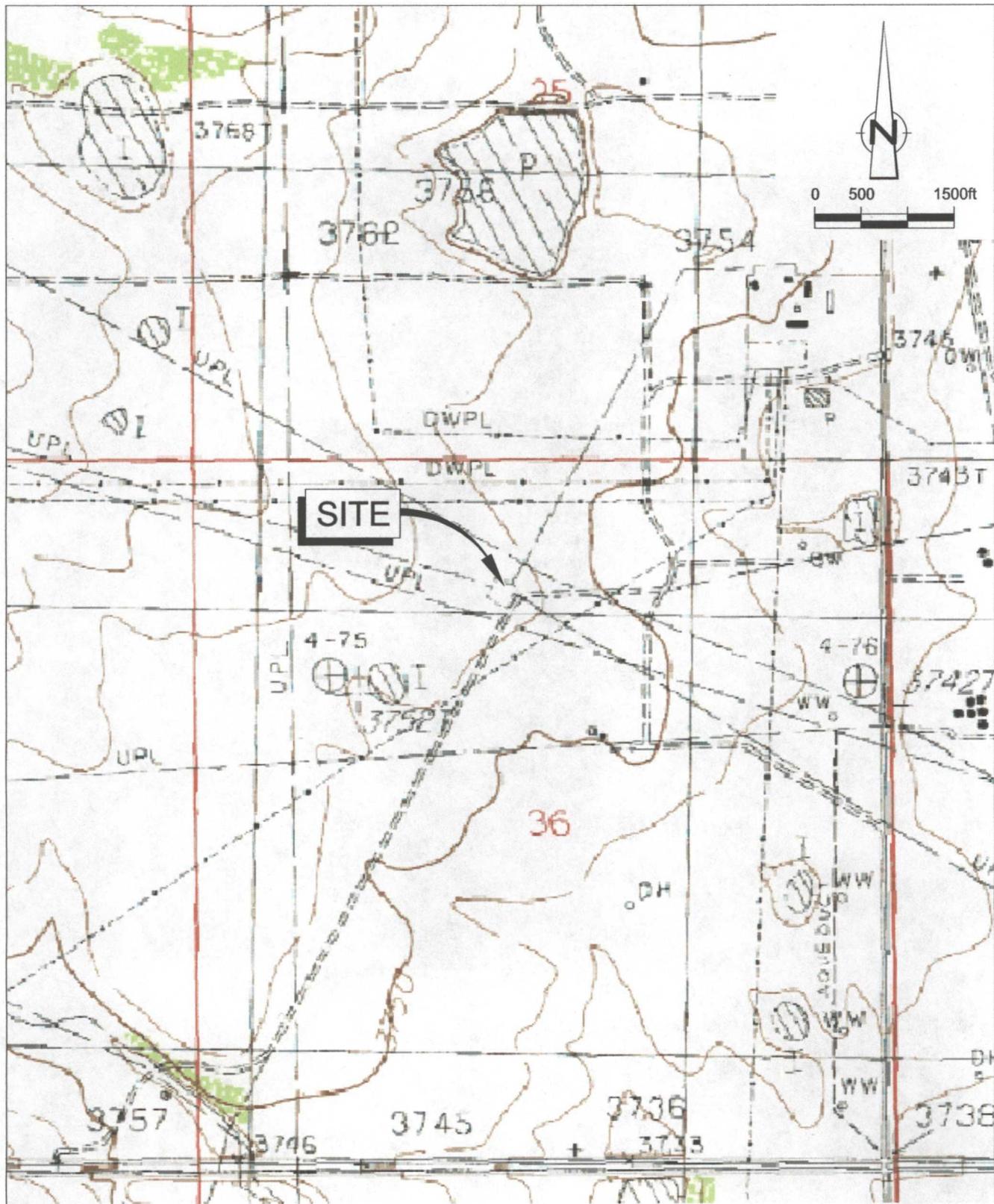
4.0 CONCLUSIONS

Benzene concentrations have been increasing in wells MW-06 and MW-07 since 2009. A 2010 site assessment will assess offsite migration near well MW-7. DCP will continue monthly remedial observation and maintenance and quarterly monitoring and sampling during 2010 to evaluate site groundwater conditions.

FIGURES

FIGURE 1: SITE PLAN

FIGURE 2: GROUNDWATER ELEVATION CONTOUR MAP

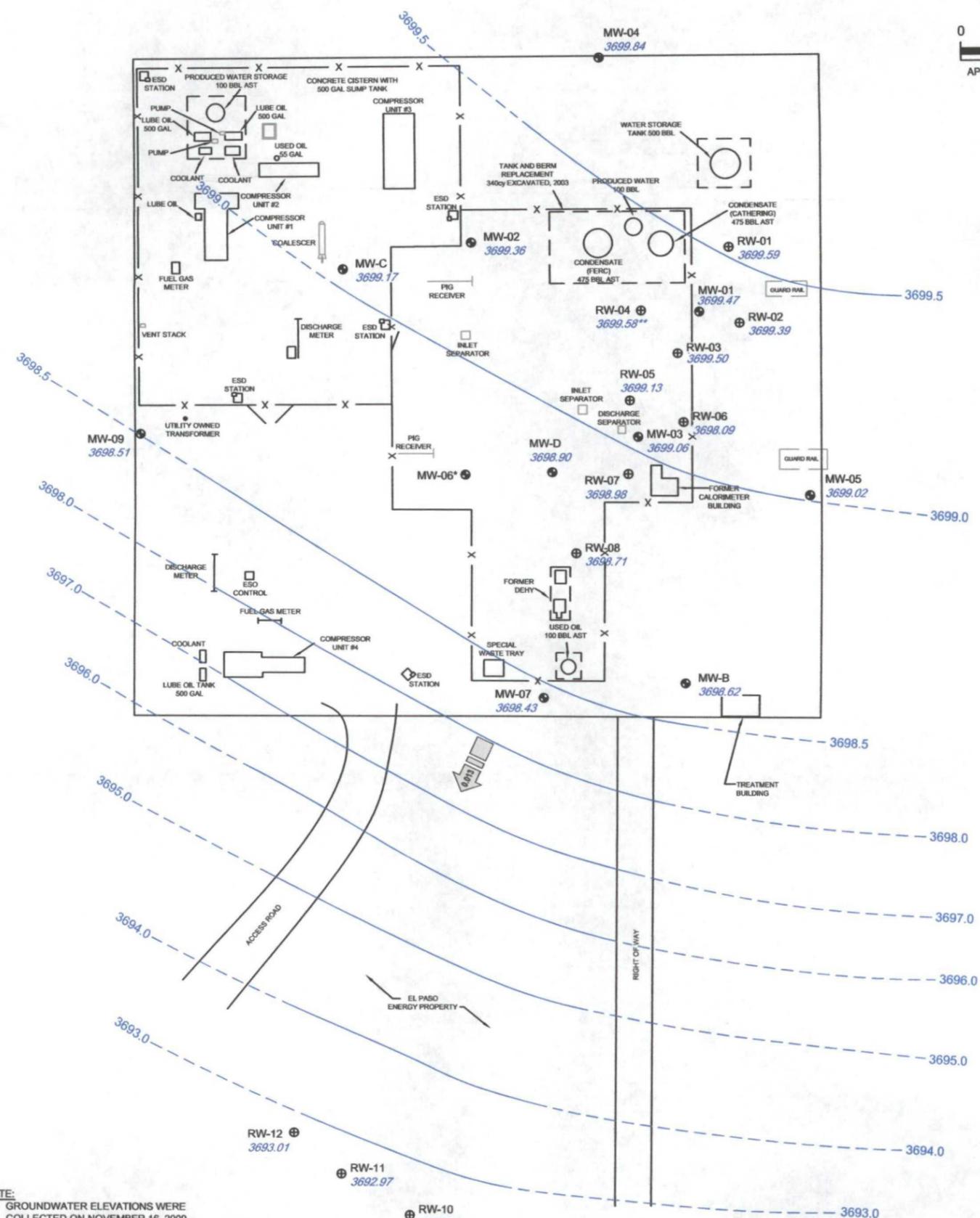
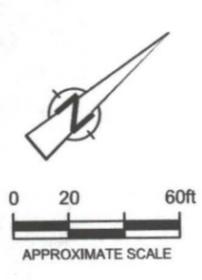


QUAD: USGS MONUMENT NORTH

Figure 1

VICINITY MAP
 APEX COMPRESSOR STATION
 LEA COUNTY, NEW MEXICO
 DCP Midstream





- NOTE:**
1. GROUNDWATER ELEVATIONS WERE COLLECTED ON NOVEMBER 16, 2009.
 2. DEPTH TO GROUNDWATER / LNAPL WAS GAUGED FROM TOP OF CASING.
 3. CONTOUR INTERVAL IS 0.5 FEET.
 4. CORRECTED GROUNDWATER ELEVATION IN MW01, RW03, AND RW04 WAS CALCULATED USING AN LNAPL SPECIFIC GRAVITY OF 0.81.

- LEGEND**
- FENCE LINE
 - REPORTED TRACK BOUNDARY
 - MW10 EXISTING MONITORING WELL
 - RW09 REMEDIATION WELL
 - 3699.5 POTENTIOMETRIC SURFACE CONTOURS AND ELEVATION
 - 3698.71 GROUNDWATER ELEVATION, FEET ABOVE MEAN SEA LEVEL
 - * MW-06 - NOT SURVEYED
 - ** ANOMALOUS DATA, NOT USED IN CONTOURING
 - ← REGIONAL GROUNDWATER FLOW DIRECTION AND GRADIENT

figure 2
GROUNDWATER ELEVATION CONTOUR MAP - JUNE 9, 2010
 DCP APEX COMPRESSOR STATION
 LEA COUNTY, NEW MEXICO
 DCP Midstream



TABLES

TABLE 1: GROUNDWATER ANALYTICAL RESULTS

TABLE 2: LNAPL RECOVERY

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Table 1. Groundwater Analytical Results - Apex Compressor Station, Lea County, New Mexico

Well ID	Date	TOC (ft msl)	DTW (ft bgs)	LNAPL Thickness (ft)	GWE (ft msl)	pH s.u.	Conductivity µS/cm	Temperature °C	DO mg/l	ORP mV	Concentrations in µg/l					
											Benzene	Toluene	Ethyl- benzene	Total Xylenes		
MW-01	1/10/2008	3759.75	59.83	--	3699.92	--	--	--	--	--	--	--	--	--	--	
MW-01	2/7/2008	3759.75	59.88	--	3699.87	--	--	--	--	--	--	--	--	--	--	
MW-01	3/4/2008	3759.75	59.71	--	3700.04	6.57	2137	18.65	2.51	-179.2	2,900	< 2,500	590	3,200		
MW-01(d)	3/4/2008	3759.75	59.71	--	3700.04	6.57	2132	18.65	2.51	-179.2	1,600	< 50	240	1,400		
MW-01	6/3/2008	3759.75	59.73	--	3700.02	6.68	3042	20.50	1.26	-105.0	4,020	483	868	5,790		
MW-01	9/17/2008	3759.75	59.68	--	3700.07	6.30	3555	19.90	0.31	-69.1	3,360	443	818	4,780		
MW-01	12/4/2008	3759.75	59.70	--	3700.05	6.71	3358	17.78	1.01	-101.7	2,530	< 12	641	2,990		
MW-01	1/29/2009	3759.75	59.70	--	3700.05	--	--	--	--	--	--	--	--	--	--	
MW-01	2/24/2009	3759.75	59.76	--	3699.99	6.64	3414	19.74	0.69	-45.0	3,670	54.9	928	5,070		
MW-01	6/24/2009	3759.75	59.83	0.04	3699.95	--	--	--	--	--	LNAPL present	--	--	--	--	
MW-01	9/2/2009	3759.75	60.06	0.07	3699.75	--	--	--	--	--	LNAPL present	--	--	--	--	
MW-01	11/16/2009	3759.75	60.17	0.16	3699.71	--	--	--	--	--	LNAPL present	--	--	--	--	
MW-01	1/14/2010	3759.75	60.20	0.07	3699.61	--	--	--	--	--	LNAPL present	--	--	--	--	
MW-01	2/25/2010	3759.75	60.13	0.06	3699.67	--	--	--	--	--	LNAPL present	--	--	--	--	
MW-01	3/24/2010	3759.75	60.25	0.05	3699.54	--	--	--	--	--	LNAPL present	--	--	--	--	
MW-01	6/10/2010	3759.75	60.40	0.15	3699.47	--	--	--	--	--	LNAPL present	--	--	--	--	
MW-02	1/10/2008	3759.67	59.84	--	3699.83	--	--	--	--	--	--	--	--	--	--	
MW-02	2/7/2008	3759.67	59.69	--	3699.98	--	--	--	--	--	--	--	--	--	--	
MW-02	3/4/2008	3759.67	59.69	--	3699.98	6.76	760	16.57	5.56	52.1	39	< 5.0	< 1.0	< 3.0		
MW-02	6/3/2008	3759.67	59.68	--	3699.99	6.93	737	20.83	4.53	-76.0	30.5	< 0.48	0.67 J	1.9 J		
MW-02	9/17/2008	3759.67	59.70	--	3699.97	6.11	834	19.74	1.24	21.6	86.8	0.53 J	2.2	27.6		
MW-02	12/4/2008	3759.67	59.74	--	3699.93	6.81	804	18.26	0.94	-113.7	40.2	< 0.48	< 0.45	< 1.4		
MW-02	1/29/2009	3759.67	59.75	--	3699.92	--	--	--	--	--	--	--	--	--	--	
MW-02	2/24/2009	3759.67	59.59	--	3700.08	6.79	853	19.71	1.07	-14.7	101	< 0.48	1.4	< 1.4		
MW-02	6/24/2009	3759.67	59.84	--	3699.83	6.70	100	97.00	5.49	-14.0	146	< 2.0	2.9	5.7 J		
MW-02	9/2/2009	3759.67	59.97	--	3699.70	6.82	110	20.92	3.21	-33.0	171	< 2.0	2.4	2.0 J		
MW-02	11/18/2009	3759.67	60.05	--	3699.62	7.36	631	21.50	--	--	8	< 2.0	< 2.0	< 6.0		
MW-02	3/24/2010	3759.67	60.20	--	3699.47	7.01	862	19.39	--	--	44.3	< 2.0	< 2.0	< 6.0		
MW-02	6/10/2010	3759.67	60.31	--	3699.36	6.86	801	22.78	--	--	23.4	< 2.0	< 2.0	2.7 J		
MW-03	1/10/2008	3759.33	59.79	--	3699.54	--	--	--	--	--	--	--	--	--	--	
MW-03	2/7/2008	3759.33	59.63	--	3699.70	--	--	--	--	--	--	--	--	--	--	
MW-03	3/5/2008	3759.33	59.62	--	3699.71	6.84	1344	18.30	3.49	-88.7	4,800	1,100	690	4,100		
MW-03	6/3/2008	3759.33	59.57	--	3699.76	6.75	1820	21.14	1.28	-136.7	4,780	187	796	4,190		
MW-03	9/17/2008	3759.33	59.66	--	3699.67	6.42	1839	20.01	0.31	-74.0	5,120	284	829	4,460		
MW-03	12/4/2008	3759.33	59.65	--	3699.68	6.85	1728	17.98	1.09	-63.4	4,200	< 24	693	3,090		
MW-03	1/29/2009	3759.33	59.60	--	3699.73	--	--	--	--	--	--	--	--	--	--	
MW-03	2/25/2009	3759.33	59.55	--	3699.78	6.80	1880	19.73	0.93	-35.6	5,300	< 24	775	3,670		
MW-03	6/24/2009	3759.33	59.73	--	3699.60	6.70	230	21.40	2.83	-81.0	5,120	82.7 J	758	4,270		
MW-03(d)	6/24/2009	3759.33	59.73	--	3699.60	6.70	230	21.40	2.83	-81.0	5,260 a	99.1	917	5,060		
MW-03	9/2/2009	3759.33	59.94	--	3699.39	6.61	250	20.96	1.88	-136.0	5,290	< 200	742	4,350		
MW-03(d)	9/2/2009	3759.33	59.94	--	3699.39	6.61	250	20.96	1.88	-136.0	5,250 a	28.9 J	828	4,730		
MW-03	11/16/2009	3759.33	60.01	--	3699.32	6.78	2030	18.56	--	--	4,400	< 0.400	805	2,240		
MW-03(d)	11/16/2009	3759.33	60.01	--	3699.32	6.78	2030	18.56	--	--	5,120	< 200	887	2,540		
MW-03	3/24/2010	3759.33	60.24	--	3699.09	7.08	2310	20.06	--	--	3,760	< 400	641	1,510		
MW-03(d)	3/24/2010	3759.33	60.24	--	3699.09	7.08	2310	20.06	--	--	3,850 a	2.0	686 a	1,590 a		
MW-03	6/10/2010	3759.33	60.27	--	3699.06	6.89	1696	24.89	--	--	3,140	< 400	585	2,250		
MW-03(d)	6/10/2010	3759.33	60.27	--	3699.06	6.89	1696	24.89	--	--	3,530 a	85.3	656 a	2,820 a		
NMOC Cleanup Levels											10	750	750	620		

