

**AP - 122**

**3<sup>rd</sup> QTR GW  
Monitoring  
Results**

**2014**

**From:** [Weathers, Stephen W](#)  
**To:** [Lowe, Leonard, EMNRD](#)  
**Cc:** [Oberding, Tomas, EMNRD](#)  
**Subject:** DCP Hobbs Gas Plant (AP-122) 3rd Q 2014 Groundwater Monitoring Report  
**Date:** Friday, January 16, 2015 8:11:39 AM  
**Attachments:** [OCD3Q2014HobbsGPGWLtr1-16-15.doc](#)  
[059097 FINAL 1-13-15.pdf](#)

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Mr. Lowe

Attached you will find the 3rd Q 2014 Hobbs Gas Plant Groundwater Monitoring Report and the associated cover letter.

If you have any questions or concerns, please give me a call.

Thanks

Stephen W Weathers, P.G.  
Principal Environmental Specialist  
DCP Midstream L.P.  
Office 303.605.1718  
Cell 303.619.3042



**DCP Midstream**  
370 17<sup>th</sup> Street, Suite 2500  
Denver, CO 80202  
**303-595-3331**  
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January 16, 2015

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

**RE: 3rd Quarter 2014 Groundwater Monitoring Results  
DCP Hobbs Gas Plant (AP-122)  
Unit G, Section 36, Township 18 South, Range 36 East  
Lea County, New Mexico**

Dear Mr. Lowe:

DCP Midstream, LP (DCP) is pleased to submit for your review, an electronic copy of the 3rd Quarter 2014 Groundwater Monitoring Results for the DCP Hobbs Gas Plant located in Lea County, New Mexico (Unit G, Section 36, Township 18 South, Range 36 East).

If you have any questions regarding the report or work plan, please call me at 303-605-1718.

Sincerely

**DCP Midstream, LP**

A handwritten signature in black ink, appearing to read "Stephen Weathers, P.G.", is written over a solid horizontal line.

Stephen Weathers, P.G.  
Principal Environmental Specialist

cc: Tomas Oberding, OCD Hobbs District Office  
Environmental Files

*Original*



**CONESTOGA-ROVERS  
& ASSOCIATES**

[www.CRAworld.com](http://www.CRAworld.com)



## Final Report

# THIRD QUARTER 2014 GROUNDWATER MONITORING REPORT HOBBS GAS PLANT LEA COUNTY, NEW MEXICO

NMOCD

AP #122

Prepared for: DCP Midstream, LP

**Conestoga-Rovers & Associates**

2135 South Loop, 250 West  
Midland, Texas 79703

January 2015 • 059097 • Report No. 24



**Partners in  
Sustainability**

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Sampling
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## Section 1.0 Introduction

Conestoga-Rovers & Associates (CRA) is submitting this Third Quarter 2014 Groundwater Monitoring Report to DCP Midstream, LP (DCP) for Hobbs Gas Plant in Lea County, New Mexico. This report summarizes the September 2014 quarterly monitoring well gauging and groundwater sampling event. Monitoring well gauging, groundwater sampling details, analytical results, conclusions and recommendations are presented below.

### 1.1 Site Background

The site is a cryogenic processing plant located in Lea County, New Mexico approximately 9 miles west of Hobbs, New Mexico (Figure 1). The site occupies approximately 3.5 acres surrounded by undeveloped area. The facility contains a laboratory, an amine unit, compressors, molecular sieve dehydration, tank batteries and an onsite water production well used for non-potable water. The DCP Apex Compressor Station is located approximately 750 feet to the north. There are seven onsite groundwater monitoring wells.

## Section 2.0 Regulatory Framework

The Site has been assigned an Abatement Plan number AP-122 by the New Mexico Oil Conservation Division (NMOCD) Environmental Bureau. The NMOCD guidelines require groundwater to be analyzed for potential contaminants as defined by the New Mexico Water Quality Control Commission (NMWQCC) Standards 20.6.2.3103 Section A. The NMWQCC Standard 20.6.2.3103, Section A, provides the Human Health Standards for Groundwater. The constituents of concern (COCs) in affected groundwater at the Site are benzene, toluene, ethylbenzene and total xylenes (BTEX). The regulation also states that non-aqueous phase liquids shall not be present floating atop or immersed within groundwater, as can be reasonably measured. In this report, groundwater analytical results for the COCs are compared to the NMWQCC standards as shown in the following table:

<i>Analyte</i>	<i>NMWQCC Standard for Groundwater</i>
<b>20.6.2.3103 Section A – Human Health Standard</b>	
Benzene	0.01 mg/L
Toluene	0.75 mg/L
Ethylbenzene	0.75 mg/L
Total Xylenes	0.62 mg/L

## Section 3.0 Monitoring Well Gauging and Groundwater Sampling

The third quarter monitoring well gauging and groundwater sampling event was conducted on September 26, 2014. Each well cap was removed to allow groundwater levels to stabilize and equilibrate prior to gauging. CRA gauged monitoring wells MW-AR, MW-B, MW-C, MW-D, MW-E and MW-F and then purged and collected groundwater samples from MW-AR, MW-D, MW-E and MW-F using a disposable polyurethane bailer. MW-G was not gauged due to a casing deformity which had increased in size and would not allow the probe of a water level indicator to pass. In addition, MW-G was not purged and sample due to the Waterra Foot Valve used previously becoming dislodged from the LDPE 3/8 inch tubing and a replacement foot valve was unable to pass by the deformity. Light non-aqueous phase liquids (LNAPL) were measured at thicknesses of 2.38 ft in MW-B and 1.30 ft. in MW-C and were not sampled. The LNAPL thickness in MW-B increased by 0.45 ft from the thickness gauged in June 2014. The LNAPL thickness in MW-C increased by 1.15 ft from the thickness gauged in June 2014. 2014 groundwater gauging data, elevations, analytical results and LNAPL thickness are summarized in Table 1. Historical groundwater and LNAPL gauging measurements are summarized in Table 2.

Prior to sampling, all monitoring 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. The samples were submitted under chain-of-custody to Accutest Laboratories of Texas. Groundwater monitoring field notes documenting gauging, purging and sampling data for the September 2014 quarterly event are presented as Appendix A. CRA's standard operating procedures for groundwater monitoring and sampling are presented as Appendix B.

### 3.1 Groundwater Gradient

Based on subsurface groundwater investigations conducted at the Site, the Ogallala Aquifer appears to be the origin of groundwater and the depth to groundwater is approximately 65 feet below ground surface (bgs). Historical static groundwater elevation has ranged between 3,691.46 (MW-E) and 3,695.74 (MW-A) ft. above mean sea level (famsl). Static groundwater elevations ranged from 3,691.89 (MW-E) to 3,693.23 (MW-AR) famsl on September 26, 2014. Groundwater flowed to the southeast with a gradient of 0.003 ft/ft (Figure 2). All wells on the site that were gauged through September 26, 2014 indicated a decline in the elevation of the potentiometric surface. The average decline from June 3, 2014 thru September 26, 2014 was 0.14 foot.

### **3.2 Purged Groundwater Management**

Purged groundwater from MW-AR, MW-D, MW-E and MW-F has been determined to be below cleanup levels and was discharged to the ground surface as allowed by the NMOCD. Purged groundwater from MW-G is stored onsite in United States Department of Transportation-approved 55-gallon drums. Stored purge water will be properly disposed when all storage drums are full.

## **Section 4.0 Analytical Methods and Results**

Groundwater samples collected from MW-AR, MW-D, MW-E, MW-F and MW-G were analyzed for benzene, toluene, ethylbenzene and total xylenes (BTEX) by SW-846 8260B.

### **4.1 Groundwater Sampling Results**

BTEX was not detected above the NMWQCC cleanup levels in groundwater samples collected from MW-AR, MW-D, MW-E and MW-F. A groundwater sample was not collected from MW-G due to a deformity in the well. In June 2014, groundwater contained a benzene concentration of 103 micrograms per liter (ug/L) which exceeds the NMWQCC cleanup levels and a total xylene concentration of 105 micrograms per liter (ug/L) which is below the NMWQCC cleanup level for total xylenes. Historical groundwater analytical results and parameter readings are summarized in Table 3. Laboratory analytical reports are presented as Appendix C.

## **Section 5.0 LNAPL Abatement and Recovery**

In April 2014, LNAPL abatement and recovery was initiated. LNAPL was bailed by hand from MW-B and MW-C during monthly visits for April, May and July, during the June quarterly monitoring event and the September quarterly monitoring event to the greatest practicable extent. The total amount bailed during the third quarter of 2014 for MW-B was 0.45 gallon and 0.20 gallon for MW-C. A cumulative total of LNAPL recovered from MW-B and MW-C during the third quarter of 2014 was 0.65 gallon. The cumulative total of LNAPL recovered from the Site since April 2014 is 2.35 gallons. LNAPL recovery for the third quarter of 2014 is summarized in Table 1. LNAPL thicknesses and BTEX analytical results are displayed in Figure 3.

## Section 6.0 Conclusions and Recommendations

MW-G was not gauged, purged and sampled due to an increase in size of the casing deformity; therefore, groundwater analytical results are unavailable for the third quarter monitoring event. BTEX was not detected above the NMWQCC cleanup levels in groundwater samples collected from MW-AR, MW-D, MW-E, and MW-F. BTEX has not been detected above the NMWQCC cleanup levels in groundwater samples collected from MW-D, MW-E and MW-F since 2008. LNAPL thickness increased to 2.38 ft in MW-B and increased to 1.30 ft. in MW-C. LNAPL abatement and recovery via hand bailing initiated in April 2014 continued during the third quarter of 2014. For the third quarter of 2014 a cumulative total of 0.65 gallon of LNAPL was recovered from MW-B and MW-C and an accumulative total of 2.35 gallons of LNAPL have been recovered from the Site since April 2014.

For the Fourth Quarter of 2014, CRA recommends the following:

- Continue quarterly monitoring well gauging and groundwater sampling to evaluate the site's groundwater condition;
- Continue evaluating the BTEX concentration in MW-G (located down gradient from LNAPL plume) to determine if natural attenuation of the dissolved phase plume is occurring; and
- Conduct Enhanced Fluid Recovery (EFR) or limited Mobile Dual Phase Extraction (MDPE) events on MW-B and MW-C for a more aggressive LNAPL abatement and recovery.

