AP-122

4th Quarter DCP Hobbs Gas Plant GW Report

DATE
2013

From:	Weathers, Stephen W
To:	Lowe, Leonard, EMNRD
Subject:	4th Quarter 2013 Groundwater Sampling Report for DCP Hobbs Gas Plant.
Date:	Monday, July 07, 2014 5:37:39 AM
Attachments:	OCD4Q2013HobbsGPGWLtr6-27-14.doc 059097 RPT 21 FINAL 6-20-14.pdf

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Leonard

Based on your phone message last week, I am sending you electronically the 4th Q 2013 DCP Hobbs Gas Plant Groundwater Monitoring Report and the associated cover letter.

From this point forward, DCP will start submitting to you all quarterly/semiannual groundwater monitor reports via email.

Thanks and let me know if you have any questions or concerns.

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

DCP Midstream
370 17th Street, Suite 2500
Denver, CO 80202
303-595-3331
303-605-2226 *FAX*

June 27, 2014

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

RE: 4th Quarter 2013 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, one copy of the 4th Quarter 2013 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

Stephen Weathers, P.G.
Principal Environmental Specialist

cc: Geoffrey Leking, OCD Hobbs District Office (Copy on CD)
Environmental Files

CONESTOGA-ROVERS & ASSOCIATES

www.CRAworld.com

FINAL REPORT

Fourth Quarter 2013
Groundwater Monitoring Report

DCP Hobbs Gas Plant
AP-122
Unit G, Section 36, Township 18 South, Range 36 East
Lea County, New Mexico

Prepared for:

Mr. Steve Weathers
DCP Midstream, LP
370 17th Street, Suite 2500
Denver, Colorado 80202

Conestoga-Rovers & Associates
2135 South Loop 250 West
Midland, TX 79703

June 2014 • 059097 • Report No. 21

Partners in Sustainability

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Section 1.0 Introduction

Conestoga-Rovers & Associates (CRA) is submitting this *Fourth Quarter 2013 Groundwater Monitoring Report* to DCP Midstream, LP (DCP) for Hobbs Gas Plant in Lea County, New Mexico. This report summarizes the quarterly monitoring well gauging and groundwater sampling event in December 2013. Monitoring well gauging, groundwater sampling details, analytical results and conclusions 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 in an 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 (ft) to the north. There are seven onsite groundwater monitoring wells.

1.2 Groundwater Gradient

Historical static groundwater elevation have ranged between 3,691.46 (MW-E) and 3,695.74 (MW-A) ft above mean sea level (famsl). Static groundwater elevations ranged from 3,692.04 (MW-G) to 3,693.58 (MW-AR) famsl on December 3, 2013. Groundwater flowed to the southeast with a gradient of 0.004 ft/ft (Figure 2). All wells on the site that were gauged through 2013 indicated a decline in the elevation of the potentiometric surface. The average decline over 2013 was 0.12 foot.

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 NMQCC 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:

Analyte	*NMWQCC Standard for Groundwater*
20.6.2.3103 Section A – Human Health Standard	
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

Fourth quarter monitoring well gauging and groundwater sampling was conducted on December 3, 2013. CRA gauged monitoring wells MW-AR through MW-G and collected groundwater samples from MW-AR and MW-D through MW-F. MW-G was not sampled due to a casing deformity which would not allow an available disposable bailer to pass. MW-G was later sampled on December 18, 2013 by using a smaller diameter disposable bailer that could pass by the casing deformity. Light non-aqueous phase liquids (LNAPL) were measured at thicknesses of 2.40 ft in MW-B and 0.37 ft in MW-C and consequently, were not sampled.

Each well cap was removed to allow groundwater levels to stabilize and equilibrate prior to gauging. All sampled groundwater 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. Groundwater samples were submitted under chain-of-custody to Accutest Laboratories of Texas. Groundwater monitoring field sheets documenting groundwater gauging, purging and sampling data for the quarterly event are presented as Appendix A. CRA's standard operating procedures for groundwater monitoring and sampling are presented as Appendix B.

3.1 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. Disposal of 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 and MW-D through 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 New Mexico Water Quality Control Commission (NMWQCC) cleanup levels in groundwater samples collected from MW-AR, MW-D, MW-E and MW-F. Groundwater from MW-G contained concentrations of dissolved benzene (160 micrograms per liter (ug/L) and total xylenes (751 ug/L) which are above the NMWQCC cleanup levels. 2013 gauging, groundwater elevations and analytical results are summarized in Table 1. Historical monitoring well gauging, groundwater elevations and analytical results are summarized in Table 2. Laboratory analytical reports are presented as Appendix C.

Section 5.0 Conclusions and Recommendations

Groundwater flow direction for the fourth quarter of 2013 continues to be southeast as it was during previous monitoring events. The elevation of the water table continues to decline. The average amount of decline during 2013 was 0.12 foot. A casing deformity is present in MW-G. Due to the deformity a routinely used disposable polyurethane bailer or submersible pump was unable to be lowered into the well and subsequently used to purge a minimum of three well casing. A first occurrence sample was collected from MW-G using a smaller sized (length and diameter) polyurethane bailer that was able to bypass the deformity. MW-G contained concentrations above the NMWQCC cleanup levels for benzene and total xylenes. The analytical results for benzene and total xylenes in MW-G may be skewed due to the well not being purged of three well volumes. MW-G is located down gradient from monitoring wells containing LNAPL. 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 was measured in MW-B at 2.40 ft and MW-C at 0.37 ft.

For 2014, CRA recommends the following:

- Continue quarterly monitoring well gauging and groundwater sampling to evaluate the site's groundwater condition;

- Evaluate the integrity of MW-G's casing and propose appropriate repairs;
- Research alternative or utilize known methods to purge and collect representative groundwater samples from MW-G;
- 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
- Continue monitoring LNAPL accumulation in MW-B and MW-C and propose abatement measures.

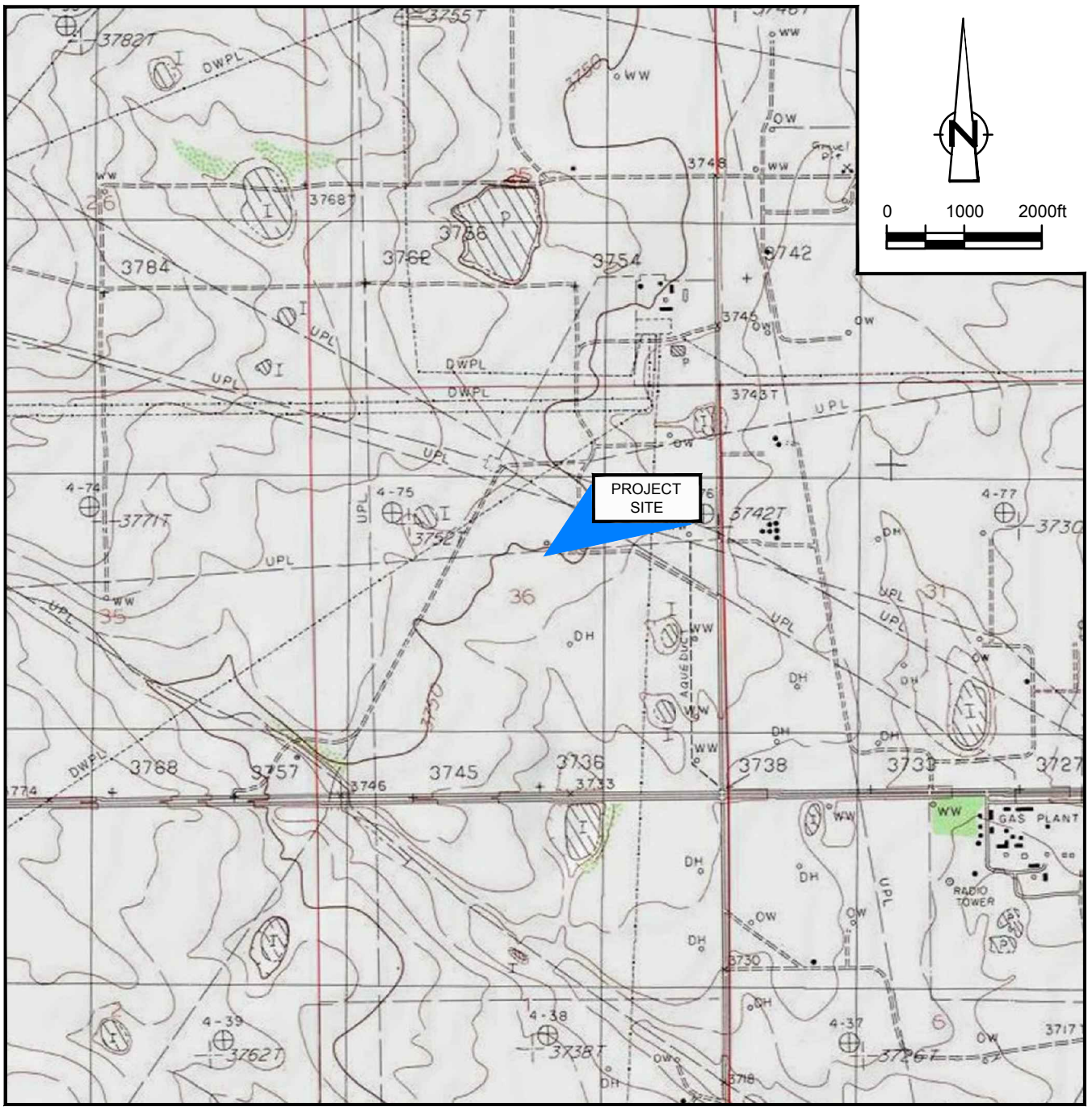
All of which is Respectfully Submitted,

CONESTOGA-ROVERS & ASSOCIATES

John Fergerson
Senior Project Manager

Thomas C. Larson
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
DCP HOBBS GAS PLANT
LEA COUNTY, NEW MEXICO
DCP Midstream