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Table 1. Groundwater Analytical Results - Apex Compressor Station, Lea County, New Mexico

Well ID	Date	TOC (ft msl)	DTW (ft bgs)	LNAPL Thickness (ft)	GWE (ft msl)	pH s u	Conductivity µS/cm	Temperature °C	DO mg/l	ORP mV	Concentrations in µg/l			
											Benzene	Toluene	Ethyl- benzene	Total Xylenes
MW-04	1/10/2008	3761.94	61.46	--	3700.48	--	--	--	--	--	--	--	--	--
MW-04	2/7/2008	3761.94	61.42	--	3700.52	--	--	--	--	--	--	--	--	--
MW-04	3/4/2008	3761.94	61.42	--	3700.52	6.60	656	17.86	5.36	102.3	<1.0	<5.0	<1.0	<3.0
MW-04	6/3/2008	3761.94	61.34	--	3700.60	6.91	759	20.20	3.60	39.9	<0.46	<0.48	<0.45	<1.4
MW-04	9/16/2008	3761.94	61.47	--	3700.47	6.63	736	19.99	3.18	84.5	2.9	<0.48	1.6 j	23
MW-04	12/3/2008	3761.94	61.43	--	3700.51	6.90	662	17.15	4.30	90.6	<0.46	<0.48	<0.45	<1.4
MW-04	1/29/2009	3761.94	61.40	--	3700.54	--	--	--	--	--	--	--	--	--
MW-04	2/24/2009	3761.94	61.31	--	3700.63	6.83	690	19.13	3.25	136.4	2.2	<0.48	<0.45	<1.4
MW-04	6/24/2009	3761.94	61.59	--	3700.35	6.70	900	20.10	6.03	152.0	3.7	<2.0	0.90 j	4.5 j
MW-04	9/2/2009	3761.94	61.70	--	3700.24	6.75	880	20.82	4.11	93.0	8.1	<2.0	0.71 j	<6.0
MW-04	11/18/2009	3761.94	61.78	--	3700.16	7.27	685	19.78	--	--	13.4	<2.0	1.9 j	3.6 j
MW-04	3/24/2010	3761.94	61.93	--	3700.01	7.08	757	19.00	--	--	0.59	<2.0	<2.0	<6.0
MW-04	6/10/2010	3761.94	62.10	--	3699.84	7.17	683	22.28	--	--	<2.0	<2.0	<2.0	<6.0
MW-05	1/10/2008	3760.97	64.46	--	3696.51	--	--	--	--	--	--	--	--	--
MW-05	2/7/2008	3760.97	61.35	--	3699.62	--	--	--	--	--	--	--	--	--
MW-05	3/4/2008	3760.97	61.30	--	3699.67	6.72	917	17.96	3.99	-129.5	3.7	<5.0	24	93
MW-05	6/3/2008	3760.97	61.18	--	3699.79	6.89	1016	21.34	1.74	-106.0	3.5	<0.48	38.9	133
MW-05	9/16/2008	3760.97	61.29	--	3699.68	6.75	976	19.64	0.60	-56.1	2.6	<0.48	49.7	179
MW-05	12/3/2008	3760.97	61.30	--	3699.67	7.01	960	18.30	1.78	-48.6	<0.46	<0.48	36	176
MW-05	2/25/2009	3760.97	61.14	--	3699.83	6.98	908	19.20	1.03	23.4	<0.46	<0.48	34.9	126
MW-05	6/24/2009	3760.97	61.41	--	3699.56	6.80	120	20.40	2.35	-44.0	1.0 j	<2.0	52.7	344
MW-05	9/2/2009	3760.97	61.57	--	3699.40	6.65	140	21.40	1.90	-72.0	<2.0	<2.0	63.6	394 a
MW-05	11/16/2009	3760.97	61.68	--	3699.29	7.16	1081	17.00	--	--	<2.0	<2.0	50.9	235
MW-05	3/24/2010	3760.97	61.81	--	3699.16	7.18	1014	20.56	--	--	<2.0	<2.0	31.5	153
MW-05	6/9/2010	3760.97	61.95	--	3699.02	7.02	921	21.39	--	--	<2.0	<2.0	24.4	93.4
MW-06	1/10/2008	3761.95	62.61	--	3699.34	--	--	--	--	--	--	--	--	--
MW-06	2/7/2008	3761.95	62.52	--	3699.43	--	--	--	--	--	--	--	--	--
MW-06	3/5/2008	3761.95	62.48	--	3699.47	6.91	1041	16.09	8.27	-15.3	8.1	<5.0	<1.0	<3.0
MW-06	6/2/2008	3761.95	--	--	--	--	--	--	--	--	--	--	--	--
MW-06	9/16/2008	3761.95	--	--	--	6.65	184	20.32	0.48	-104.0	1.0 j	<0.48	<0.45	12
MW-06	12/3/2008	3761.95	--	--	--	6.89	1168	18.51	0.91	-71.4	126	<0.48	4.1	<1.4
MW-06	2/24/2009	3761.95	--	--	--	6.85	1204	19.76	0.81	21.8	60.7	<0.48	1.9 j	<1.4
MW-06	6/24/2009	3761.95	59.21	--	3702.74	6.80	130	20.30	9.55	-5.0	22.9	<2.0	1.7 j	6.7
MW-06	9/2/2009	3761.95	59.31	--	3702.64	6.83	140	59.20	1.82	-36.0	28.4	<2.0	1.4 j	<6.0
MW-06	11/18/2009	3761.95	59.41	--	3702.54	7.12	1250	18.67	--	--	148	<2.0	<2.0	<6.0
MW-06(d)	11/18/2009	3761.95	59.41	--	3702.54	7.12	1250	18.67	--	--	150	<2.0	<2.0	<6.0
MW-06	3/24/2010	3761.95	59.51	--	3702.44	7.11	1331	20.50	--	--	172 a	<2.0	<2.0	<6.0
MW-06	6/10/2010	--	59.64	--	--	7.06	1166	22.50	--	--	182 a	<2.0	<2.0	<6.0
NMOC Cleanup Levels											10	750	750	620

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Table 1. Groundwater Analytical Results - Apex Compressor Station, Lea County, New Mexico

Well ID	Date	TOC (ft msl)	DTW (ft bgs)	LNAPL Thickness (ft)	GWE (ft msl)	pH s.u.	Conductivity µS/cm	Temperature °C	DO mg/l	ORP mV	Benzene	Toluene	Ethyl- benzene	Total Xylenes	
															Concentrations in µg/l
MW-07	1/10/2008	3761.98	63.18	--	3698.80	--	--	--	--	--	--	--	--	--	
MW-07	2/7/2008	3761.98	63.06	--	3698.92	--	--	--	--	--	--	--	--	--	
MW-07	3/4/2008	3761.98	63.01	--	3698.97	6.88	1240	17.78	2.58	-190.8	600	< 5.0	92	86	
MW-07	6/3/2008	3761.98	62.94	--	3699.04	7.05	1360	20.32	1.47	-175.1	896	< 2.4	190	109	
MW-07(d)	6/3/2008	3761.98	62.94	--	3699.04	7.05	1360	20.32	1.47	-175.1	924	< 0.48	196	122	
MW-07	9/17/2008	3761.98	63.07	--	3698.91	6.43	1379	20.52	0.58	-92.0	869	< 0.48	201	564	
MW-07(d)	9/17/2008	3761.98	63.07	--	3698.91	6.43	1379	20.52	0.58	-92.0	997	< 0.48	206	537	
MW-07	12/3/2008	3761.98	63.10	--	3698.88	7.13	1240	17.30	1.90	-93.7	1,050	< 4.8	264	917	
MW-07	1/29/2009	3761.98	63.00	--	3698.98	--	--	--	--	--	--	--	--	--	
MW-07	2/24/2009	3761.98	62.88	--	3699.10	7.10	1308	19.39	1.21	-52.4	1,560	< 4.8	330	1,160	
MW-07	6/23/2009	3761.98	63.08	--	3698.90	6.90	140	20.80	5.09	-55.0	769 a	1.2 J	190	527 a	
MW-07	9/2/2009	3761.98	63.25	--	3698.73	6.87	160	21.12	1.98	-96.0	501 a	1.3 J	200	271 a	
MW-07(d)	9/2/2009	3761.98	63.25	--	3698.73	6.87	160	21.12	1.98	-96.0	564 a	0.64 J	95.5	305	
MW-07	11/18/2009	3761.98	63.33	--	3698.65	7.38	1394	19.78	--	--	1,460 a	2.8	294 a	1,110 a	
MW-07	3/24/2010	3761.98	63.46	--	3698.52	7.33	1465	20.28	--	--	1,650 a	< 2.0	424	1,310	
MW-07	6/10/2010	3761.98	63.55	--	3698.43	7.34	1034	23.50	--	--	1,880 a	< 2.0	412	1,290	
MW-09	1/10/2008	3762.54	63.65	--	3698.89	--	--	--	--	--	--	--	--	--	
MW-09	2/7/2008	3762.54	63.62	--	3698.92	--	--	--	--	--	--	--	--	--	
MW-09	3/4/2008	3762.54	63.56	--	3698.98	7.09	606	17.78	7.95	95.0	< 1.0	< 5.0	< 1.0	< 3.0	
MW-09	6/3/2008	3762.54	63.49	--	3699.05	7.25	688	20.80	6.36	45.7	< 0.46	< 0.48	< 0.45	< 1.4	
MW-09(d)	6/3/2008	3762.54	63.49	--	3699.05	7.25	688	20.80	6.36	45.7	< 0.46	< 0.48	< 0.45	< 1.4	
MW-09	9/16/2008	3762.54	63.62	--	3698.92	6.96	693	19.77	4.80	94.1	0.62 J	< 0.48	0.46 J	11.6	
MW-09	12/3/2008	3762.54	63.65	--	3698.89	7.25	693	17.59	6.90	98.1	< 0.46	< 0.48	< 0.45	< 1.4	
MW-09	1/29/2009	3762.54	63.60	--	3698.94	--	--	--	--	--	--	--	--	--	
MW-09	2/24/2009	3762.54	65.47	--	3697.07	7.25	783	19.15	6.39	167.4	< 0.46	< 0.48	< 0.45	< 1.4	
MW-09	6/23/2009	3762.54	63.65	--	3698.89	7.20	100	20.00	9.02	210.0	< 2.0	< 2.0	< 2.0	< 6.0	
MW-09	9/2/2009	3762.54	63.77	--	3698.77	7.11	110	20.81	8.76	111.0	< 2.0	< 2.0	< 2.0	< 6.0	
MW-09	11/18/2009	3762.54	63.85	--	3698.69	7.28	1068	19.06	--	--	< 2.0	< 2.0	< 2.0	< 6.0	
MW-09	3/24/2010	3762.54	63.92	--	3698.62	7.36	1241	19.56	--	--	< 2.0	< 2.0	< 2.0	< 6.0	
MW-09	6/9/2010	3762.54	64.03	--	3698.51	7.28	1198	22.67	--	--	< 2.0	< 2.0	< 2.0	< 6.0	
MW-10	1/10/2008	3762.66	65.78	--	3696.88	--	--	--	--	--	--	--	--	--	
MW-10	2/7/2008	3762.66	65.74	--	3696.92	--	--	--	--	--	--	--	--	--	
MW-10	3/4/2008	3762.66	65.66	--	3697.00	7.22	524	14.63	16.11	102.9	< 1.0	< 5.0	< 1.0	< 3.0	
MW-10	6/2/2008	3762.66	65.89	--	3696.77	7.27	632	20.26	6.97	499.9	< 0.46	< 0.48	< 0.45	< 1.4	
MW-10	9/16/2008	3762.66	65.84	--	3696.82	7.29	569	18.98	5.34	45.4	< 0.46	< 0.48	< 0.45	11.1	
MW-10	12/3/2008	3762.66	65.75	--	3696.91	7.51	553	17.82	8.19	111.1	< 0.46	< 0.48	< 0.45	< 1.4	
MW-10	1/29/2009	3762.66	65.70	--	3696.96	--	--	--	--	--	--	--	--	--	
MW-10	2/24/2009	3762.66	65.53	--	3697.13	7.51	573	18.89	6.69	233.1	< 0.46	< 0.48	< 0.45	< 1.4	
MW-10	6/23/2009	3762.66	65.63	--	3697.03	7.40	690	20.20	10.40	230.0	< 2.0	< 2.0	< 2.0	< 6.0	
MW-10	9/2/2009	3762.66	65.85	--	3696.81	6.67	780	20.39	8.55	180.0	< 2.0	< 2.0	< 2.0	< 6.0	
MW-10	11/18/2009	3762.66	65.87	--	3696.79	7.76	1014	19.17	--	--	< 2.0	< 2.0	< 2.0	< 6.0	
MW-10	3/24/2010	3762.66	65.87	--	3696.79	7.61	729	18.78	--	--	< 2.0	< 2.0	< 2.0	< 6.0	
MW-10	6/9/2010	3762.66	66.02	--	3696.64	7.64	583	22.28	--	--	< 2.0	< 2.0	< 2.0	< 6.0	
NMOC Cleanup Levels												10	750	750	620