All of which is Respectfully Submitted,

CONESTOGA-ROVERS & ASSOCIATES

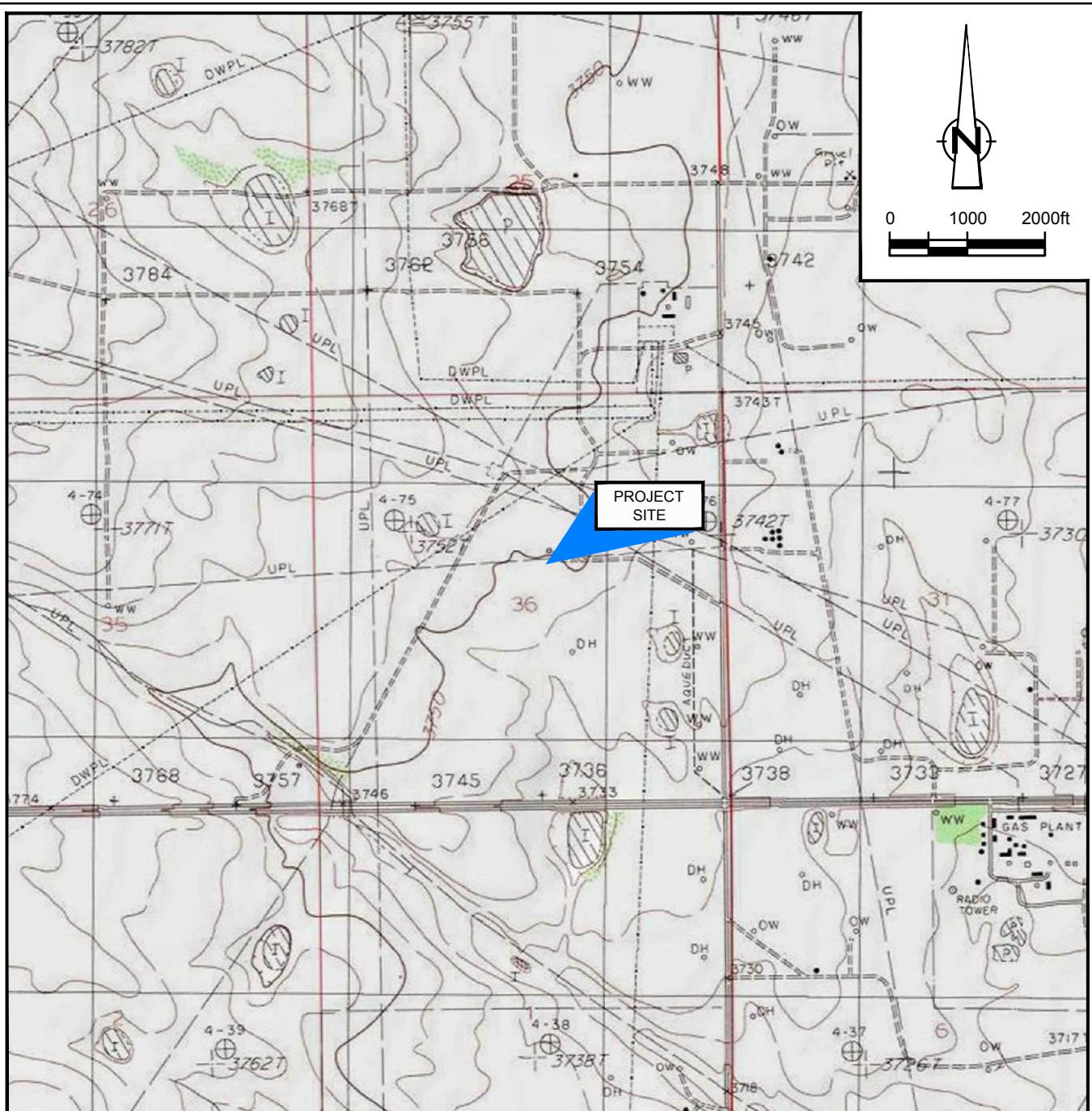


John Fergerson, P.G.  
Senior Project Manager



Thomas C. Larson, P.G.  
Principal, Midland Operations Manager

## Figures

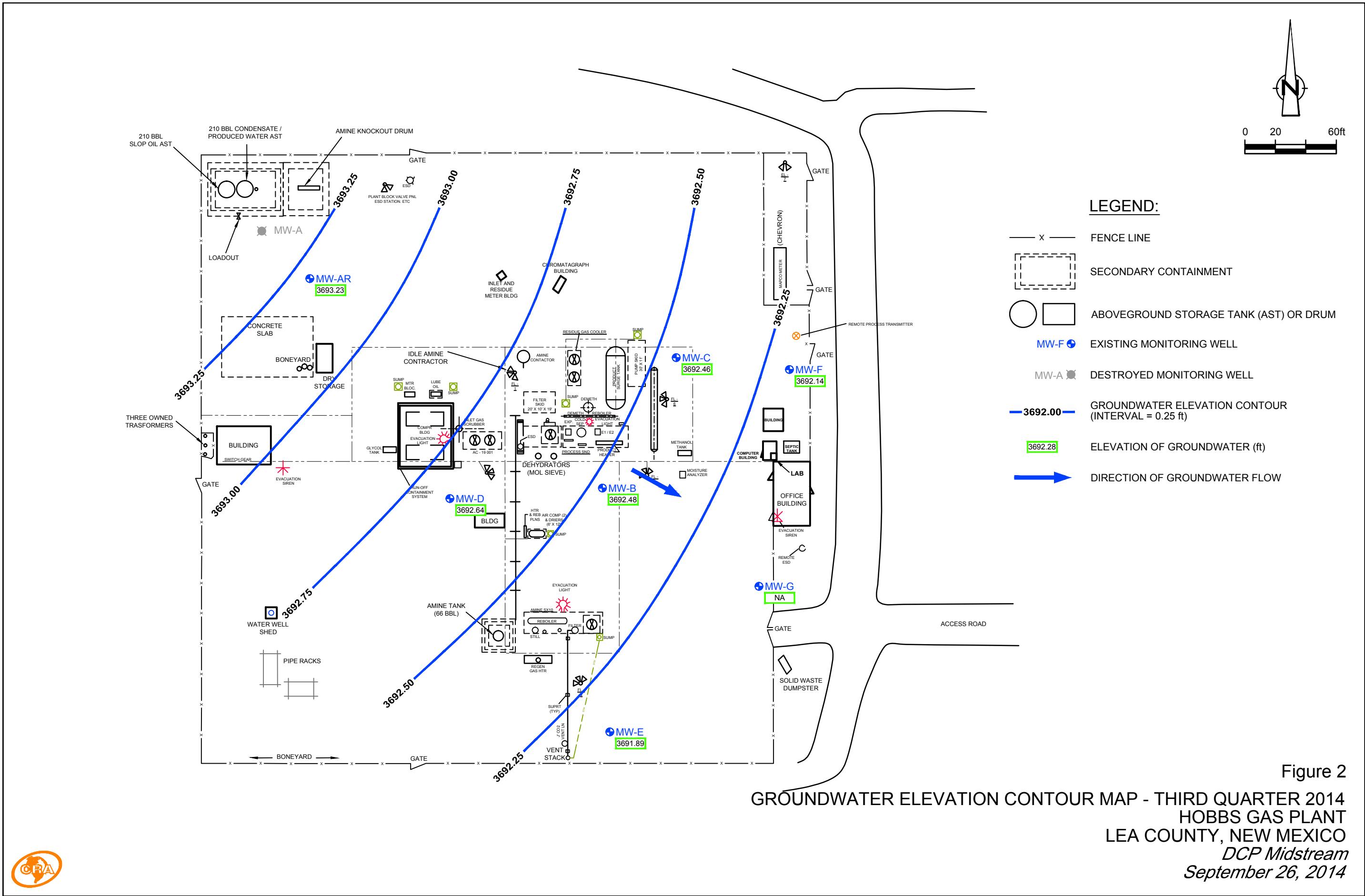


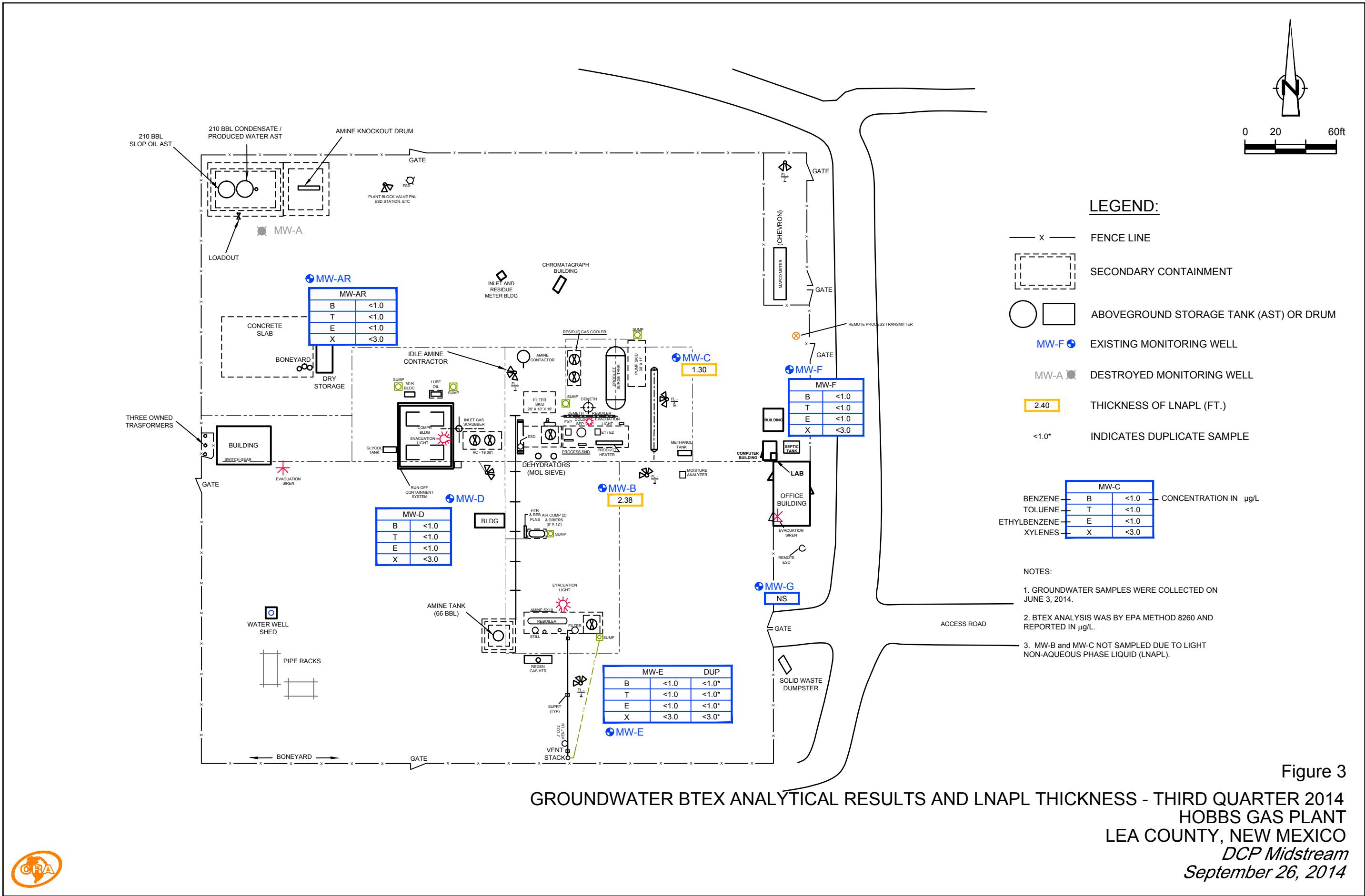
SOURCE: USGS 7.5 MINUTE QUAD  
"MONUMENT NORTH, NEW MEXICO EAST"

LAT/LONG: 32.7056° NORTH, 103.3072° WEST  
COORDINATE: NAD83 DATUM, U.S. FOOT  
STATE PLANE ZONE - NEW MEXICO EAST

Figure 1  
VICINITY MAP  
HOBBS GAS PLANT  
LEA COUNTY, NEW MEXICO  
*DCP Midstream*







## Tables

**TABLE 1**  
**DCP MIDSTREAM, LP - HOBBS GAS PLANT**  
**2014 SUMMARY OF GROUNDWATER GAUGING DATA, ELEVATIONS,**  
**ANALYTICAL RESULTS, LNAPL THICKNESS AND PRODUCT REMOVED**

<b>Well ID</b>	<b>Date</b>	<b>TOC</b>	<b>DTW</b>	<b>DTP</b>	<b>LNAPL Thickness</b>	<b>GWE</b>	<b>Product Removed</b>	<b>Benzene</b>	<b>Toluene</b>	<b>Ethyl-benzene</b>	<b>Total Xylenes</b>					
		(ft msl)	(ft bgs)	(ft bgs)	(ft)	(ft msl)	(gals)	Concentrations in $\mu\text{g/l}$								
<b>NMWQCC Cleanup Levels</b>											<b>10</b>	<b>750</b>	<b>750</b>	<b>620</b>		
MW-AR	03/11/14	3755.73	62.21	--	--	3693.52	--	<1.0	<1.0	<1.0	<3.0					
	06/03/14		62.35	--	--	3693.38	--	<1.0	<1.0	<1.0	<3.0					
	09/26/14		62.50	--	--	3693.23	--	<1.0	<1.0	<1.0	<3.0					
MW-B *	03/11/14	3755.70	64.90	62.50	2.40	3692.74	--	LNAPL present								
*	04/16/14		64.98	62.58	2.40	3692.66	0.75	LNAPL present								
*	05/20/14		64.85	62.65	2.20	3692.63	0.30	LNAPL present								
*	06/03/14		64.73	62.80	1.93	3692.53	0.35	LNAPL present								
*	07/30/14		63.45	62.64	0.81	3692.91	0.20	LNAPL present								
*	09/26/14		65.15	62.77	2.38	3692.48	0.25	LNAPL present								
MW-C *	03/11/14	3755.35	63.12	62.55	0.57	3692.69	--	LNAPL present								
*	04/16/14		63.31	62.60	0.71	3692.62	0.25	LNAPL present								
*	05/20/14		63.08	62.67	0.41	3692.60	0.04	LNAPL present								
*	06/03/14		63.08	62.93	0.15	3692.39	0.01	LNAPL present								
*	07/30/14		62.39	62.39	0.00	3692.96	0.00	LNAPL present								
*	09/26/14		63.94	62.64	1.30	3692.46	0.20	LNAPL present								
MW-D	03/11/14	3755.19	62.24	--	--	3692.95	--	<1.0	<1.0	<1.0	<3.0					
	06/03/14		62.43	--	--	3692.76	--	<1.0	<1.0	<1.0	<3.0					
	09/26/14		62.55	--	--	3692.64	--	<1.0	<1.0	<1.0	<3.0					
MW-E	03/11/14	3754.11	61.95	--	--	3692.16	--	<1.0	<1.0	<1.0	<3.0					
	06/03/14		62.09	--	--	3692.02	--	<1.0	<1.0	<1.0	<1.0					
	09/26/14		62.22	--	--	3691.89	--	<1.0	<1.0	<1.0	<3.0					
MW-F	03/11/14	3755.88	63.49	--	--	3692.39	--	<1.0	<1.0	<1.0	<3.0					
	06/03/14		63.60	--	--	3692.28	--	<1.0	<1.0	<1.0	<1.0					
	09/26/14		63.74	--	--	3692.14	--	<1.0	<1.0	<1.0	<3.0					
MW-G	03/11/14	3754.67	62.73	--	--	3691.94	--	<b>109</b>	449	77.3	333					
	06/03/14		Not Gauged due to Damage					--	--	--	--					
	09/26/14		Not Gauged due to Damage					--	--	--	--					
<b>Notes and Abbreviations:</b>																
ID = Identification																
TOC = Top of casing																
DTW = Depth to water																
GWE = Groundwater elevation																
* = Groundwater elevation corrected using a LNAPL specific gravity of 0.81																
Wells were re-surveyed on 9/25/2013																
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																
$\mu\text{g/l}$ = Micrograms per liter																
<x = Not detected above x $\mu\text{g/l}$																
<b>BOLD</b> = Indicates concentration above the NMQCC Cleanup Levels																
NMWQCC = New Mexico Water Quality Control Commission																
LNAPL = Light non-aqueous phase liquids																