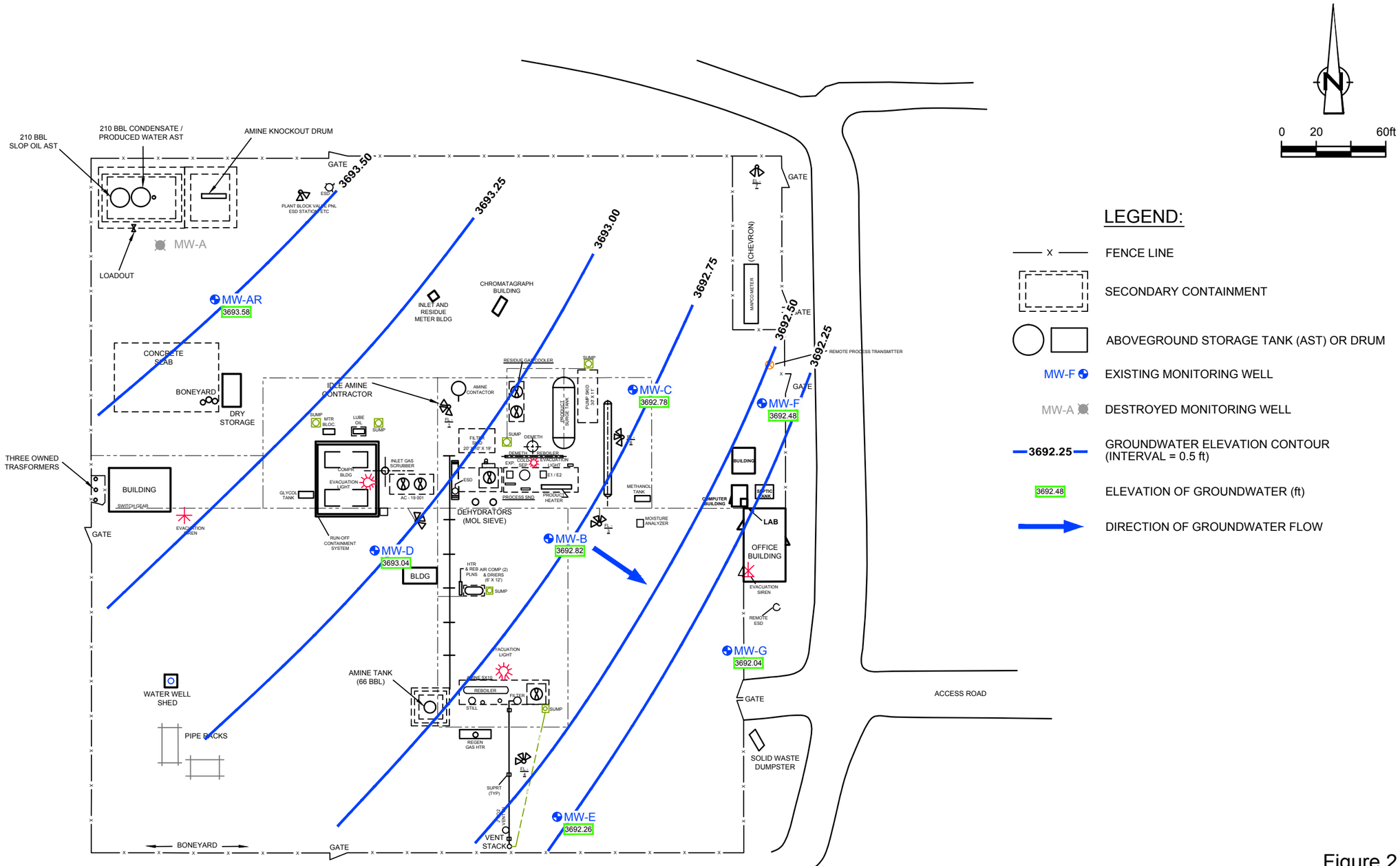
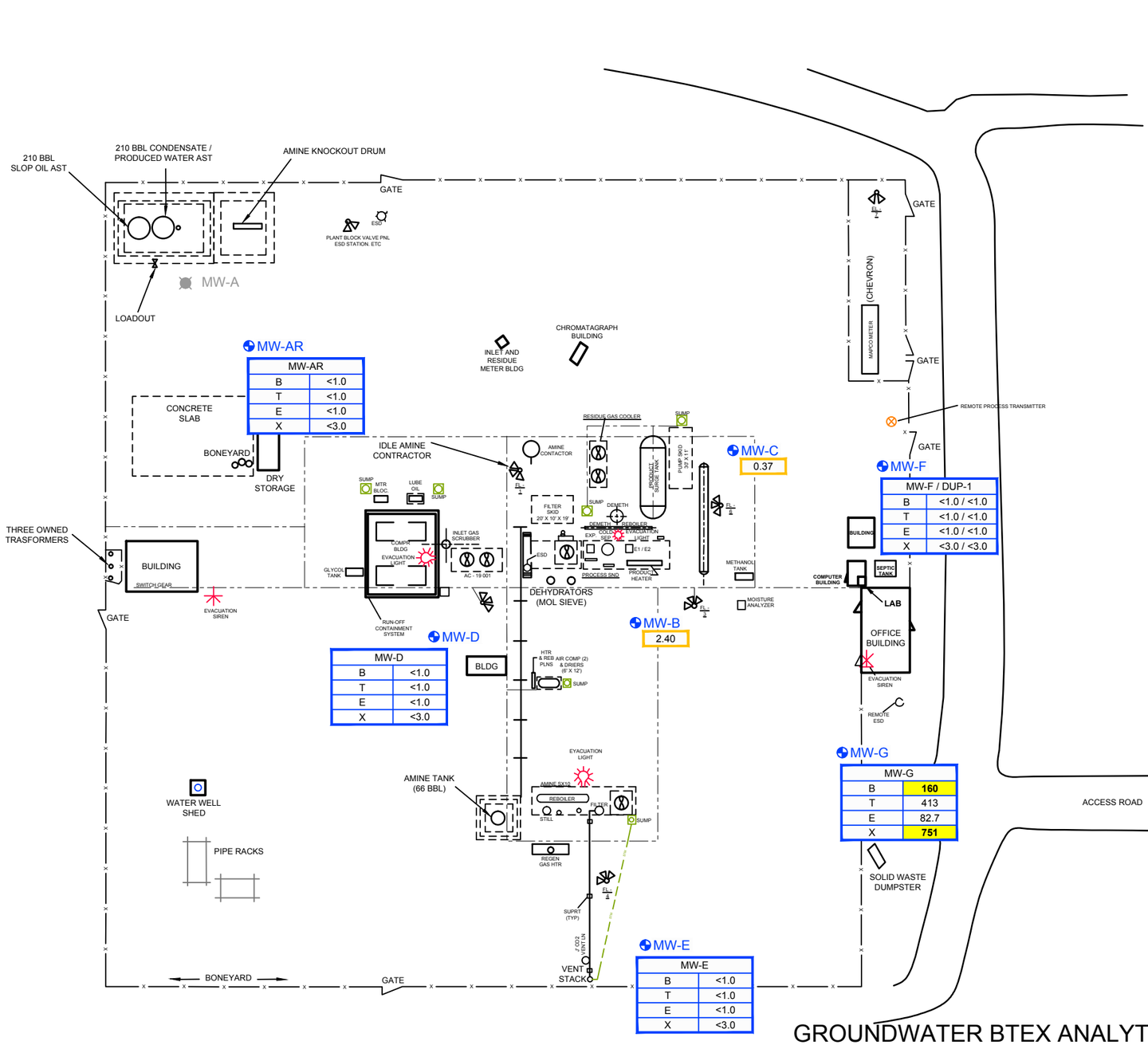


Figure 2

GROUNDWATER ELEVATION CONTOUR MAP - FOURTH QUARTER 2013
DCP HOBBS GAS PLANT
LEA COUNTY, NEW MEXICO
DCP Midstream



0 20 60ft

LEGEND:

- FENCE LINE
- SECONDARY CONTAINMENT
- ABOVEGROUND STORAGE TANK (AST) OR DRUM
- MW-F — EXISTING MONITORING WELL
- MW-A — DESTROYED MONITORING WELL
- 0.37 — LNAPL THICKNESS

MW-C			
BENZENE	B	<1.0	CONCENTRATION IN µg/L
TOLUENE	T	<1.0	
ETHYLBENZENE	E	<1.0	
XYLENES	X	<3.0	

NOTES:

1. GROUNDWATER SAMPLES WERE COLLECTED ON DECEMBER 3, 2013.
2. BTEX ANALYSIS WAS BY EPA METHOD 8260 AND REPORTED IN µg/L.
3. MW-B and MW-C NOT SAMPLED DUE TO LIGHT NON-AQUEOUS PHASE LIQUID (LNAPL).
4. YELLOW SHADED CELL INDICATES NMWQCC EXCEEDANCE.

