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July 27, 2011

Mr. Leonard Lowe
Environmental Engineer
New Mexico Oil Conservation Division
1220 S. St. Francis Dr.
Santa Fe, NM 87505

**RE: 2010 1st, 2nd, 3rd, and 4th Quarter Groundwater Monitoring Reports for the
Apex Compressor Station – GW-163
Lea County, New Mexico
NE ¼ Section 36, Township 18 South, Range 36 East (NM Meridian)**

Dear Mr. Lowe:

DCP Midstream, LP (DCP) is submitting the 2010 quarterly groundwater monitoring reports for the referenced site. LNAPL removal by manual bailing has continued at MW-01, RW-03, and RW-04 on a monthly basis. Benzene concentrations have been increasing in MW-06 and MW-07, towards the south of the site. Although downgradient monitoring wells remain non-detect or below regulatory standards, DCP Midstream has determined (please refer to 2010 subsurface investigation workplan) that further delineation both to the east and south is necessary. DCP is currently securing access for the drilling of 2-3 additional investigation wells from El Paso south of the Apex Compressor Station.

On a related note, and in an effort to reduce paperwork at this site, DCP will send groundwater monitoring reports semi-annually, while continuing the quarterly groundwater monitoring schedule. Q1-Q2 2011 groundwater results will be finalized shortly and sent to your attention.

If you have any questions regarding these reports, please call me at 303-605-1893.

Sincerely,

DCP Midstream, LP


Daniel Dick
Environmental Engineer

Enclosures

cc: Larry Johnson, OCD District I, Hobbs
DCP Midstream Environmental Files



FIRST 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:

Mr. Daniel Dick

DCP Midstream, LP

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**CONESTOGA-ROVERS
& ASSOCIATES**

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& ASSOCIATES**

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**CONESTOGA-ROVERS
& ASSOCIATES**

1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA) is submitting this *First Quarter 2010 Groundwater Monitoring Report* to DCP Midstream, LP (DCP) for the Apex Compressor Station. This report summarizes the March 24 through March 31, 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 59.51 (MW-06) to 65.87 ft bgs (MW-10) on March 24, 2010. Groundwater flows to the south-southeast with a gradient of 0.0085 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 March 24, 2010. Groundwater samples were collected 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 March 26 and March 29 through March 31, 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 a duplicate sample, 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 gauging results and field parameters are summarized in Table 1.



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LNAPL Recovery

CRA manually removed LNAPL from wells MW-01, RW-03, and RW-04 on January 14, February 25, and March 31, 2010. LNAPL thickness ranged from approximately 0.05 (MW-01) to 3.13 ft (RW-04) during the first quarter 2010. LNAPL recovery is summarized in Table 2.

Purged Groundwater

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

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 the following:

- 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 ($\mu\text{g/l}$)
Benzene	10
Toluene	750
Ethylbenzene	750
Total xylenes	620



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Groundwater Sampling Results

No BTEX was detected above NMWQCC standards in wells MW-4, MW-05, MW-09, MW-10, MW-B, MW-C, and RW-09 through RW-12. The maximum benzene concentration was 5,140 micrograms per liter ($\mu\text{g/l}$) in sample RW-05. Groundwater analytical results are summarized in Table 1. The laboratory analytical report is presented as Appendix C.