**TABLE 2**  
**DCP MIDSTREAM, LP - HOBBS GAS PLANT**  
**HISTORICAL SUMMARY OF GROUNDWATER**  
**AND LNAPL GAUGING MEASUREMENTS**

<i>Well ID</i>	<i>Date</i>	<i>TOC (ft msl)</i>	<i>DTW (ft bgs)</i>	<i>DTP (ft.)</i>	<i>LNAPL Thickness (ft.)</i>	<i>GWE (ft msl)</i>	<i>Product Recovered (gal.)</i>
MW-A	03/23/06	3755.87	60.54	--	--	3695.33	--
	06/14/06		60.71	--	--	3695.16	--
	08/14/06		60.71	--	--	3695.16	--
	11/14/06		60.81	--	--	3695.06	--
	03/27/07		60.28	--	--	3695.59	--
	06/21/07		60.28	--	--	3695.59	--
	09/18/07		60.44	--	--	3695.43	--
	12/13/07		60.32	--	--	3695.55	--
	03/05/08		60.18	--	--	3695.69	--
	06/02/08		60.19	--	--	3695.68	--
	09/15/08		60.58	--	--	3695.29	--
	12/03/08		60.41	--	--	3695.46	--
	02/27/09		60.18	--	--	3695.69	--
	06/25/09		60.21	--	--	3695.66	--
	09/01/09		60.37	--	--	3695.50	--
	11/17/09		60.40	--	--	3695.47	--
	03/25/10		60.40	--	--	3695.47	--
	06/08/10		60.39	--	--	3695.48	--
	09/21/10		60.13	--	--	3695.74	--
	12/16/10		60.24	--	--	3695.63	--
	03/11/11		60.39	--	--	3695.48	--
	06/14/11		60.63	--	--	3695.24	--
	09/27/11		61.04	--	--	3694.83	--
	12/13/11		61.24	--	--	3694.63	--
	03/27/12		61.39	--	--	3694.48	--
	06/19/12		61.54	--	--	3694.33	--
	09/24/12		61.71	--	--	3694.16	--
	12/10/12		61.91	--	--	3693.96	--
MW-AR	09/17/13	3755.73	62.09	--	--	3693.64	--
	12/03/13		62.15	--	--	3693.58	--
	03/11/14		62.21	--	--	3693.52	--
	06/03/14		62.35	--	--	3693.38	--
	09/26/14		62.50	--	--	3693.23	--
MW-B	03/23/06	3755.94	62.08	--	--	3693.86	--
	06/15/06		61.58	--	--	3694.36	--
	08/14/06		62.34	--	--	3693.60	--
	11/14/06		62.16	--	--	3693.78	--
	03/27/07		61.77	--	--	3694.17	--
	06/21/07		61.84	--	--	3694.10	--
	09/18/07		61.93	--	--	3694.01	--

**TABLE 2**  
**DCP MIDSTREAM, LP - HOBBS GAS PLANT**  
**HISTORICAL SUMMARY OF GROUNDWATER**  
**AND LNAPL GAUGING MEASUREMENTS**

<b>Well ID</b>	<b>Date</b>	<b>TOC (ft msl)</b>	<b>DTW (ft bgs)</b>	<b>DTP (ft.)</b>	<b>LNAPL Thickness (ft.)</b>	<b>GWE (ft msl)</b>	<b>Product Recovered (gal.)</b>
MW-B cont.	12/13/07	3755.70	61.85	--	--	3694.09	--
	03/05/08		61.66	--	--	3694.28	--
	06/02/08		61.69	--	--	3694.25	--
	09/15/08		62.04	--	--	3693.90	--
	12/03/08		61.93	--	--	3694.01	--
	02/27/09		61.68	--	--	3694.26	--
	06/25/09		61.63	--	--	3694.31	--
	09/01/09		61.81	--	--	3694.13	--
	11/17/09		61.85	--	--	3694.09	--
	03/25/10		61.70	--	--	3694.24	--
	06/08/10		61.77	--	--	3694.17	--
	09/21/10		61.58	--	--	3694.36	--
	12/16/10		61.61	--	--	3694.33	--
	03/11/11		61.74	--	--	3694.20	--
	06/14/11		61.95	--	--	3693.99	--
	09/27/11		62.43	--	--	3693.51	--
	12/13/11		62.60	--	--	3693.34	--
*	03/27/12		62.94	--	0.29	3693.23	--
*	06/19/12		64.10	--	1.65	3693.18	--
*	09/24/12		64.60	--	2.10	3693.04	--
*	12/10/12		65.07	--	2.57	3692.95	--
*	03/11/13		65.00	--	3.60	3693.86	--
*	06/11/13		65.02	--	2.57	3693.00	--
*	09/16/13		64.84	--	2.44	3692.84	--
*	12/03/13		64.82	62.42	2.40	3692.82	--
*	03/11/14		64.90	62.50	2.40	3692.74	--
*	04/16/14		64.98	62.58	2.40	3692.66	0.75
*	05/20/14		64.85	62.65	2.20	3692.63	0.30
*	06/03/14		64.73	62.80	1.93	3692.53	0.35
*	07/30/14		63.45	62.64	0.81	3692.91	0.20
*	09/26/14		65.15	62.77	2.38	3692.48	0.25
MW-C	03/23/06	3755.59	61.69	--	--	3693.90	--
	06/14/06		61.86	--	--	3693.73	--
	08/14/06		61.88	--	--	3693.71	--
	11/14/06		61.70	--	--	3693.89	--
	03/27/07		61.28	--	--	3694.31	--
	06/21/07		61.57	--	--	3694.02	--
	09/18/07		61.48	--	--	3694.11	--
	12/13/07		61.34	--	--	3694.25	--
	03/05/08		61.18	--	--	3694.41	--
	06/02/08		61.22	--	--	3694.37	--

**TABLE 2**  
**DCP MIDSTREAM, LP - HOBBS GAS PLANT**  
**HISTORICAL SUMMARY OF GROUNDWATER**  
**AND LNAPL GAUGING MEASUREMENTS**

<b>Well ID</b>	<b>Date</b>	<b>TOC (ft msl)</b>	<b>DTW (ft bgs)</b>	<b>DTP (ft.)</b>	<b>LNAPL Thickness (ft.)</b>	<b>GWE (ft msl)</b>	<b>Product Recovered (gal.)</b>
MW-C Cont.	09/15/08		61.54	--	--	3694.05	--
	12/03/08		61.48	--	--	3694.11	--
	02/27/09		61.15	--	--	3694.44	--
	06/25/09		61.16	--	--	3694.43	--
	09/01/09		61.35	--	--	3694.24	--
	11/17/09		61.37	--	--	3694.22	--
	03/25/10		61.27	--	--	3694.32	--
	06/08/10		61.33	--	--	3694.26	--
	09/21/10		61.10	--	--	3694.49	--
	12/16/10		61.15	--	--	3694.44	--
	03/11/11		61.28	--	--	3694.31	--
	06/14/11		61.52	--	--	3694.07	--
	09/27/11		62.00	--	--	3693.59	--
	12/13/11		62.20	--	--	3693.39	--
	03/27/12		62.33	--	--	3693.26	--
	06/19/12		62.45	--	--	3693.14	--
	09/24/12		62.67	--	--	3692.92	--
	12/10/12		62.73	--	--	3692.86	--
	03/11/13		61.70	--	--	3693.89	--
*	06/11/13	3755.35	62.73	62.70	0.03	3692.88	--
*	09/16/13		62.73	62.53	0.20	3692.78	--
	12/03/13		62.87	62.50	0.37	3692.78	--
*	03/11/14		63.12	62.55	0.57	3692.69	--
*	04/16/14		63.31	62.60	0.71	3692.62	0.25
*	05/20/14		63.08	62.67	0.41	3692.60	0.04
*	06/03/14		63.08	62.93	0.15	3692.39	0.01
*	07/30/14		62.39	62.39	0.00	3692.96	--
*	09/26/14		63.94	62.64	1.30	3692.46	0.20
MW-D	03/23/06	3755.43	61.09	--	--	3694.34	--
	06/14/06		61.32	--	--	3694.11	--
	08/14/06		61.36	--	--	3694.07	--
	11/14/06		61.22	--	--	3694.21	--
	03/27/07		60.85	--	--	3694.58	--
	06/21/07		60.97	--	--	3694.46	--
	09/18/07		61.05	--	--	3694.38	--
	12/13/07		60.91	--	--	3694.52	--
	03/05/08		60.77	--	--	3694.66	--
	06/02/08		60.77	--	--	3694.66	--
	09/15/08		61.10	--	--	3694.33	--
	12/03/08		61.08	--	--	3694.35	--
	02/27/09		60.79	--	--	3694.64	--

**TABLE 2**  
**DCP MIDSTREAM, LP - HOBBS GAS PLANT**  
**HISTORICAL SUMMARY OF GROUNDWATER**  
**AND LNAPL GAUGING MEASUREMENTS**

<b>Well ID</b>	<b>Date</b>	<b>TOC (ft msl)</b>	<b>DTW (ft bgs)</b>	<b>DTP (ft.)</b>	<b>LNAPL Thickness (ft.)</b>	<b>GWE (ft msl)</b>	<b>Product Recovered (gal.)</b>
MW-D cont.	06/25/09	3755.19	60.77	--	--	3694.66	--
	09/01/09		60.96	--	--	3694.47	--
	11/17/09		60.96	--	--	3694.47	--
	03/25/10		60.89	--	--	3694.54	--
	06/08/10		60.91	--	--	3694.52	--
	09/21/10		60.66	--	--	3694.77	--
	12/16/10		60.72	--	--	3694.71	--
	03/11/11		60.84	--	--	3694.59	--
	06/14/11		61.09	--	--	3694.34	--
	09/27/11		61.55	--	--	3693.88	--
	12/13/11		61.70	--	--	3693.73	--
	03/27/12		61.84	--	--	3693.59	--
	06/19/12		61.97	--	--	3693.46	--
	09/24/12		62.12	--	--	3693.31	--
	12/10/12		62.26	--	--	3693.17	--
	03/11/13		62.20	--	--	3693.23	--
	06/11/13		62.26	--	--	3693.17	--
	09/17/13		62.14	--	--	3693.05	--
	12/03/13		62.15	--	--	3693.04	--
	03/11/14		62.24	--	--	3692.95	--
	06/03/14		62.43	--	--	3692.76	--
	09/26/14		62.55	--	--	3692.64	--
MW-E	03/23/06	3754.36	61.09	--	--	3693.27	--
	06/15/06		61.32	--	--	3693.04	--
	08/14/06		61.41	--	--	3692.95	--
	11/14/06		61.27	--	--	3693.09	--
	03/27/07		60.86	--	--	3693.50	--
	06/21/07		61.09	--	--	3693.27	--
	09/18/07		61.09	--	--	3693.27	--
	12/13/07		60.91	--	--	3693.45	--
	03/05/08		60.75	--	--	3693.61	--
	06/02/08		60.78	--	--	3693.58	--
	09/15/08		61.21	--	--	3693.15	--
	12/03/08		61.13	--	--	3693.23	--
	02/27/09		60.81	--	--	3693.55	--
	06/25/09		60.74	--	--	3693.62	--
	09/01/09		60.93	--	--	3693.43	--
	11/17/09		60.94	--	--	3693.42	--
	03/25/10		60.82	--	--	3693.54	--
	06/08/10		60.83	--	--	3693.53	--
	09/21/10		60.65	--	--	3693.71	--