Figure 3

GROUNDWATER BTEX ANALYTICAL RESULTS - FOURTH QUARTER 2013
DCP HOBBS GAS PLANT
LEA COUNTY, NEW MEXICO
DCP Midstream

CPA

059097-00(021)GN-DL002 JUN 16/2014

Tables

TABLE 1

2013 GAUGING, GROUNDWATER ELEVATION AND ANALYTICAL RESULTS
DCP MIDSTREAM HOBBS GAS PLANT
LEA COUNTY, NEW MEXICO

Well ID	Date	TOC (ft msl)	DTW (ft bgs)	GWE* (ft msl)	Benzene	Toluene	Ethyl -benzene	Total Xylenes
					← Concentrations in µg/l →			
NMWQCC Cleanup Levels					***10***	***750***	***750***	***620***
MW-AR	9/17/2013	3755.73	62.09	3693.64	<1.0	<1.0	<1.0	<3.0
	12/3/2013		62.15	3693.58	<1.0	<1.0	<1.0	<3.0
MW-B	3/11/2013	3755.94	65.00	3693.86	LNAPL Present			
	6/11/2013		65.02	3693.00	LNAPL Present			
	9/16/2013	3755.70	64.84	3692.84	LNAPL Present			
	12/3/2013		64.82	3692.86	LNAPL Present			
MW-C	3/11/2013	3755.59	61.70	3693.89	8.6/4.7	0.66J/0.37J	2.9/1.6	19.8/11.1
	12/3/2013		62.73	3692.88	LNAPL Present			
	9/16/2013	3755.35	62.73	3692.78	LNAPL Present			
	12/3/2013		62.87	3692.78	LNAPL Present			
MW-D	3/11/2013	3755.43	62.20	3693.23	<1.0	<1.0	<1.0	<3.0
	6/11/2013		62.26	3693.17	<1.0/<1.0	<1.0/<1.0	<1.0/<1.0	<3.0/<3.0
	9/17/2013	3755.19	62.14	3693.05	<1.0	<1.0	<1.0	<3.0
	12/3/2013		62.15	3693.04	<1.0	<1.0	<1.0	<3.0
MW-E	3/11/2013	3754.36	61.91	3692.45	<1.0	<1.0	<1.0	<3.0
	6/11/2013		61.97	3692.39	<1.0	<1.0	<1.0	<3.0
	9/17/2013	3754.11	61.90	3692.21	<1.0	<1.0	<1.0	<3.0
	12/3/2013		61.85	3692.26	<1.0	<1.0	<1.0	<3.0
MW-F	3/11/2013	3756.13	63.50	3692.63	<1.0	<1.0	<1.0	<3.0
	6/11/2013		63.51	3692.62	<1.0	<1.0	<1.0	<3.0
	9/17/2013	3755.88	63.41	3692.47	<1.0/<1.0	<1.0/<1.0	<1.0/<1.0	<3.0/<3.0
	12/3/2013		63.40	3692.48	<1.0/<1.0	<1.0/<1.0	<1.0/<1.0	<3.0/<3.0
MW-G	9/17/2013	3754.67	62.65	3692.02	113	449	77.3	720
	12/3/2013		62.63	3692.04	160	413	82.7	751

Notes and Abbreviations:

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
µg/l = Micrograms per liter
<x = Not detected above x µg/l
x/y = Sample results/blind duplicate results
BOLD = Indicates concentration above the NMQCC Cleanup Levels
NMWQCC = New Mexico Water Quality Control Commission
LNAPL = Light non-aqueous phase liquids

TABLE 2

HISTORICAL MONITORING, WELL GAUGING, GROUNDWATER ELEVATIONS AND ANALYTICAL RESULTS
DCP MIDSTREAM HOBBS GS PLANT, LEA COUNTY, NEW MEXICO

Well ID	Date	TOC (ft msl)	DTW (ft bgs)	LNAPL feet	GWE* (ft msl)	pH s.u.	Conductivitiy µS/cm	Temperature ºC	DO mg/l	ORP mV	Benzene	Toluene	Ethylbenzene	Total
											← Concentrations in µg/l →			
NMWQCC Cleanup Levels											***10***	***750***	***750***	***620***
MW-A	03/05/08	3755.87	60.18	--	3695.69	7.20	431	17.46	11.42	21.3	**11**	<5.0	3.8	15.0
	06/02/08		60.19	--	3695.68	7.31	573	20.57	5.49	31.1	<0.46	<0.48	<0.45	<1.4
	09/15/08		60.58	--	3695.29	6.81	533	19.27	4.96	238.7	<0.46	<0.48	<0.45	<1.4
	12/03/08		60.41	--	3695.46	7.37	505	18.20	7.17	183.9	<0.46	<0.48	<0.45	<1.4
	02/27/09		60.18	--	3695.69	7.29	505	19.34	8.15	64.1	<0.46	<0.48	<0.45	<1.4
	06/25/09		60.21	--	3695.66	6.90	660	19.80	8.20	145.0	<2.0	<2.0	<2.0	<6.0
	09/01/09		60.37	--	3695.50	7.07	670	19.86	8.11	69.0	<2.0	<2.0	<2.0	<6.0
	11/17/09		60.40	--	3695.47	7.82	576	17.67	--	--	<2.0	<2.0	<2.0	<6.0
	03/25/10		60.40	--	3695.47	7.51	567	21.70	--	--	<2.0	<2.0	<2.0	<6.0
	06/08/10		60.39	--	3695.48	7.36	513		--	--	<2.0	<2.0	<2.0	<6.0
	09/21/10		60.13	--	3695.74	7.11	585.0	20.30	--	--	<0.50	<0.43	<0.55	<1.7
	12/16/10		60.24	--	3695.63	7.27	225.7	18.00	--	--	<0.50	<0.43	<0.55	<1.7
	03/11/11		60.39	--	3695.48	7.31	556.5	19.40	--	--	<2.0	<2.0	<2.0	<6.0
	06/14/11		60.63	--	3695.24	6.93	582.3	21.00	--	--	<1.0	<1.0	<1.0	<3.0
	09/27/11		61.04	--	3694.83	7.65	538.6	20.80	--	--	<1.0	<1.0	<1.0	<3.0
	12/13/11		61.24	--	3694.63	7.50	574.1	17.5	--	--	<1.0	<1.0	<1.0	<3.0
	03/27/12		61.39	--	3694.48	7.79	515.8	19.7	--	--	<1.0	<1.0	<1.0	<3.0
	06/19/12		61.54	--	3694.33	7.53	518.1	20.2	--	--	<1.0	<1.0	<1.0	<3.0
	09/24/12		61.71	--	3694.16	7.86	553.6	20.5	--	--	<1.0	<1.0	<1.0	<3.0
	12/10/12		61.91	--	3693.96	7.10	554.2	19.7	--	--	<1.0	<1.0	<1.0	<3.0
	03/11/13									Destroyed				
MW-AR	09/17/13	3755.73	62.09	--	3693.64	7.67	581.00	19.20	--	--	<1.0	<1.0	<1.0	<3.0
	12/03/13		62.15		3693.58	8.17	791.60	18.90	--	--	<1.0	<1.0	<1.0	<3.0
MW-B	03/05/08	3755.94	61.66	--	3694.28	6.67	836	16.99	2.49	-214.1	**550**	64	130	**730**
	06/02/08		61.69	--	3694.25	7.08	868	19.99	1.09	-150.1	**444**	86.5	155	**716**
	09/15/08		62.04	--	3693.90	6.60	902	19.63	0.56/0.56	1.0	**398/488**	36.6/46.0	157/200	**947/1,210**
	12/03/08		61.93	--	3694.01	6.93	889	18.39	1.57	-161.4	**25.6**	0.56 J	7.1	29.2
	02/27/09		61.68	--	3694.26	6.87	921	18.83	0.96	-115.7	**592**	86.3	176	**1,230**
	06/25/09		61.63	--	3694.31	6.60	130	19.80	2.50	-131.0	**1,490**	270	411	**2,750**
	09/01/09		61.81	--	3694.13	6.60	130	20.36	1.92	-206.0	**1,420**	195	380	**2,930**
	11/17/09		61.85	--	3694.09	6.99	822	17.50	--	--	**199**	2.9	68.5	159
	03/25/10		61.70	--	3694.24	6.99	1007	20.80	--	--	**199**	7.8	112	375
	06/08/10		61.77	--	3694.17	6.98	866	21.56	--	--	**438/631**	20.2/26.8	161/191	**836/1,230**
	09/21/10		61.58	--	3694.36	6.73	981.4	19.70	--	--	**572**[a]	21.7	167	**885**
	12/16/10		61.61	--	3694.33	7.04	994.3	17.50	--	--	**154**	14.6	52.8	239
	03/11/11		61.74	--	3694.20	6.89	945.9	19.5	--	--	**360**[a]**/295**[a]	19.9	175	**742**
	06/14/11		61.95	--	3693.99	6.69	997.8	20.1	--	--	**295**[a]**/448**[a]	9.2/11.0	135/162	**584/932**[a]
	09/27/11		62.43	--	3693.51	7.3	872.7	20.8	--	--	**225**[a]	0.8	147	464[a]
	12/13/11		62.60	--	3693.34	7.07	1006	18.2	--	--	**357**[a]	10	157	581[a]
	03/27/12		62.94	0.29	3693.23					LNAPL present				
	06/19/12		64.10	1.65	3693.18					LNAPL present				

