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January 13, 2012

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

**RE: Second 2011 Semi Annual Groundwater Monitoring Report
DCP Monument Booster Station (1RP-156-0)
Unit B Section 33, Township 19 South, Range 37 East**

Dear Mr. Lowe:

DCP Midstream, LP (DCP) is pleased to submit for your review one copy of the Second 2011 Semi Annual Groundwater Monitoring Report for the DCP Monument Booster Station located in Lea County, New Mexico (Unit B Section 33, Township 19 South, Range 37 East).

Groundwater monitoring activities were completed on September 15, 2011. The data indicate that the groundwater conditions remain stable. The next semi-annual monitoring event is scheduled for the first half of 2012.

If you have any questions regarding the report, please call at 303-605-1695 or e-mail me CECole@dcpmidstream.com.

Sincerely,

DCP Midstream, LP

A handwritten signature in cursive script that reads "Chandler E. Cole".

Chandler E Cole.
Senior Environmental Specialist

Enclosure

cc: Larry Johnson – OCD District Office, Hobbs
Environmental Files

Second Half 2011 Semi-Annual Groundwater Monitoring Summary Report

**Monument Booster Station
Lea County, New Mexico
1RP-156-0**

Prepared for:



370 17th St., Suite 2500
Denver, CO 80202

Prepared by:



Tasman Geosciences

5690 Webster, Ave
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November 22, 2011

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1. Introduction

Tasman Geosciences, LLC (Tasman) is submitting to DCP Midstream (DCP) the results of the second half 2011 semi-annual groundwater monitoring activities conducted September 15, 2011 at the Monument Booster Station (Site) in Lea County, New Mexico (Figure 1). The purpose of the field activities described herein were to: a) determine the presence of light non-aqueous phase liquid (LNAPL) hydrocarbons; b) measure groundwater levels; c) obtain groundwater samples for chemical analysis; and d) subsequently evaluate and present groundwater flow and quality conditions. Previous groundwater monitoring activities were performed by American Environmental Consulting LLC (AEC) after which project responsibilities were transferred to Tasman Geosciences, LLC (Tasman). The field data and laboratory analytical results were used to develop groundwater elevation maps, an analytical results map, and LNAPL versus time and groundwater elevation graphs to evaluate current conditions at the Site.

2. Site Location and Background

The Site is located in New Mexico Oil Conservation Division (OCD) designated Unit B, Section 33, Township 19 South, Range 37 East (Figure 1). The facility coordinates are 32.6240 degrees north and 103.2555 degrees west. This facility is active and continues to be used for gas compression as well as other activities. DCP also owns the property to the south and east that is contiguous to the fenced facility boundary (Figure 2).

In 1992 three underground storage tanks (USTs) that formally contained used oil and pipeline liquids (oil and/or natural gas liquid condensate) near the main compressor building were removed. At that time and again in 1994, hydrocarbon-impacted soils (approximately 1,000 cubic yards) were excavated and removed from the site. Also in 1994, subsurface soil and groundwater investigation activities were initiated to define the horizontal and vertical extent of residual hydrocarbon impacts. In 1994, a total of two groundwater monitoring wells were installed and six soil borings were advanced. In 1995, six additional monitoring wells were installed and one soil boring was advanced.

In 1995/1996, hand bailing of LNAPL detected in monitoring wells MW-1 and MW-5 was initiated. In 1997, the LNAPL remediation technique was modified to an automated pneumatic product recovery pumping system (Xitech system) in these wells. Around 1999/2000, the Xitech system was taken out of service from both wells and replaced by product absorbent socks and hand bailing. Sometime in mid-2000, the product removal activities were ceased while groundwater monitoring continued.

The Site currently has eight groundwater monitoring wells (MW-1, MW-1D, MW-2, MW-3, MW-4, MW-5, MW-6 and MW-7). Seven of the wells are located on the gas compressor facility while the other well, MW-3, is located in the southeast corner of the adjacent DCP owned property. Well MW-2 is located in the northwest corner of the gas compressor facility and is considered the up-gradient well for the site. Based on previous data, it appears that a release occurred near the former Pipeline Liquids aboveground

storage tank (AST) located near wells MW-1 and MW-1D in the center of the gas compressor facility along the eastern property boundary (Figure 2). Since 1994/1995, monitoring wells MW-1 and MW-5 have continued to exhibit measurable LNAPL.