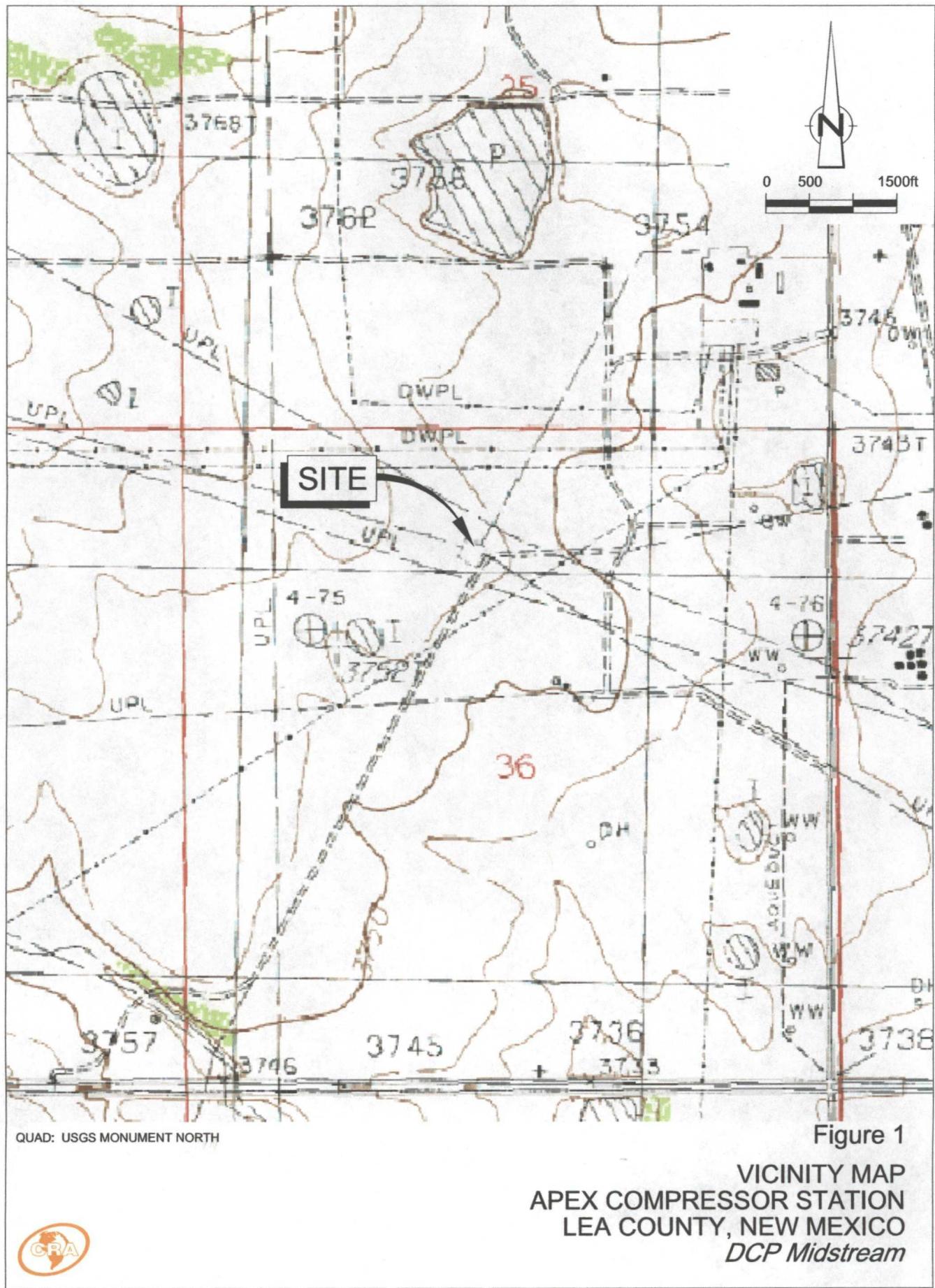
4.0 CONCLUSIONS

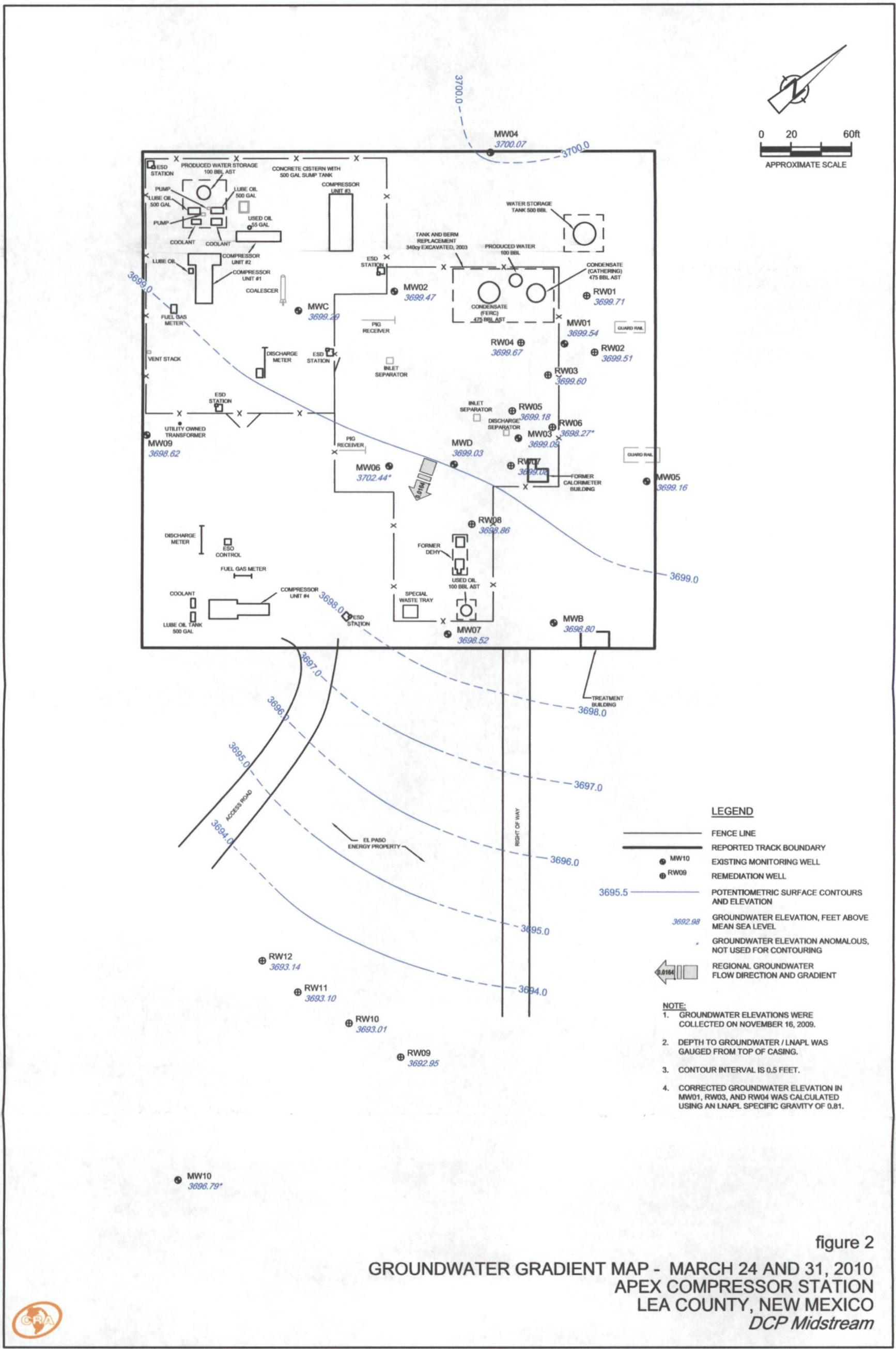
DCP will continue monthly remedial observation and maintenance and quarterly monitoring and sampling during 2010 to evaluate site groundwater conditions.