Well ID	Date	TOC (ft msl)	DTW (ft bgs)	LNAPL feet	GWE* (ft msl)	pH s.u.	Conductivitiy µS/cm	Temperature ºC	DO mg/l	ORP mV	Benzene	Toluene	Ethylbenzene	Total
											← Concentrations in µg/l →			
NMWQCC Cleanup Levels											***10***	***750***	***750***	***620***
MW-B cont.	09/24/12		64.60	2.10	3693.04					LNAPL present				
	12/10/12		65.07	2.57	3692.95					LNAPL present				
	03/11/13		65.00	3.60	3693.86					LNAPL present				
	06/11/13		65.02	2.57	3693.00					LNAPL present				
	09/16/13	3755.70	64.84	2.44	3692.84					LNAPL present				
	12/03/13		64.82	2.40	3692.82					LNAPL present				
MW-C	03/05/08	3755.59	61.18	--	3694.41	6.91	535	17.46	6.50	-104.1	**61/160**	5.3/<25	19.0/160	78.0/140
	06/02/08		61.22	--	3694.37	6.90	781	20.00	2.64	-121.2	**75.4/103**	4.9/8.1	26.3/36.9	121/170
	09/15/08		61.54	--	3694.05	6.51	679	18.99	1.97	160.3	**130**	5.7	47.3	222
	12/03/08		61.48	--	3694.11	6.88	621	18.24	2.31	-17.8	**39.0/50.6**	<0.48/<0.48	10.5/13.6	33.3/44.5
	02/27/09		61.15	--	3694.44	6.90	614	18.56	1.96	-8.7	**69.9/36.6**	0.78 J/<0.48	20.1/10.0	86.8/43.3
	06/25/09		61.16	--	3694.43	6.60	760	19.60	4.42	54.0	**54.3/64.2**	0.72 J/0.87 J	11.9/19.0	53.0/82.4
	09/01/09		61.35	--	3694.24	6.78	990	19.27	2.66	40.0	**82.8/71.5**	1.3 J/ 1.0J	23.1/19.8	132/110
	11/17/09		61.37	--	3694.22	7.26	631	17.17	--	--	**30/25.7**	<2.0/<2.0	9.3/7.7	53.0/44.3
	03/25/10		61.27	--	3694.32	7.13	686	19.20	--	--	**48.2/52.2**	3.0/2.9	16.9/20.3	141/123
	06/08/10		61.33	--	3694.26	6.92	621	23.06	--	--	**20.4**	1.1	8.5	52.3
	09/21/10		61.10	--	3694.49	6.58	741.8	19.2	--	--	**124**	3.1	50.4	276
	12/16/10		61.15	--	3694.44	6.95	760.5	18.1	--	--	**10.7**/5.4	0.59/<0.43	5.1/2.8	25.2/12.6
	03/11/11		61.28	--	3694.31	6.80	725.3	19.3	--	--	**95.8**	5.7	42.4	235
	06/14/11		61.52	--	3694.07	6.60	737.1	21.2	--	--	**66.0**	2.8	29.8	145
	09/27/11		62.00	--	3693.59	7.34	677.2	20.5	--	--	**40.3**	0.7	19.9	94.4
	12/13/11		62.20	--	3693.39	7.06	730.1	16.5	--	--	**112/44.1**	4.3/1.9	29.8/14.4	200/97.7
	03/27/12		62.33	--	3693.26	7.26	652.3	19.2	--	--	**37.0/52.0**	1.2/1.8	11.4/15.0	75.8/104
	06/19/12		62.45	--	3693.14	7.15	701.2	20.0	--	--	**66.8**	1.9	20.1	135
	09/24/12		62.67	--	3692.92	7.76	732.2	20.6	--	--	2.1	<0.33	0.89	5.6
	12/10/12		62.73	--	3692.86	7.08	669.6	17.6	--	--	**26.6**	2.2	8.2	57.8
	03/11/13		61.70	--	3693.89	7.64	800.5	18.4	--	--	8.6/4.7	0.66 J/0.37 J	2.9/1.6	19.8/11.1
	06/11/13		62.73	0.03	3692.88					LNAPL present				
	09/16/13	3755.35	62.73	0.20	3692.78					LNAPL present				
	12/03/13		62.87	0.37	3692.78					LNAPL present				
MW-D	03/05/08	3755.43	60.77	--	3694.66	6.85	507	17.23	9.66	22.5	<1.0	<5.0	<1.0	<3.0
	06/02/08		60.77	--	3694.66	7.13	668	19.99	5.39	29.2	<0.46	<0.48	<0.45	<1.4
	09/15/08		61.10	--	3694.33	6.64	646	19.42	3.65	233.1	<0.46	<0.48	<0.45	<1.4
	12/03/08		61.08	--	3694.35	7.09	587	17.95	5.46	175.5	<0.46	<0.48	<0.45	<1.4
	02/27/09		60.79	--	3694.64	7.01	589	19.59	7.22	77.1	<0.46	<0.48	<0.45	<1.4
	06/25/09		60.77	--	3694.66	6.70	820	20.10	6.38	177.0	<2.0	<2.0	<2.0	<6.0
	09/01/09		60.96	--	3694.47	6.81	860	19.90	6.11	118.0	<2.0	<2.0	<2.0	<6.0
	11/17/09		60.96	--	3694.47	7.67	658	16.67	--	--	<2.0	<2.0	<2.0	<6.0
	03/25/10		60.89	--	3694.54	7.18	706	19.50	--	--	<2.0	<2.0	<2.0	<6.0
	06/08/10		60.91	--	3694.52	7.09	636	22.28	--	--	<2.0	<2.0	<2.0	<6.0
	09/21/10		60.66	--	3694.77	6.84	730.5	19.30	--	--	<0.50	<0.43	<0.55	<1.7
	12/16/10		60.72	--	3694.71	7.03	794.7	18.70	--	--	<0.50	<0.43	<0.55	<1.7
	03/11/11		60.84	--	3694.59	6.82	760.7	19.40	--	--	<2.0	<2.0	<2.0	<6.0
	06/14/11		61.09	--	3694.34	6.65	842.4	20.00	--	--	<1.0	<1.0	<1.0	<3.0
	09/27/11		61.55	--	3693.88	7.21	708.7	20.60	--	--	<1.0	<1.0	<1.0	<3.0