3. Groundwater Monitoring

This section describes the field groundwater monitoring activities as well as the laboratory analyses performed during the second half 2011 semi-annual monitoring event. Monitoring activities included Site-wide groundwater gauging, LNAPL measurements, groundwater purging and sampling, and subsequent packaging and shipping of the samples to the laboratory for chemical analyses. Figure 2 illustrates the groundwater monitoring network utilized to perform these activities at the Site.

3.1 Groundwater and LNAPL Elevation Monitoring

Groundwater and LNAPL levels were measured in order to evaluate hydraulic characteristics and provide information regarding fluctuations in groundwater and LNAPL elevations at the Site. In addition, wells that did not have LNAPL present were measured for total depth and recorded for subsequent use to estimate groundwater purge volumes. During the second half 2011 semi-annual monitoring event, groundwater and/or LNAPL levels were measured at eight Site monitoring well locations.

Groundwater levels were measured on the north side of the well casing to the nearest 0.01-foot using an oil-water interface probe (IP). Measured groundwater levels are presented in Table 1. Groundwater levels were subsequently converted to elevations (feet above mean sea level [AMSL]). LNAPL levels, where indicated by the IP, were also recorded on the field data sheets.

Groundwater level field measurements and collected during the second half 2011 semi-annual monitoring event as well as historical elevations are presented in Table 1 and the second half 2011 semi-annual groundwater elevation contour map is illustrated on Figure 3. Groundwater elevations ranged from 3,567.31 feet AMSL at monitoring well MW-2 to 3,560.35 feet AMSL at monitoring well MW-3. As illustrated on Figure 3, groundwater flow at the Site generally trends to the southeast with a gradient of approximately 0.007 foot per foot between monitoring wells MW-2 and MW-3.

LNAPL was detected at MW-1 (0.38-feet) and MW-5 (0.77-feet) with measured thicknesses indicated in parenthesis.

3.2 Groundwater Quality Monitoring

Prior to collecting groundwater samples, groundwater levels, the presence of LNAPL, and total depth (in wells without LNAPL) were measured in Site monitoring wells, as previously described. Subsequently, a minimum of three well casing volumes of groundwater (calculated from total depth of the well and groundwater level measurements) were purged using polyethylene bailers from the subject well prior to

collecting groundwater samples. Groundwater samples were collected using the same dedicated polyethylene bailers, placed in clean laboratory supplied containers for the selected analytical methods and packed in an ice-filled cooler and maintained at approximately four (4) degrees Celsius ($^{\circ}\text{C}$) for transportation. Groundwater samples were then shipped under chain-of-custody procedures to Accutest Laboratories (Accutest) in Wheat Ridge, Colorado, for analysis.

Water quality samples were collected from six of eight wells. MW-1 and MW-5 were not sampled due to the presence of measurable LNAPL detected in the well. Water quality samples were submitted to Accutest for benzene, toluene, ethylbenzene, and xylene (BTEX) analyses by United States Environmental Protection Agency (USEPA) Method 8260B.

Table 2 summarizes BTEX concentrations in groundwater samples collected during the September 2011 event. Laboratory analytical reports for the event are included in Appendix A and analytical results are summarized on Figure 4. For this sampling event, the analytical results for monitoring wells sampled (MW-1 and MW-5 exhibited LNAPL and therefore were not sampled) are as follows:

- MW-1D: Benzene, toluene and total xylene were non-detect (below laboratory reporting limits), and ethylbenzene was detected at 0.00055 milligrams per liter (mg/l), which is below the New Mexico Water Quality Control Commission (NMWQCC) Groundwater Standard of 0.75 mg/l.
- MW-2, MW-3, MW-4 and MW-6: BTEX were non-detect (below laboratory reporting limits) in these wells;
- MW-7: Benzene was detected at 0.394 mg/l, which is above the NMWQCC Groundwater Standard of 0.01 mg/l. Ethylbenzene and total xylene had detections of 0.149 mg/l and 0.0442 mg/l, respectively, which are below the NMWQCC Groundwater Standards. Toluene was non-detect (below laboratory reporting limits).