FIGURES

FIGURE 1: SITE PLAN

FIGURE 2: GROUNDWATER ELEVATION CONTOUR MAP





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)	GWB (ft msl)	pH	Conductivity µS/cm	Temperature °C	DO mg/l	ORP mV	Benzene	Toluene	Ethyl- benzene	Total Xylenes
											Concentrations in µg/l			
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	3,870	54.9	928	5,070
MW-01	6/24/2009	3759.75	59.83	0.04	3699.95									
MW-01	9/2/2009	3759.75	60.06	0.07	3699.75									
MW-01	11/16/2009	3759.75	60.17	0.16	3699.71									
MW-01	1/14/2010	3759.75	60.20	0.07	3699.61									
MW-01	2/25/2010	3759.75	60.13	0.06	3699.67									
MW-01	3/24/2010	3759.75	60.25	0.05	3699.54									
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	1.9
MW-02	9/17/2008	3759.67	59.70	--	3699.97	6.11	834	19.74	1.24	21.6	86.8	0.53	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	57
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	20
MW-02	11/16/2009	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-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	3,470
MW-03	6/24/2009	3759.33	59.73	--	3699.60	6.70	230	21.40	2.83	-81.0	5,120	827	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	828	4,730
MW-03	11/16/2009	3759.33	60.01	--	3699.32	6.78	2030	18.56	--	--	4,400	< 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

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	GWE	pH	Conductivity	Temperature	D _O	ORP	Benzene	Toluene	Ethyl-benzene	Total Xylenes
		(ft msl)	(ft bgs)	Thickness	(ft msl)	s u	μS/cm	°C	mg/l	mV	Concentrations in μg/l	Concentrations in μg/l	Concentrations in μg/l	Concentrations in μg/l
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	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	4.5
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	<6.0
MW-04	11/18/2009	3761.94	61.78	—	3700.16	7.27	685	19.78	--	--	13.4	<2.0	1.9	3.6
MW-04	3/24/2010	3761.94	61.93	—	3700.01	7.08	757	19	--	--	0.59	<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	1.01	<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-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	1.01	<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	<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	17.1	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	<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	20.5	--	--	172 a	<2.0	<2.0	<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 (ft ms)	DTW (ft bgs)	LNAPL Thickness (ft)	GWE (ft ms)	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-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-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

NMOCDA 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	Benzene	Toluene	Ethyl- benzene	Total Xylenes
											Concentrations in μg/l			
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
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
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
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
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	10.1	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
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
MW-B	11/18/2009	3758.52	59.61	--	3698.91	7.28	1095	16.67	--	--	5.4	3.3	2.2	4.9
MW-B	3/24/2010	3758.52	59.72	--	3698.80	7.14	1105	19.28	--	--	4.9	48.4	8.9	45.7
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
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
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
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
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
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
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
MW-C	11/18/2009	3759.93	60.56	--	3699.37	7.22	1000	18.89	--	--	<2.0	<2.0	<2.0	<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
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
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
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
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
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
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
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
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
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
MW-D	11/18/2009	3759.53	60.41	--	3699.12	7.09	1223	18.78	--	--	1,070	30.4	303	1,330
MW-D	3/24/2010	3759.53	60.50	--	3699.03	7.04	1306	20.06	--	--	1,260	38.9	292	1920

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	Benzene	Toluene	Ethyl- benzene	Total Xylenes
											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	19.1	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	255.00	947
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	1,080
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-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		

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 msf)	(ft bgs)	(ft)	(ft msf)	s.u.	µS/cm	°C	mg/l	mV	Concentrations in µg/l			
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-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	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-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	10,800	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	355	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-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	111	334	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

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	DTW	LNAPL	GWE	pH	Conductivity	Temperature	DO	ORP	Benzene	Toluene	Ethylbenzene	Total Xylenes
		(ft msl)	(ft bgs)	Thickness (ft)	(ft msl)	s.u.	µS/cm	°C	mg/l	mV				Concentrations in µg/l
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
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
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
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
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
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
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
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
RW-08	3/24/2010	3759.51	60.65	-	3698.86	7.26	1525	20.56	-	-	4,250	< 50	714	3,650
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
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
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
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
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
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
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
RW-09	11/18/2009	3754.40	61.42	-	3692.98	7.09	1270	16.28	-	-	< 2.0	< 2.0	< 2.0	< 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
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
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
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
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
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
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
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
RW-10	11/18/2009	3754.53	61.45	-	3693.08	7.46	1343	17.28	-	-	< 2.0	< 2.0	< 2.0	< 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
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 $\mu\text{S}/\text{cm}$	Temperature °C	DO mg/l	ORP mV	Benzene	Toluene	Ethyl- benzene	Total Xylenes
											Concentrations in $\mu\text{g}/\text{l}$			
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-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

NMOCOD Cleanup Levels

10 750 750 620

Notes and Abbreviations:

- ID = Identification
- TOC = Top of casting
- DTW = Depth to water
- LNAPL = Light non-aqueous phase liquids
- GWE = 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 8021 or 8260B
- ft msl = Feet above mean sea level
- ft bgs = Feet below ground surface
- ft = Feet
- s.u. = Standard unit
- $\mu\text{S}/\text{cm}$ = Microsiemens per centimeter
- °C = Degrees Celsius
- mg/l = Milligrams per liter
- mV = Millivolts
- $\mu\text{g}/\text{l}$ = micrograms per liter
- = Not measured/not analyzed
- <x = Not detected above x $\mu\text{g}/\text{l}$
- d = Duplicate sample
- s = Result from the second run
- J = An estimated value
- NMOCOD = New Mexico Oil Conservation Division

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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	1/26/2005	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-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 (ft bgs)	Depth to LNAPL (ft msl)	LNAPL Thickness feet	LNAPL Removed 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

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
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

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
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

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
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 125.00