**TABLE 2**  
**DCP MIDSTREAM, LP - HOBBS GAS PLANT**  
**HISTORICAL SUMMARY OF GROUNDWATER**  
**AND LNAPL GAUGING MEASUREMENTS**

<i>Well ID</i>	<i>Date</i>	<i>TOC (ft msl)</i>	<i>DTW (ft bgs)</i>	<i>DTP (ft.)</i>	<i>LNAPL Thickness (ft.)</i>	<i>GWE (ft msl)</i>	<i>Product Recovered (gal.)</i>
MW-E cont.	12/16/10	3754.11	60.65	--	--	3693.71	--
	03/11/11		60.75	--	--	3693.61	--
	06/14/11		60.91	--	--	3693.45	--
	09/27/11		61.43	--	--	3692.93	--
	12/13/11		61.59	--	--	3692.77	--
	03/27/12		61.66	--	--	3692.70	--
	06/19/12		61.81	--	--	3692.55	--
	09/24/12		61.94	--	--	3692.42	--
	12/10/12		62.90	--	--	3691.46	--
	03/11/13		61.91	--	--	3692.45	--
	06/11/13		61.97	--	--	3692.39	--
	09/17/13		61.90	--	--	3692.21	--
	12/03/13		61.85	--	--	3692.26	--
	03/11/14		61.95	--	--	3692.16	--
	06/03/14		62.09	--	--	3692.02	--
	09/26/14		62.22	--	--	3691.89	--
MW-F	03/23/06	3756.13	62.53	--	--	3693.60	--
	06/14/06		62.72	--	--	3693.41	--
	08/14/06		62.68	--	--	3693.45	--
	11/14/06		62.46	--	--	3693.67	--
	03/27/07		67.05	--	--	3689.08	--
	06/21/07		62.32	--	--	3693.81	--
	09/18/07		62.31	--	--	3693.82	--
	12/13/07		62.19	--	--	3693.94	--
	03/05/08		62.01	--	--	3694.12	--
	06/02/08		62.06	--	--	3694.07	--
	09/15/08		62.44	--	--	3693.69	--
	12/03/08		62.22	--	--	3693.91	--
	02/27/09		61.97	--	--	3694.16	--
	06/25/09		61.96	--	--	3694.17	--
	09/01/09		62.18	--	--	3693.95	--
	11/17/09		62.13	--	--	3694.00	--
	03/25/10		62.02	--	--	3694.11	--
	06/08/10		62.12	--	--	3694.01	--
	09/21/10		61.92	--	--	3694.21	--
	12/16/10		61.93	--	--	3694.20	--
	03/11/11		62.05	--	--	3694.08	--
	06/14/11		62.35	--	--	3693.78	--
	09/27/11		62.85	--	--	3693.28	--
	12/13/11		63.05	--	--	3693.08	--
	03/27/12		63.16	--	--	3692.97	--

**TABLE 2**  
**DCP MIDSTREAM, LP - HOBBS GAS PLANT**  
**HISTORICAL SUMMARY OF GROUNDWATER**  
**AND LNAPL GAUGING MEASUREMENTS**

<b>Well ID</b>	<b>Date</b>	<b>TOC (ft msl)</b>	<b>DTW (ft bgs)</b>	<b>DTP (ft.)</b>	<b>LNAPL Thickness (ft.)</b>	<b>GWE (ft msl)</b>	<b>Product Recovered (gal.)</b>
MW-F cont.	06/19/12	3755.88	63.30	--	--	3692.83	--
	09/24/12		63.50	--	--	3692.63	--
	12/10/12		63.65	--	--	3692.48	--
	03/11/13		63.50	--	--	3692.63	--
	06/11/13		63.51	--	--	3692.62	--
	09/17/13		63.41	--	--	3692.47	--
	12/03/13		63.40	--	--	3692.48	--
	03/11/14		63.49	--	--	3692.39	--
	06/03/14		63.60	--	--	3692.28	--
	09/26/14		63.74	--	--	3692.14	--
MW-G	09/17/13	3754.67	62.65	--	--	3692.02	--
	12/03/13		62.63	--	--	3692.04	--
	12/18/13		62.61	--	--	3692.06	--
	03/11/14		62.73	--	--	3691.94	--
	06/03/14		Not Gauged due to Damage				--
	09/26/14		Not Gauged due to Damage				--

**Notes and Abbreviations:**

ID = Identification

TOC = Top of casing

DTW = Depth to water

LNAPL = Light non-aqueous phase liquids

GWE = Groundwater elevation

\* = Groundwater elevation corrected using a LNAPL specific gravity of 0.81

ft msl = Feet above mean sea level

ft bgs = Feet below ground surface

-- = No LNAPL gauged

Wells were re-surveyed on 9/25/2013

**TABLE 3**  
**DCP MIDSTREAM, LP - HOBBS GAS PLANT**  
**HISTORICAL SUMMARY OF GROUNDWATER**  
**ANALYTICAL RESULTS AND PARAMETER READINGS**

Well ID	Sample Date	Benzene 10	Toluene 750	Ethyl-Benzene	Total Xylenes	LNAPL	pH	Conductivity ( $\mu\text{S}/\text{cm}$ )	Temperature ( $^{\circ}\text{C}$ )	DO ( $\text{mg}/\text{l}$ )	ORP (mV)
		( $\mu\text{g}/\text{l}$ )	( $\mu\text{g}/\text{l}$ )	750 ( $\mu\text{g}/\text{l}$ )	620 ( $\mu\text{g}/\text{l}$ )	Thickness (ft)					
MW-AR	03/23/06	< 1.0	< 5.0	< 1.0	< 3.0	--	7.37	373	17.0	6.19	--
DUP	03/23/06	< 1.0	< 5.0	< 1.0	< 3.0	--	--	--	--	--	--
	06/14/06	< 1.0	< 5.0	< 1.0	< 3.0	--	7.38	532	20.1	8.67	--
	08/14/06	< 0.5	< 5.0	< 0.5	< 1.5	--	5.70	578	22.4	5.7	68.7
	11/14/06	< 1.0	< 5.0	< 1.0	< 3.0	--	7.10	433	18.9	7.6	44.4
	03/28/07	< 1.0	< 5.0	< 1.0	< 3.0	--	7.71	594	18.9	10.04	223.7
	06/21/07	< 1.0	< 5.0	< 1.0	< 3.0	--	7.30	565	19.5	5.45	28.7
	09/18/07	< 1.0	< 5.0	< 1.0	< 3.0	--	7.13	495	19.9	4.79	5.9
	12/13/07	< 1.0	< 5.0	< 1.0	< 3.0	--	7.23	614	18.4	7.01	-8.6
	03/05/08	<b>11</b>	<5.0	3.8	15.0	--	7.20	431	17.5	11.42	21.3
	06/02/08	<0.46	<0.48	<0.45	<1.4	--	7.31	573	20.6	5.49	31.1
	09/15/08	<0.46	<0.48	<0.45	<1.4	--	6.81	533	19.3	4.96	238.7
	12/03/08	<0.46	<0.48	<0.45	<1.4	--	7.37	505	18.2	7.17	183.9
	02/27/09	<0.46	<0.48	<0.45	<1.4	--	7.29	505	19.3	8.15	64.1
	06/25/09	<2.0	<2.0	<2.0	<6.0	--	6.90	660	19.8	8.20	145.0
	09/01/09	<2.0	<2.0	<2.0	<6.0	--	7.07	670	19.9	8.11	69.0
	11/17/09	<2.0	<2.0	<2.0	<6.0	--	7.82	576	17.7	--	--
	03/25/10	<2.0	<2.0	<2.0	<6.0	--	7.51	567	21.7	--	--
	06/08/10	<2.0	<2.0	<2.0	<6.0	--	7.36	513	--	--	--
	09/21/10	<0.50	<0.43	<0.55	<1.7	--	7.11	585	20.3	--	--
	12/16/10	<0.50	<0.43	<0.55	<1.7	--	7.27	226	18.0	--	--
	03/11/11	<2.0	<2.0	<2.0	<6.0	--	7.31	557	19.4	--	--
	06/14/11	<1.0	<1.0	<1.0	<3.0	--	6.93	582	21.0	--	--
	09/27/11	<1.0	<1.0	<1.0	<3.0	--	7.65	539	20.8	--	--
	12/13/11	<1.0	<1.0	<1.0	<3.0	--	7.50	574	17.5	--	--
	03/27/12	<1.0	<1.0	<1.0	<3.0	--	7.79	516	19.7	--	--
	06/19/12	<1.0	<1.0	<1.0	<3.0	--	7.53	518	20.2	--	--
	09/24/12	<1.0	<1.0	<1.0	<3.0	--	7.86	554	20.5	--	--
	12/10/12	<1.0	<1.0	<1.0	<3.0	--	7.10	554	19.7	--	--
	09/17/13	<1.0	<1.0	<1.0	<3.0	--	7.67	581	19.2	--	--
	12/03/13	<1.0	<1.0	<1.0	<3.0	--	8.17	792	18.9	--	--
	03/11/14	<1.0	<1.0	<1.0	<3.0	--	8.26	568	18.8	--	--
	06/03/14	<1.0	<1.0	<1.0	<3.0	--	7.51	580	19.0	--	--
	09/26/14	<1.0	<1.0	<1.0	<3.0	--	7.43	568	19.0	--	--

**TABLE 3**  
**DCP MIDSTREAM, LP - HOBBS GAS PLANT**  
**HISTORICAL SUMMARY OF GROUNDWATER**  
**ANALYTICAL RESULTS AND PARAMETER READINGS**

Well ID	Sample Date	Benzene 10	Toluene 750	Ethyl-Benzene	Total Xylenes	LNAPL	pH	Conductivity ( $\mu\text{S}/\text{cm}$ )	Temperature ( $^{\circ}\text{C}$ )	DO ( $\text{mg}/\text{l}$ )	ORP (mV)
		( $\mu\text{g}/\text{l}$ )	( $\mu\text{g}/\text{l}$ )	750 ( $\mu\text{g}/\text{l}$ )	620 ( $\mu\text{g}/\text{l}$ )	Thickness (ft)					
MW-B	03/23/06	200	370	43	750	--	6.96	440	19.1	1.71	--
	06/15/06	150	110	40	270	--	7.02	809	19.2	3.68	--
DUP	06/15/06	110	50	27	160	--	--	--	--	--	--
	08/14/06	29	6.2	< 0.5	48	--	6.63	753	19.9	1.41	-140.6
	11/14/06	200	74	82	440	--	6.69	609	19.0	7.83	-198.5
	03/28/07	300	120	140	1000	--	6.84	1009	19.4	4.34	-150.6
	06/21/07	310	81	110	740	--	6.92	863	19.1	3.72	-127.9
	09/18/07	410	87	160	1100	--	6.74	822	20.0	1.18	-140.1
	12/13/07	420	86	140	630	--	6.85	980	18.2	7.39	--
	03/05/08	550	64	130	730	--	6.67	836	17.0	2.49	-214.1
	06/02/08	444	86.5	155	716	--	7.08	868	20.0	1.09	-150.1
DUP	09/15/08	398	36.6	157	947	--	6.60	902	19.6	0.56/0.56	1.0
	09/15/08	488	46	200	1,210	--	--	--	--	--	--
	12/03/08	25.6	0.56	7.1	29.2	--	6.93	889	18.4	1.57	-161.4
	02/27/09	592	86.3	176	1,230	--	6.87	921	18.8	0.96	-115.7
	06/25/09	1,490	270	411	2,750	--	6.60	130	19.8	2.50	-131.0
	09/01/09	1,420	195	380	2,930	--	6.60	130	20.4	1.92	-206.0
	11/17/09	199	2.9	68.5	159	--	6.99	822	17.5	--	--
	03/25/10	199	7.8	112	375	--	6.99	1007	20.8	--	--
DUP	06/08/10	438	20.2	161	836	--	6.98	866	21.6	--	--
	06/08/10	631	26.8	191	1,230	--	--	--	--	--	--
	09/21/10	572	21.7	167	885	--	6.73	981	19.7	--	--
	12/16/10	154	14.6	52.8	239	--	7.04	994	17.5	--	--
DUP	03/11/11	360	19.9	175	742	--	6.89	946	19.5	--	--
	03/11/11	295	--	--	742	--	--	--	--	--	--
	06/14/11	295	9.2	135	584	--	6.69	998	20.1	--	--
DUP	06/14/11	448	11	162	932	--	--	--	--	--	--
	09/27/11	225	0.8	147	464	--	7.30	873	20.8	--	--
	12/13/11	357	10	157	581	--	7.07	1006	18.2	--	--
	03/27/12	LNAPL present				0.29	--	--	--	--	--
	06/19/12	LNAPL present				1.65	--	--	--	--	--
	09/24/12	LNAPL present				2.10	--	--	--	--	--
	12/10/12	LNAPL present				2.57	--	--	--	--	--
	03/11/13	LNAPL present				3.60	--	--	--	--	--
	06/11/13	LNAPL present				2.57	--	--	--	--	--
	09/16/13	LNAPL present				2.44	--	--	--	--	--