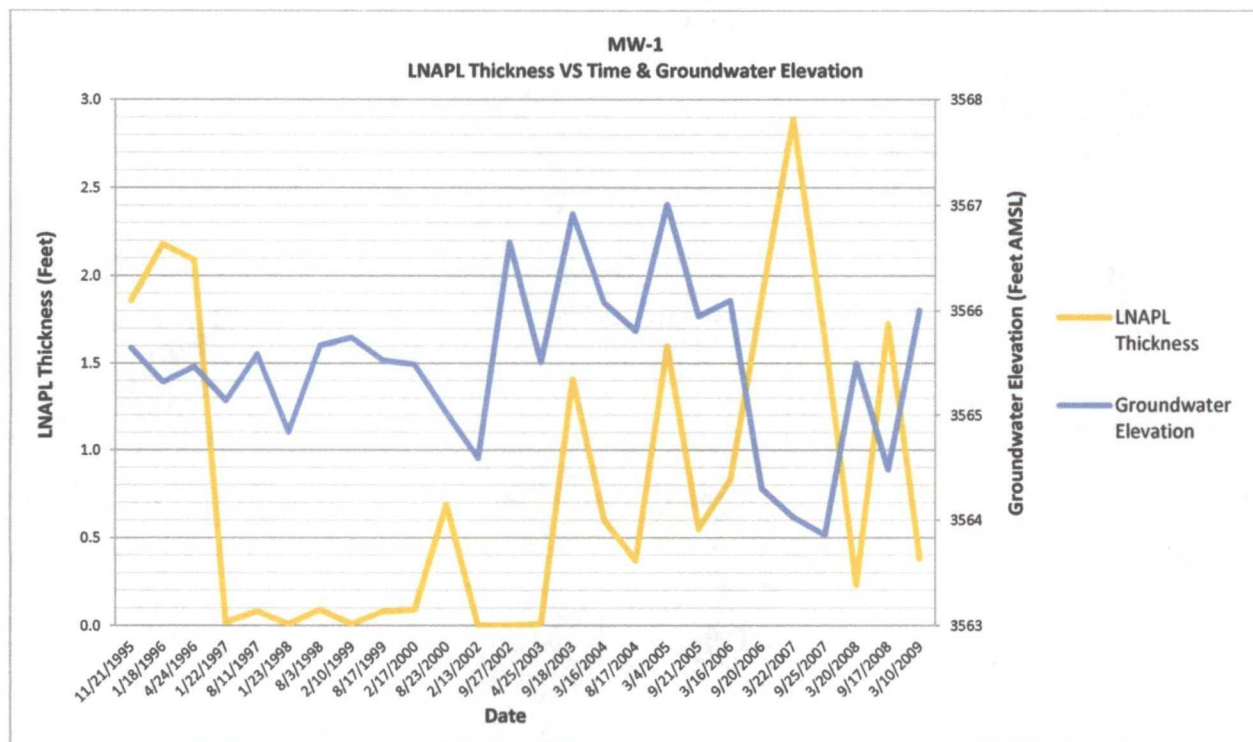
Table 2 summarizes BTEX concentrations in groundwater samples collected during the second half 2011 event. Laboratory analytical reports for the event are included in Appendix A, analytical results are summarized on Figure 4, and a dissolved-phase benzene isoconcentration map is illustrated on Figure 5. Water quality parameters were not collected during the monitoring event due to a malfunctioning field instrument. However, based on evaluation of previous monitoring field data sheets (First Half 2011), the site monitoring wells did not require collection of more than three purge volumes to achieve parameter stabilization. As such, the analytical data are considered to be representative of site conditions in that a minimum 3 purge volumes were evacuated from all sampled monitoring wells during the 2011 second half semi-annual event.