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



Groundwater Monitoring Field Sheet

Well ID	Time Central Time	DTP	DTW	Depth to Bottom	Product Thickness	Amount of Product Removed	Casing Diam.	Comments
MW-10	1305	—	65.87	71.83	—	—	2"	needs vault / upright
RW-11	1312	—	61.51	69.37	—	—	2"	
RW-12	1315	—	61.62	68.63	—	—	2"	
MW-C	1322	—	60.64	67.78	—	—	2"	
RW-10	1329	—	61.52	69.27	—	—	2"	
RW-9	1332	—	61.45	66.80	—	—	2"	
MW-5	1338	—	61.81	71.75	—	—	2"	needs vault / upright
MW-9	1342	—	63.92	72.95	—	—	2"	needs vault / upright
MW-4	1347	—	61.93	71.98	—	—	2"	needs vault / upright
MW-B	1356	—	59.72	71.05	—	—	2"	
MW-6	1403	—	59.51	67.54	—	—	2"	
MW-2	1410	—	60.20	69.66	—	—	2"	
RW-8	1417	—	60.65	69.02	—	—	2"	

Project Name: APEX COMPRESSOR STATION

Project Number/Task: 058660-11-02

Field Staff: Joe Lewandowski / Joe Mireles

Date: 03-24-10



Groundwater Monitoring Field Sheet

Well ID	Time	DTP	DTW	Depth to Bottom	Product Thickness	Amount of Product Removed	Casing Diam.	Comments
RW-1	1423	—	59.78	68.19	—	—	2"	
MW-D	1429	—	60.50	71.11	—	—	2"	
RW-2	1435	—	59.78	69.43	—	—	2"	
MW-7	1438	—	63.46	72.23	—	—	2"	needs vault / upright
RW-6	1452	—	60.17	70.76	—	—	2"	
RW-7	1456	—	60.45	69.92	—	—	2"	
RW-5	1458	—	60.35	69.24	—	—	2"	
MW-3	1500	—	60.24	69.51	—	—	2"	
RW-6	1505	59.30 60.23	62.25 62.25	62.25 62.25	— 2.94	—	2"	Well has product
RW-7	1508	59.34	62.40	3.06	—	—	2"	Well has product
RW-8	1511	60.20	60.25	—	.05	—	2"	Well has product

Project Name: APEX COMPRESSOR STATION

Project Number/Task: 058660-11-02

Field Staff: Joe Lewandowski / Joe Mireles

Date: 03-24-10



WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: MW-1
Project Number: 058660	Date:	Well Yield:
Site Address:	Sampling Method: Hand Bailing	Well Diameter
		Field Staff:
Initial Depth to Water:	Total Well Depth:	Water Column Height:
Volume/ft:	1 Casing Volume:	3 Casing Volumes:
Purging Device:	Did Well Dewater?:	Total Gallons Purged:
Start Purge Time:	Stop Purge Time:	Total Time:

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. 200 °F	pH	Cond. (uS)	Comments

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method



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& ASSOCIATES

WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: MW-2
Project Number: 058660	Date: 3-30-10	Well Yield: 5.5
Site Address:	Sampling Method: Hand Bailing	Well Diameter 2"
		Field Staff: JL, JM
Initial Depth to Water: 60.20	Total Well Depth: 69.66	Water Column Height: 9.46
Volume/ft: .16	1 Casing Volume: 1.51	3 Casing Volumes: 4.54
Purging Device: Bailer	Did Well Dewater?: NO	Total Gallons Purged: 3.5
Start Purge Time: 1242	Stop Purge Time: 1300	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. (°F)	pH	Cond. (uS)	Comments
12:50	.25	70.8	6.96	824	well is missing a
12:53	.25	69.4	7.04	815	bolt ear, and a
12:55	.25	66.9	7.01	862	corner of the pad

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-2	3-30-10	1300	40ml vial	HCl	VOC's	8260B



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WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: MW-3 = DVP 33110
Project Number: 058660	Date: 3-31-10	Well Yield: 5.5
Site Address:	Sampling Method: Hand Bailing	Well Diameter 2"
		Field Staff: JL, JM
Initial Depth to Water: 60.24	Total Well Depth: 69.51	Water Column Height: 9.27
Volume/ft: .16	1 Casing Volume: 1.48	3 Casing Volumes: 4.45
Purging Device: Bailer	Did Well Dewater?:	Total Gallons Purged: 5.5
Start Purge Time: 1136	Stop Purge Time: 1155	Total Time: 19 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. 68°F	pH	Cond. mS	Comments
1145	.25	68.0	7.03	2.32	
1147	.25	68.0	7.01	2.34	
1149	.25	68.1	7.08	2.31	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-3	3/31/10	1155	40ml VOA	HCl	VOC's	B260B



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WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: MW-4
Project Number: 058660	Date: 03-30-10	Well Yield: 5.75
Site Address:	Sampling Method: Hand Bailing	Well Diameter 2"
		Field Staff: J.M. J.L.
Initial Depth to Water: 61.93	Total Well Depth: 71.96	Water Column Height: 10.05
Volume/ft: 0.16	1 Casing Volume: 1.61	3 Casing Volumes: 4.82
Purging Device: Bailer	Did Well Dewater?: NO	Total Gallons Purged: 5.75
Start Purge Time: 1113	Stop Purge Time: 1125	Total Time: 12

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. (°F)	pH	Cond. (uS)	Comments
1119	0.25	70.3	7.06	779	
1121	0.25	69.5	7.10	754	
1123	0.25	66.2	7.08	757	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-4	3-30-10	1125	VOA	HCl	VOCs	GC/MS 8260B SCV 846



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WELL SAMPLING FORM

Project Name: Apex Compressor		CRA Mgr: John Riggi	Well ID: MW-5
Project Number: 058660		Date: 03-29-10	Well Yield: 5.75
Site Address:		Sampling Method: Hand Bailing	Well Diameter 2"
			Field Staff: JL, JM
Initial Depth to Water: 61.81		Total Well Depth: 71.75	Water Column Height: 9.94
Volume/ft: 14		1 Casing Volume: 1.59	3 Casing Volumes: 4.77
Purging Device: Bailer		Did Well Dewater?: NO	Total Gallons Purged: 5,75
Start Purge Time: 1418		Stop Purge Time: 1440	Total Time: 22