CONESTOGA-ROVERS & ASSOCIATES

Table 1. Groundwater Analytical Results - Apex Compressor Station, Lea County, New Mexico

Well ID	Date	TOC (ft msl)	DTW (ft bgs)	LNAPL Thickness (ft)	GWE (ft msl)	pH s.u.	Conductivity µS/cm	Temperature °C	DO mg/l	ORP mV	Concentrations in µg/l				
											Benzene	Toluene	Ethyl - benzene	Total Xylenes	
MW-B	1/10/2008	3758.52	59.45	--	3699.07	--	--	--	--	--	--	--	--	--	--
MW-B	2/7/2008	3758.52	59.34	--	3699.18	--	--	--	--	--	--	--	--	--	--
MW-B	3/4/2008	3758.52	59.29	--	3699.23	6.62	1035	17.67	6.17	16.1	<1.0	<5.0	<1.0	<3.0	<3.0
MW-B	6/3/2008	3758.52	59.19	--	3699.33	6.81	1108	20.73	3.84	-45.2	40.1	161	14.1	115	115
MW-B	9/16/2008	3758.52	59.32	--	3699.20	6.28	1099	19.71	0.95	-32.8	63.9	230	50.5	245	245
MW-B	12/3/2008	3758.52	59.31	--	3699.21	6.96	893	18.04	3.56	53.1	<0.46	<0.48	<0.45	<1.4	<1.4
MW-B	1/29/2009	3758.52	59.30	--	3699.22	--	--	--	--	--	--	--	--	--	--
MW-B	2/24/2009	3758.52	59.17	--	3699.35	6.93	927	19.10	2.97	144.8	3.0	7.8	1.0 J	6.9	6.9
MW-B	6/24/2009	3758.52	59.37	--	3699.15	6.80	120	21.30	6.26	20.0	60.9	566 a	92.6	553	553
MW-B	9/2/2009	3758.52	59.54	--	3698.98	6.81	130	38.60	1.85	-69.0	70.6	602 a	91.5	590 a	590 a
MW-B	11/18/2009	3758.52	59.61	--	3698.91	7.28	1095	16.67	--	--	5.4	3.3	2.2	4.9 J	4.9 J
MW-B	3/24/2010	3758.52	59.72	--	3698.80	7.14	1105	19.28	--	--	4.9	48.4	8.9	45.7	45.7
MW-B	6/10/2010	3758.52	59.90	--	3698.62	7.12	1028	21.67	--	--	16.8	70.6	25.7	102	102
MW-C	1/10/2008	3759.93	60.33	--	3699.60	--	--	--	--	--	--	--	--	--	--
MW-C	2/7/2008	3759.93	60.24	--	3699.69	--	--	--	--	--	--	--	--	--	--
MW-C	3/5/2008	3759.93	60.21	--	3699.72	6.98	595	16.89	9.97	56.9	<1.0	<5.0	<1.0	<3.0	<3.0
MW-C	6/3/2008	3759.93	60.15	--	3699.78	6.99	773	20.83	6.90	-81.1	<0.46	<0.48	<0.45	<1.4	<1.4
MW-C	9/16/2008	3759.93	60.22	--	3699.71	6.73	803	19.99	3.58	90.0	<0.46	<0.48	<0.45	11.2	11.2
MW-C	12/3/2008	3759.93	60.30	--	3699.63	6.97	761	18.36	5.37	115.6	<0.46	<0.48	<0.45	<1.4	<1.4
MW-C	1/29/2009	3759.93	60.20	--	3699.73	--	--	--	--	--	--	--	--	--	--
MW-C	2/24/2009	3759.93	60.12	--	3699.81	6.91	792	13.21	4.40	186.3	<0.46	<0.48	<0.45	<1.4	<1.4
MW-C	6/24/2009	3759.93	60.32	--	3699.61	6.80	110	20.60	6.31	127.0	<2.0	<2.0	<2.0	<6.0	<6.0
MW-C	9/2/2009	3759.93	60.42	--	3699.51	7.02	120	20.14	6.20	88.0	<2.0	<2.0	<2.0	<6.0	<6.0
MW-C	11/18/2009	3759.93	60.56	--	3699.37	7.22	1000	18.89	--	--	<2.0	<2.0	<2.0	<6.0	<6.0
MW-C	3/24/2010	3759.93	60.64	--	3699.29	7.11	1019	19.56	--	--	<2.0	0.10	<2.0	<6.0	<6.0
MW-C	6/9/2010	3759.93	60.76	--	3699.17	7.01	861	22.68	--	--	<2.0	<2.0	<2.0	<6.0	<6.0
MW-D	1/10/2008	3759.53	60.19	--	3699.34	--	--	--	--	--	--	--	--	--	--
MW-D	2/7/2008	3759.53	60.08	--	3699.45	--	--	--	--	--	--	--	--	--	--
MW-D	3/5/2008	3759.53	60.04	--	3699.49	7.00	891	16.64	11.15	-134.4	470	140	160	610	610
MW-D	6/3/2008	3759.53	59.97	--	3699.56	6.83	1249	21.09	0.75	-195.8	662	47.4	252	202	202
MW-D	9/16/2008	3759.53	60.10	--	3699.43	6.23	1221	20.31	0.46	-102.2	711	93.8	255	518	518
MW-D	12/3/2008	3759.53	60.10	--	3699.43	6.94	1118	18.12	1.32	-111.5	749	36.4	282	1,200	1,200
MW-D(d)	12/3/2008	3759.53	60.10	--	3699.43	6.94	1118	18.12	1.32	-111.5	738	36.7	263	1,200	1,200
MW-D	1/29/2009	3759.53	60.15	--	3699.38	--	--	--	--	--	--	--	--	--	--
MW-D	2/24/2009	3759.53	59.94	--	3699.59	6.87	1153	19.47	0.92	-38.1	759	176	277	1,070	1,070
MW-D(d)	2/24/2009	3759.53	59.94	--	3699.59	6.87	1153	19.47	0.92	-38.1	937	173	326	1,430	1,430
MW-D	6/24/2009	3759.53	60.18	--	3699.35	6.80	130	20.70	2.01	-89.0	999	253	322	1,780	1,780
MW-D	9/2/2009	3759.53	60.29	--	3699.24	6.90	150	20.72	2.11	-128.0	963	202	319	1,940	1,940
MW-D	11/18/2009	3759.53	60.41	--	3699.12	7.09	1223	18.78	--	--	1,070	30.4	303	1,330	1,330
MW-D	3/24/2010	3759.53	60.50	--	3699.03	7.04	1306	20.06	--	--	1,260	38.9	292	1,920	1,920
MW-D	6/10/2010	3759.53	60.63	--	3698.90	6.99	977	23.89	--	--	634 a	73.5	260 a	1,350 a	1,350 a
NMOCD Cleanup Levels											10	750	750	620	

CONESTOGA-ROVERS & ASSOCIATES

Table 1. Groundwater Analytical Results - Apex Compressor Station, Lea County, New Mexico

Well ID	Date	TOC	DTW	LNAPL Thickness	GWE	pH	Conductivity	Temperature	DO	ORP	Benzene	Toluene	Ethyl-benzene	Total Xylenes
		(ft msd)	(ft bgs)	(ft)	(ft msd)	u	µS/cm	°C	mg/l	mV	Concentrations in µg/l			
RW-01	1/10/2008	3759.49	59.39	--	3700.10	--	--	--	--	--	--	--	--	--
RW-01	2/7/2008	3759.49	59.28	--	3700.21	--	--	--	--	--	--	--	--	--
RW-01	3/4/2008	3759.49	59.62	--	3699.87	6.68	1884	18.34	4.02	-218.1	620	< 50	170	860
RW-01(d)	3/4/2008	3759.49	59.62	--	3699.87	6.68	1884	18.34	4.02	-218.1	550	< 50	200	1,000
RW-01	6/3/2008	3759.49	59.11	--	3700.38	6.85	2192	20.99	2.41	-136.4	662	7.7	712	3,750
RW-01	9/17/2008	3759.49	59.21	--	3700.28	6.71	1929	20.24	0.41	-82.1	499	2.1	345	1,480
RW-01(d)	9/17/2008	3759.49	59.21	--	3700.28	6.71	1929	20.24	0.41	-82.1	522	1.9 J	302	1,390
RW-01	12/4/2008	3759.49	59.25	--	3700.24	7.01	1797	17.80	1.03	-127.4	515	< 2.4	347	1,540
RW-01	1/29/2009	3759.49	59.25	--	3700.24	--	--	--	--	--	--	--	--	--
RW-01	2/24/2009	3759.49	59.12	--	3700.37	6.90	1922	19.91	0.50	-94.4	770	< 2.4	387	1,570
RW-01	6/23/2009	3759.49	59.34	--	3700.15	6.90	220	20.80	2.13	-121.0	1,110 a	< 2.0	304 a	1,360
RW-01(d)	6/23/2009	3759.49	59.34	--	3700.15	6.90	220	20.80	2.13	-121.0	1,160	< 2.0	315	1,400
RW-01	9/3/2009	3759.49	59.55	--	3699.94	6.55	220	19.80	1.79	-126.0	1,100	< 2.0	363	1,780
RW-01	11/18/2009	3759.49	59.63	--	3699.86	7.11	1868	21.06	--	--	906 a	< 2.0	321 a	901 a
RW-01	3/24/2010	3759.49	59.78	--	3699.71	7.12	1830	19.56	--	--	1,010	< 2.0	255	947
RW-01	6/10/2010	3759.49	59.90	--	3699.59	7.09	1086	22.67	--	--	919	< 2.0	253	821
RW-02	1/10/2008	3759.29	59.33	--	3699.96	--	--	--	--	--	--	--	--	--
RW-02	2/7/2008	3759.29	59.29	--	3700.00	--	--	--	--	--	--	--	--	--
RW-02	3/4/2008	3759.29	59.21	--	3700.08	6.54	2101	18.03	2.57	-185.2	1,400	< 50	260	880
RW-02	6/3/2008	3759.29	59.15	--	3700.14	6.71	2232	20.70	1.34	-118.8	1,230	< 0.48	348	1,100
RW-02	9/17/2008	3759.29	59.21	--	3700.08	6.19	1926	19.49	0.54	-47.3	1,160	< 0.48	344	1,220
RW-02	12/4/2008	3759.29	59.22	--	3700.07	6.92	1527	17.78	2.07	-94.8	860	< 0.48	289	779
RW-02(d)	12/4/2008	3759.29	59.22	--	3700.07	6.92	1527	17.78	2.07	-94.8	849	< 4.8	266	741
RW-02	1/29/2009	3759.29	59.25	--	3700.04	--	--	--	--	--	--	--	--	--
RW-02	2/24/2009	3759.29	59.12	--	3700.17	6.86	1513	19.42	1.03	-68.4	1,200	< 0.48	397	1,160
RW-02(d)	2/24/2009	3759.29	59.12	--	3700.17	6.86	1513	19.42	1.03	-68.4	1,130	< 4.8	360	1,060
RW-02	6/23/2009	3759.29	59.32	--	3699.97	6.80	170	20.70	2.34	-93.0	1,140	< 2.0	405	1,530
RW-02	9/3/2009	3759.29	59.54	--	3699.75	6.65	170	19.72	1.84	-133.0	962	< 2.0	417	1,830
RW-02	11/18/2009	3759.29	59.61	--	3699.68	6.92	1420	19.17	--	--	715 a	< 2.0	303 a	846 a
RW-02	3/24/2010	3759.29	59.78	--	3699.51	7.02	1425	20.39	--	--	512	< 2.0	208	647
RW-02	6/10/2010	3759.29	59.90	--	3699.39	7.01	1148	22.50	--	--	491	< 2.0	216	661
RW-03	1/10/2008	3759.46	59.48	--	3699.98	--	--	--	--	--	LNAPL present	--	--	--
RW-03	2/7/2008	3759.46	59.46	--	3700.00	--	--	--	--	--	LNAPL present	--	--	--
RW-03	3/3/2008	3759.46	60.10	0.75	3699.97	--	--	--	--	--	LNAPL present	--	--	--
RW-03	6/2/2008	3759.46	60.36	1.20	3700.07	--	--	--	--	--	LNAPL present	--	--	--
RW-03	9/15/2008	3759.46	60.73	1.63	3700.05	--	--	--	--	--	LNAPL present	--	--	--
RW-03	12/3/2008	3759.46	60.73	1.66	3700.07	--	--	--	--	--	LNAPL present	--	--	--
RW-03	1/29/2009	3759.46	61.70	2.80	3700.03	--	--	--	--	--	LNAPL present	--	--	--
RW-03	2/25/2009	3759.46	60.67	1.73	3700.19	--	--	--	--	--	LNAPL present	--	--	--
RW-03	6/24/2009	3759.46	61.52	2.42	3699.90	--	--	--	--	--	LNAPL present	--	--	--
RW-03	9/2/2009	3759.46	61.95	2.82	3699.79	--	--	--	--	--	LNAPL present	--	--	--
RW-03	11/16/2009	3759.46	62.03	2.85	3699.71	--	--	--	--	--	LNAPL present	--	--	--
RW-03	1/14/2010	3759.46	62.23	3.00	3699.54	--	--	--	--	--	LNAPL present	--	--	--
RW-03	2/25/2010	3759.46	62.20	2.96	3699.69	--	--	--	--	--	LNAPL present	--	--	--
RW-03	3/31/2010	3759.46	62.24	2.94	3699.60	--	--	--	--	--	LNAPL present	--	--	--
RW-03	6/10/2010	3759.46	62.44	3.06	3699.50	--	--	--	--	--	LNAPL present	--	--	--
NMOCD Cleanup Levels											10	750	750	620