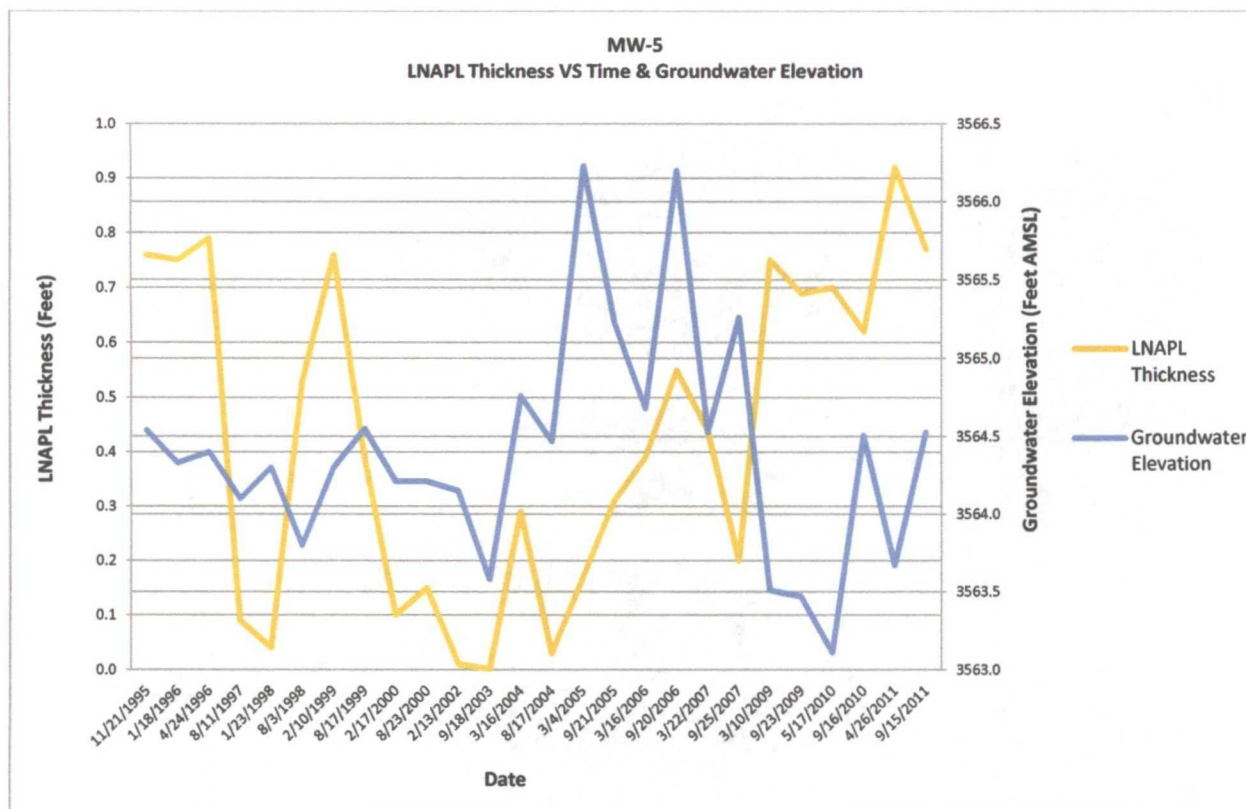
4. Remediation Activities

Natural attenuation continues to provide effective control and passive remediation of the dissolved-phase groundwater plume as well as LNAPL on Site. Monitoring wells MW-3, MW-4 and MW-6, which act as "point of compliance" wells along the down-gradient facility and/or property boundaries, continue to exhibit non-detect dissolved-phase BTEX concentrations in groundwater. Based on the

historic and recent data, it appears that natural attenuation provides effective remediation of residual impacts at the site.

As illustrated in the graphs below, LNAPL thickness in MW-1 and MW-5 does not appear to exhibit any seasonal fluctuation trends or a relationship to groundwater levels.





5. Conclusions

Dissolved-phase hydrocarbon impacts only exceed the regulatory limits in monitoring well MW-7 which is within 50-feet of the former anticipated release area which is located in the center of the property. Measurable LNAPL persists at MW-1 (anticipated former source area) and MW-5. Considering the apparent minimal subsurface aerial extent of LNAPL and minimal extent of dissolved-phase hydrocarbons at the Site, the residual source material does not appear significant in terms of emplaced volume.