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. (°F)	pH	Cond. (uS)	Comments
1428	0.25	72.3	7.17	1084	
1431	0.25	69.8	7.12	1079	
1434	0.25	69.0	7.18	1014	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-5	3-29-10	1440	VFA	HCl	VOC's	8260B SW846



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WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: MW-6
Project Number: 058660	Date: 03-30-10	Well Yield: 4.75
Site Address:	Sampling Method: Hand Bailing	Well Diameter 2"
		Field Staff: JL, JM
Initial Depth to Water: 59.51	Total Well Depth: 67.54	Water Column Height: 8.03
Volume/ft: .16	1 Casing Volume: 1.28	3 Casing Volumes: 3.85
Purging Device: Bailer	Did Well Dewater?: no	Total Gallons Purged: 4.75
Start Purge Time: 1206	Stop Purge Time: 1225	Total Time: 19

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) °F	pH	Cond. (uS)	Comments
1217	0.25	75.0	7.09	1310	
1220	0.25	68.5	7.06	1300	
1222	0.25	68.9	7.11	1331	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-6	3-30-10	1225	VQA	HCl	VOCs	8260B SL 840



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: 3-30-10	Well Yield: 5,25
Site Address:	Sampling Method: Hand Bailing	Well Diameter 2"
		Field Staff: JL, JN
Initial Depth to Water: 63.46	Total Well Depth: 72.23	Water Column Height: 8.77
Volume/ft: .16	1 Casing Volume: 1.40	3 Casing Volumes: 4.21
Purging Device: Bailer	Did Well Dewater?: NO	Total Gallons Purged: 5,25
Start Purge Time: 1507	Stop Purge Time: 1525	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) °F	pH	Cond. (µS)	Comments
1517	0.25	69.8	7.30	1462	
1519	0.25	69.0	7.32	1459	
1521	0.25	68.5	7.33	1465	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-7	3-30-10	1525	VOA	HCl	VOCs	8260B SW846



WELL SAMPLING FORM

Project Name: Apex Compressor		CRA Mgr: John Riggi	Well ID: MW-9
Project Number: 058660		Date: 03-29-10	Well Yield: 5.25
Site Address:		Sampling Method: Hand Bailing	Well Diameter 2"
			Field Staff: JL, JM
Initial Depth to Water: 63.92		Total Well Depth: 72.95	Water Column Height: 9.03
Volume/ft: .16		1 Casing Volume: 1.44	3 Casing Volumes: 4.33
Purging Device: Bailer		Did Well Dewater?: NO	Total Gallons Purged: 5.25
Start Purge Time: 1340		Stop Purge Time: 1400	Total Time: 20

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. (°F)	pH	Cond. (uS)	Comments
1350	.25	70.3	7.28	1348	
1353	.25	68.1	7.33	1323	
1355	.25	67.2	7.36	1241	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-9	3-29-10	1400	40ml VOA	HCl	VOC's	B260B



WELL SAMPLING FORM

Project Name: Apex Compressor		CRA Mgr: John Riggi	Well ID: MW-10
Project Number: 058660		Date: 03-26-10	Well Yield: 4
Site Address:		Sampling Method: Hand Bailing	Well Diameter 2"
			Field Staff: JL, JM
Initial Depth to Water: 65.87		Total Well Depth: 71.83	Water Column Height: 5.96
Volume/ft: .16		1 Casing Volume: .95	3 Casing Volumes: 2.86
Purging Device: Bailer		Did Well Dewater?: NO	Total Gallons Purged: 4
Start Purge Time: 1200		Stop Purge Time: 1215	Total Time: 15 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. (°F)	pH	Cond. (uS)	Comments
1206	0.25	68.3	7.61	643	
1208	0.25	66.3	7.60	648	
1211	0.25	65.8	7.61	629	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-10	3-26-10	1215	VDA	HCl	Voc's	8260B SW 846



WELL SAMPLING FORM

Project Name: Apex Compressor		CRA Mgr: John Riggi	Well ID: MW-B
Project Number: 058660		Date: 03-30-10	Well Yield: 6.5
Site Address:		Sampling Method: Hand Bailing	Well Diameter 2"
			Field Staff: JL, JM
Initial Depth to Water: 59.72		Total Well Depth: 71.05	Water Column Height: 11.33
Volume/ft: 0.16		1 Casing Volume: 1.81	3 Casing Volumes: 5.43
Purging Device: Bailing		Did Well Dewater?: NO	Total Gallons Purged: 6.5
Start Purge Time: 1140		Stop Purge Time: 1155	Total Time: 15

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. (°F)	pH	Cond. (uS)	Comments
1145	.25	70.0	6.94	1190	
1148	.25	68.0	7.12	1120	
1150	.25	66.7	7.14	1105	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-B	3-30-10	1155	V0 A	HCl	VOCs	8260B SW 846



WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: MW-C
Project Number: 058660	Date: 03-29-10	Well Yield: 4.75
Site Address:	Sampling Method: Hand Bailing	Well Diameter 2"
		Field Staff: JL, JM
Initial Depth to Water: 60.64	Total Well Depth: 67.78	Water Column Height: 7.17
Volume/ft: .16	1 Casing Volume: 1.14	3 Casing Volumes: 3.42
Purging Device: Bailer	Did Well Dewater?: No	Total Gallons Purged: 4.75
Start Purge Time: 12:40	Stop Purge Time: 13:00	Total Time: 20 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
12:48	.25	69.4	7.09	1131	
12:50	.25	67.8	7.19	953	
12:53	.25	67.1	7.20	970	
12:55	.25	67.2	7.11	1019	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-C	3-29-10	13:00	40mL VOA	HCl	VOC's	8260B