CONESTOGA-ROVERS & ASSOCIATES

Table 1. Groundwater Analytical Results - Apex Compressor Station, Lea County, New Mexico

Well ID	Date	TOC (ft ml)	DTW (ft bgs)	LNAPL Thickness (ft)	GWE (ft ml)	pH s u	Conductivity µS/cm	Temperature °C	DO mg/l	ORP mV	Concentrations in µg/l				
											Benzene	Toluene	Ethyl- benzene	Total Xylenes	
RW-04	1/10/2008	3759.59	62.01	2.93	3699.95						LNAPL present				
RW-04	2/7/2008	3759.59	61.55	2.51	3700.07						LNAPL present				
RW-04	3/3/2008	3759.59	61.75	2.56	3699.91						LNAPL present				
RW-04	6/2/2008	3759.59	61.64	2.83	3700.24						LNAPL present				
RW-04	9/15/2008	3759.59	61.76	2.88	3700.16						LNAPL present				
RW-04	12/3/2008	3759.59	61.68	2.80	3700.18						LNAPL present				
RW-04	1/29/2009	3759.59	61.70	2.80	3700.16						LNAPL present				
RW-04	2/25/2009	3759.59	61.46	2.70	3700.32						LNAPL present				
RW-04	6/24/2009	3759.59	61.96	2.98	3700.04						LNAPL present				
RW-04	9/2/2009	3759.59	62.23	3.07	3699.85						LNAPL present				
RW-04	11/16/2009	3759.59	62.30	3.07	3699.78						LNAPL present				
RW-04	1/14/2010	3759.59	62.40	3.11	3699.71						LNAPL present				
RW-04	2/25/2010	3759.59	62.43	3.13	3699.70						LNAPL present				
RW-04	3/31/2010	3759.59	62.40	3.06	3699.67						LNAPL present				
RW-04	6/10/2010	3759.59	62.60	3.20	3699.58						LNAPL present				
RW-05	1/10/2008	3759.53	59.84	--	3699.69	--	--	--	--	--	--	--	--	--	--
RW-05	2/7/2008	3759.53	59.74	--	3699.79	--	--	--	--	--	--	--	--	--	--
RW-05	3/5/2008	3759.53	59.73	--	3699.80	6.84	1238	18.23	2.34	-213.9	4,800	7,200	1,400	10,000	
RW-05	6/3/2008	3759.53	59.65	--	3699.88	6.81	1644	22.10	0.91	-213.6	5,000	2,310	817	4,910	
RW-05	9/17/2008	3759.53	59.74	--	3699.79	6.42	1791	20.63	0.04	-75.1	5,040	3,620	874	5,840	
RW-05	12/4/2008	3759.53	59.76	--	3699.77	6.87	1689	18.31	0.61	-132.7	3,790	638	653	4,090	
RW-05	1/29/2009	3759.53	59.75	--	3699.78	--	--	--	--	--	--	--	--	--	--
RW-05	2/25/2009	3759.53	59.70	--	3699.83	6.86	1972	19.52	1.09	-14.3	5,030	934	722	4,840	
RW-05	6/24/2009	3759.53	59.83	--	3699.70	6.70	230	20.80	4.54	-88.0	5,030	5,400	696	4,450	
RW-05	9/3/2009	3759.53	60.04	--	3699.49	6.63	270	21.06	1.89	-134.0	4,880	5,490	570	3,800	
RW-05	11/18/2009	3759.53	60.16	--	3699.37	6.94	2540	18.00	--	--	5,740	149.1	693	4,030	
RW-05	3/24/2010	3759.53	60.35	--	3699.18	6.95	2780	19.28	--	--	5,140	795	558	3,610	
RW-05	6/10/2010	3759.53	60.40	--	3699.13	6.92	1995	23.00	--	--	5,690	488	602	3,550	
RW-05(d)	6/10/2010	3759.53	60.40	--	3699.13	6.92	1995	23.00	--	--	5,590	230	565	3,200	
RW-06	1/10/2008	3758.44	58.78	--	3699.66	--	--	--	--	--	--	--	--	--	--
RW-06	3/5/2008	3758.44	59.67	--	3698.77	6.91	1217	17.81	3.47	-146.1	14,000	10,000	3,200	18,000	
RW-06	6/2/2008	3758.44	51.69	--	3706.75	6.80	1601	21.23	1.36	-182.0	3,930	3,660	1,090	7,200	
RW-06	9/17/2008	3758.44	59.68	--	3698.76	6.39	1664	19.84	0.25	-68.2	3,860	3,870	981	5,980	
RW-06	12/4/2008	3758.44	59.65	--	3698.79	6.90	1594	17.93	1.21	-161.8	2,890	555	715	3,970	
RW-06	1/29/2009	3758.44	59.70	--	3698.74	--	--	--	--	--	--	--	--	--	--
RW-06	2/25/2009	3758.44	59.61	--	3698.83	6.82	1753	19.79	0.86	-30.7	3,460	435	786	4,830	
RW-06	6/24/2009	3758.44	59.77	--	3698.67	6.70	200	20.80	2.13	-81.0	3,360	1,760	809	5,470	
RW-06	9/3/2009	3758.44	59.97	--	3698.47	6.67	230	20.82	2.13	-124.0	2,890	1,140	683	4,780	
RW-06	11/18/2009	3758.44	60.03	--	3698.41	6.95	2020	17.67	--	--	2,590	<200	756	4,280	
RW-06	3/24/2010	3758.44	60.17	--	3698.27	7.01	2150	21.56	--	--	1,650	172	576	3,100	
RW-06	6/10/2010	3758.44	60.35	--	3698.09	6.91	1417	23.17	--	--	1,840	225	598	3,400	
RW-07	1/10/2008	3759.53	60.08	--	3699.45	--	--	--	--	--	--	--	--	--	--
RW-07	2/7/2008	3759.53	59.93	--	3699.60	--	--	--	--	--	--	--	--	--	--
RW-07	3/5/2008	3759.53	59.99	--	3699.54	6.88	1131	17.76	3.88	-113.1	1,800	<100	280	1,300	
RW-07	6/3/2008	3759.53	59.87	--	3699.66	6.85	1459	21.24	1.32	-159.8	2,230	1.1.1	33.4	1,290	
RW-07	9/17/2008	3759.53	59.94	--	3699.59	6.61	1623	20.04	0.52	-76.9	3,160	<24	478	2,570	
RW-07	12/4/2008	3759.53	59.95	--	3699.58	6.93	1593	17.74	1.14	-78.4	3,300	<24	439	2,000	
RW-07	1/29/2009	3759.53	63.00	--	3696.53	--	--	--	--	--	--	--	--	--	--
RW-07	2/25/2009	3759.53	59.83	--	3699.70	6.88	1695	19.68	0.92	-47.4	3,930	<24	424	2,120	
RW-07	6/24/2009	3759.53	60.03	--	3699.50	6.60	220	21.04	4.06	-92.0	3,860	<2.0	489	2,510	
RW-07	9/3/2009	3759.53	60.23	--	3699.30	6.63	240	20.90	2.09	-155.0	3,530	<200	403	1,950	
RW-07	11/18/2009	3759.53	60.29	--	3699.24	7.24	1601	20.50	--	--	2,310	<200	265	925	
RW-07	3/24/2010	3759.53	60.45	--	3699.08	7.14	1798	20.78	--	--	1,900	<200	316	607	
RW-07	6/10/2010	3759.53	60.55	--	3698.98	7.01	1348	22.89	--	--	2,480	<200	307	721	
NMOCD Cleanup Levels											10	750	750	620	

CONESTOGA-ROVERS & ASSOCIATES

Table 1. Groundwater Analytical Results - Apex Compressor Station, Lea County, New Mexico

Well ID	Date	TOC (ft msl)	DTW (ft bgs)	LNAPL Thickness (ft)	GWE (ft msl)	pH s u	Conductivity µS/cm	Temperature °C	DO mg/l	ORP mV	Concentrations in µg/l				
											Benzene	Toluene	Ethyl- benzene	Total Xylenes	
RW-08	1/10/2008	3759.51	60.33	--	3699.18	--	--	--	--	--	--	--	--	--	--
RW-08	2/7/2008	3759.51	60.19	--	3699.32	--	--	--	--	--	--	--	--	--	--
RW-08	3/4/2008	3759.51	60.23	--	3699.28	6.74	1215	17.99	2.42	-127.1	1,700	< 5,000	< 1,000	6,000	6,000
RW-08	6/3/2008	3759.51	60.12	--	3699.39	7.05	1405	21.77	1.32	-110.0	3,470	< 9.7	751	4,000	4,000
RW-08	9/17/2008	3759.51	60.25	--	3699.26	6.50	1307	19.87	0.88	-60.5	2,210	< 4.0	488	3,450	3,450
RW-08	12/4/2008	3759.51	60.23	--	3699.28	7.05	1201	17.94	1.87	-61.1	3,240	< 9.7	567	2,950	2,950
RW-08	1/29/2009	3759.51	60.20	--	3699.31	--	--	--	--	--	--	--	--	--	--
RW-08	2/25/2009	3759.51	60.09	--	3699.42	6.98	1279	19.86	1.23	-33.8	768	< 9.7	727	2,480	2,480
RW-08	6/24/2009	3759.51	60.32	--	3699.19	6.40	140	20.60	2.13	-76.0	1,960	< 50	534	3,330	3,330
RW-08	9/2/2009	3759.51	60.44	--	3699.07	6.91	150	20.94	1.87	-129.0	1,620	< 50	506	3,530	3,530
RW-08	11/18/2009	3759.51	60.55	--	3698.96	7.28	1432	20.06	--	--	3,920 a	1.3 j	604 a	1,550 a	1,550 a
RW-08	3/24/2010	3759.51	60.65	--	3698.86	7.26	1525	20.56	--	--	4,250	< 50	714	3,650	3,650
RW-08	6/10/2010	3759.51	60.80	--	3698.71	7.14	1235	22.50	--	--	2,930	< 50	715	3,870	3,870
RW-09	1/10/2008	3754.40	61.29	--	3693.11	--	--	--	--	--	--	--	--	--	--
RW-09	2/7/2008	3754.40	61.14	--	3693.26	--	--	--	--	--	--	--	--	--	--
RW-09	3/4/2008	3754.40	61.25	--	3693.15	6.79	110	17.67	5.21	91.4	24	< 5.0	< 1.0	11.0	11.0
RW-09	6/3/2008	3754.40	61.08	--	3693.32	6.93	1183	20.12	2.52	89.7	30.1	< 0.48	< 0.45	8.9	8.9
RW-09	9/16/2008	3754.40	61.31	--	3693.09	6.20	1238	19.73	0.72	1.8	18.9	< 0.48	1.5 j	17.1	17.1
RW-09	12/3/2008	3754.40	61.25	--	3693.15	6.91	1133	18.59	1.29	94.3	16.5	< 0.48	< 0.45	< 1.4	< 1.4
RW-09	1/29/2009	3754.40	62.15	--	3692.25	--	--	--	--	--	--	--	--	--	--
RW-09	2/24/2009	3754.40	61.04	--	3693.36	7.04	1096	19.31	2.43	207.4	< 0.46	< 0.48	< 0.45	< 1.4	< 1.4
RW-09	6/23/2009	3754.40	61.16	--	3693.24	7.10	110	20.80	8.83	228.0	< 2.0	< 2.0	< 2.0	< 6.0	< 6.0
RW-09	9/2/2009	3754.40	61.35	--	3693.05	6.92	130	20.82	4.29	86.0	< 2.0	< 2.0	< 2.0	< 6.0	< 6.0
RW-09	11/18/2009	3754.40	61.42	--	3692.98	7.09	1270	16.28	--	--	< 2.0	< 2.0	< 2.0	< 6.0	< 6.0
RW-09	3/24/2010	3754.40	61.45	--	3692.95	7.16	1280	21.56	--	--	< 2.0	< 2.0	< 2.0	2.9	2.9
RW-09	6/9/2010	3754.40	61.59	--	3692.81	7.08	1117	22.17	--	--	< 2.0	< 2.0	< 2.0	< 6.0	< 6.0
RW-10	1/10/2008	3754.53	61.33	--	3693.20	--	--	--	--	--	--	--	--	--	--
RW-10	2/7/2008	3754.53	61.19	--	3693.34	--	--	--	--	--	--	--	--	--	--
RW-10	3/4/2008	3754.53	61.29	--	3693.24	6.96	967	16.38	7.83	169.9	< 1.0	< 5.0	< 1.0	< 3.0	< 3.0
RW-10	6/3/2008	3754.53	61.14	--	3693.39	7.09	1023	20.01	7.07	132.8	< 0.46	< 0.48	0.65 j	< 1.4	< 1.4
RW-10	9/16/2008	3754.53	61.35	--	3693.18	7.01	1082	19.51	4.77	83.0	< 0.46	< 0.48	< 0.45	3.8 j	3.8 j
RW-10	12/3/2008	3754.53	61.30	--	3693.23	7.22	962	18.64	6.55	98.5	< 0.46	< 0.48	< 0.45	< 1.4	< 1.4
RW-10	1/29/2009	3754.53	61.20	--	3693.33	--	--	--	--	--	--	--	--	--	--
RW-10	2/24/2009	3754.53	61.10	--	3693.43	7.12	1079	19.20	5.83	218.9	< 0.46	< 0.48	< 0.45	< 1.4	< 1.4
RW-10	6/23/2009	3754.53	61.22	--	3693.31	7.30	100	20.50	9.99	227.0	< 2.0	< 2.0	< 2.0	< 6.0	< 6.0
RW-10	9/2/2009	3754.53	61.40	--	3693.13	7.22	120	20.51	7.98	126.0	< 2.0	< 2.0	< 2.0	< 6.0	< 6.0
RW-10	11/18/2009	3754.53	61.45	--	3693.08	7.46	1343	17.28	--	--	< 2.0	< 2.0	< 2.0	< 6.0	< 6.0
RW-10	3/24/2010	3754.53	61.52	--	3693.01	7.33	1276	19.67	--	--	< 2.0	< 2.0	< 2.0	< 6.0	< 6.0
RW-10	6/9/2010	3754.53	61.64	--	3692.89	7.20	1139	22.17	--	--	< 2.0	< 2.0	< 2.0	< 6.0	< 6.0
NMOCD Cleanup Levels											10	750	750	620	