The persistence of LNAPL in the vicinity of MW-1 and MW-5 (detected at these well for approximately 15 years) and absence of down gradient free phase hydrocarbons and dissolved-phase impacts (with the exception of MW-7 immediately down gradient to MW-1) in groundwater indicates that the residual constituents of concern are not mobile in the subsurface and natural attenuation continues to persist at the site.

Key factors that may be affecting mobility of product at the Site likely include the transmissivity of the subsurface formation and the hydraulic gradient across the Site. There appears to be minimal hydraulic gradient potential at the Site so even though the subsurface may be transmissive the overall plume velocity is slow and therefore does not influence LNAPL mobility. Biodegradation of source material over distance and time from the point of release are likely occurring because dissolved-phase BTEX constituents in groundwater are minimal near the residual LNAPL and further are confirmed ("point of compliance" wells along the down gradient property boundary continue to be non-detect for all BTEX constituents) to be maintained on Site.

Ongoing semi-annual groundwater sampling activities will provide for continued monitoring of Site dissolved-phase BTEX concentration and LNAPL trends.

6. Recommendations

Based on evaluation of historical data and 2011 site observations and monitoring results, continued semi-annual groundwater monitoring and sampling at the monitoring locations illustrated on Figure 2 is recommended.

Tables

TABLE 1
SECOND 2011 SEMI-ANNUAL
SUMMARY OF GROUNDWATER ELEVATION DATA
MONUMENT BOOSTER STATION
LEA COUNTY, NEW MEXICO

Location	Date	Depth to Groundwater (1) (feet)	Depth to Product (1) (feet)	Free Phase Hydrocarbon Thickness (feet)	Total Depth (2) (feet)	TOC Elevation (feet amsl)	Groundwater Elevation (feet amsl)	Change in Groundwater Elevation Since Previous Event (3) (feet)
MW-1	9/23/2009			2.89		3591.15	3564.03	-0.27
MW-1	5/17/2010			1.64		3591.15	3563.86	-0.17
MW-1	9/16/2010			0.23		3591.15	3565.50	1.64
MW-1	4/26/2011	27.97	26.24	1.73		3591.15	3564.48	-1.02
MW-1	9/15/2011	25.43	25.05	0.38		3591.15	3566.01	1.53
MW-1D	9/23/2009					3591.31	3564.63	0.03
MW-1D	5/17/2010					3591.31	3564.11	-0.52
MW-1D	9/16/2010					3591.31	3565.68	1.57
MW-1D	4/26/2011	26.49				3591.31	3564.82	-0.86
MW-1D	9/15/2011	25.17			36.36	3591.31	3566.14	1.32
MW-2	9/23/2009					3596.30	3566.73	-0.02
MW-2	5/17/2010					3596.30	3566.22	-0.51
MW-2	9/16/2010					3596.30	3567.26	1.04
MW-2	4/26/2011	29.49				3596.30	3566.81	-0.45
MW-2	9/15/2011	28.99			43.26	3596.30	3567.31	0.50
MW-3	9/23/2009					3583.86	3560.62	-0.42
MW-3	5/17/2010					3583.86	3560.26	-0.36
MW-3	9/16/2010					3583.86	3561.38	1.12
MW-3	4/26/2011	22.65				3583.86	3561.21	-0.17
MW-3	9/15/2011	23.51			35.70	3583.86	3560.35	-0.86
MW-4	9/23/2009					3588.77	3561.99	-0.22
MW-4	5/17/2010					3588.77	3561.62	-0.37
MW-4	9/16/2010					3588.77	3562.87	1.25
MW-4	4/26/2011	26.60				3588.77	3562.17	-0.70
MW-4	9/15/2011	26.65			38.99	3588.77	3562.12	-0.05
MW-5	9/23/2009			0.69		3592.16	3563.47	-0.04
MW-5	5/17/2010			0.70		3592.16	3563.11	-0.36
MW-5	9/16/2010			0.62		3592.16	3564.51	1.40
MW-5	4/26/2011	29.18	28.26	0.92		3592.16	3563.67	-0.84
MW-5	9/15/2011	28.21	27.44	0.77		3592.16	3564.53	0.86
MW-6	9/23/2009					3587.93	3562.12	
MW-6	5/17/2010					3587.93	3561.83	-0.29
MW-6	9/16/2010					3587.93	3563.54	1.71
MW-6	4/26/2011	25.47				3587.93	3562.46	-1.08
MW-6	9/15/2011	25.28			39.51	3587.93	3562.65	0.19
MW-7	9/23/2009					3589.40	3563.17	-0.07
MW-7	5/17/2010					3589.40	3562.70	-0.47
MW-7	9/16/2010					3589.40	3564.16	1.46
MW-7	4/26/2011	26.00				3589.40	3563.40	-0.76
MW-7	09/15/11	25.07			35.85	3589.40	3564.33	0.93
Average Change in groundwater elevation since the previous monitoring event								0.55