WELL SAMPLING FORM

Project Name: Apex Compressor		CRA Mgr: John Riggi	Well ID: MW-D
Project Number: 058660		Date: 3-30-10	Well Yield: 6,00
Site Address:		Sampling Method: Hand Bailing	Well Diameter 2"
			Field Staff: JL JM
Initial Depth to Water: 60.50		Total Well Depth: 71.11	Water Column Height: 10.61
Volume/ft: 0.16		1 Casing Volume: 1.70	3 Casing Volumes: 5.10
Purging Device: Bailer		Did Well Dewater?: NO	Total Gallons Purged: 6,00
Start Purge Time: 1407		Stop Purge Time: 1425	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) °F	pH	Cond. (uS)	Comments
1416	0.25	71.7	7.09	1312	
1418	0.25	69.2	7.04	1305	
1421	0.25	68.1	7.04	1306	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-D	3-30-10	1425	VOA	H2O	Vocs	8260B SW 8464



WELL SAMPLING FORM

Project Name: Apex Compressor		CRA Mgr: John Riggi	Well ID: RW-1
Project Number: 058660		Date: 3-30-10	Well Yield: 5
Site Address:		Sampling Method: Hand Bailing	Well Diameter 2"
			Field Staff: JL, JM
Initial Depth to Water: 59.78		Total Well Depth: 68.19	Water Column Height: 8.41
Volume/ft: .16		1 Casing Volume: 1.35	3 Casing Volumes: 4.04
Purging Device: Bailer		Did Well Dewater?: NO	Total Gallons Purged: 5
Start Purge Time: 13:37		Stop Purge Time: 1355	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 Central Time	Volume Purged (gallons)	Temp. °F	pH	Cond. (uS)	Comments
1345	.25	70.8	7.01	1802	
1349	.25	69.6	7.10	1846	
1352	.25	67.2	7.12	1830	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
RW-1	3-30-10	1355	40ml VOA	HCl	VOC's	8200B



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& ASSOCIATES

WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: RW-2
Project Number: 058660	Date: 3-30-10	Well Yield: 5.75
Site Address:	Sampling Method: Hand Bailing	Well Diameter 2"
		Field Staff: JL, JM
Initial Depth to Water: 59.78	Total Well Depth: 69.43	Water Column Height: 9.65
Volume/ft: .16	1 Casing Volume: 1.54	3 Casing Volumes: 4.63
Purging Device: Bailer	Did Well Dewater?: No	Total Gallons Purged: 5.75
Start Purge Time: 1441	Stop Purge Time: 1500	Total Time: 5:05 19m 49s

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. (°F)	pH	Cond. (uS)	Comments
1449	.25	72.1	6.94	1501	
1453	.25	69.8	7.05	1508	
1456	.25	68.7	7.02	1425	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
RW-2	3-30-10	1500	40ML VOA	HCl	VOC's	8260B



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WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: RW-3
Project Number: 058660	Date:	Well Yield:
Site Address:	Sampling Method: Hand Bailing	Well Diameter
		Field Staff:
Initial Depth to Water:	Total Well Depth:	Water Column Height:
Volume/ft:	1 Casing Volume:	3 Casing Volumes:
Purging Device:	Did Well Dewater?:	Total Gallons Purged:
Start Purge Time:	Stop Purge Time:	Total Time:

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

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method



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WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: RW-4
Project Number: 058660	Date:	Well Yield:
Site Address:	Sampling Method: Hand Bailing	Well Diameter
		Field Staff:
Initial Depth to Water:	Total Well Depth:	Water Column Height:
Volume/ft:	1 Casing Volume:	3 Casing Volumes:
Purging Device:	Did Well Dewater?:	Total Gallons Purged:
Start Purge Time:	Stop Purge Time:	Total Time:

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. (μ S)	Comments

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method

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WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: RW-5
Project Number: 058660	Date: 3-31-10	Well Yield: 5.25
Site Address:	Sampling Method: Hand Bailing	Well Diameter 2"
		Field Staff: JM JL
Initial Depth to Water: 60.35	Total Well Depth: 69.24	Water Column Height: 8.89
Volume/ft: 0.16	1 Casing Volume: 1.42	3 Casing Volumes: 4.27
Purging Device: Bailer	Did Well Dewater?: NO	Total Gallons Purged: 5.25
Start Purge Time: 1108	Stop Purge Time: 1130	Total Time: 22

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. °F	pH	Cond. (μS) mS	Comments
1118	25	70.3	6.91	2.78	
1121	25	68.1	6.96	2.77	
1123	25	66.7	6.95	2.78	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
RW-5	3/31/10	1130	40ml VOA	HCl	VOC's	8260B



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WELL SAMPLING FORM

Project Name: Apex Compressor		CRA Mgr: John Riggi	Well ID: RW-6
Project Number: 058660		Date: 3-30-10	Well Yield: 6
Site Address:		Sampling Method: Hand Bailing	Well Diameter 2"
			Field Staff: JL, JM
Initial Depth to Water: 60.17	Total Well Depth: 70.76	Water Column Height: 10.59	
Volume/ft: .16	1 Casing Volume: 1.69	3 Casing Volumes: 5.08	
Purging Device: bailed	Did Well Dewater?: ND	Total Gallons Purged: 6.	
Start Purge Time: 1535	Stop Purge Time: 1555	Total Time: 20	

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. °F	pH	Cond. mS	Comments
1543	.25	71.4	6.98	2.12	
1546	.25	70.1	7.03	2.14	
1548	.25	70.8	7.01	2.15	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
RW-4	3-30-10	1555	40 mL VOA	HCl	VOC's	82leOB