CONESTOGA-ROVERS & ASSOCIATES

Table 1. Groundwater Analytical Results - Apex Compressor Station, Lea County, New Mexico

Well ID	Date	TOC	DTW	LNAPL	GWB	pH	Conductivity	Temperature	DO	ORP	Benzene	Toluene	Ethyl - benzene	Total Xylenes
		(ft msl)	(ft bgs)	Thk.kness (ft)	(ft msl)	s.u.	µS/cm	°C	mg/l	mV	Concentrations in µg/l			
RW-11	1/10/2008	3754.61	61.32	--	3693.29	--	--	--	--	--	--	--	--	--
RW-11	2/7/2008	3754.61	61.27	--	3693.34	--	--	--	--	--	--	--	--	--
RW-11	3/4/2008	3754.61	61.28	--	3693.33	6.88	832	16.95	8.66	179.1	<1.0	<5.0	<1.0	<3.0
RW-11	6/3/2008	3754.61	61.45	--	3693.16	6.89	909	20.43	6.89	148.7	<0.46	<0.48	<0.45	<1.4
RW-11	9/16/2008	3754.61	61.35	--	3693.26	6.98	910	19.22	4.11	72.4	<0.46	<0.48	<0.45	<1.4
RW-11	12/3/2008	3754.61	61.33	--	3693.28	7.12	879	18.41	5.49	80.6	<0.46	<0.48	<0.45	<1.4
RW-11	1/29/2009	3754.61	61.25	--	3693.36	--	--	--	--	--	--	--	--	--
RW-11	2/24/2009	3754.61	61.14	--	3693.47	7.19	876	19.18	5.46	220.6	<0.46	<0.48	<0.45	<1.4
RW-11	6/23/2009	3754.61	61.23	--	3693.38	7.40	780	20.20	10.95	227.0	<2.0	<2.0	<2.0	<6.0
RW-11	9/2/2009	3754.61	61.42	--	3693.19	7.31	100	20.92	7.86	133.0	<2.0	<2.0	<2.0	<6.0
RW-11	11/18/2009	3754.61	61.49	--	3693.12	7.43	1034	15.67	--	--	<2.0	<2.0	<2.0	<6.0
RW-11	3/24/2010	3754.61	61.51	--	3693.10	7.34	1024	20.06	--	--	<2.0	<2.0	<2.0	<6.0
RW-11	6/9/2010	3754.61	61.64	--	3692.97	7.36	854	22.44	--	--	<2.0	<2.0	<2.0	<6.0
RW-12	1/10/2008	3754.76	61.44	--	3693.32	--	--	--	--	--	--	--	--	--
RW-12	2/7/2008	3754.76	61.35	--	3693.41	--	--	--	--	--	--	--	--	--
RW-12	3/4/2008	3754.76	61.40	--	3693.36	7.09	577	16.53	10.49	157.9	<1.0	<5.0	<1.0	<3.0
RW-12	6/3/2008	3754.76	61.29	--	3693.47	7.25	672	19.64	6.52	157.2	<0.46	<0.48	<0.45	<1.4
RW-12	9/16/2008	3754.76	61.47	--	3693.29	7.12	666	19.12	4.91	63.7	<0.46	<0.48	<0.45	<1.4
RW-12	12/3/2008	3754.76	61.40	--	3693.36	7.29	650	18.59	6.51	56.4	<0.46	<0.48	<0.45	<1.4
RW-12	1/29/2009	3754.76	61.35	--	3693.41	--	--	--	--	--	--	--	--	--
RW-12	2/24/2009	3754.76	61.24	--	3693.52	7.33	665	18.86	6.15	215.7	<0.46	<0.48	<0.45	<1.4
RW-12	6/23/2009	3754.76	61.35	--	3693.41	7.30	730	20.20	9.46	226.0	<2.0	<2.0	<2.0	<6.0
RW-12	9/2/2009	3754.76	61.54	--	3693.22	7.36	820	20.76	7.64	146.0	<2.0	<2.0	<2.0	<6.0
RW-12	11/18/2009	3754.76	61.61	--	3693.15	7.52	807	15.67	--	--	<2.0	<2.0	<2.0	<6.0
RW-12	3/24/2010	3754.76	61.62	--	3693.14	7.39	820	18.78	--	--	<2.0	<2.0	<2.0	<6.0
RW-12	6/9/2010	3754.76	61.75	--	3693.01	7.41	702	22.28	--	--	<2.0	<2.0	<2.0	<6.0

NMOCDC Cleanup Levels

10 750 750 620

Notes and Abbreviations

- ID = Identification
- TOC = Top of casing
- DTW = Depth to water
- LNAPL = Light non-aqueous phase liquids
- GWB = Groundwater elevation
- * = A specific gravity for LNAPL of 0.81 was used to calculate corrected groundwater elevation
- DO = Dissolved oxygen
- ORP = Oxidation reduction potential
- BTEX = Benzene, toluene, ethylbenzene, and total xylenes by SW-846 R021 or R260B
- ft msl = Feet above mean sea level
- ft bgs = Feet below ground surface
- ft = Feet
- s.u. = Standard unit
- µS/cm = Microsiemens per centimeter
- °C = Degrees Celsius
- mg/l = Milligrams per liter
- mV = Millivolts
- µg/l = micrograms per liter
- = Not measured/not analyzed
- <x = Not detected above x µg/l
- d = Duplicate sample
- o = Result from the second run
- J = An estimated value

NMOCDC = New Mexico Oil Conservation Division

\\Ders-1\shared\Project Files\0586\058660-APDX\058660-RPTS-2Q 2010 GWM\058660-6-T1.xls\Groundwater Analytical Results

CONESTOGA-ROVERS & ASSOCIATES

Table 2. LNAPL Recovery Table - Apex Compressor Station, Lea County, New Mexico

Well ID	Date	DTW (ft bgs)	Depth to LNAPL (ft msl)	LNAPL Thickness feet	LNAPL Removed gallons
MW-01	1/26/05	59.43	54.39	5.04	—
MW-01	2/24/05	59.94	59.54	0.40	0.25
MW-01	2/25/05	59.78	59.63	0.15	0.10
MW-01	4/28/05	59.96	59.68	0.28	—
MW-01	4/29/05	59.89	59.80	0.09	—
MW-01	5/24/05	59.98	59.74	0.24	—
MW-01	7/27/05	60.12	59.83	0.29	—
MW-01	8/24/05	60.01	59.81	0.20	—
MW-01	10/26/05	60.11	59.89	0.22	1.00
MW-01	12/1/05	60.28	59.70	0.58	1.00
MW-01	1/25/06	60.31	60.11	0.20	—
MW-01	2/15/06	60.28	60.14	0.14	—
MW-01	3/23/06	60.22	60.13	0.09	—
MW-01	5/18/06	60.37	60.27	0.10	—
MW-01	5/17/09	60.37	60.27	0.10	0.50
MW-01	6/15/06	60.44	60.34	0.10	—
MW-01	7/17/06	60.25	60.15	0.10	0.50
MW-01	8/17/06	60.45	60.41	0.04	1.00
MW-01	9/11/06	60.59	60.29	0.30	0.40
MW-01	2/26/07	59.96	59.94	0.02	0.50
MW-01	6/24/09	59.83	59.79	0.04	—
MW-01	9/2/09	60.06	59.99	0.07	—
MW-01	11/16/09	60.17	60.01	0.16	0.02
MW-01	12/15/09	—	—	—	0.25
MW-01	1/14/10	60.20	60.13	0.07	0.01
MW-01	2/25/10	60.19	60.13	0.06	0.01
MW-01	3/31/10	60.25	60.20	0.05	0.01
MW-01	4/27/10	60.38	60.33	0.05	0.01
MW-01	5/27/10	60.52	60.25	0.27	0.01
MW-01	6/10/10	60.40	60.25	0.15	0.02
MW-03	1/26/05	59.29	59.11	0.18	—
MW-03	2/24/05	59.76	59.50	0.26	0.25
MW-03	2/25/05	59.67	59.58	0.09	0.10
MW-03	4/28/05	59.82	59.63	0.19	—
MW-03	4/29/05	59.94	59.89	0.05	—
MW-03	5/24/05	59.81	59.70	0.11	—
MW-03	7/27/05	60.05	59.82	0.23	—
MW-03	8/24/05	59.92	59.73	0.19	—
MW-03	10/26/05	60.09	59.88	0.21	1.00
MW-03	12/1/05	60.19	59.95	0.24	1.00
MW-03	1/25/06	60.22	60.08	0.14	—
MW-03	2/15/06	60.19	60.09	0.10	—
MW-03	3/23/06	60.24	60.20	0.04	—
MW-03	5/16/06	60.32	60.25	0.07	—
MW-03	5/17/06	60.32	60.25	0.07	0.40
MW-03	6/15/06	60.35	60.31	0.04	—
MW-03	7/17/06	60.29	60.26	0.03	0.50
MW-03	8/17/06	60.42	60.36	0.06	0.10
MW-03	9/11/06	60.32	60.27	0.05	0.30
MW-03	10/16/06	60.28	60.27	0.01	—

CONESTOGA-ROVERS & ASSOCIATES

Table 2. LNAPL Recovery Table - Apex Compressor Station, Lea County, New Mexico

Well ID	Date	DTW	Depth to LNAPL	LNAPL Thickness	LNAPL Removed
		(ft bgs)	(ft msl)	feet	gallons
RW-01	8/24/05	59.66	59.31	0.35	—
RW-01	7/27/05	59.90	59.34	0.56	—
RW-01	5/24/05	59.75	59.22	0.53	—
RW-01	4/29/05	59.80	59.14	0.66	—
RW-01	4/28/05	60.08	59.06	1.02	—
RW-01	10/26/05	59.78	59.41	0.37	2.00
RW-01	12/1/05	59.91	59.50	0.41	—
RW-01	1/25/06	59.96	59.66	0.30	—
RW-01	2/15/06	59.88	59.68	0.20	—
RW-01	3/23/06	59.80	59.68	0.12	—
RW-01	5/16/06	59.95	59.82	0.13	—
RW-01	5/17/06	59.95	59.82	0.13	1.00
RW-01	6/15/06	59.96	59.89	0.07	—
RW-01	7/17/06	59.90	59.74	0.16	0.50
RW-01	8/17/06	60.01	59.98	0.03	—
RW-01	9/11/06	59.92	59.83	0.09	1.00
RW-01	11/14/06	59.70	59.66	0.04	—
RW-01	12/11/06	59.83	59.81	0.02	—
RW-01	2/26/07	59.79	59.76	0.03	0.50
RW-01	6/19/06	59.55	59.51	0.04	0.10
RW-03	1/26/05	60.50	59.16	1.34	—
RW-03	2/24/05	59.86	59.34	0.52	0.25
RW-03	2/25/05	59.75	59.54	0.21	0.10
RW-03	4/28/05	59.83	59.48	0.35	—
RW-03	4/29/05	59.89	59.77	0.12	—
RW-03	5/24/05	59.82	59.55	0.27	—
RW-03	7/27/05	59.95	59.68	0.27	—
RW-03	8/24/05	59.85	59.62	0.23	—
RW-03	10/26/05	59.96	59.72	0.24	1.25
RW-03	12/1/05	60.09	59.81	0.28	1.00
RW-03	1/25/06	60.07	59.96	0.11	—
RW-03	2/15/06	60.08	59.98	0.10	—
RW-03	3/23/06	59.99	59.96	0.03	—
RW-03	5/16/06	60.19	60.10	0.09	—
RW-03	5/17/06	60.19	60.10	0.09	0.40
RW-03	6/15/06	60.12	60.07	0.05	—
RW-03	7/17/06	60.02	60.00	0.02	0.25
RW-03	8/17/06	60.25	60.24	0.01	0.10
RW-03	3/3/08	60.10	59.35	0.75	1.50
RW-03	6/2/08	60.36	59.16	1.20	—
RW-03	9/15/08	60.73	59.10	1.63	0.50
RW-03	12/3/08	60.73	59.07	1.66	2.50
RW-03	1/29/09	61.70	58.90	2.80	2.00
RW-03	2/25/09	60.67	58.94	1.73	2.00
RW-03	6/24/09	61.52	59.10	2.42	—
RW-03	9/2/09	61.95	59.13	2.82	—
RW-03	11/16/09	62.03	59.18	2.85	1.25
RW-03	12/15/09	—	—	—	2.00
RW-03	1/14/10	62.23	59.23	3.00	1.00
RW-03	2/25/10	62.20	59.24	2.96	1.00
RW-03	3/31/10	62.24	59.30	2.94	1.50
RW-03	4/27/10	62.34	59.36	2.98	1.00
RW-03	5/27/10	62.45	59.38	3.07	1.50
RW-03	6/10/10	62.44	59.38	3.06	1.25