Notes:

- 1- Depths measured from the north edge of the well casing.
- 2- Total depths were collected and recorded during the second 2011 semi-annual monitoring event.
- 3- Changes in groundwater elevation calculated by subtracting the measurement collected during the previous monitoring even from the measurement collected during the most recent monitoring event.

- Data presented for well locations includes previous four sampling events, when available. Historic groundwater elevation data for these locations are available upon request.

Sample locations are shown on Figure 2 and a groundwater elevation contour map is shown on Figure 3

amsl - feet above mean sea level.

TOC - top of casing

NM - not measured

* Groundwater elevation was corrected for product thickness using the following calculation:

Water table elevation = Water Elevation in Well + ([LNAPL Thickness in Well] * [LNAPL Density])

LNAPL density was assumed to be approximately 0.75 grams per cubic centimeter

TABLE 2
SECOND HALF 2011 SEMI-ANNUAL
SUMMARY OF BTEX CONCENTRATIONS IN GROUNDWATER
MONUMENT BOOSTER STATION
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		0.01	0.75	0.75	0.62	
MW-1	9/15/2011	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1D	9/23/2009	<0.002	<0.002	<0.002	<0.006	
MW-1D	5/17/2010	<0.002	<0.002	<0.002	<0.006	
MW-1D	9/16/2010	<0.002	<0.002	<0.002	<0.004	
MW-1D	4/26/2011	<0.001	<0.002	<0.002	<0.002	
MW-1D	9/15/2011	<0.001	<0.002	<0.002	<0.004	
MW-2	9/23/2009	<0.002	<0.002	<0.002	<0.006	
MW-2	5/17/2010	<0.002	<0.002	<0.002	<0.006	
MW-2	9/16/2010	<0.001	<0.002	<0.002	<0.004	
MW-2	4/26/2011	<0.001	<0.002	<0.002	<0.002	
MW-2	9/15/2011	<0.001	<0.002	<0.002	<0.004	
MW-3	9/23/2009	<0.002	<0.002	<0.002	<0.006	
MW-3	5/17/2010	<0.002	<0.002	<0.002	<0.006	
MW-3	9/16/2010	<0.001	<0.002	<0.002	<0.004	
MW-3	4/26/2011	<0.001	<0.002	<0.002	<0.002	
MW-3	9/15/2011	<0.001	<0.002	<0.002	<0.004	
MW-4	9/23/2009	<0.002	<0.002	<0.002	<0.006	
MW-4	5/17/2010	<0.002	<0.002	<0.002	<0.006	
MW-4	9/16/2010	<0.001	<0.002	<0.002	<0.004	
MW-4	4/26/2011	<0.001	<0.002	<0.002	<0.002	
MW-4	9/15/2011	<0.001	<0.002	<0.002	<0.004	
MW-5	9/15/2011	LNAPL	LNAPL	LNAPL	LNAPL	
MW-6	9/23/2009	0.035	<0.002	0.0215	0.052J	
MW-6	5/17/2010	<0.002	<0.002	<0.002	<0.006	
MW-6	9/16/2010	<0.001	<0.002	<0.002	<0.004	
MW-6	4/26/2011	<0.001	<0.002	<0.002	<0.002	
MW-6	9/15/2011	<0.001	<0.002	<0.002	<0.004	
MW-7	9/23/2009	0.0332 / <0.002	<0.002/ <0.002	0.0176/ <0.002	0.0033J/ <0.006	
MW-7	5/17/2010	0.0201 / 0.0198	<0.002/ <0.002	0.0095/0.0092	0.0033J/0.0033J	
MW-7	9/16/2010	0.522 / 0.512	<0.01/ <0.01	0.294/0.289	0.0383/0.0378	
MW-7	4/26/2011	0.0091/ 0.0104	<0.01/ <0.01	0.0042/0.0041	<0.01/ <0.01	
MW-7	9/15/2011	0.394	<0.01	0.149	0.0442	Duplicate sample collected