Well ID	Date	TOC (ft msl)	DTW (ft bgs)	LNAPL feet	GWE* (ft msl)	pH s.u.	Conductivitiy µS/cm	Temperature ºC	DO mg/l	ORP mV	Benzene	Toluene	Ethylbenzene	Total
											← Concentrations in µg/l →			
NMWQCC Cleanup Levels											***10***	***750***	***750***	***620***
MW-D cont.	12/13/11		61.70	--	3693.73	7.28	771.7	16.7	--	--	<1.0	<1.0	<1.0	<3.0
	03/27/12		61.84	--	3693.59	7.18	659.7	20.5	--	--	<1.0	<1.0	<1.0	<3.0
	06/19/12		61.97	--	3693.46	7.26	706.4	21.1	--	--	<1.0	<1.0	<1.0	<3.0
	09/24/12		62.12	--	3693.31	8.18	717.9	23.0	--	--	<1.0	<1.0	<1.0	<3.0
	12/10/12		62.26	--	3693.17	6.92	676.4	18.3	--	--	<1.0/<1.0	<1.0/<1.0	<1.0/<1.0	<3.0/<3.0
	03/11/13		62.20	--	3693.23	8.14	706.9	18.8	--	--	<1.0	<1.0	<1.0	<3.0
	06/11/13		62.26	--	3693.17	7.01	658.0	20.5	--	--	<1.0/<1.0	<1.0/<1.0	<1.0/<1.0	<3.0/<3.0
	09/17/13	3755.19	62.14	--	3693.05	7.38	694.0	19.5	--	--	<1.0	<1.0	<1.0	<3.0
	12/03/13		62.15	--	3693.04	8.32	696.1	18.1	--	--	<1.0	<1.0	<1.0	<3.0
MW-E	03/05/08	3754.36	60.75	--	3693.61	6.89	487	17.29	8.99	38.4	**14**	< 5.0	3.9	14
	06/02/08		60.78	--	3693.58	7.07	633	19.91	3.72	9.4	<0.46	<0.48	<0.45	<1.4
	09/15/08		61.21	--	3693.15	6.74	601	19.27	4.02	228.3	<0.46	<0.48	<0.45	<1.4
	12/03/08		61.13	--	3693.23	7.03	592	18.58	5.25	186.2	<0.46	<0.48	<0.45	<1.4
	02/27/09		60.81	--	3693.55	7.01	590	19.10	6.29	91.2	<0.46	<0.48	<0.45	<1.4
	06/25/09		60.74	--	3693.62	6.80	270	20.10	5.19	60.0	<2.0	<2.0	<2.0	<6.0
	09/01/09		60.93	--	3693.43	6.84	780	20.94	5.95	16.0	<2.0	<2.0	<2.0	<6.0
	11/17/09		60.94	--	3693.42	7.32	610	17.06	--	--	<2.0	<2.0	<2.0	<6.0
	03/25/10		60.82	--	3693.54	7.14	654	19.50	--	--	<2.0	<2.0	<2.0	<6.0
	06/08/10		60.83	--	3693.53	7.00	612	22.50	--	--	<2.0	<2.0	<2.0	<6.0
	09/21/10		60.65	--	3693.71	6.72	730	19.40	--	--	<0.50/<0.50	<0.43/<0.43	<0.55/<0.55	<1.7/<1.7
	12/16/10		60.65	--	3693.71	7.01	698.8	18.10	--	--	<0.50	<0.43	<0.55	<1.7
	03/11/11		60.75	--	3693.61	6.82	684.9	19.30	--	--	<2.0/<2.0	<2.0/<2.0	<2.0/<2.0	<6.0/<6.0
	06/14/11		60.91	--	3693.45	6.63	727.9	21.00	--	--	<1.0	<1.0	<1.0	<3.0
	09/27/11		61.43	--	3692.93	7.42	607.3	20.90	--	--	<1.0/<1.0	<1.0/<1.0	<1.0/<1.0	<3.0/<3.0
	12/13/11		61.59	--	3692.77	7.19	682.3	15.9	--	--	<1.0	<1.0	<1.0	<3.0
	03/27/12		61.66	--	3692.70	7.55	630.1	20.0	--	--	<1.0	<1.0	<1.0	<3.0
	06/19/12		61.81	--	3692.55	7.25	641.0	19.9	--	--	<1.0/<1.0	<1.0/<1.0	<1.0/<1.0	<3.0/<3.0
	09/24/12		61.94	--	3692.42	7.83	706.9	23.0	--	--	<1.0/<1.0	<1.0/<1.0	<1.0/<1.0	<3.0/<3.0
	12/10/12		62.90	--	3691.46	6.21	652.7	17.1	--	--	<1.0	<1.0	<1.0	<3.0
	03/11/13		61.91	--	3692.45	8.17	697.3	18.8	--	--	<1.0	<1.0	<1.0	<3.0
	06/11/13		61.97	--	3692.39	6.98	687.0	23.4	--	--	<1.0	<1.0	<1.0	<3.0
	09/17/13	3754.11	61.90	--	3692.21	7.30	717.0	19.2	--	--	<1.0	<1.0	<1.0	<3.0
	12/03/13		61.85	--	3692.26	8.40	663.0	18.5	--	--	<1.0	<1.0	<1.0	<3.0
MW-F	03/05/08	3756.13	62.01	--	3694.12	6.76	657	17.01	9.71	3.6	1.9	< 5.0	< 1.0	3.8
	06/02/08		62.06	--	3694.07	6.76	879	19.00	3.08	21.4	<0.46	<0.48	<0.45	<1.4
	09/15/08		62.44	--	3693.69	6.43	876	19.17	2.52	234.3	<0.46	<0.48	<0.45	<1.4
	12/03/08		62.22	--	3693.91	6.76	917	17.79	3.79	188.4	<0.46	<0.48	<0.45	<1.4
	02/27/09		61.97	--	3694.16	6.77	857	18.61	3.85	93.4	<0.46	<0.48	<0.45	<1.4
	06/25/09		61.96	--	3694.17	6.20	100	19.80	5.56	221.0	<2.0	<2.0	<2.0	<6.0
	09/01/09		62.18	--	3693.95	6.51	110	19.25	5.27	108.0	<2.0	<2.0	<2.0	<6.0
	11/17/09		62.13	--	3694.00	6.93	1,030	18.67	--	--	<2.0	<2.0	<2.0	<6.0
	03/25/10		62.02	--	3694.11	6.94	1,053	19.00	--	--	<2.0	<2.0	<2.0	<6.0
	06/08/10		62.12	--	3694.01	7.03	900	22.06	--	--	<2.0	<2.0	<2.0	<6.0
	09/21/10		61.92	--	3694.21	6.67	1,003	19.10	--	--	<0.50	<0.43	<0.55	<1.7
	12/16/10		61.93	--	3694.20	6.90	1,058	17.60	--	--	<0.50	<0.43	<0.55	<1.7

Well ID	Date	TOC (ft msl)	DTW (ft bgs)	LNAPL feet	GWE* (ft msl)	pH s.u.	Conductivitiy µS/cm	Temperature ºC	DO mg/l	ORP mV	Benzene	Toluene	Ethylbenzene	Total
											← Concentrations in µg/l →			
NMWQCC Cleanup Levels											***10***	***750***	***750***	***620***
	03/11/11		62.05	--	3694.08	6.84	1,017	19.00	--	--	<2.0	<2.0	<2.0	<6.0
	06/14/11		62.35	--	3693.78	6.53	1,053	20.10	--	--	<1.0	<1.0	<1.0	<3.0
	09/27/11		62.85	--	3693.28	7.05	890	20.40	--	--	<1.0	<1.0	<1.0	<3.0
	12/13/11		63.05	--	3693.08	7.12	922.0	16.7	--	--	<1.0	<1.0	<1.0	<3.0
	03/27/12		63.16	--	3692.97	7.20	754.8	20.6	--	--	<1.0	<1.0	<1.0	<3.0
	06/19/12		63.30	--	3692.83	7.23	776.1	19.7	--	--	<1.0	<1.0	<1.0	<3.0
	09/24/12		63.50	--	3692.63	7.64	769.8	21.6	--	--	<0.34	<0.33	<0.32	<0.87
	12/10/12		63.65	--	3692.48	6.97	753.7	15.8	--	--	<1.0	<1.0	<1.0	<3.0
	03/11/13		63.50	--	3692.63	7.96	829.7	18.4	--	--	<1.0	<1.0	<1.0	<3.0
	06/11/13		63.51	--	3692.62	7.04	740.1	20.2	--	--	<1.0	<1.0	<1.0	<3.0
	09/17/13	3755.88	63.41	--	3692.47	7.39	781.0	19.1	--	--	<1.0/<1.0	<1.0/<1.0	<1.0/<1.0	<3.0/<3.0
	12/03/13		63.40		3692.48	8.94	801.1	18.1	--	--	<1.0/<1.0	<1.0/<1.0	<1.0/<1.0	<3.0/<3.0
MW-G	09/17/13	3754.67	62.65	--	3692.02		Well not purged due to damage				**113**	449	77.3	**720**
	12/03/13		62.63	--	3692.04		Well not purged due to damage				**160**	413	82.7	**751**

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
µS/cm = Microsiemens per centimeter
ºC = Degrees Celcius
mg/l = Milligrams per liter
mV = Millivolts
µg/l = Micrograms per liter
NMWQCC = New Mexico Water Quality Control Commission
<x = Not detected above x µg/l
BOLD = Indicates concentration above the NMWQCC Cleanup Levels
-- = Not measured/not analyzed
x / y = Sample results / blind duplicate results
Wells were re-surveyed on 9/25/2013

Appendices

Appendix A
Groundwater Monitoring Field Sheets

CRA

HOBBS Quarterly Groundwater Sampling Field Sheet

Well ID	Time	DTP	DTW	Depth to Bottom	Product Thickness	Amount of Product Removed	Casing Diam.	Comments
MW-AR		-	62.15	70.00	-		2"	Pad destroyed (took picture)
MW-B		62.42	~~62.82~~ 62.80	-	2.40		2"	
MW-C		6250	6287	-	.37		2"	
MW-D		-	62.15	69.70	-		2"	
MW-E		-	61.85	71.20	-		2"	
MW-F		-	63.40	73.70	-		2"	
MW-G			62.63	69.67			2"	Could'nt sample w/ mini baile

Project Name: Hobbs Gas Plant

Project Number: **059097**

Field Staff: Justin Nixon / Celicio Lerma

Date: 12/3/13

CONESTOGA-ROVERS & ASSOCIATES

WELL SAMPLING FORM
DISPOSABLE BAILER SAMPLING

Site ID: **Hobbs**	CRA Mgr: **Siobhan Pritchard**	Well ID: **MW-A** R
CRA Project No.: **059097**	Date: 12-3-13	Field Staff: JN CL

Depth to Water: 62.15	Depth to Bottom: 7000	Water Column Height:
Volume/ft:	1 Casing Volume: 0.163	3 Casing Volumes: 0.489
Well Diameter: 2"	Did Well Dewater?: Yes No	Total Gallons Purged: 3.5
Purged groundwater: Drum☐ Surface☒		

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

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

Time	Volume Purged (gallons)	Temp. (°C) ± 10%	Ph ± 0.1	Cond. (µS) ± 3%	Comments
		18.9	8.21	799.6	
		18.9	8.18	797.3	
		18.9	8.17	791.6	

**** A minimum of three parameters must be monitored and recorded.****
NOTE: If well is purged dry, DO NOT collect sample until it has recharged to approximately 80% of its pre-purge volume.