CONESTOGA-ROVERS & ASSOCIATES

Table 2. LNAPL Recovery Table - Apex Compressor Station, Lea County, New Mexico

Well ID	Date	DTW	Depth to LNAPL	LNAPL Thickness	LNAPL Removed
		(ft bgs)	(ft msl)	feet	gallons
RW-04	1/26/05	59.40	59.19	0.21	—
RW-04	2/24/05	60.16	59.28	0.88	0.50
RW-04	2/25/05	60.18	59.84	0.34	0.25
RW-04	4/28/05	60.53	59.34	1.19	—
RW-04	4/29/05	60.04	59.46	0.58	—
RW-04	5/24/05	60.81	59.29	1.52	—
RW-04	7/27/05	61.44	59.26	2.18	—
RW-04	8/24/05	61.52	59.12	2.40	—
RW-04	10/26/05	61.96	59.12	2.84	4.00
RW-04	12/1/05	62.11	59.22	2.89	2.00
RW-04	1/25/06	62.33	59.29	3.04	7.50
RW-04	2/15/06	61.05	59.24	1.81	—
RW-04	3/23/06	62.30	59.30	3.00	—
RW-04	5/16/06	62.55	59.39	3.16	—
RW-04	5/17/06	62.55	59.39	3.16	2.50
RW-04	6/15/06	62.75	59.54	3.21	3.50
RW-04	7/17/06	62.29	59.37	2.92	2.80
RW-04	8/17/06	62.48	59.48	3.00	3.50
RW-04	9/11/06	62.55	59.43	3.12	2.00
RW-04	11/14/06	62.31	59.29	3.02	—
RW-04	12/11/06	62.17	59.24	2.93	—
RW-04	2/26/07	61.06	59.14	1.92	2.70
RW-04	3/28/07	61.98	59.09	2.89	—
RW-04	5/24/07	62.01	60.10	1.91	2.50
RW-04	6/19/07	62.04	59.14	2.90	1.50
RW-04	7/19/07	62.16	59.06	3.10	3.00
RW-04	8/16/07	62.25	59.06	3.19	4.00
RW-04	9/17/07	62.27	59.06	3.21	2.00
RW-04	10/18/07	62.48	59.20	3.28	2.00
RW-04	11/16/07	62.27	59.16	3.11	2.50
RW-04	12/12/07	60.70	59.10	1.60	3.00
RW-04	1/10/08	62.01	59.08	2.93	3.50
RW-04	2/7/08	61.55	59.04	2.51	3.50
RW-04	3/3/08	61.75	59.19	2.56	3.00
RW-04	6/2/08	61.64	58.81	2.83	4.00
RW-04	9/15/08	61.76	58.88	2.88	1.50
RW-04	12/3/08	61.68	58.88	2.80	2.75
RW-04	1/29/09	61.70	58.90	2.80	2.50
RW-04	2/25/09	61.46	58.76	2.70	3.00
RW-04	6/24/09	61.96	58.98	2.98	—
RW-04	9/2/09	62.30	59.23	3.07	—
RW-04	11/16/09	62.30	59.23	3.07	1.25
RW-04	12/15/09	—	—	—	2.00
RW-04	1/14/10	62.40	59.29	3.11	1.75
RW-04	2/25/10	62.43	59.30	3.13	1.50
RW-04	3/31/10	62.40	59.34	3.06	1.25
RW-04	4/27/10	62.54	59.40	3.14	1.25
RW-04	5/27/10	62.60	59.42	3.18	1.25
RW-04	6/10/10	62.60	59.40	3.20	1.25

CONESTOGA-ROVERS & ASSOCIATES

Table 2. LNAPL Recovery Table - Apex Compressor Station, Lea County, New Mexico

Well ID	Date	DTW	Depth to LNAPL	LNAPL Thickness	LNAPL Removed
		(ft bgs)	(ft msl)	feet	gallons
RW-05	1/26/05	59.55	59.40	0.15	—
RW-05	2/24/05	59.90	59.59	0.31	0.25
RW-05	2/25/05	59.96	59.84	0.12	0.10
RW-05	4/28/05	59.99	59.70	0.29	—
RW-05	4/29/05	60.06	59.96	0.10	—
RW-05	5/24/05	60.01	59.77	0.24	—
RW-05	7/27/05	60.21	59.90	0.31	—
RW-05	8/24/05	60.10	59.84	0.26	—
RW-05	10/26/05	60.20	59.95	0.25	1.50
RW-05	12/1/05	60.35	60.03	0.32	1.00
RW-05	1/25/06	60.39	60.15	0.24	—
RW-05	2/15/06	60.32	60.16	0.16	—
RW-05	3/23/06	60.31	60.20	0.11	—
RW-05	5/16/06	60.38	60.32	0.06	—
RW-05	5/17/06	60.38	60.02	0.36	0.50
RW-05	6/15/06	60.46	60.39	0.07	—
RW-05	7/17/06	60.40	60.29	0.11	0.50
RW-05	8/17/06	60.50	60.48	0.02	0.10
RW-06	1/26/05	59.50	59.42	0.08	—
RW-06	2/24/05	59.77	59.60	0.17	0.10
RW-06	2/25/06	59.68	59.62	0.06	0.05
RW-06	4/28/05	59.93	59.71	0.22	—
RW-06	4/29/05	59.98	59.90	0.08	—
RW-06	5/24/05	59.95	59.77	0.18	—
RW-06	7/27/05	60.09	59.88	0.21	—
RW-06	8/24/05	59.94	59.82	0.12	—
RW-06	10/26/05	60.09	59.94	0.15	1.00
RW-06	12/1/05	60.21	60.03	0.18	1.00
RW-06	1/25/06	60.14	60.11	0.03	—
RW-06	2/15/06	60.22	60.15	0.07	—
RW-06	3/23/06	60.22	60.21	0.01	—
RW-06	5/16/06	60.37	60.28	0.09	—
RW-06	5/17/06	60.37	60.28	0.09	0.30
RW-06	6/15/06	60.42	60.39	0.03	—
RW-06	7/17/06	60.27	60.26	0.01	0.25
RW-06	8/17/06	60.46	60.41	0.05	0.10

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Table 2. LNAPL Recovery Table - Apex Compressor Station, Lea County, New Mexico

Well ID	Date	DTW (ft bgs)	Depth to LNAPL (ft msl)	LNAPL Thickness feet	LNAPL Removed gallons
RW-08	1/25/06	61.64	60.40	1.24	—
RW-08	2/15/06	60.86	60.58	0.28	—
RW-08	3/23/06	60.70	60.61	0.09	—
RW-08	5/16/06	60.82	60.80	0.02	—
RW-08	5/17/06	60.82	60.80	0.02	0.50
RW-08	6/15/06	60.91	60.84	0.07	—
RW-08	7/17/06	60.80	60.69	0.11	0.50
RW-08	8/17/06	60.90	60.85	0.05	0.20
RW-08	9/11/06	60.89	60.83	0.06	0.30
RW-08	10/16/06	60.82	60.81	0.01	—
RW-08	2/26/07	60.38	60.27	0.11	0.50
RW-08	6/19/07	60.41	60.38	0.03	0.10

Total LNAPL Recovered 132.54

Notes and Abbreviations:

LNAPL = Light non-aqueous phase liquids

ID = Identification

ft bgs = Feet below ground surface

ft msl = Feet above mean sea level

— = No LNAPL recovered

APPENDIX A

WELL SAMPLING FORMS AND FIELD NOTES



CONESTOGA-ROVERS
& ASSOCIATES

Groundwater Monitoring Field Sheet – APRIL 2010 LNAPL ABATEMENT

Well ID	Time	DTP	DTW	Depth to Bottom	Product Thickness	Amount of Product Removed	Casing Diam.	Comments
RW-3	1200	59.36	62.34	—	2.98	1.0	2	
RW-4	1205	59.40	62.54	—	3.14	1.25	2	
MW-1	1155	60.33	60.38	—	.05	TRACE	2	

Project Name: **Apex Compressor Station**

Project Number/Task: **058860-11-03**

Field Staff: JRL / JP

Date: 4-27-10



CONESTOGA-ROVERS
& ASSOCIATES

Groundwater Monitoring Field Sheet – MAY 2010 LNAPL ABATEMENT

Well ID	Time	DTP	DTW	Depth to Bottom	Product Thickness	Amount of Product Removed	Casing Diam.	Comments
RW-3	937	59.38	62.45	-	3.07	1.5 gal	2	
RW-4	941	59.42	62.60	-	3.18	1.75 gal	2	
MW-1	932	60.25	60.52	-	0.27	0.01 gal	2	

Project Name: **Apex-Compressor Station**

Project Number/Task: **058860-11-03**

Field Staff: Neil, Justin

Date: 5-27-10



CONESTOGA-ROVERS
& ASSOCIATES

Groundwater Monitoring Field Sheet

Well ID	Time	DTP	DTW	Depth to Bottom	Product Thickness	Amount of Product Removed	Casing Diam.	Comments
MW-10	1015	—	66.02	72.01	—	—	2"	
RW-11	1022	—	61.64	69.45	—	—	2"	
RW-12	1024	—	61.75	68.73	—	—	2"	
MW-C	1030	—	60.76	67.90	—	—	2"	
RW-10	1036	—	61.64	69.34	—	—	2"	
MW-9	1039	—	64.03	73.05	—	—	2"	
MW-5	1044	—	61.95	72.00	—	—	2"	
RW-9	1049	—	61.59	66.92	—	—	2"	
MW-4	1053	—	62.10	72.28	—	—	2"	
MW-B	1057	—	59.90	71.45	—	—	2"	
MW-6	1103	—	59.64	67.70	—	—	2"	
MW-2	1107	—	60.31	69.95	—	—	2"	
RW-8	1112	—	60.80	69.10	—	—	2"	

Project Name: **APEX COMPRESSOR STATION**

Project Number/Task: **058660-11-02**

Field Staff: JRL / JP

Date: 06-09-10

Groundwater Monitoring Field Sheet

Well ID	Time	DTP	DTW	Depth to Bottom	Product Thickness	Amount of Product Removed	Casing Diam.	Comments
RW-1	1119	—	59.90	68.46	—	—	2"	odor
MW-D	1124	—	60.63	71.25	—	—	2"	
RW-2	1128	—	59.90	69.70	—	—	2"	
MW-7	1130	—	63.55	72.45	—	—	2"	
RW-6	1138	—	60.35	71.00	—	—	2"	
RW-7	1141	—	60.55	70.05	—	—	2"	odor
RW-5	1143	—	60.40	69.45	—	—	2"	odor
MW-3	11:48	—	60.27	69.80	—	—	2"	odor
RW-1	1152			N/A			2"	Well has product
RW-1	1157			N/A			2"	Well has product
RW-1	1200			N/A			2"	Well has product

Project Name: **APEX COMPRESSOR STATION**

Project Number/Task: **058660-11-02**

Field Staff: JPL, JP

Date: 06-09-10



CONESTOGA-ROVERS
& ASSOCIATES

WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: MW-2
Project Number: 058660	Date: 6-10-10	Well Yield: 5gal
Site Address: APEX Hobbs New Mexico	Sampling Method: Hand Bailing	Well Diameter 2"
		Field Staff: JRL, JP
Initial Depth to Water: 60.31	Total Well Depth: 69.95	Water Column Height: 9.64
Volume/ft: .16	1 Casing Volume: 1.54	3 Casing Volumes: 4.62
Purging Device: Bailor	Did Well Dewater?: NO	Total Gallons Purged: 5gal
Start Purge Time: 1207	Stop Purge Time: 1214	Total Time: 13min

1 Casing Volume = Water column height x Volume/ft

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Volume Purged (gallons)	Temp. (°C)	pH	Cond. (uS)	Comments
1215	.25	79.0	6.80	806	
1216	.25	75.5	6.88	798	
1218	.25	73.0	6.86	801	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-2	6-10-10	1220	40ml	HCl		



CONESTOGA-ROVERS
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WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: MW-3
Project Number: 058660	Date: 6-10-10	Well Yield: 5 gal
Site Address: APEX Hobbs New Mexico	Sampling Method: Hand Bailing	Well Diameter 2"
		Field Staff: JRL, JP
Initial Depth to Water: 60.27	Total Well Depth: 69.80	Water Column Height: 9.53
Volume/ft: .16	1 Casing Volume: 1.52	3 Casing Volumes: 4.57
Purging Device: Bailer	Did Well Dewater?: NO	Total Gallons Purged: 5 gal
Start Purge Time: 1446	Stop Purge Time: 1453	Total Time: 13 min