**TABLE 3**  
**DCP MIDSTREAM, LP - HOBBS GAS PLANT**  
**HISTORICAL SUMMARY OF GROUNDWATER**  
**ANALYTICAL RESULTS AND PARAMETER READINGS**

Well ID	Sample Date	Benzene 10 (µg/l)	Toluene 750 (µg/l)	Ethyl-Benzene 750 (µg/l)	Total Xylenes 620 (µg/l)	LNAPL Thickness (ft)	pH (s.u.)	Conductivity (µS/cm)	Temperature (°C)	DO (mg/l)	ORP (mV)
		NMWQCC Cleanup Levels									
MW-B cont.	12/03/13					2.40	--	--	--	--	--
	03/11/14					2.40	--	--	--	--	--
	06/03/14					1.93	--	--	--	--	--
	09/26/14					2.38	--	--	--	--	--
MW-C	03/23/06	< 1.0	< 5.0	< 1.0	< 3.0	--	7.12	350	19.2	4.21	-
	06/14/06	<b>80.0</b>	37.0	22.0	180	--	7.03	618	20.1	4.17	-
	08/14/06	<b>31.0</b>	8.70	2.90	58.0	--	6.71	644	22.0	2.08	-147.4
	11/14/06	<b>30.0</b>	19.0	11.0	83.0	--	6.71	483	18.5	4.31	-138.6
	03/28/07	<b>84.0</b>	44.0	19.0	160	--	6.98	692	18.6	4.79	-95.4
	06/21/07	<b>18.0</b>	7.10	3.50	26.0	--	7.02	659	18.9	4.36	-90.5
	09/18/07	<b>43.0</b>	5.30	14.0	57.0	--	6.88	625	19.2	3.8	-103.6
DUP	09/18/07	<b>48.0</b>	6.90	16.0	64.0	--	--	--	--	--	--
	12/13/07	<b>13.0</b>	< 5.0	4.50	22.0	--	7.00	844	18.0	10.86	-106.1
DUP	12/13/07	<b>17.0</b>	< 5.0	5.80	25.0	--	--	--	--	--	--
DUP	03/05/08	<b>61.0</b>	5.30	19.0	78.0	--	--	--	--	--	--
DUP	03/05/08	<b>160</b>	<25	160	140	--	6.91	535	17.5	6.50	-104.1
DUP	06/02/08	<b>75.1</b>	4.90	26.3	121	--	--	--	--	--	--
DUP	06/02/08	<b>103</b>	8.10	36.9	170	--	6.90	781	20.0	2.64	-121.2
DUP	09/15/08	<b>130</b>	5.70	47.3	222	--	6.51	679	19.0	1.97	160.3
DUP	12/03/08	<b>39.0</b>	<0.48	10.5	33.3	--	6.88	621	18.2	2.31	-17.8
DUP	12/03/08	<b>50.6</b>	<0.48	13.6	44.5	--	--	--	--	--	--
DUP	02/27/09	<b>69.9</b>	0.78	20.1	86.8	--	6.90	614	18.6	1.96	-8.7
DUP	02/27/09	<b>36.6</b>	<0.48	10.0	43.3	--	--	--	--	--	--
DUP	06/25/09	<b>54.3</b>	0.72	11.9	53.0	--	6.60	760	19.6	4.42	54.0
DUP	06/25/09	<b>64.2</b>	0.87	19.0	82.4	--	--	--	--	--	--
DUP	09/01/09	<b>82.8</b>	1.30	23.1	132	--	6.78	990	19.3	2.66	40.0
DUP	09/01/09	<b>71.5</b>	1.00	19.8	110	--	--	--	--	--	--
DUP	11/17/09	<b>30.0</b>	<2.0	9.30	53.0	--	7.26	631	17.2	--	--
DUP	11/17/19	<b>25.7</b>	<2.0	7.70	44.3	--	--	--	--	--	--
DUP	03/25/10	<b>48.2</b>	3.00	16.9	141	--	7.13	686	19.2	--	--
DUP	03/25/10	<b>52.2</b>	2.90	20.3	123	--	--	--	--	--	--
DUP	06/08/10	<b>20.4</b>	1.10	8.50	52.3	--	6.92	621	23.1	--	--
DUP	09/21/10	<b>124</b>	3.10	50.4	276	--	6.58	742	19.2	--	--
DUP	12/16/10	<b>10.7</b>	0.59	5.10	25.2	--	6.95	761	18.1	--	--
DUP	12/16/10	5.40	<0.43	2.80	12.6	--	--	--	--	--	--

**TABLE 3**  
**DCP MIDSTREAM, LP - HOBBS GAS PLANT**  
**HISTORICAL SUMMARY OF GROUNDWATER**  
**ANALYTICAL RESULTS AND PARAMETER READINGS**

<b>Well ID</b>	<b>Sample Date</b>	<b>Benzene 10</b>	<b>Toluene 750</b>	<b>Ethyl-Benzene</b>	<b>Total Xylenes</b>	<b>LNAPL</b>	<b>pH</b>	<b>Conductivity</b>	<b>Temperature</b>	<b>DO</b>	<b>ORP</b>
		( $\mu\text{g/l}$ )	( $\mu\text{g/l}$ )	750 ( $\mu\text{g/l}$ )	620 ( $\mu\text{g/l}$ )	Thickness (ft)					
MW-C cont.	03/11/11	95.8	5.70	42.4	235	--	6.80	725	19.3	--	--
	06/14/11	66.0	2.80	29.8	145	--	6.60	737	21.2	--	--
	09/27/11	40.3	0.73	19.9	94.4	--	7.34	677	20.5	--	--
	12/13/11	112	4.30	29.8	200	--	7.06	730	16.5	--	--
DUP	12/13/11	44.1	1.90	14.4	97.7	--	--	--	--	--	--
	03/27/12	37.0	1.20	11.4	75.8	--	7.26	652	19.2	--	--
DUP	03/27/12	52.0	1.80	15.0	108	--	--	--	--	--	--
	06/19/12	66.8	1.90	20.1	135	--	7.15	701	20.0	--	--
	09/24/12	2.10	<0.33	0.89	5.60	--	7.76	732	20.6	--	--
	12/10/12	26.6	2.20	8.20	57.8	--	7.08	670	17.6	--	--
DUP	03/11/13	8.60	0.66	2.90	19.8	--	7.64	801	18.4	--	--
	03/11/13	4.70	0.37	1.60	11.1	--	--	--	--	--	--
	06/11/13	LNAPL present				0.03	--	--	--	--	--
	09/16/13	LNAPL present				0.20	--	--	--	--	--
MW-D	12/03/13	LNAPL present				0.37	--	--	--	--	--
	03/11/14	LNAPL present				0.57	--	--	--	--	--
	06/03/14	LNAPL present				0.15	--	--	--	--	--
	09/26/14	LNAPL present				1.30	--	--	--	--	--
	03/23/06	< 1.0	< 5.0	< 1.0	< 3.0	< 0.1	6.86	426	18.5	3.88	--
	06/14/06	< 1.0	< 5.0	< 1.0	< 3.0	< 0.1	6.08	722	20.1	5.36	--
	08/14/06	< 0.5	< 5.0	< 0.5	< 1.5	--	7.08	602	20.0	7.38	109.6
	11/14/06	< 1.0	< 5.0	< 1.0	< 3.0	--	6.73	464	19.0	6.53	79.2
MW-D	03/28/07	< 1.0	< 5.0	< 1.0	< 3.0	--	6.90	777	19.2	9.8	715.4
	06/21/07	< 1.0	< 5.0	< 1.0	< 3.0	--	6.99	681	19.3	6.24	54.9
	09/18/07	< 1.0	< 5.0	< 1.0	< 3.0	--	6.79	645	19.5	4.46	65.6
	12/13/07	< 1.0	< 5.0	< 1.0	< 3.0	--	7.00	714	18.3	10.41	5.4
	03/05/08	< 1.0	< 5.0	< 1.0	< 3.0	--	6.85	507	17.2	9.66	22.5
	06/02/08	< 0.46	< 0.48	< 0.45	< 1.4	--	7.13	668	20.0	5.39	29.2
	09/15/08	< 0.46	< 0.48	< 0.45	< 1.4	--	6.64	646	19.4	3.65	233.1
	12/03/08	< 0.46	< 0.48	< 0.45	< 1.4	--	7.09	587	18.0	5.46	175.5
	02/27/09	< 0.46	< 0.48	< 0.45	< 1.4	--	7.01	589	19.6	7.22	77.1
	06/25/09	< 2.0	< 2.0	< 2.0	< 6.0	--	6.70	820	20.1	6.38	177.0
	09/01/09	< 2.0	< 2.0	< 2.0	< 6.0	--	6.81	860	19.9	6.11	118.0
	11/17/09	< 2.0	< 2.0	< 2.0	< 6.0	--	7.67	658	16.7	--	--
	03/25/10	< 2.0	< 2.0	< 2.0	< 2.0	< 6.0	--	7.18	706	19.5	--

**TABLE 3**  
**DCP MIDSTREAM, LP - HOBBS GAS PLANT**  
**HISTORICAL SUMMARY OF GROUNDWATER**  
**ANALYTICAL RESULTS AND PARAMETER READINGS**

Well ID	Sample Date	Benzene 10	Toluene 750	Ethyl-Benzene	Total Xylenes	LNAPL	pH	Conductivity ( $\mu\text{S}/\text{cm}$ )	Temperature ( $^{\circ}\text{C}$ )	DO ( $\text{mg}/\text{l}$ )	ORP (mV)
		( $\mu\text{g}/\text{l}$ )	( $\mu\text{g}/\text{l}$ )	750 ( $\mu\text{g}/\text{l}$ )	620 ( $\mu\text{g}/\text{l}$ )	Thickness (ft)					
MW-D cont.	06/08/10	<2.0	<2.0	<2.0	<6.0	--	7.09	636	22.3	--	--
	09/21/10	<0.50	<0.43	<0.55	<1.7	--	6.84	731	19.3	--	--
	12/16/10	<0.50	<0.43	<0.55	<1.7	--	7.03	795	18.7	--	--
	03/11/11	<2.0	<2.0	<2.0	<6.0	--	6.82	761	19.4	--	--
	06/14/11	<1.0	<1.0	<1.0	<3.0	--	6.65	842	20.0	--	--
	09/27/11	<1.0	<1.0	<1.0	<3.0	--	7.21	709	20.6	--	--
	12/13/11	<1.0	<1.0	<1.0	<3.0	--	7.28	772	16.7	--	--
	03/27/12	<1.0	<1.0	<1.0	<3.0	--	7.18	660	20.5	--	--
	06/19/12	<1.0	<1.0	<1.0	<3.0	--	7.26	706	21.1	--	--
	09/24/12	<1.0	<1.0	<1.0	<3.0	--	8.18	718	23.0	--	--
	12/10/12	<1.0	<1.0	<1.0	<3.0	--	6.92	676	18.3	--	--
	12/10/12	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--
	03/11/13	<1.0	<1.0	<1.0	<3.0	--	8.14	707	18.8	--	--
DUP	06/11/13	<1.0	<1.0	<1.0	<3.0	--	7.01	658	20.5	--	--
	06/11/13	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--
	09/17/13	<1.0	<1.0	<1.0	<3.0	--	7.38	694	19.5	--	--
	12/03/13	<1.0	<1.0	<1.0	<3.0	--	8.32	696	18.1	--	--
DUP	03/11/14	<1.0	<1.0	<1.0	<3.0	--	7.97	641	19.0	--	--
	06/03/14	<1.0	<1.0	<1.0	<3.0	--	7.40	642	19.6	--	--
	06/03/14	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--
	09/26/14	<1.0	<1.0	<1.0	<3.0	--	7.32	665	19.1	--	--
MW-E	03/23/06	< 1.0	< 5.0	< 1.0	< 3.0	< 0.1	7.21	347	19.7	5.04	--
	06/15/06	< 1.0	< 5.0	< 1.0	< 3.0	< 0.1	7.13	543	19.4	6.43	--
	08/14/06	< 0.5	< 5.0	< 0.5	< 1.5	--	6.75	541	20.3	7.24	101.4
	11/14/06	< 1.0	< 5.0	< 1.0	< 3.0	--	6.83	413	19.0	6.69	54.1
	03/28/07	< 1.0	< 5.0	< 1.0	< 3.0	--	7.07	667	19.0	6.44	46.9
	03/28/07	< 1.0	< 5.0	< 1.0	< 3.0	--	--	--	--	--	--
	06/21/07	< 1.0	< 5.0	< 1.0	< 3.0	--	6.90	640	19.1	3.94	20.3
	09/18/07	< 1.0	< 5.0	< 1.0	< 3.0	--	6.92	585	22.0	3.28	7.6
	12/13/07	< 1.0	< 5.0	< 1.0	< 3.0	--	7.02	778	18.0	7.28	3.5
	03/05/08	<b>14.0</b>	< 5.0	3.90	14.0	--	6.89	487	17.3	8.99	38.4
	06/02/08	<0.46	<0.48	<0.45	<1.4	--	7.07	633	19.9	3.72	9.4
	09/15/08	<0.46	<0.48	<0.45	<1.4	--	6.74	601	19.3	4.02	228.3
	12/03/08	<0.46	<0.48	<0.45	<1.4	--	7.03	592	18.6	5.25	186.2
	02/27/09	<0.46	<0.48	<0.45	<1.4	--	7.01	590	19.1	6.29	91.2