Notes:

- 1.) The environmental cleanup standards for water that are applicable to the Monument Booster Station are the New Mexico Water Quality Control Commission (NMWQCC) Groundwater Standards.
- 2.) Monitoring well locations MW-1 and MW-5 have historically exhibited measurable LNAPL during groundwater monitoring events. Therefore, those wells have not been sampled.
- 3.) Data presented for well locations include previous four sampling events, when available. Historic groundwater analytical results for these locations are available upon request.

Bold red values indicate an exceedance of the NMWQCC groundwater standards for the Site.

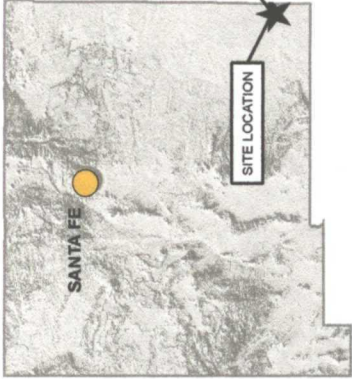
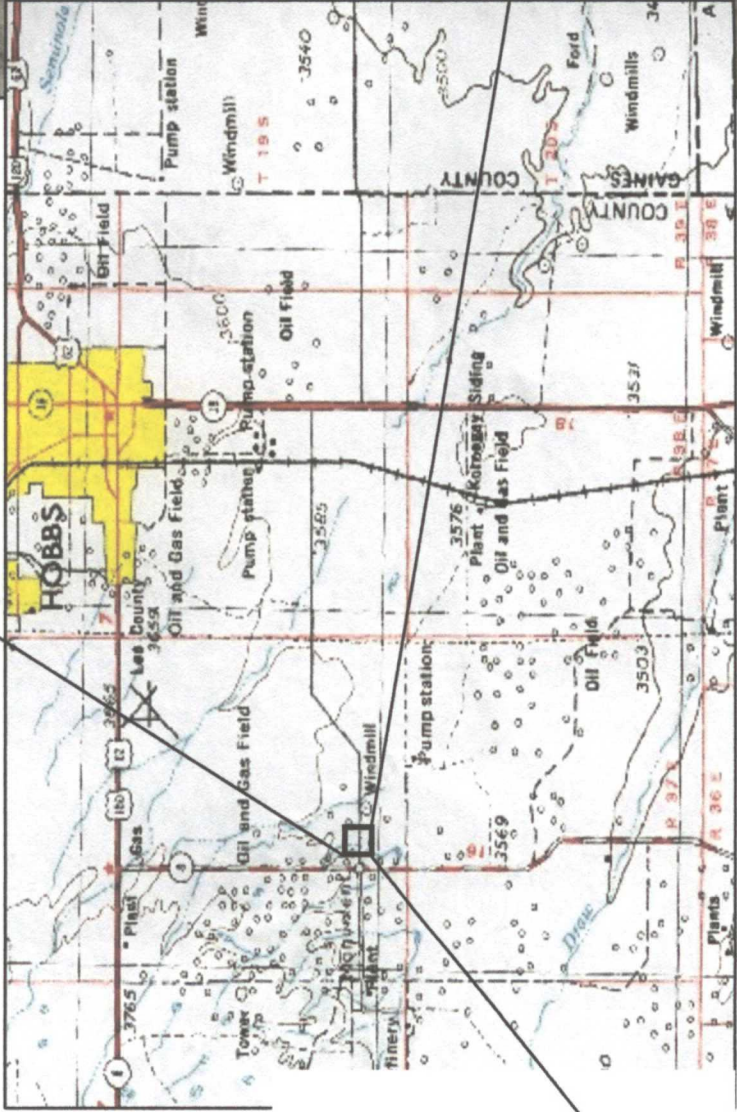
Sample locations are shown on Figure 2 and analytical results are illustrated on Figure 4.