Sample ID	Date	Time	Analytes / Analytical Method
MW-AR	12-3-13	1230	☒ BTEX by SW-846 8260B
			○ _____

Additional Comments:

CONESTOGA-ROVERS & ASSOCIATES

WELL SAMPLING FORM
DISPOSABLE BAILER SAMPLING

Site ID: **Hobbs**	CRA Mgr: **Siobhan Pritchard**	Well ID: **MW-B**
CRA Project No.: **059097**	Date:	Field Staff:

Depth to Water:	Depth to Bottom:	Water Column Height:
Volume/ft:	1 Casing Volume:	3 Casing Volumes:
Well Diameter:	Did Well Dewater?: Yes No	Total Gallons Purged:
Purged groundwater: Drum☐ Surface☐		

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

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

Time	Volume Purged (gallons)	Temp. (°C) ± 10%	Ph ± 0.1	Cond. (Ms) ± 3%	Comments

**** A minimum of three parameters must be monitored and recorded.****
NOTE: If well is purged dry, DO NOT collect sample until it has recharged to approximately 80% of its pre-purge volume.

Sample ID	Date	Time	Analytes / Analytical Method
			○ BTEX by SW-846 8260B
			○ _____

Additional Comments:

CONESTOGA-ROVERS & ASSOCIATES

WELL SAMPLING FORM
DISPOSABLE BAILER SAMPLING

Site ID: **Hobbs**	CRA Mgr: **Siobhan Pritchard**	Well ID: **MW-C**
CRA Project No.: **059097**	Date:	Field Staff:

Depth to Water:	Depth to Bottom:	Water Column Height:
Volume/ft:	1 Casing Volume:	3 Casing Volumes:
Well Diameter:	Did Well Dewater?: Yes No	Total Gallons Purged:
Purged groundwater: Drum☐ Surface☐		

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

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

Time	Volume Purged (gallons)	Temp. (°C) ± 10%	Ph ± 0.1	Cond. (Ms) ± 3%	Comments

**** A minimum of three parameters must be monitored and recorded.****
NOTE: If well is purged dry, DO NOT collect sample until it has recharged to approximately 80% of its pre-purge volume.

Sample ID	Date	Time	Analytes / Analytical Method
			○ BTEX by SW-846 8260B
			○ _____

Additional Comments:

CONESTOGA-ROVERS & ASSOCIATES

WELL SAMPLING FORM
DISPOSABLE BAILER SAMPLING

Site ID: **Hobbs**	CRA Mgr: **Siobhan Pritchard**	Well ID: **MW-D**
CRA Project No.: **059097**	Date: 12-3-13	Field Staff: Jw cl

Depth to Water: 62.15	Depth to Bottom: 69.70	Water Column Height:
Volume/ft:	1 Casing Volume: 0.163	3 Casing Volumes: 0.489
Well Diameter: 2"	Did Well Dewater?: Yes (No)	Total Gallons Purged: 3
Purged groundwater: Drum ☐ Surface ☒		

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

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

Time	Volume Purged (gallons)	Temp. (°C) ± 10%	Ph ± 0.1	Cond. (~~MS~~ mS) ± 3%	Comments
		18.1	8.35	699.3	
		18.3	8.29	703.6	
		18.1	8.32	696.1	

**** A minimum of three parameters must be monitored and recorded.****
NOTE: If well is purged dry, DO NOT collect sample until it has recharged to approximately 80% of its pre-purge volume.

Sample ID	Date	Time	Analytes / Analytical Method
MW-D	12-3-13	1250	☒ BTEX by SW-846 8260B
			○ _____

Additional Comments:

CONESTOGA-ROVERS & ASSOCIATES

WELL SAMPLING FORM
DISPOSABLE BAILER SAMPLING

Site ID: **Hobbs**	CRA Mgr: **Siobhan Pritchard**	Well ID: **MW-E**
CRA Project No.: **059097**	Date: 12-3-13	Field Staff: JW CL

Depth to Water: 61.85	Depth to Bottom: 71.20	Water Column Height:
Volume/ft:	1 Casing Volume: 0.163	3 Casing Volumes: 0.489
Well Diameter: 2"	Did Well Dewater?: Yes (No)	Total Gallons Purged: 4.5
Purged groundwater: Drum ☐ Surface ☒		

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

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

Time	Volume Purged (gallons)	Temp. (°C) ± 10%	Ph ± 0.1	Cond. (~~MS~~ mS) ± 3%	Comments
		18.4	8.47	667.1	
		18.5	8.41	669.3	
		18.5	8.40	663.0	

**** A minimum of three parameters must be monitored and recorded.****
NOTE: If well is purged dry, DO NOT collect sample until it has recharged to approximately 80% of its pre-purge volume.

Sample ID	Date	Time	Analytes / Analytical Method
mw-E	12-3-13	1305	☒ BTEX by SW-846 8260B
			○ _____

Additional Comments:

CONESTOGA-ROVERS & ASSOCIATES

WELL SAMPLING FORM
DISPOSABLE BAILER SAMPLING

Site ID: **Hobbs**	CRA Mgr: **Siobhan Pritchard**	Well ID: MW-F
CRA Project No.: **059097**	Date: 12-3-13	Field Staff: JW CC

Depth to Water: 63.40	Depth to Bottom: 73.70	Water Column Height:
Volume/ft:	1 Casing Volume: 0.163	3 Casing Volumes: 0.489
Well Diameter: 2"	Did Well Dewater?: Yes No	Total Gallons Purged: 5
Purged groundwater: Drum☐ Surface☒		

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

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

Time	Volume Purged (gallons)	Temp. (°C) ± 10%	Ph ± 0.1	Cond. (Ms) ± 3%	Comments
		18.3	8.97	801.3	
		18.1	8.93	804.7	
		18.1	8.94	801.1	

**** A minimum of three parameters must be monitored and recorded. ****
NOTE: If well is purged dry, DO NOT collect sample until it has recharged to approximately 80% of its pre-purge volume.

Sample ID	Date	Time	Analytes / Analytical Method
MW-F	12-3-13	1340	☒ BTEX by SW-846 8260B
Dupl	12-3-13		○ _____

Additional Comments:

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™ or Alconox™ followed by one rinse of clean tap water and then two rinses of distilled water.

Groundwater Purging and Sampling

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

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

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

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

Sample Handling

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

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

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

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

Well Development

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

CONESTOGA-ROVERS & ASSOCIATES

Waste Handling and Disposal

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

Appendix C
Laboratory Analytical Reports

Gulf Coast ACCUTEST LABORATORIES

12/13/13

Technical Report for

DCP Midstream, LLC

CRA: DCP Midstream-Hobbs

Accutest Job Number: TC40719

Sampling Date: 12/03/13

Report to:

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

Total number of pages in report: **23**

NELAP ACCREDITED TNI LABORATORY

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.

Richard Rodriguez
Laboratory Director

Client Service contact: Sylvia Garza 713-271-4700

Certifications: TX (T104704220-13-12) AR (13-019-0) AZ (AZ0769) FL (E87628) KS (E-10366) LA (85695/04004) OK (2013-142) VA (2085)

Sections: 1 2 3 4 5

Table of Contents

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Accutest Laboratories

Sample Summary

DCP Midstream, LLC

Job No: TC40719

CRA: DCP Midstream-Hobbs

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
TC40719-1	12/03/13	12:30		12/04/13	AQ	Ground Water	MW-AR
TC40719-2	12/03/13	12:50		12/04/13	AQ	Ground Water	MW-D
TC40719-3	12/03/13	13:05		12/04/13	AQ	Ground Water	MW-E
TC40719-4	12/03/13	13:40		12/04/13	AQ	Ground Water	MW-F
TC40719-5	12/03/13	00:00		12/04/13	AQ	Ground Water	DUP-1
TC40719-6	12/03/13	00:00		12/04/13	AQ	Trip Blank Water	TRIP BLANK

Summary of Hits

Job Number: TC40719
Account: DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs
Collected: 12/03/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method

TC40719-1 **MW-AR**

No hits reported in this sample.

TC40719-2 **MW-D**

No hits reported in this sample.

TC40719-3 **MW-E**

No hits reported in this sample.

TC40719-4 **MW-F**

No hits reported in this sample.

TC40719-5 **DUP-1**

No hits reported in this sample.