**TABLE 3**  
**DCP MIDSTREAM, LP - HOBBS GAS PLANT**  
**HISTORICAL SUMMARY OF GROUNDWATER**  
**ANALYTICAL RESULTS AND PARAMETER READINGS**

Well ID	Sample Date	Benzene 10	Toluene 750	Ethyl-Benzene	Total Xylenes	LNAPL	pH	Conductivity ( $\mu\text{S}/\text{cm}$ )	Temperature ( $^{\circ}\text{C}$ )	DO ( $\text{mg}/\text{l}$ )	ORP (mV)	
		( $\mu\text{g}/\text{l}$ )	( $\mu\text{g}/\text{l}$ )	750 ( $\mu\text{g}/\text{l}$ )	620 ( $\mu\text{g}/\text{l}$ )	Thickness (ft)						
MW-E cont.	06/25/09	<2.0	<2.0	<2.0	<6.0	--	6.80	270	20.1	5.19	60.0	
	09/01/09	<2.0	<2.0	<2.0	<6.0	--	6.84	780	20.9	5.95	16.0	
	11/17/09	<2.0	<2.0	<2.0	<6.0	--	7.32	610	17.1	--	--	
	03/25/10	<2.0	<2.0	<2.0	<6.0	--	7.14	654	19.5	--	--	
	06/08/10	<2.0	<2.0	<2.0	<6.0	--	7.00	612	22.5	--	--	
	09/21/10	<0.50	<0.43	<0.55	<1.7	--	6.72	730	19.4	--	--	
DUP	09/21/10	<0.50	<0.43	<0.55	<1.7	--	--	--	--	--	--	
	12/16/10	<0.50	<0.43	<0.55	<1.7	--	7.01	699	18.1	--	--	
	03/11/11	<2.0	<2.0	<2.0	<6.0	--	6.82	685	19.3	--	--	
DUP	03/11/11	<2.0	<2.0	<2.0	<6.0	--	--	--	--	--	--	
	06/14/11	<1.0	<1.0	<1.0	<3.0	--	6.63	728	21.0	--	--	
	09/27/11	<1.0	<1.0	<1.0	<3.0	--	7.42	607	20.9	--	--	
DUP	09/27/11	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	
	12/13/11	<1.0	<1.0	<1.0	<3.0	--	7.19	682	15.9	--	--	
	03/27/12	<1.0	<1.0	<1.0	<3.0	--	7.55	630	20.0	--	--	
DUP	06/19/12	<1.0	<1.0	<1.0	<3.0	--	7.25	641	19.9	--	--	
	06/19/12	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	
	09/24/12	<1.0	<1.0	<1.0	<3.0	--	7.83	707	23.0	--	--	
DUP	09/24/12	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	
	12/10/12	<1.0	<1.0	<1.0	<3.0	--	6.21	653	17.1	--	--	
	03/11/13	<1.0	<1.0	<1.0	<3.0	--	8.17	697	18.8	--	--	
	06/11/13	<1.0	<1.0	<1.0	<3.0	--	6.98	687	23.4	--	--	
	09/17/13	<1.0	<1.0	<1.0	<3.0	--	7.30	717	19.2	--	--	
	12/03/13	<1.0	<1.0	<1.0	<3.0	--	8.40	663	18.5	--	--	
	03/11/14	<1.0	<1.0	<1.0	<3.0	--	8.05	629	19.0	--	--	
	06/03/14	<1.0	<1.0	<1.0	<3.0	--	7.33	683	19.3	--	--	
	09/26/14	<1.0	<1.0	<1.0	<3.0	--	7.28	638	19.2	--	--	
	09/26/14	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	
MW-F	03/23/06	< 1.0	< 5.0	< 1.0	< 3.0	< 0.1	6.82	517	19.4	2.12	--	
	06/14/06	< 1.0	< 5.0	< 1.0	< 3.0	< 0.1	6.81	855	21.7	5.52	--	
	08/14/06	< 0.5	< 5.0	< 0.5	< 1.5	--	6.65	846	20.0	2.45	123.7	
	DUP	08/14/06	< 0.5	< 5.0	< 0.5	< 1.5	--	--	--	--	--	
	DUP	11/14/06	< 1.0	< 5.0	< 1.0	< 3.0	--	6.52	544	18.2	4.5	178.2
	DUP	11/14/06	< 1.0	< 5.0	< 1.0	< 3.0	--	--	--	--	--	
	03/27/07	< 1.0	< 5.0	< 1.0	< 3.0	--	6.84	833	18.4	4.61	177	

**TABLE 3**  
**DCP MIDSTREAM, LP - HOBBS GAS PLANT**  
**HISTORICAL SUMMARY OF GROUNDWATER**  
**ANALYTICAL RESULTS AND PARAMETER READINGS**

Well ID	Sample Date	Benzene 10	Toluene 750	Ethyl-Benzene	Total Xylenes	LNAPL	pH	Conductivity ( $\mu\text{S}/\text{cm}$ )	Temperature (°C)	DO (mg/l)	ORP (mV)
		( $\mu\text{g}/\text{l}$ )	( $\mu\text{g}/\text{l}$ )	750 ( $\mu\text{g}/\text{l}$ )	620 ( $\mu\text{g}/\text{l}$ )	Thickness (ft)					
MW-F cont.	06/21/07	< 1.0	< 5.0	< 1.0	< 3.0	--	6.85	849	18.6	4.64	84.7
	DUP	< 1.0	< 5.0	< 1.0	< 3.0	--	--	--	--	--	--
	09/18/07	< 1.0	< 5.0	< 1.0	< 3.0	--	6.63	734	19.0	3.61	207.9
	12/13/07	< 1.0	< 5.0	< 1.0	< 3.0	--	6.71	1062	17.9	9.52	-5.7
	03/05/08	1.90	< 5.0	< 1.0	3.80	--	6.76	657	17.0	9.71	3.6
	06/02/08	<0.46	<0.48	<0.45	<1.4	--	6.76	879	19.0	3.08	21.4
	09/15/08	<0.46	<0.48	<0.45	<1.4	--	6.43	876	19.2	2.52	234.3
	12/03/08	<0.46	<0.48	<0.45	<1.4	--	6.76	917	17.8	3.79	188.4
	02/27/09	<0.46	<0.48	<0.45	<1.4	--	6.77	857	18.6	3.85	93.4
	06/25/09	<2.0	<2.0	<2.0	<6.0	--	6.20	100	19.8	5.56	221.0
	09/01/09	<2.0	<2.0	<2.0	<6.0	--	6.51	110	19.3	5.27	108.0
	11/17/09	<2.0	<2.0	<2.0	<6.0	--	6.93	1030	18.7	--	--
	03/25/10	<2.0	<2.0	<2.0	<6.0	--	6.94	1053	19.0	--	--
	06/08/10	<2.0	<2.0	<2.0	<6.0	--	7.03	900	22.1	--	--
	09/21/10	<0.50	<0.43	<0.55	<1.7	--	6.67	1003	19.1	--	--
	12/16/10	<0.50	<0.43	<0.55	<1.7	--	6.90	1058	17.6	--	--
	03/11/11	<2.0	<2.0	<2.0	<6.0	--	6.84	1017	19.0	--	--
	06/14/11	<1.0	<1.0	<1.0	<3.0	--	6.53	1053	20.1	--	--
	09/27/11	<1.0	<1.0	<1.0	<3.0	--	7.05	890	20.4	--	--
	12/13/11	<1.0	<1.0	<1.0	<3.0	--	7.12	922	16.7	--	--
	03/27/12	<1.0	<1.0	<1.0	<3.0	--	7.20	755	20.6	--	--
	06/19/12	<1.0	<1.0	<1.0	<3.0	--	7.23	776	19.7	--	--
	09/24/12	<0.34	<0.33	<0.32	<0.87	--	7.64	770	21.6	--	--
	12/10/12	<1.0	<1.0	<1.0	<3.0	--	6.97	754	15.8	--	--
	03/11/13	<1.0	<1.0	<1.0	<3.0	--	7.96	830	18.4	--	--
	06/11/13	<1.0	<1.0	<1.0	<3.0	--	7.04	740	20.2	--	--
	09/17/13	<1.0	<1.0	<1.0	<3.0	--	7.39	781	19.1	--	--
DUP	09/17/13	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--
	12/03/13	<1.0	<1.0	<1.0	<3.0	--	8.94	801	18.1	--	--
DUP	12/03/13	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--
	03/11/14	<1.0	<1.0	<1.0	<3.0	--	8.19	769	18.6	--	--
DUP	03/11/14	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--
	06/03/14	<1.0	<1.0	<1.0	<3.0	--	7.62	847	18.8	--	--
	09/26/14	<1.0	<1.0	<1.0	<3.0	--	7.58	715	18.7	--	--

**TABLE 3**  
**DCP MIDSTREAM, LP - HOBBS GAS PLANT**  
**HISTORICAL SUMMARY OF GROUNDWATER**  
**ANALYTICAL RESULTS AND PARAMETER READINGS**

<b>Well ID</b>	<b>Sample Date</b>	<b>Benzene 10</b>	<b>Toluene 750</b>	<b>Ethyl-Benzene</b>	<b>Total Xylenes</b>	<b>LNAPL</b>	<b>pH</b>	<b>Conductivity</b>	<b>Temperature</b>	<b>DO</b>	<b>ORP</b>
		( $\mu\text{g/l}$ )	( $\mu\text{g/l}$ )	750 ( $\mu\text{g/l}$ ) NMWQCC Cleanup Levels	620 ( $\mu\text{g/l}$ )	Thickness (ft)					
MW-G	09/17/13	<b>113</b>	449	77.3	<b>720</b>	--					
	12/03/13	--	--	--	--	--					
	12/18/13	<b>160</b>	413	82.7	<b>751</b>	--					
	03/11/14	<b>109</b>	183	44.7	333	--	7.85	670	20.3	--	--
	06/03/14	<b>103</b>	54.0	20.8	105	--	7.51	702	29.5	--	--
	09/26/14	--	--	--	--	--					
Water Supply Well	08/14/06	<0.5	<5.0	<0.5	<1.5		7.47	473	20.9	4.61	31.7

**Notes and Abbreviations:**

ID = Identification

TOC = Top of casing

DTW = Depth to water

LNAPL = Light non-aqueous phase liquids

GWE = Groundwater elevation

\* = Groundwater elevation corrected using a LNAPL specific gravity of 0.81

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

s.u. = Standard unit

$\mu\text{s}/\text{cm}$  = Microsiemens per centimeter

$^{\circ}\text{C}$  = Degrees Celcius

$\text{mg/l}$  = Milligrams per liter

$\text{mV}$  = Millivolts

$\mu\text{g/l}$  = Micrograms per liter

NMWQCC = New Mexico Water Quality Control Commission

<x = Not detected above x  $\mu\text{g/l}$

**BOLD** = Indicates concentration above the NMWQCC Cleanup Levels

-- = Not measured/not analyzed

## Appendices

## Appendix A

### Groundwater Monitoring Field Sheets

## Appendix A

### Groundwater Monitoring Field Sheets

Location Hobbs Gas Plant Date 9-26-14 61

Project / Client 0590971 DCO

Joe Mielos, Nate Knowles, Truck 266  
0817, given

D655 S, a-t HACH MP-6  
multimeter - calibration -

Conductivity 1.413 Aquasolutions  
Lot # 3091305 Exp 9-30-14  
read: 1414 actual: 1413

pH 7 Aquasolutions  
Lot # 30307103 Exp 3/30/15  
read: 1414 actual: 1413  
7.01 7.0