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WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: RW-7
Project Number: 058660	Date: 3/31/10	Well Yield: 5.5
Site Address:	Sampling Method: Hand Bailing	Well Diameter 2"
		Field Staff: JL, JM
Initial Depth to Water: 60.45	Total Well Depth: 69.92	Water Column Height: 9.47
Volume/ft: .16	1 Casing Volume: 1.52	3 Casing Volumes: 4.55
Purging Device: Bruler	Did Well Dewater?: NO	Total Gallons Purged: 5.5
Start Purge Time: 1040	Stop Purge Time: 1100	Total Time: 20 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. °F	pH	Cond. (uS)	Comments
1048	.25	72.3	7.17	1938	
1051	.25	70.1	7.14	1904	
1054	.25	69.4		1798	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
RW-7	3/31/10	1100	40mL VOA	HCl	VOC's	8260 P



WELL SAMPLING FORM

Project Name: Apex Compressor		CRA Mgr: John Riggi	Well ID: RW-8
Project Number: 058660		Date: 3-30-10	Well Yield: 5.0
Site Address:		Sampling Method: Hand Bailing	Well Diameter 2"
			Field Staff: JL, JM
Initial Depth to Water: 60.65		Total Well Depth: 69.02	Water Column Height: 8.37
Volume/ft: 0.16		1 Casing Volume: 1.34	3 Casing Volumes: 4.02
Purging Device: Bailer		Did Well Dewater?: NO	Total Gallons Purged: 5.0
Start Purge Time: 1305		Stop Purge Time: 1325	Total Time: 20

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) °F	pH	Cond. (uS)	Comments
1315	0.25	70.7	7.24	1555	
1320	0.25	70.0	7.22	1502	
1323	0.25	69.0	7.24	1525	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
RW-8	3-30-10	1325	VDA	HCl	VOCs	8260B SW846



WELL SAMPLING FORM

Project Name: Apex Compressor		CRA Mgr: John Riggi	Well ID: RW-9
Project Number: 058660		Date: 3-29-10	Well Yield: 3.75
Site Address:		Sampling Method: Hand Bailing	Well Diameter 2"
			Field Staff: J.L. J.M.
Initial Depth to Water: 61.45	Total Well Depth: 66.80	Water Column Height: 5.35	
Volume/ft: 16	1 Casing Volume: 0.86	3 Casing Volumes: 2.57	
Purging Device: Bailer	Did Well Dewater?: NO	Total Gallons Purged: 3.75	
Start Purge Time: 1451	Stop Purge Time: 1510	Total Time: 00:19 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. (°F)	pH	Cond. (uS)	Comments
1500	25	72.8	7.15	1280	
1502	25	70.5	7.14	1271	
1505		70.8	7.16	1280	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
RW-9	3-29-10	1510	40 mL VDF	HCl	VOC's	8260B



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WELL SAMPLING FORM

Project Name: Apex Compressor		CRA Mgr: John Riggi	Well ID: RW-10
Project Number: 058660		Date: 3-29-10	Well Yield: 4.75
Site Address:		Sampling Method: Hand Bailing	Well Diameter 2"
			Field Staff: J.L., J.M.
Initial Depth to Water: 61.57		Total Well Depth: 69.27	Water Column Height: 7.75
Volume/ft: 0.16		1 Casing Volume: 1.24	3 Casing Volumes: 3.72
Purging Device: Bailing		Did Well Dewater?: NO	Total Gallons Purged: 4.75
Start Purge Time: 1310		Stop Purge Time: 1330	Total Time: 20

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. (°F)	pH	Cond. (uS)	Comments
1319	0.25	71.2	7.33	1251	
1323	0.25	68.9	7.22	1299	
1326	0.25	67.4	7.33	1276	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
RW-10	3-29-10	1330	VDA	HCl	VOC's	8260B SW846



WELL SAMPLING FORM

Project Name: Apex Compressor	CRA Mgr: John Riggi	Well ID: RW-11
Project Number: 058660	Date: 03-26-10	Well Yield: 4.75
Site Address:	Sampling Method: Hand Bailing	Well Diameter 2"
		Field Staff: JL, JM
Initial Depth to Water: 61.51	Total Well Depth: 69.37	Water Column Height: 7.86
Volume/ft: .16	1 Casing Volume: 1.26	3 Casing Volumes: 3.77
Purging Device: Bailer	Did Well Dewater?: NO	Total Gallons Purged: 4.75
Start Purge Time: 1220	Stop Purge Time: 1245	Total Time: 25

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. 68°F	pH	Cond. (uS)	Comments
1233	.25	68.9	7.29	1051	
1236	.25	68.3	7.34	1032	
1239	.25	68.1	7.34	1024	

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
RW-11	3-26-10	1245	VIC	HCl	VOCs	8260B SLV84 G



WELL SAMPLING FORM

Project Name: Apex Compressor		CRA Mgr: John Riggi	Well ID: RW-12
Project Number: 058660		Date: 3-26-10	Well Yield: 4.25
Site Address:		Sampling Method: Hand Bailing	Well Diameter 2"
			Field Staff: J.M. JL.
Initial Depth to Water: 61.62		Total Well Depth: 68.63	Water Column Height: 7.01
Volume/ft: 0.16		1 Casing Volume: 1.12	3 Casing Volumes: 3.37
Purging Device: Bailer		Did Well Dewater?: NO	Total Gallons Purged: 4.25
Start Purge Time: 1310		Stop Purge Time: 1330	Total Time: 20

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. (°F)	pH	Cond. (uS)	Comments
1320	0.25	70.7	7.40	812	
1323	0.25	66.7	7.33	795	
1328	0.25	65.8	7.39	820	

near miss @ 1324 gusts blows J.M. hard hat off J.L's head.