1 Casing Volume = Water column height x Volume/ ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Volume Purged (gallons)	Temp. (°C)	pH	Cond. (uS)	Comments
1422 1454	.25	76.8	6.81	1721	1721
1430 1457	.25	74.9	6.95	1698	1698
1452 1458	.25	76.8	6.89		1696

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-3	6-10-10	1459 1458	40 ml	HCl		



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WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: MW-4
Project Number: 058660	Date: 6-10-2010	Well Yield: 5.1 gal
Site Address: <i>APEX</i> <i>Hobbs New Mexico</i>	Sampling Method: Hand Bailing	Well Diameter 2"
		Field Staff: JRL, JP
Initial Depth to Water: 62.10	Total Well Depth: 72.28	Water Column Height: 10.18
Volume/ft: .16	1 Casing Volume: 1.63	3 Casing Volumes: 4.89
Purging Device: <i>Bailer</i>	Did Well Dewater?: <i>NO</i>	Total Gallons Purged: 5.1 gal
Start Purge Time: 1117 1117	Stop Purge Time: 1126	Total Time: 14 min

1 Casing Volume = Water column height x Volume/ ft.

Well Diam	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Volume Purged (gallons)	Temp. (°C)	pH	Cond. (uS)	Comments
1126	.25	71.0	7.15	685	
1128	.25	71.2	7.11	672	
1129	.25	72.1	7.17	683	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-4	6-10-10	1131	40ml	HCl		



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WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: MW-5
Project Number: 058660	Date:	Well Yield: 5.1 gal
Site Address: APEX Hobbs New Mexico	Sampling Method: Hand Bailing	Well Diameter 2"
		Field Staff: JRL, JP
Initial Depth to Water: 61.95	Total Well Depth: 72.00	Water Column Height: 10.05
Volume/ft: .16	1 Casing Volume: 1.61	3 Casing Volumes: 4.82
Purging Device: Bailer	Did Well Dewater?: NO	Total Gallons Purged: 5.1 gal
Start Purge Time: 1415	Stop Purge Time: 1424	Total Time: 13 MIN

1 Casing Volume = Water column height x Volume/ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Volume Purged (gallons)	Temp. (°C)	pH	Cond. (uS)	Comments
1425	.25	72.8	6.96	857	
1426	.25	72.1	7.06	891	
1427	.25	70.5	7.02	921	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-5	6-9-10	1428	40ml	HCl		



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WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: MW-6
Project Number: 058660	Date: 6-10-10	Well Yield: 4.1 gal
Site Address: APEX Hobbs New Mexico	Sampling Method: Hand Bailing	Well Diameter: 2"
		Field Staff: JRL, JP
Initial Depth to Water: 59.64	Total Well Depth: 67.70	Water Column Height: 8.06
Volume/ft: 0.16	1 Casing Volume: 1.29	3 Casing Volumes: 3.87
Purging Device: Boiler	Did Well Dewater?: NO	Total Gallons Purged: 4.1 gal
Start Purge Time: 1148	Stop Purge Time: 1159	Total Time: 17

1 Casing Volume = Water column height x Volume/ ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Volume Purged (gallons)	Temp. (°C)	pH	Cond. (uS)	Comments
1200	.25	74.4	7.07	1133	
1202	.25	73.7	7.04	1140	
1204	.25	72.5	7.06	1166	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-6	6-10-10	1205	40 ml	HCl		



CONESTOGA-ROVERS
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WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: MW-7
Project Number: 058660	Date: 6-10-10	Well Yield: 4.75 gal
Site Address: APEX Hobbs New Mexico	Sampling Method: Hand Bailing	Well Diameter 2"
		Field Staff: JRL JP
Initial Depth to Water: 63.55	Total Well Depth: 72.45	Water Column Height: 8.90
Volume/ft: .16	1 Casing Volume: 1.42	3 Casing Volumes: 4.27
Purging Device: Bailor	Did Well Dewater?: NO	Total Gallons Purged: 4.75 gal
Start Purge Time: 1327	Stop Purge Time: 1335	Total Time: 17 min

1 Casing Volume = Water column height x Volume/ ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Volume Purged (gallons)	Temp. (°C)	pH	Cond. (uS)	Comments
1338	.25	72.5	7.39	1063	
1340	.25	74.1	7.28	1062	
1343	.25	74.3	7.24	1034	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-7	6-10-10	1344	40ml	HCl		



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WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: MW-9
Project Number: 058660	Date: 06-09-10	Well Yield: 5 gal
Site Address: APEX Habbs New Mexico	Sampling Method: Hand Bailing	Well Diameter 2"
		Field Staff: JRL, JP
Initial Depth to Water: 64.03	Total Well Depth: 73.05	Water Column Height: 9.02
Volume/ft: 0.16	1 Casing Volume: 1.44	3 Casing Volumes: 4.33
Purging Device: <i>Boiler</i>	Did Well Dewater?: NO	Total Gallons Purged: 5 gal
Start Purge Time: 1348	Stop Purge Time: 1356	Total Time: 17 min

1 Casing Volume = Water-column height x Volume/ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Volume Purged (gallons)	Temp. (°C)	pH	Cond. (uS)	Comments
1357	0.25	74.6	7.26	1185	
1359	0.25	73.0	7.25	1232	
1400	0.25	72.8	7.28	1198	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-9	6-9-10	1405	40ml	HCl		



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WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: MW-10
Project Number: 058660	Date: 06-09-10	Well Yield: 3.75
Site Address: APEX Hobbs New Mexico	Sampling Method: Hand Bailing	Well Diameter 2"
		Field Staff: JRL, JP
Initial Depth to Water: 66.02	Total Well Depth: 72.01	Water Column Height: 5.99
Volume/ft: .16	1 Casing Volume: 0.958	3 Casing Volumes: 2.88
Purging Device: Bailer	Did Well Dewater?: NO	Total Gallons Purged: 3.75
Start Purge Time: 1205	Stop Purge Time: 1212	Total Time: 12 min

1 Casing Volume = Water column height x Volume/ ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Volume Purged (gallons)	Temp. (°C)	pH	Cond. (uS)	Comments
1213	.25	73.2	7.65	585	
1214	.25	73.7	7.62	580	
1215	.25	72.1	7.64	583	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-10	6-9-10	1217	40ml	HCl		



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WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: MW-B
Project Number: 058660	Date: 6-10-10	Well Yield: 6gal
Site Address: APEX Hobbs New Mexico	Sampling Method: Hand Bailing	Well Diameter 2"
		Field Staff: JRL, JP
Initial Depth to Water: 59.90	Total Well Depth: 71.45	Water Column Height: 11.55
Volume/ft: .16	1 Casing Volume: 1.85	3 Casing Volumes: 5.54
Purging Device: Boiler	Did Well Dewater?: NO	Total Gallons Purged: 6 gal
Start Purge Time: 1134	Stop Purge Time: 1145	Total Time: 17

1 Casing Volume = Water column height x Volume/ ft.

<u>Well Diam.</u>	<u>Volume/ft (gallons)</u>
2"	0.16
4"	0.65
6"	1.47

Time	Volume Purged (gallons)	Temp. (°C)	pH	Cond. (uS)	Comments
1146	.25	71.7	7.06	1041	
1148	.25	71.0	7.16	1033	
1150	.25	71.0	7.12	1028	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-B	6-10-10	1151	40ml	HCl		



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WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: MW-C
Project Number: 058660	Date: 06-09-10	Well Yield: 4 gal
Site Address: <i>Apex Hobbs New Mexico</i>	Sampling Method: Hand Bailing	Well Diameter: 2"
		Field Staff: JRL, JP
Initial Depth to Water: 60.76	Total Well Depth: 67.90	Water Column Height: 7.14
Volume/ft: 0.16	1 Casing Volume: 1.14	3 Casing Volumes: 3.43
Purging Device: <i>Bailer</i>	Did Well Dewater?: NO	Total Gallons Purged: 4 gal
Start Purge Time: 1306	Stop Purge Time: 1313	Total Time: 10 min

1 Casing Volume = Water column height x Volume/ ft.

<u>Well Diam</u>	<u>Volume/ft (gallons)</u>
2"	0.16
4"	0.65
6"	1.47

Time	Volume Purged (gallons)	Temp. (°C)	pH	Cond. (uS)	Comments
1314	0.25	74.4	7.00	868	
1315	0.25	73.4	7.02	867	
1316	0.25	72.8	7.01	861	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-C	6-9-10	1320	40ml	HCl		



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WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: MW-D
Project Number: 058660	Date: 6-10-10	Well Yield: 5.75 gal
Site Address: APEX Hobbs New Mexico	Sampling Method: Hand Bailing	Well Diameter 2"
		Field Staff: JEL, JP
Initial Depth to Water: 60.63	Total Well Depth: 71.63	Water Column Height: 11.00
Volume/ft: 0.16	1 Casing Volume: 1.76	3 Casing Volumes: 5.28
Purging Device: Boiler	Did Well Dewater?: NO	Total Gallons Purged: 5.75 gal
Start Purge Time: 1252	Stop Purge Time: 1304	Total Time: 18 min

1 Casing Volume = Water column height x Volume/ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Volume Purged (gallons)	Temp. (°C)	pH	Cond. (uS)	Comments
1305	0.25	83.1	7.03	1006	
1307	0.25	75.9	7.02	983	
1308	0.25	75.0	6.99	977	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-D	6-10-10	1310	40ml	HCl		



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WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: RW-1
Project Number: 058660	Date: 6-10-10	Well Yield: 4.5 gal
Site Address: APEX Hobbs New Mexico	Sampling Method: Hand Bailing	Well Diameter 2"
		Field Staff: JRL, JP
Initial Depth to Water: 59.90	Total Well Depth: 68.46	Water Column Height: 8.56
Volume/ft: 0.16	1 Casing Volume: 1.37	3 Casing Volumes: 4.11
Purging Device: Bailor	Did Well Dewater?: NO	Total Gallons Purged: 4.5 gal
Start Purge Time: 1238	Stop Purge Time: 1245	Total Time: 14 min

1 Casing Volume = Water column height x Volume/ ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Volume Purged (gallons)	Temp. (°C)	pH	Cond. (uS)	Comments
1247	.25	74.4	7.15	1194	
1248	.25	72.1	7.13	1153	
1251	.25	72.8	7.09	1086	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
RW-1	6-10-10	1252	40ml	HCl		



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WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: RW-2
Project Number: 058660	Date: 6-10-10	Well Yield: 5gal
Site Address: APEX Hobbs New Mexico	Sampling Method: Hand Bailing	Well Diameter 2"
		Field Staff: JRL, JP
Initial Depth to Water: 59.90	Total Well Depth: 69.70	Water Column Height: 9.80
Volume/ft: .16	1 Casing Volume: 1.57	3 Casing Volumes: 4.70
Purging Device: <i>bailler</i>	Did Well Dewater?: NO	Total Gallons Purged: 5gal
Start Purge Time: 1310	Stop Purge Time: 1321	Total Time: 14 min

1 Casing Volume = Water column height x Volume/ft

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Volume Purged (gallons)	Temp. (°C)	pH	Cond. (uS)	Comments
1321	.25	76.2	7.09	1136	
1322	.25	74.1	6.99	1131	
1323	.25	72.5	7.01	1148	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
RW-2	6-10-10	1324	40ml	HCl		



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DUP

WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: RW-5
Project Number: 058660	Date: <i>6-10-10</i>	Well Yield: <i>4.75 gal</i>
Site Address: APEX <i>Hobbs New Mexico</i>	Sampling Method: Hand Bailing	Well Diameter <i>2"</i>
		Field Staff: <i>JRL, JP</i>
Initial Depth to Water: <i>60.40</i>	Total Well Depth: <i>69.45</i>	Water Column Height: <i>9.05</i>
Volume/ft: <i>.16</i>	1 Casing Volume: <i>1.45</i>	3 Casing Volumes: <i>4.35</i>
Purging Device: <i>Bailer</i>	Did Well Dewater?: <i>NO</i>	Total Gallons Purged: <i>4.25 gal</i>
Start Purge Time: <i>1420</i>	Stop Purge Time: <i>1427</i>	Total Time: <i>14 min</i>

1 Casing Volume = Water column height x Volume/ft

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Volume Purged (gallons)	Temp. (°C)	pH	Cond. (uS)	Comments
<i>1429</i>	<i>.25</i>	<i>73.4</i>	<i>6.80</i>	<i>2.00</i>	
<i>1431</i>	<i>.25</i>	<i>74.1</i>	<i>6.82</i>	<i>1931</i>	
<i>1433</i>	<i>.25</i>	<i>73.4</i>	<i>6.92</i>	<i>1995</i>	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
<i>RW-5</i>	<i>6-10-10</i>	<i>1434</i>	<i>40mL</i>	<i>HCl</i>		



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WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: RW-6
Project Number: 058660	Date: 6-10-10	Well Yield: 5.5 gal
Site Address: Apex Hobbs New Mexico	Sampling Method: Hand Bailing	Well Diameter 2"
		Field Staff: JRL, JP
Initial Depth to Water: 60.35	Total Well Depth: 71.00	Water Column Height: 10.65
Volume/ft: 0.16	1 Casing Volume: 1.70	3 Casing Volumes: 5.11
Purging Device: Bailer	Did Well Dewater?: NO	Total Gallons Purged: 5.5 gal
Start Purge Time: 1352	Stop Purge Time: 1402	Total Time: 18 min

1 Casing Volume = Water column height x Volume/ ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Volume Purged (gallons)	Temp. (°C)	pH	Cond. (uS)	Comments
1402	.25	72.8	6.87	1420	
1404	.25	73.6	6.91	1396	
1405	.25	73.7	6.91	1417	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
RW-6	6-10-10	1410	40 ml	HCl		