0727 no added and checked  
+ truck 140971  
read some

0942 arrive s.t.e 141083

0946 sign in



64

Location Hobbs Gas Plant Date 9-26-14

Project / Client 059097 / OCP

Joe Morales, Nate Krouskos, Truck 262, J.W.  
PG 61 continued  
765M

Partly cloudy, 59 to 75°F  
winds 5 to 15 mph

I.P. ~~065~~ Beatach 200ft 07088  
H2S Toripro 06590  
H2S Torisave 07080  
HACI multimeter M16 06579

reference gas sheets and  
DTM sheets

ID	OTP	DTW	TD	Petro	Time
MWT	-	62.50	69.27	9-26	1103
MWE	62.64	63.94	NA	-	-
MWB	<del>62.77</del>	<del>65.15</del>	NA	-	-
MWD	-	62.55	69.64	9-26	1116
MWE	-	62.72	71.14	9-26	1140
MWF	-	63.74	73.55	9-26	952
MWB	unable to gauge and sample				

65

Location Hobbs Gas Plant Date 9-26-14

Project / Client 059097 / OCP

and continue Pg 64 continues

MWB	Temp	condo.	pH.	Balanced
MWB	19.1	606.2	7.32	0.15
MWB	19.0	570.3	7.36	0.33
MWB	19.0	568.2	7.43	0.33

MWB	0.2 gal NAP
MWB	4.8 water

MWB	0.25 gal NAP
MWB	4.75 water

MWD	19.6	656.4	7.3	0.33
MWD	19.3	650.9	7.25	0.33
MWD	19.2	665.4	7.32	0.33
MWD	= D4P			
MWE	19.5	649.3	7.15	0.33
MWE	19.2	649.9	7.24	0.33
MWE	19.2	637.9	7.28	0.33

Location Hobbs Gas Plant Date 9-26-14

Project / Client 059097 / DCP

Pg 65 continued

	Temp	Conc	RH	Bailed	Tmerc
MWF	19.8	707.8	7.69	0.33	
	19.0	723.0	7.60	0.33	
	18.7	715.3	7.58	0.33	

1606 No sample, lost water in well, water and silt popped it off tubing  
1625 finished sampling and OPM signed out head Midland

1605 arrive office 14/196

1614 Filled rock and packed samples,

1627 Ship Gasplant and ALEX Samples, Fodder Sat. delivery

1639 Back at office

5 drums  $\approx$  4.33 full

*S. Goethur*

The manufacturers of "Rite in the Rain" all-weather writing products are grateful to the numerous environmental experts who have contributed to the development of this book. Should you have any additions, improvements or corrections for future publications of this field book or have suggestions for other environmental field book formats, we welcome your input.

Although much effort has been taken to insure the accuracy of the following reference pages, the J. L. Darling Corp. can not guarantee the accuracy of the data contained herein.

To provide input or solicit pricing on these or custom printed field books, contact your "Rite in the Rain" dealer or J. L. Darling Corp., 253-922-5000 or fax 253-922-5300. [www.riteintherain.com](http://www.riteintherain.com)

#### Common Field Data Error Codes

Error Codes Are Used to Explain Common Mistakes and Are Written Above or Close to the Mistake  
Commonly Used Error Codes Include:

- RE Recording Error
- CE Calculation Error
- TE Transcription Error
- SE Spelling Error
- CL Changed for Clarity
- DC Original Sample Description
- Changed After Further Evaluation
- WO Write Over
- NI Not Initiated and Dated at Time of Entry
- OB Not Recorded at the Time of Initial Observation

Note: Error Code Should Be Circled, Dated And Initiated When Recorded.

#### Hazard Classifications

- Class 1 Explosives
- Class 2 Gas
- Class 3 Flammable Liquid
- Class 4 Flammable Solids (Potential spontaneous combustion, or emission of flammable gases when in contact with water)
- Class 5 Oxidizing Substances and Organic Peroxides
- Class 6 Toxic (poisonous) and Infectious substances
- Class 7 Radioactive material
- Class 8 Corrosives
- Class 9 Miscellaneous dangerous goods

#### Container type abbreviations (for sampling guidelines):

- BR - Boston Round
- ABR - Amber Boston Round
- AJ - Amber Jug
- CWM - Clear Wide Mouth
- AWM - Amber Wide Mouth
- Poly - Polyethylene Bottles
- BOD Bottle

## Appendix B

### Standard Operating Procedures for Groundwater Monitoring and Sampling



**CONESTOGA-ROVERS  
& ASSOCIATES**

## **STANDARD FIELD PROCEDURES FOR GROUNDWATER MONITORING AND SAMPLING**

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

### **Groundwater Monitoring**

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

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

### **Groundwater Purging and Sampling**

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



## **CONESTOGA-ROVERS & ASSOCIATES**

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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& ASSOCIATES**

### **Waste Handling and Disposal**

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

\|DEN-S1\Shared\Denver\Alaska\AK SOP\CRA Alaska SOP\AK Groundwater Monitoring and Sampling SOP - CRA.doc

## Appendix C

### Laboratory Analytical Reports



10/06/14

## Technical Report for

**DCP Midstream, LLC**

**CRA:Hobbs Gas Plant / 059097-2014-02 / Lea County, New Mexico**

**Accutest Job Number: TC55593**

**Sampling Date: 09/26/14**

**Report to:**

**DCP Midstream, L.P.  
370 17th Street Suite 2500  
Denver, CO 80202  
SWWeathers@dcpmidstream.com; cknights@craworld.com;  
jfergerson@craworld.com  
ATTN: Mr. Steve Weathers**

**Total number of pages in report: 19**



Test results contained within this data package meet the requirements  
of the National Environmental Laboratory Accreditation Program  
and/or state specific certification programs as applicable.

A handwritten signature in black ink, appearing to read "Richard Rodriguez".

**Richard Rodriguez**  
**Laboratory Director**

**Client Service contact: Sylvia Garza 713-271-4700**

**Certifications: TX (T104704220-14-17, 1M104704220-14-1) AR (14-016-0) AZ (AZ0769) FL (E87628)  
KS (E-10366) LA (85695/04004) NJ (TX010) OK (2014-139) VA (2085)**

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Test results relate only to samples analyzed.**

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1  
2  
3  
4  
5



## Sample Summary

DCP Midstream, LLC

Job No: TC55593

CRA:Hobbs Gas Plant / 059097-2014-02 / Lea County, New Mexico

Sample Number	Collected Date	Time By	Matrix Received	Code Type	Client Sample ID	
TC55593-1	09/26/14	11:03	09/27/14	AQ	Ground Water	MW-A-092614
TC55593-2	09/26/14	11:16	09/27/14	AQ	Ground Water	MW-D-092614
TC55593-3	09/26/14	11:40	09/27/14	AQ	Ground Water	MW-E-092614
TC55593-4	09/26/14	09:52	09/27/14	AQ	Ground Water	MW-F-092614
TC55593-5	09/26/14	00:00	09/27/14	AQ	Ground Water	DUP-092614
TC55593-6	09/26/14	00:00	09/27/14	AQ	Trip Blank Water	TRIP

**Summary of Hits**

**Job Number:** TC55593  
**Account:** DCP Midstream, LLC  
**Project:** CRA:Hobbs Gas Plant / 059097-2014-02 / Lea County, New Mexico  
**Collected:** 09/26/14

Lab Sample ID	Client Sample ID	Result/ Analyte	Qual	MQL	SDL	Units	Method
---------------	------------------	--------------------	------	-----	-----	-------	--------

**TC55593-1 MW-A-092614**

No hits reported in this sample.

**TC55593-2 MW-D-092614**

No hits reported in this sample.

**TC55593-3 MW-E-092614**

No hits reported in this sample.

**TC55593-4 MW-F-092614**

No hits reported in this sample.

**TC55593-5 DUP-092614**

No hits reported in this sample.

**TC55593-6 TRIP**

No hits reported in this sample.



## Sample Results

---

## Report of Analysis

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**Report of Analysis**

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<b>Client Sample ID:</b>	MW-A-092614	<b>Date Sampled:</b>	09/26/14
<b>Lab Sample ID:</b>	TC55593-1	<b>Date Received:</b>	09/27/14
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	CRA:Hobbs Gas Plant / 059097-2014-02 / Lea County, New Mexico		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	G0253157.D	1	09/30/14	CF	n/a	n/a	VG1448
Run #2							

<b>Purge Volume</b>	
Run #1	5.0 ml
Run #2	

**Purgeable Aromatics**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>MQL</b>	<b>SDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	0.00034 U	0.0010	0.00034	mg/l	
108-88-3	Toluene	0.00033 U	0.0010	0.00033	mg/l	
100-41-4	Ethylbenzene	0.00032 U	0.0010	0.00032	mg/l	
1330-20-7	Xylene (total)	0.00087 U	0.0030	0.00087	mg/l	

<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
1868-53-7	Dibromofluoromethane	96%		72-122%
17060-07-0	1,2-Dichloroethane-D4	91%		68-124%
2037-26-5	Toluene-D8	93%		80-119%
460-00-4	4-Bromofluorobenzene	94%		72-126%

U = Not detected      SDL = Sample Detection Limit  
 MQL = Method Quantitation Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	MW-D-092614	<b>Date Sampled:</b>	09/26/14
<b>Lab Sample ID:</b>	TC55593-2	<b>Date Received:</b>	09/27/14
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	CRA:Hobbs Gas Plant / 059097-2014-02 / Lea County, New Mexico		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	G0253158.D	1	09/30/14	CF	n/a	n/a	VG1448
Run #2							

<b>Purge Volume</b>	
Run #1	5.0 ml
Run #2	

**Purgeable Aromatics**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>MQL</b>	<b>SDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	0.00034 U	0.0010	0.00034	mg/l	
108-88-3	Toluene	0.00033 U	0.0010	0.00033	mg/l	
100-41-4	Ethylbenzene	0.00032 U	0.0010	0.00032	mg/l	
1330-20-7	Xylene (total)	0.00087 U	0.0030	0.00087	mg/l	

<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
1868-53-7	Dibromofluoromethane	97%		72-122%
17060-07-0	1,2-Dichloroethane-D4	90%		68-124%
2037-26-5	Toluene-D8	94%		80-119%
460-00-4	4-Bromofluorobenzene	94%		72-126%

U = Not detected      SDL = Sample Detection Limit  
 MQL = Method Quantitation Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	MW-E-092614	<b>Date Sampled:</b>	09/26/14
<b>Lab Sample ID:</b>	TC55593-3	<b>Date Received:</b>	09/27/14
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	CRA:Hobbs Gas Plant / 059097-2014-02 / Lea County, New Mexico		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	G0253159.D	1	09/30/14	CF	n/a	n/a	VG1448
Run #2							

<b>Purge Volume</b>	
Run #1	5.0 ml
Run #2	

**Purgeable Aromatics**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>MQL</b>	<b>SDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	0.00034 U	0.0010	0.00034	mg/l	
108-88-3	Toluene	0.00033 U	0.0010	0.00033	mg/l	
100-41-4	Ethylbenzene	0.00032 U	0.0010	0.00032	mg/l	
1330-20-7	Xylene (total)	0.00087 U	0.0030	0.00087	mg/l	

<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
1868-53-7	Dibromofluoromethane	96%		72-122%
17060-07-0	1,2-Dichloroethane-D4	93%		68-124%
2037-26-5	Toluene-D8	95%		80-119%
460-00-4	4-Bromofluorobenzene	96%		72-126%

U = Not detected      SDL = Sample Detection Limit  
 MQL = Method Quantitation Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	MW-F-092614	<b>Date Sampled:</b>	09/26/14
<b>Lab Sample ID:</b>	TC55593-4	<b>Date Received:</b>	09/27/14
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	CRA:Hobbs Gas Plant / 059097-2014-02 / Lea County, New Mexico		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	G0253160.D	1	09/30/14	CF	n/a	n/a	VG1448
Run #2							

<b>Purge Volume</b>	
Run #1	5.0 ml
Run #2	

**Purgeable Aromatics**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>MQL</b>	<b>SDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	0.00034 U	0.0010	0.00034	mg/l	
108-88-3	Toluene	0.00033 U	0.0010	0.00033	mg/l	
100-41-4	Ethylbenzene	0.00032 U	0.0010	0.00032	mg/l	
1330-20-7	Xylene (total)	0.00087 U	0.0030	0.00087	mg/l	

<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
1868-53-7	Dibromofluoromethane	98%		72-122%
17060-07-0	1,2-Dichloroethane-D4	91%		68-124%
2037-26-5	Toluene-D8	94%		80-119%
460-00-4	4-Bromofluorobenzene	94%		72-126%

U = Not detected      SDL = Sample Detection Limit  
 MQL = Method Quantitation Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