TC40719-6 **TRIP BLANK**

No hits reported in this sample.

Gulf Coast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-AR		
Lab Sample ID:	TC40719-1	**Date Sampled:**	12/03/13
Matrix:	AQ - Ground Water	**Date Received:**	12/04/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	CRA: DCP Midstream-Hobbs		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E0027229.D	1	12/07/13	FI	n/a	n/a	VE1246
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		72-122%
17060-07-0	1,2-Dichloroethane-D4	99%		68-124%
2037-26-5	Toluene-D8	88%		80-119%
460-00-4	4-Bromofluorobenzene	90%		72-126%

ND = Not detected MDL - Method Detection Limit
RL = Reporting 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

Client Sample ID:	MW-D		
Lab Sample ID:	TC40719-2	**Date Sampled:**	12/03/13
Matrix:	AQ - Ground Water	**Date Received:**	12/04/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	CRA: DCP Midstream-Hobbs		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E0027230.D	1	12/07/13	FI	n/a	n/a	VE1246
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		72-122%
17060-07-0	1,2-Dichloroethane-D4	100%		68-124%
2037-26-5	Toluene-D8	94%		80-119%
460-00-4	4-Bromofluorobenzene	95%		72-126%

ND = Not detected MDL - Method Detection Limit
RL = Reporting 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

Client Sample ID:	MW-E		
Lab Sample ID:	TC40719-3	**Date Sampled:**	12/03/13
Matrix:	AQ - Ground Water	**Date Received:**	12/04/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	CRA: DCP Midstream-Hobbs		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E0027231.D	1	12/07/13	FI	n/a	n/a	VE1246
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		72-122%
17060-07-0	1,2-Dichloroethane-D4	102%		68-124%
2037-26-5	Toluene-D8	94%		80-119%
460-00-4	4-Bromofluorobenzene	95%		72-126%

ND = Not detected MDL - Method Detection Limit
RL = Reporting 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

Client Sample ID:	MW-F		
Lab Sample ID:	TC40719-4	**Date Sampled:**	12/03/13
Matrix:	AQ - Ground Water	**Date Received:**	12/04/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	CRA: DCP Midstream-Hobbs		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E0027232.D	1	12/07/13	FI	n/a	n/a	VE1246
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		72-122%
17060-07-0	1,2-Dichloroethane-D4	100%		68-124%
2037-26-5	Toluene-D8	94%		80-119%
460-00-4	4-Bromofluorobenzene	94%		72-126%

ND = Not detected MDL - Method Detection Limit
RL = Reporting 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

Client Sample ID:	DUP-1		
Lab Sample ID:	TC40719-5	**Date Sampled:**	12/03/13
Matrix:	AQ - Ground Water	**Date Received:**	12/04/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	CRA: DCP Midstream-Hobbs		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C002593980.D	1	12/06/13	FI	n/a	n/a	VC1578
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		72-122%
17060-07-0	1,2-Dichloroethane-D4	87%		68-124%
2037-26-5	Toluene-D8	99%		80-119%
460-00-4	4-Bromofluorobenzene	106%		72-126%

ND = Not detected MDL - Method Detection Limit
RL = Reporting 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

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	TC40719-6	**Date Sampled:**	12/03/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/04/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	CRA: DCP Midstream-Hobbs		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	E0027220.D	1	12/06/13	FI	n/a	n/a	VE1246
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		72-122%
17060-07-0	1,2-Dichloroethane-D4	100%		68-124%
2037-26-5	Toluene-D8	94%		80-119%
460-00-4	4-Bromofluorobenzene	95%		72-126%

ND = Not detected MDL - Method Detection Limit
RL = Reporting 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

Gulf Coast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories

10165 Harwin, Suite 150 - Houston, TX 77036 - 713-271-4700 fax: 713-271-4770

FED-EX Tracking # | Bottle Order Control #

Accutest Quote # | Accutest Job # TC40719

Client / Reporting Information | **Project Information**

Company Name: Conestoga Rovers and Associates
Project Name / No.: DCP Midstream-Hobbs 059097-2013-04
Project Contact: Jeffrey Cloud | E-Mail:
Bill to: DCP Midstream-Hobbs | Invoice Attn.: Steve Weathers
Address: 2135 South Loop 250 W
Address:
City: Midland | State: Texas | Zip: 79703
City: | State: | Zip:
Phone No.: 432 686-0086 | Fax No.:
Phone No.: | Fax No.:
Samplers's Name: Justin Nixon
Client Purchase Order #:

Requested Analyses

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Wastewater; SO - Soil; SL - Sludge; OI - Oil; LIQ - Liquid; SOL - Other Solid

Accutest Sample #	Field ID / Point of Collection	Collection Date	Collection Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH	HNO3	H2SO4	ENCORE	NaHSO4	MEOH	NONE	BTEX - 8260B	LAB USE ONLY
1	MW-A R	12-3-13	1230	GW	3	X								X	
	~~MW-B~~			GW	3	X								X	
	~~MW-C~~			GW	3	X								X	
2	MW-D	12-3-13	1250	GW	3	X								X	
3	MW-E	12-3-13	1305	GW	3	X								X	
4	MW-F	12-3-13	1340	GW	3	X								X	
5	DUP-1	12-3-13	—	GW	3	X								X	
6	Trip Blank	12-3-13	—	TB	2	X								X	

Turnaround Time (Business days)

- 10 Day *STANDARD* — Approved By:/ Date:
- 7 Day
- 4 Day *RUSH*
- 3 Day *EMERGENCY*
- 2 Day *EMERGENCY*
- 1 Day *EMERGENCY*
- Other: 10 calendar day

Real time analytical data available via Lablink

Data Deliverable Information

- Commercial "A"
- Commercial "B"
- Reduced Tier 1
- Full Data Package
- TRRP-13
- EDD Format
- Other

Commercial "A" = Results Only
Commercial "B" = Results & Standard QC

Comments / Remarks

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		12-3-13 1745	1	2	12/4/13 930	2
3			3	4		4
5			5	Custody Seal #	Preserved where applicable ☐	On Ice ☐ Cooler Temp.

TC40719: Chain of Custody
Page 1 of 4

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: TC40719 **Client:** CRA **Project:** DCP MIDSTREAM HOBBS 059097-2013-04

Date / Time Received: 12/4/2013 **Delivery Method:** **Airbill #'s:** 581784506402

No. Coolers: 1 **Therm ID:** IR-5; **Temp Adjustment Factor:** 0;

Cooler Temps (Initial/Adjusted): #1: (2/2);

Cooler Security	Y	N		Y	N
1. Custody Seals Present:	☑	☐	3. COC Present:	☑	☐
2. Custody Seals Intact:	☑	☐	4. Smpl Dates/Time OK	☑	☐

Cooler Temperature	Y	N
1. Temp criteria achieved:	☑	☐
2. Cooler temp verification:		
3. Cooler media:	Ice (Bag)	

Quality Control Preservation	Y	N	N/A	WTB	STB
1. Trip Blank present / cooler:	☑	☐	☐	☑	☐
2. Trip Blank listed on COC:	☑	☐	☐		
3. Samples preserved properly:	☑	☐			
4. VOCs headspace free:	☑	☐	☐		

Sample Integrity - Documentation	Y	N
1. Sample labels present on bottles:	☑	☐
2. Container labeling complete:	☑	☐
3. Sample container label / COC agree:	☑	☐

Sample Integrity - Condition	Y	N
1. Sample recvd within HT:	☑	☐
2. All containers accounted for:	☑	☐
3. Condition of sample:	Broken / Leaking	

Sample Integrity - Instructions	Y	N	N/A
1. Analysis requested is clear:	☑	☐	
2. Bottles received for unspecified tests	☐	☑	
3. Sufficient volume recvd for analysis:	☑	☐	
4. Compositing instructions clear:	☐	☐	☑
5. Filtering instructions clear:	☐	☐	☑

Comments 1 of 3 vials received broken in cooler.

Accutest Laboratories
V:713.271.4700
10165 Harwin Drive
F: 713.271.4770
Houston, TX 77036
www/accutest.com

TC40719: Chain of Custody
Page 2 of 4

Problem Resolution

Accutest Job Number: TC40719

CSR: _____ **Response Date:** _____

Response:

TC40719: Chain of Custody
Page 3 of 4

Sample Receipt Log

Job #: TC40719 **Date / Time Received:** 12/4/2013 **Initials:** BG

Client: CRA

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
	TC40719-1	40ml	1	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.				
	TC40719-1	40ml	2	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.				
1	TC40719-2	40ml	1	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	2	0	2
1	TC40719-2	40ml	2	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	2	0	2
1	TC40719-2	40ml	3	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	2	0	2
1	TC40719-3	40ml	1	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	2	0	2
1	TC40719-3	40ml	2	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	2	0	2
1	TC40719-3	40ml	3	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	2	0	2
1	TC40719-4	40ml	1	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	2	0	2
1	TC40719-4	40ml	2	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	2	0	2
1	TC40719-4	40ml	3	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	2	0	2
1	TC40719-5	40ml	1	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	2	0	2
1	TC40719-5	40ml	2	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	2	0	2
1	TC40719-5	40ml	3	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	2	0	2
	TC40719-6	40ml	1	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.				
	TC40719-6	40ml	2	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.				