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WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: RW-7
Project Number: 058660	Date: 6-10-10	Well Yield: 5 gal
Site Address: APEX Hobbs New Mexico	Sampling Method: Hand Bailing	Well Diameter 2"
		Field Staff: JRL, JP
Initial Depth to Water: 60.55	Total Well Depth: 70.05	Water Column Height: 9.50
Volume/ft: 0.16	1 Casing Volume: 1.52	3 Casing Volumes: 4.56
Purging Device: Bailor	Did Well Dewater?: NO	Total Gallons Purged: 5 gal
Start Purge Time: 1408	Stop Purge Time: 1415	Total Time: 14 min

1 Casing Volume = Water column height x Volume/ft

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Volume Purged (gallons)	Temp. (°C)	pH	Cond. (uS)	Comments
1416	0.25	77.7	7.02	1348	
1419	0.25	73.7	7.00	1358	
1421	0.25	73.2	7.01	1348	
1422					

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
RW-7	6-10-10	1422	40 ml	HCl		



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WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: RW-8
Project Number: 058660	Date: 6-10-10	Well Yield: 4.1 gal
Site Address: APEX Hobbs New Mexico	Sampling Method: Hand Bailing	Well Diameter: 2" ^{5/8}
		Field Staff: JRL, JP
Initial Depth to Water: 60.80	Total Well Depth: 69.10	Water Column Height: 8.30
Volume/ft: .16	1 Casing Volume: 1.33	3 Casing Volumes: 3.98
Purging Device: Bailer	Did Well Dewater?: NO	Total Gallons Purged: 4.1 gal
Start Purge Time: 1218	Stop Purge Time: 1227	Total Time: 18

1 Casing Volume = Water column height x Volume/ ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Volume Purged (gallons)	Temp. (°C)	pH	Cond. (uS)	Comments
1231	.25	77.3	7.24	1175	
1232	.25	74.3	7.12	1264	
1235	.25	72.5	7.14	1235	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
RW-8	6-10-10	1236	40ml	HCl		



WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: RW-9
Project Number: 058660	Date: 06-09-10	Well Yield: 3.2 gal
Site Address: APEX Hobbs New Mexico	Sampling Method: Hand Bailing	Well Diameter: 2"
		Field Staff: JRL, JP
Initial Depth to Water: 61.59	Total Well Depth: 66.92	Water Column Height: 5.33
Volume/ft: 0.16	1 Casing Volume: 0.853	3 Casing Volumes: 2.56
Purging Device: Bailer	Did Well Dewater?: NO	Total Gallons Purged: 3.2 gal
Start Purge Time: 1438	Stop Purge Time: 1444	Total Time: 12 min

1 Casing Volume = Water column height x Volume/ ft.

<u>Well Diam.</u>	<u>Volume/ft (gallons)</u>
2"	0.16
4"	0.65
6"	1.47

Time	Volume Purged (gallons)	Temp. (°C)	pH	Cond. (uS)	Comments
1445	0.25	74.3	7.16	1073	
1446	0.25	73.4	7.17	1047	
1447	0.25	71.9	7.08	1117	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
RW-9	6-9-10	1450	40 mL	HCl		



WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: RW-10
Project Number: 058660	Date: 06-09-10	Well Yield: 4 gal
Site Address: APEX Hobbs New Mexico	Sampling Method: Hand Bailing	Well Diameter 2"
		Field Staff: JRL, JP
Initial Depth to Water: 61.64	Total Well Depth: 69.34	Water Column Height: 7.70
Volume/ft: .16	1 Casing Volume: 1.23	3 Casing Volumes: 3.70
Purging Device: Bailer	Did Well Dewater?: No	Total Gallons Purged: 4 gal
Start Purge Time: 1326	Stop Purge Time: 1332	Total Time: 13 min

1 Casing Volume = Water column height x Volume/ft

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Volume Purged (gallons)	Temp. (°C)	pH	Cond. (uS)	Comments
1333	.25	73.2	7.32	1044	
1335	.25	72.5	7.28	1065	
1337	.25	71.9	7.20	1139	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
RW-10	6-9-10	1339	40ml	HCl		



WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: RW-11
Project Number: 058660	Date: 06-09-10	Well Yield: 4 gal
Site Address: APEX Habbs New Mexico	Sampling Method: Hand Bailing	Well Diameter 2"
		Field Staff: JPL, JP
Initial Depth to Water: 61.64	Total Well Depth: 69.45	Water Column Height: 7.81
Volume/ft: .16	1 Casing Volume: 1.25	3 Casing Volumes: 3.75
Purging Device: Bailor	Did Well Dewater?: NO	Total Gallons Purged: 4 gal
Start Purge Time: 12 26	Stop Purge Time: 12 33	Total Time: 14 min

1 Casing Volume = Water column height x Volume/ft.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Volume Purged (gallons)	Temp. (°C)	pH	Cond. (uS)	Comments
12 34	.25	74.8	7.38	862	
12 36	.25	73.0	7.38	864	
12 37	.25	72.4	7.36	854	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
RW-11	6-9-10	12 40	40ml	HCl		



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WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: RW-12
Project Number: 058660	Date: 06-09-10	Well Yield: 4 gal
Site Address: APEX Hobbs New Mexico	Sampling Method: Hand Bailing	Well Diameter 2"
		Field Staff: JRJ, JP
Initial Depth to Water: 61.75	Total Well Depth: 68.73	Water Column Height: 6.98
Volume/ft: .16	1 Casing Volume: 1.12	3 Casing Volumes: 3.35
Purging Device: Bailer	Did Well Dewater?: NO	Total Gallons Purged: 4 gal
Start Purge Time: 1245	Stop Purge Time: 1252	Total Time: 14 min

1 Casing Volume = Water column height x Volume/ ft.

<u>Well Diam.</u>	<u>Volume/ft (gallons)</u>
2"	0.16
4"	0.65
6"	1.47

Time	Volume Purged (gallons)	Temp. (°C)	pH	Cond. (uS)	Comments
1252	.25	73.7	7.38	707	
1254	.25	73.2	7.34	711	
1256	.25	72.1	7.41	702	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
RW-12	6-9-10	1258	40ml	HCl		

40

Location APEX Camp. Date 6-10-10Project / Client 058660 DEP
GWS/03M SP/RL

0700 - PREP FOR DAY

0730 - LOADED TRUCKS

0800 - LEFT OFFICE
1709251056 ARRIVED ON SITE AND
SIGNED IN AT OFFICE1058 REVIEWED HASP FF
HEALTH AND SAFETY

ITEMS & TOPICS

TGSM - HASP, SWA,

LIFTING / RD, S, T, & F

H₂S, WEATHER, HEAT,

HAND, PINCH POINTS

TRAFFIC, HOSPITAL ROUTE

1104 - STARTED GWS EVENT

1105 - CALIBRATED EXTECH STICK

~~1105~~ STARTED PURGING1515 - ~~1515~~ Went and got buckets from
Hobbs for O₂M. Then bailed wells1535 - Dropped buckets off and dumped
product1537 - DROVE TO LINAM STATION
TO DUMP PURGE WATERLocation APEX Camp. Date 6-10-10⁴¹Project / Client 058660- DEP
GWS/03M SP/RL

O ₂ M	Well	DTW	DTP	Product Removed	Water Removed
	RW-3	62.44	59.88	1.25g	1gal
	RW-4	62.60	59.40	1.25g	1.25g
	MW-1	60.40	60.25	0.02g	0.25g

Product thickness

RW-3 - 3.0b

RW-4 - 3.20

MW-1 - 0.15

4 DRUMS FULL

1 DRUM - 25 gal

1538 - ARRIVED AT LINAM

AND SIGNED IN

DUMP PURGE WATER

SIGNED OUT 171044

1547 - LEFT FOR OFFICE

1730 ARRIVED AT OFFICE 171150

APPENDIX B

STANDARD OPERATING PROCEDURES FOR
GROUNDWATER MONITORING AND SAMPLING



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& ASSOCIATES**

STANDARD FIELD PROCEDURES FOR GROUNDWATER MONITORING AND SAMPLING

This document presents standard field methods for groundwater monitoring, purging and sampling, and well development. These procedures are designed to comply with Federal, State and local regulatory guidelines. Conestoga-Rovers & Associates' specific field procedures are summarized below.

Groundwater Monitoring

Prior to performing monitoring activities, the historical monitoring and analytical data of each monitoring well shall be reviewed to determine if any of the wells are likely to contain separate phase hydrocarbons (SPH) and to determine the order in which the wells will be monitored (i.e. cleanest to dirtiest). Groundwater monitoring should not be performed when the potential exists for surface water to enter the well (i.e. flooding during a rainstorm).

Prior to monitoring, each well shall be opened and the well cap removed to allow water levels to stabilize and equilibrate. The condition of the well box and well cap shall be observed and recommended repairs noted. Any surface water that may have entered and flooded the well box should be evacuated prior to removing the well cap. In wells with no history of SPH, the static water level and total well depth shall be measured to the nearest 0.01 foot with an electronic water level meter. Wells with the highest contaminant concentrations shall be monitored last. In wells with a history of SPH, the SPH level/thickness and static water level shall be measured to the nearest 0.01 foot using an electronic interface probe. The water level meter and/or interface probe shall be thoroughly cleaned and decontaminated at the beginning of the monitoring event and between each well. Monitoring equipment shall be washed using soapy water consisting of Liqui-nox™ or Alconox™ followed by one rinse of clean tap water and then two rinses of distilled water.

Groundwater Purging and Sampling

Prior to groundwater purging and sampling, the historical analytical data of each monitoring well shall be reviewed to determine the order in which the wells should be purged and sampled (i.e. cleanest to dirtiest). No purging or groundwater sampling shall be performed on wells with a measurable thickness of SPH or floating SPH globules. If a sheen is observed, the well should be purged and a groundwater sample collected only if no SPH is present. Wells shall be purged either by hand using a disposal or PVC bailer or by using an aboveground pump (e.g. peristaltic or Wattera™) or down-hole pump (e.g. Grundfos™ or DC Purger pump).

Groundwater wells shall be purged approximately three to ten well-casing volumes (depending on the regulatory agency requirements) or until groundwater parameters of temperature, pH, and conductivity have stabilized to within 10% for three consecutive readings. Temperature, pH, and conductivity shall be measured and recorded at the start of purging, once per well casing volume removed, and at the completion of purging. The total volume of groundwater removed shall be recorded along with any other notable physical characteristic such as color and odor. If required, field parameters such as turbidity, dissolved oxygen (DO), and oxidation-reduction potential (ORP) shall be measured prior to collection of each groundwater sample.

Groundwater samples shall be collected after the well has been purged and allowed to recharge to 80% of the pre-purging static water level, or if the well is slow to recharge, after waiting a minimum of 2 hours. Groundwater samples shall be collected using clean disposable bailers or



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pumps (if an operating remediation system exists on site and the project manager approves of its use for sampling) and shall be decanted into clean containers supplied by the analytical laboratory. New latex gloves and disposable tubing or bailers shall be used for sampling each well. If a PVC bailer or down-hole pump is used for groundwater purging, it shall be decontaminated before purging each well by using soapy water consisting of Liqui-nox™ or Alconox™ followed by one rinse of clean tap water and then two rinses of distilled water. If a submersible pump with non-dedicated discharge tubing is used for groundwater purging, both the inside and outside of pump and discharge tubing shall be decontaminated as described above.

Sample Handling

Except for samples that will be tested in the field, or that require special handling or preservation, samples shall be stored in coolers chilled to 4° C for shipment to the analytical laboratory. Samples shall be labeled, placed in protective foam sleeves or bubble wrap as needed, stored on crushed ice at or below 4° C, and submitted under chain-of-custody (COC) to the laboratory. The laboratory shall be notified of the sample shipment schedule and arrival time. Samples shall be shipped to the laboratory within a time frame to allow for extraction and analysis to be performed within the standard sample holding times.

Sample labels shall be filled out using indelible ink and must contain the site name; field identification number; the date, time, and location of sample collection; notation of the type of sample; identification of preservatives used; remarks; and the signature of the sampler. Field identification must be sufficient to allow easy cross-reference with the field datasheet.

All samples submitted to the laboratory shall be accompanied by a COC record to ensure adequate documentation. One copy of the COC shall be kept in the QA/QC file and another copy shall be retained in the project file. Information on the COC shall consist of the project name and number; project location; sample numbers; sampler/recorder's signature; date and time of collection of each sample; sample type; analyses requested; name of person receiving the sample; and date of receipt of sample.

Laboratory-supplied trip blanks shall accompany the samples and be analyzed to check for cross-contamination, if requested by the project manager.

Well Development

Wells shall be developed using a combination of groundwater surging and extraction. A surge block shall be used to swab the well and agitate the groundwater in order to dislodge any fine sediment from the sand pack. After approximately ten minutes of swabbing the well, groundwater shall be extracted from the well using a bailer, pump and/or reverse air-lifting through a pipe to remove the sediments from the well. Alternating surging and extraction shall continue until the sediment volume in the groundwater (i.e. turbidity) is negligible, which typically requires extraction of approximately ten well-casing volumes of groundwater. Preliminary well development usually is performed during well installation prior to placing the sanitary surface seal to ensure sand pack stabilization. Well development that is performed after surface seal installation, should occur 72 hours after seal installation to ensure that the cement has had adequate time to set.



**CONESTOGA-ROVERS
& ASSOCIATES**

Waste Handling and Disposal

Groundwater extracted during development and sampling shall be stored onsite in sealed U.S. DOT H17 55-gallon drums. Each drum shall be labeled with the contents, date of generation, generator identification and consultant contact. If hydrocarbon concentrations in the purged groundwater are below ADEC cleanup levels or the site is in a remote area (pending ADEC approval) groundwater will be discharged to the ground surface, at least 100 feet from the nearest surface water body.

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APPENDIX C

LABORATORY ANALYTICAL REPORT