**Report of Analysis**

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<b>Client Sample ID:</b>	DUP-092614	<b>Date Sampled:</b>	09/26/14
<b>Lab Sample ID:</b>	TC55593-5	<b>Date Received:</b>	09/27/14
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	CRA:Hobbs Gas Plant / 059097-2014-02 / Lea County, New Mexico		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	G0253161.D	1	09/30/14	CF	n/a	n/a	VG1448
Run #2							

<b>Purge Volume</b>	
Run #1	5.0 ml
Run #2	

**Purgeable Aromatics**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>MQL</b>	<b>SDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	0.00034 U	0.0010	0.00034	mg/l	
108-88-3	Toluene	0.00033 U	0.0010	0.00033	mg/l	
100-41-4	Ethylbenzene	0.00032 U	0.0010	0.00032	mg/l	
1330-20-7	Xylene (total)	0.00087 U	0.0030	0.00087	mg/l	

<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
1868-53-7	Dibromofluoromethane	96%		72-122%
17060-07-0	1,2-Dichloroethane-D4	91%		68-124%
2037-26-5	Toluene-D8	92%		80-119%
460-00-4	4-Bromofluorobenzene	94%		72-126%

U = Not detected      SDL = Sample Detection Limit  
 MQL = Method Quantitation Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

**Report of Analysis**

Page 1 of 1

3.6  
3

<b>Client Sample ID:</b>	TRIP	<b>Date Sampled:</b>	09/26/14
<b>Lab Sample ID:</b>	TC55593-6	<b>Date Received:</b>	09/27/14
<b>Matrix:</b>	AQ - Trip Blank Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260C		
<b>Project:</b>	CRA:Hobbs Gas Plant / 059097-2014-02 / Lea County, New Mexico		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	G0253156.D	1	09/30/14	CF	n/a	n/a	VG1448
Run #2							

<b>Purge Volume</b>	
Run #1	5.0 ml
Run #2	

**Purgeable Aromatics**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>MQL</b>	<b>SDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	0.00034 U	0.0010	0.00034	mg/l	
108-88-3	Toluene	0.00033 U	0.0010	0.00033	mg/l	
100-41-4	Ethylbenzene	0.00032 U	0.0010	0.00032	mg/l	
1330-20-7	Xylene (total)	0.00087 U	0.0030	0.00087	mg/l	

<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
1868-53-7	Dibromofluoromethane	96%		72-122%
17060-07-0	1,2-Dichloroethane-D4	90%		68-124%
2037-26-5	Toluene-D8	94%		80-119%
460-00-4	4-Bromofluorobenzene	94%		72-126%

U = Not detected      SDL = Sample Detection Limit  
 MQL = Method Quantitation Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound



## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody

# CHAIN OF CUSTODY

PAGE 1 OF 1

Client / Reporting Information		Project Name:		Project Information		PEDEX Tracking #		Bottle Order Central #											
Company Name <b>CRA</b>		Project Name: <b>DCP Hobbs Gas Plant</b>				10105 Harwin Dr, Ste 150 Houston, TX 77036 TEL: 713-271-4700 FAX: 713-271-4770 www.accutest.com													
Street Address <b>13091 Pond Springs Rd, Suite A100</b>		Street		Billing Information ( If different from Report to)															
City <b>Austin</b>	State <b>TX</b>	Zip <b>78729</b>	City <b>Lea County</b>	State <b>NM</b>	Company Name <b>DCP Midstream</b>														
Project Co	E-mail	Project #	Street Address																
Chris G. Knight/John Ferguson	d.com	0598097-2014-02																	
Phone #	Fax #	Client Purchase Order #	City		State	Zip													
512-506-8803																			
Samples(s) Name(s) <b>CKT</b> Phone # <b>512 268 0086</b>		Project Manager <b>John Ferguson</b>	Attention:																
Collection				Number of preserved Bottles															
Accutest Sample #	Field ID / Point of Collection	Date	Time	Sampled By	Matrix	# of bottles	HCl	NaOH	ZnS04	HgCl2	NaF	TSP	HgHg4	EDTA	OTHER	BTEX (B260)	12/27/2014	12/27/2014	LAB USE ONLY
1	MW-A-092614	9-26-14	1103	J MWL GW	3	X										X 3			
2	MW-B-092614	9-26-14	1116	J MWL GW	3	X										X 3			
3	MW-E-092614	9-26-14	1140	J MWL GW	3	X										X 3			
4	MW-F-092614	9-26-14	0952	J MWL GW	3	X										X 3			
5	DUM-092614	9-26-14	—	J MWL GW	3	X										X 3			
6	TRIP	—	—	—	—	2	X									X 2			
7	TRIP	—	—	—	—	1									X 1				
Turnaround Time (Business days)		Approved By (Accutest PM) / Date:		Data Deliv. & Info:		Comments / Specif. Instructions													
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 5 Day <input type="checkbox"/> 4 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day EMERGENCY				<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULT1 (Level 3+4) <input type="checkbox"/> REDT1 (Level 3+4) <input type="checkbox"/> Commercial "C"		<input type="checkbox"/> TRP <input checked="" type="checkbox"/> EDD Format <input type="checkbox"/> Other _____  Commercial "A" = Results Only Commercial "B" = Results + QC Summary Commercial "C" = Results + QC & Surrogate Summary													
Emergency & Rush T/A data available VIA Lablink						iferguson@craworld.com													
Sample Custody must be documented below each time samples change possession, including courier delivery.										1045									
1 Relinquished by Sampler: <b>John Miles</b>	Date Time: <b>9-26-14 1600</b>	Received By: <b>1</b>	Relinquished By: <b>2</b>	Received By: <b>2</b>	Date Time: <b>9-27-14 1600</b>	Received By: <b>2</b>													
3 Relinquished by Sampler:	Date Time:	Received By:	4	Received By:	Date Time:	Received By:													
5 Relinquished by:	Date Time:	Received By:	5	Custody Seal #	<input type="checkbox"/> Intact	Preserved where applicable	On Ice	Cooler Temp.											

4.1

**TC55593: Chain of Custody**  
**Page 1 of 3**



## Accutest Laboratories Sample Receipt Summary

Page 1 of 2

Accutest Job Number: TC55593 Client: CRA Project: DCP HOBBS GAS PLANT  
Date / Time Received: 9/27/2014 10:45:00 AM Delivery Method: Airbill #'s: 617012725101  
No. Coolers: 1 Therm ID: IR6; Temp Adjustment Factor: 0;  
Cooler Temps (Initial/Adjusted): #1: (2.4/2.4);

<b>Cooler Security</b>		<b>Y or N</b>	<b>Y or N</b>		
1. Custody Seals Present:	<input checked="" type="checkbox"/> <input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/> <input type="checkbox"/>		
2. Custody Seals Intact:	<input checked="" type="checkbox"/> <input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/> <input type="checkbox"/>		
<b>Cooler Temperature</b>		<b>Y or N</b>			
1. Temp criteria achieved:	<input checked="" type="checkbox"/> <input type="checkbox"/>				
2. Cooler temp verification:					
3. Cooler media:	Ice (Bag)				
<b>Quality Control Preservation</b>		<b>Y or N</b>	<b>N/A</b>	<b>WTB</b>	<b>STB</b>
1. Trip Blank present / cooler:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Trip Blank listed on COC:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
3. Samples preserved properly:	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
4. VOCs headspace free:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<b>Sample Integrity - Documentation</b>					
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
2. Container labeling complete:	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
<b>Sample Integrity - Condition</b>					
1. Sample recvd within HT:	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
2. All containers accounted for:	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
3. Condition of sample:			Intact		
<b>Sample Integrity - Instructions</b>					
1. Analysis requested is clear:	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
2. Bottles received for unspecified tests	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
4. Compositing instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>

Comments

Accutest Laboratories  
V:713.271.4700

10165 Harwin Drive  
F: 713.271.4770

Houston, TX 77036  
[www.accutest.com](http://www.accutest.com)

**TC55593: Chain of Custody**  
**Page 2 of 3**

## Sample Receipt Log

Page 2 of 2

**Job #:** TC55593

**Date / Time Received:** 9/27/2014 10:45:00 AM 10:4

**Initials:** bh

**Client:** CRA

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TC55593-1	40ml	1	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR6	2.4	0	2.4
1	TC55593-1	40ml	2	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR6	2.4	0	2.4
1	TC55593-1	40ml	3	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR6	2.4	0	2.4
1	TC55593-2	40ml	1	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR6	2.4	0	2.4
1	TC55593-2	40ml	2	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR6	2.4	0	2.4
1	TC55593-2	40ml	3	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR6	2.4	0	2.4
1	TC55593-3	40ml	1	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR6	2.4	0	2.4
1	TC55593-3	40ml	2	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR6	2.4	0	2.4
1	TC55593-3	40ml	3	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR6	2.4	0	2.4
1	TC55593-4	40ml	1	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR6	2.4	0	2.4
1	TC55593-4	40ml	2	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR6	2.4	0	2.4
1	TC55593-4	40ml	3	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR6	2.4	0	2.4
1	TC55593-5	40ml	1	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR6	2.4	0	2.4
1	TC55593-5	40ml	2	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR6	2.4	0	2.4
1	TC55593-5	40ml	3	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR6	2.4	0	2.4
1	TC55593-6	40ml	1	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR6	2.4	0	2.4
1	TC55593-6	40ml	2	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR6	2.4	0	2.4

**TC55593: Chain of Custody**
**Page 3 of 3**



## GC/MS Volatiles

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### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

## Method Blank Summary

Page 1 of 1

Job Number: TC55593

Account: DUKE DCP Midstream, LLC

Project: CRA:Hobbs Gas Plant / 059097-2014-02 / Lea County, New Mexico

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG1448-MB	G0253141.D	1	09/30/14	CF	n/a	n/a	VG1448

The QC reported here applies to the following samples:

Method: SW846 8260C

TC55593-1, TC55593-2, TC55593-3, TC55593-4, TC55593-5, TC55593-6

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.34	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.87	ug/l	

CAS No. Surrogate Recoveries Limits

1868-53-7	Dibromofluoromethane	94%	72-122%
17060-07-0	1,2-Dichloroethane-D4	90%	68-124%
2037-26-5	Toluene-D8	92%	80-119%
460-00-4	4-Bromofluorobenzene	92%	72-126%

## Blank Spike Summary

Page 1 of 1

Job Number: TC55593

Account: DUKE DCP Midstream, LLC

Project: CRA:Hobbs Gas Plant / 059097-2014-02 / Lea County, New Mexico

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG1448-BS	G0253139.D	1	09/30/14	CF	n/a	n/a	VG1448

The QC reported here applies to the following samples:

Method: SW846 8260C

TC55593-1, TC55593-2, TC55593-3, TC55593-4, TC55593-5, TC55593-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	25	28.8	115	68-119
100-41-4	Ethylbenzene	25	28.9	116	71-117
108-88-3	Toluene	25	28.9	116	73-119
1330-20-7	Xylene (total)	75	84.7	113	74-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	91%	72-122%
17060-07-0	1,2-Dichloroethane-D4	91%	68-124%
2037-26-5	Toluene-D8	95%	80-119%
460-00-4	4-Bromofluorobenzene	96%	72-126%

\* = Outside of Control Limits.

5.2.1  
5

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: TC55593

Account: DUKE DCP Midstream, LLC

Project: CRA:Hobbs Gas Plant / 059097-2014-02 / Lea County, New Mexico

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC55456-1MS	G0253153.D	10	09/30/14	CF	n/a	n/a	VG1448
TC55456-1MSD	G0253154.D	10	09/30/14	CF	n/a	n/a	VG1448
TC55456-1	G0253152.D	10	09/30/14	CF	n/a	n/a	VG1448

The QC reported here applies to the following samples:

Method: SW846 8260C

TC55593-1, TC55593-2, TC55593-3, TC55593-4, TC55593-5, TC55593-6

CAS No.	Compound	TC55456-1		Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits
		ug/l	Q								Rec/RPD
71-43-2	Benzene	971		250	1310	136* a	250	1380	164* a	5	68-119/12
100-41-4	Ethylbenzene	129		250	388	104	250	424	118*	9	71-117/12
108-88-3	Toluene	6.3	J	250	248	97	250	283	111	13	73-119/13
1330-20-7	Xylene (total)	842		750	1630	105	750	1750	121*	7	74-119/13

CAS No.	Surrogate Recoveries	MS	MSD	TC55456-1	Limits
1868-53-7	Dibromofluoromethane	90%	94%	96%	72-122%
17060-07-0	1,2-Dichloroethane-D4	89%	91%	90%	68-124%
2037-26-5	Toluene-D8	94%	94%	95%	80-119%
460-00-4	4-Bromofluorobenzene	96%	95%	95%	72-126%

(a) Outside control limits due to high level in sample relative to spike amount.

\* = Outside of Control Limits.

5.3.1  
5