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
RW-12	3-26-10	1330	V04	HCl	VOCs	8260B SW346

12

Location AP-E-X - Hobbs, NM Date 1-14-10

Project / Client 058660 10CP

04M well prep JP JM

0815 - checked vehicle, performed truck check and filled out truck logs.
121535

0830 head site

1020 arrive site 121638
white drilling already at site.
Justin Primera starts site training
while crew already done.

1950 TAG M with Joe Blackwell
Harold & Wayland

HASP Review / ~~SSA~~ SSA /
LIFTING/WALKING/SWA/Pinch
POINTS/H2S/TRAFFIC

1102 - WHITE DRILLING STARTED
WORKING ON MW-6
FILL PERSONAL FILE WORKING
ALL REQUIRED PRE.

13

Location _____ Date _____

Project / Client _____

1110 - OTHER WORK BEING
PERFORMED AROUND WORK
AREA. ENSURED ALL
WORKERS WERE ~~AWARDED~~
ON EACH OTHER.

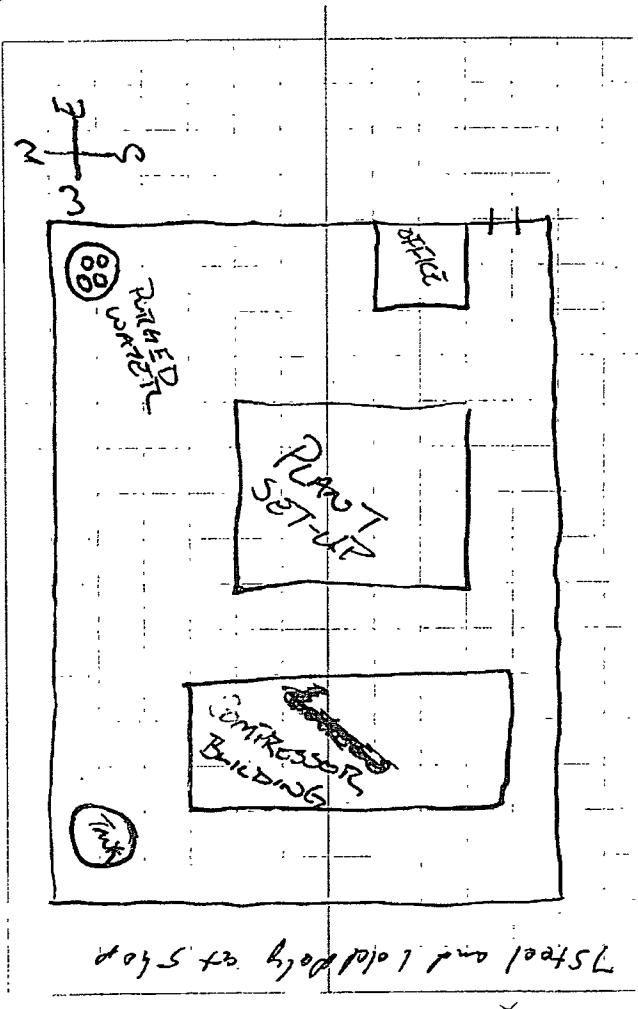
1119 - SWA
STOPPED WORKS TO
REMOVE SOME DANGEROUS
WIRE FROM AICORN,
WORK VALUE INSTALLATION

1121 - RESTARTED WORK

PAD IS 3X3
8 BAGS OF QUARTZITE

1136 - FINISH WITH MW-6
WELL PAD REPAIR
GPS cord. MW-6

N 32°42 min 30.8 sec W 103°19 m. 21.8 sec



- 11143 - SOUTHDOWN INDUSTRIAL CENTER
5175 27 1193.57270
- 6 DTP DTW TRICL BAALEO BAALEO
MWI 60.13 60.20 0.07 0.01 gal
1 TRW3 59.23 60.23 3.00 1 gal
2 TRW4 59.29 60.40 3.11 1.75 gal
3 1280 - L-1015 HEDY ISLAND WILSON
+ 1282 - STARTED DEMOS. AND
DECOR. TRAVELER'S PROJECT
TO DUNNS HORSES PLACE
1281 - EMPLOY B-C-L-S IN SHORESBY
as ea 4 poly dr-m's J/12-22683
MWU - VINTAGE NEEDS 60L+S
1245 Head PCA J-NCT:01 12/16/89

Project / Client _____
Location _____ Date 1-14-10

Project / Client _____
Location _____ Date 1-14-10



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Groundwater Monitoring Field Sheet

Well ID	Time	DTP	DTW	Depth to Bottom	Product Thickness	Amount of Product Removed	Casing Diam.	Comments
Nw-1	1117	60.13	60.19		0.06	0.01 gal	4	Bailed 2.5 gallons of Water
RW-3	1117	59.24	62.20		2.96	1 gal	4	Bailed .5 gal of Water
RW-4	1117	59.30	62.43		3.13	1.5 gal	4	Bailed .5 gal of water

Project Name: Aper Compressor station DTH

Project Number/Task: 058660 - 11 - 03 - 2010

Field Staff: Tee Minelos

Date: 2-25-2010



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Groundwater Monitoring Field Sheet

Well ID	Time	DTP	DTW	Depth to Bottom	Product Thickness	Amount of Product Removed	Casing Diam.	Comments
RW-3	1200	59.30	62.24	—		1.50	2"	
RW-4	1200	59.34	62.40	—		1.25	2"	
MW-1	1215	60.20	60.25	—		0.01	2"	

Project Name: Apex Compressor Station

Field Staff: J.M. J.L.

Project Number/Task: 058860-11-03

Date: 3-31-10

APPENDIX B

STANDARD OPERATING PROCEDURES FOR GROUNWATER MONITORING AND SAMPLING



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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-noxTM or AlconoxTM 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 WatteraTM) or down-hole pump (e.g. GrundfosTM 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.



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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