LNAPL = Light Non-Aqueous Phase Liquid

NM = Not measured.

mg/L = milligrams per liter.

Figures



DESIGNED BY: B. Humphrey
DRAWN BY: J. Clonts
SHEET CHK'D BY: _____
CROSS CHK'D BY: _____
APPROVED BY: _____
APPROVED BY: _____

Tasman Geosciences, LLC
5690 Webster St.
Arvada, CO 8002
720-988-2024



Tasman Geosciences

MONUMENT BOOSTER STATION
*Second Half 2011 Groundwater Monitoring
Summary Report*

SITE LOCATION



Legend

- Monitoring Well



DESIGNED BY: B. Humphrey
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SHEET CHK'D BY: _____
CROSS CHK'D BY: _____
APPROVED BY: _____
APPROVED BY: _____



Tasman Geosciences

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720-988-2024

MONUMENT BOOSTER STATION
*Second Half 2011 Groundwater Monitoring
Summary Report*

SITE MAP



DESIGNED BY: B. Humphrey
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CROSS CHK'D BY:
APPROVED BY:
APPROVED BY:



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Arvada, CO 8002
720-988-2024

MONUMENT BOOSTER STATION
*Second Half 2011 Groundwater Monitoring
Summary Report*

**GROUNDWATER ELEVATION
CONTOUR MAP
(SEPTEMBER 15, 2011)**

MW-2			
Compound	4/26/2011 (mg/L)	9/15/2011 (mg/L)	
Benzene	<0.001	<0.001	
Toluene	<0.002	<0.002	
Ethylbenzene	<0.002	<0.002	
Total Xylenes	<0.002	<0.004	

MW-1D			
Compound	4/26/2011 (mg/L)	9/15/2011 (mg/L)	
Benzene	<0.001	<0.001	
Toluene	<0.002	<0.002	
Ethylbenzene	<0.002	<0.002	
Total Xylenes	<0.002	<0.004	

MW-6			
Compound	4/26/2011 (mg/L)	9/15/2011 (mg/L)	
Benzene	<0.001	<0.001	
Toluene	<0.002	<0.002	
Ethylbenzene	<0.002	<0.002	
Total Xylenes	<0.002	<0.004	

MW-7			
Compound	4/26/2011 (mg/L)	9/15/2011 (mg/L)	
Benzene	0.0091/0.0104	0.394	
Toluene	<0.01/<0.01	<0.01	
Ethylbenzene	0.0042/0.0041	0.149	
Total Xylenes	<0.01/<0.01	0.0442	

MW-4			
Compound	4/26/2011 (mg/L)	9/15/2011 (mg/L)	
Benzene	<0.001	<0.001	
Toluene	<0.002	<0.002	
Ethylbenzene	<0.002	<0.002	
Total Xylenes	<0.002	<0.004	

MW-3			
Compound	4/26/2011 (mg/L)	9/15/2011 (mg/L)	
Benzene	<0.001	<0.001	
Toluene	<0.002	<0.002	
Ethylbenzene	<0.002	<0.002	
Total Xylenes	<0.002	<0.004	

Legend

- Monitoring Well
- Measured LNAPL
(0.77) Thickness

Notes:

Data reported for the April 26, 2011 monitoring event were collected by AEC and provided in the first quarter 2011 groundwater monitoring summary report.

All aqueous analytical results are presented in milligrams per liter (mg/L)

LNAPL - Light Non-Aqueous Phase Liquid.



DESIGNED BY: B. Humphrey

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SHEET CHK'D BY:

CROSS CHK'D BY:

APPROVED BY:

APPROVED BY:



Tasman Geosciences

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MONUMENT BOOSTER STATION

Second Half 2011 Groundwater Monitoring
Summary Report

ANALYTICAL RESULTS
MAP 2011

FIGURE
4

Appendix A
Laboratory Analytical Report