TC40719: Chain of Custody
Page 4 of 4

Gulf Coast ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: TC40719
Account: DUKE DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC1578-MB	C002593973.D	1	12/06/13	FI	n/a	n/a	VC1578

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC40719-5

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	95%	72-122%
17060-07-0	1,2-Dichloroethane-D4	86%	68-124%
2037-26-5	Toluene-D8	98%	80-119%
460-00-4	4-Bromofluorobenzene	107%	72-126%

Method Blank Summary

Job Number: TC40719
Account: DUKE DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VE1246-MB	E0027213.D	1	12/06/13	FI	n/a	n/a	VE1246

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC40719-1, TC40719-2, TC40719-3, TC40719-4, TC40719-6

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	100%	72-122%
17060-07-0	1,2-Dichloroethane-D4	99%	68-124%
2037-26-5	Toluene-D8	93%	80-119%
460-00-4	4-Bromofluorobenzene	93%	72-126%

Blank Spike Summary

Job Number: TC40719
Account: DUKE DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC1578-BS	C002593971.D	1	12/06/13	FI	n/a	n/a	VC1578

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC40719-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	25	26.5	106	68-119
100-41-4	Ethylbenzene	25	28.0	112	71-117
108-88-3	Toluene	25	27.4	110	73-119
1330-20-7	Xylene (total)	75	87.8	117	74-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	72-122%
17060-07-0	1,2-Dichloroethane-D4	96%	68-124%
2037-26-5	Toluene-D8	107%	80-119%
460-00-4	4-Bromofluorobenzene	106%	72-126%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: TC40719
Account: DUKE DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VE1246-BS	E0027211.D	1	12/06/13	FI	n/a	n/a	VE1246

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC40719-1, TC40719-2, TC40719-3, TC40719-4, TC40719-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	25	26.3	105	68-119
100-41-4	Ethylbenzene	25	25.9	104	71-117
108-88-3	Toluene	25	25.8	103	73-119
1330-20-7	Xylene (total)	75	75.8	101	74-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	72-122%
17060-07-0	1,2-Dichloroethane-D4	98%	68-124%
2037-26-5	Toluene-D8	95%	80-119%
460-00-4	4-Bromofluorobenzene	93%	72-126%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC40719
Account: DUKE DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC40740-8MS	C002593976.D	50	12/06/13	FI	n/a	n/a	VC1578
TC40740-8MSD	C002593977.D	50	12/06/13	FI	n/a	n/a	VC1578
TC40740-8	C002593974.D	1	12/06/13	FI	n/a	n/a	VC1578
TC40740-8	C002593975.D	50	12/06/13	FI	n/a	n/a	VC1578

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC40719-5

CAS No.	Compound	TC40740-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	2490 [a]		1250	3480	79	3240	60*	7	68-119/12
100-41-4	Ethylbenzene	582 [a]		1250	1700	89	1590	81	7	71-117/12
108-88-3	Toluene	ND		1250	1160	93	1110	89	4	73-119/13
1330-20-7	Xylene (total)	871 [a]		3750	4430	95	4230	90	5	74-119/13

CAS No.	Surrogate Recoveries	MS	MSD	TC40740-8	TC40740-8	Limits
1868-53-7	Dibromofluoromethane	89%	90%	96%	90%	72-122%
17060-07-0	1,2-Dichloroethane-D4	82%	78%	93%	75%	68-124%
2037-26-5	Toluene-D8	99%	101%	107%	101%	80-119%
460-00-4	4-Bromofluorobenzene	108%	107%	112%	113%	72-126%

(a) Result is from Run #2.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC40719
Account: DUKE DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC40725-1MS	E0027216.D	500	12/06/13	FI	n/a	n/a	VE1246
TC40725-1MSD	E0027217.D	500	12/06/13	FI	n/a	n/a	VE1246
TC40725-1	E0027215.D	500	12/06/13	FI	n/a	n/a	VE1246

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC40719-1, TC40719-2, TC40719-3, TC40719-4, TC40719-6

CAS No.	Compound	TC40725-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	11900		12500	25200	106	25300	107	0	68-119/12
100-41-4	Ethylbenzene	1070		12500	13900	103	14200	105	2	71-117/12
108-88-3	Toluene	26300		12500	39200	103	39000	102	1	73-119/13
1330-20-7	Xylene (total)	16000		37500	53900	101	54200	102	1	74-119/13

CAS No.	Surrogate Recoveries	MS	MSD	TC40725-1	Limits
1868-53-7	Dibromofluoromethane	99%	100%	99%	72-122%
17060-07-0	1,2-Dichloroethane-D4	98%	98%	100%	68-124%
2037-26-5	Toluene-D8	94%	94%	95%	80-119%
460-00-4	4-Bromofluorobenzene	94%	93%	93%	72-126%

* = Outside of Control Limits.

Gulf Coast ACCUTEST LABORATORIES

01/07/14

Technical Report for

DCP Midstream, LLC

CRA: DCP Midstream-Hobbs

Accutest Job Number: TC41698

Sampling Date: 12/18/13

Report to:

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

Total number of pages in report: **17**

NELAP ACCREDITED TNI LABORATORY

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.

Richard Rodriguez
Laboratory Director

Client Service contact: Sylvia Garza 713-271-4700

Certifications: TX (T104704220-13-12) AR (13-019-0) AZ (AZ0769) FL (E87628) KS (E-10366) LA (85695/04004) OK (2013-142) VA (2085)

Sections: 1 2 3 4 5

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Sample Summary

DCP Midstream, LLC

Job No: TC41698

CRA: DCP Midstream-Hobbs

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
TC41698-1	12/18/13	14:15		12/26/13	AQ	Water	MW-G

Summary of Hits

Job Number: TC41698
Account: DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs
Collected: 12/18/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
TC41698-1	**MW-G**					
Benzene		0.160	0.0010	0.00034	mg/l	SW846 8260C
Toluene		0.413	0.010	0.0033	mg/l	SW846 8260C
Ethylbenzene		0.0827	0.0010	0.00032	mg/l	SW846 8260C
Xylene (total)		0.751	0.030	0.0087	mg/l	SW846 8260C

Gulf Coast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-G		
Lab Sample ID:	TC41698-1	**Date Sampled:**	12/18/13
Matrix:	AQ - Water	**Date Received:**	12/26/13
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	CRA: DCP Midstream-Hobbs		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G0246978.D	1	12/27/13	SC	n/a	n/a	VG1161
Run #2	X0097161.D	10	12/30/13	AK	n/a	n/a	VX2134

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.160	0.0010	0.00034	mg/l	
108-88-3	Toluene	0.413 [a]	0.010	0.0033	mg/l	
100-41-4	Ethylbenzene	0.0827	0.0010	0.00032	mg/l	
1330-20-7	Xylene (total)	0.751 [a]	0.030	0.0087	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%	81%	72-122%
17060-07-0	1,2-Dichloroethane-D4	102%	92%	68-124%
2037-26-5	Toluene-D8	112%	92%	80-119%
460-00-4	4-Bromofluorobenzene	100%	97%	72-126%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting 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

Gulf Coast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CONESTOGA-ROVERS & ASSOCIATES

CHAIN OF CUSTODY RECORD

Address: 2135 S Loop 250 W
Phone: 432-686-0086 Fax:

TC41698

COC NO.: 32959
PAGE ___ OF ___
(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 059097-2013-04	Laboratory Name: Accutest Laboratories
Project Name: DCP Midstream - Hobbs	Lab Contact:
Project Location:	Lab Location: Houston, TX
Chemistry Contact: Jeffrey Cloud	Lab Quote No:
Sampler(s): Stuart Mercer	SSOW ID:
	Cooler No:
	Carrier: Fed Ex
	Airbill No: 797494196006
	Date Shipped: 12/23/13

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Container Quantity & Preservation: Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO_3)	Sulfuric Acid (H_2SO_4)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	Analysis Requested (See Back of COC for Definitions): BTEX 8260B	MS/MSD Request	Comments/ Special Instructions:
1	MW-G	12/18/13	1415	WG	3		✓							3			
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	

TAT Required in business days (use separate COCs for different TATs):
☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☒ Other: Standard

Total Number of Containers: 3
All Samples in Cooler must be on COC

Notes/ Special Requirements:

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1.	CRA	12/23/13	1700	1. FedEx			
2. FedEx				2.	Accutest	12/26/13	11:20
3.				3.			

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10B (20110804)

TC41698: Chain of Custody
Page 1 of 3

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: TC41698 **Client:** CRA **Project:** DCP MIDSTREAM-HOBBS

Date / Time Received: 12/26/2013 **Delivery Method:** **Airbill #'s:** 7974 9419 6006

No. Coolers: 1 **Therm ID:** IR-5; **Temp Adjustment Factor:** 0;

Cooler Temps (Initial/Adjusted): #1: (3.2/3.2);

Cooler Security	Y	N		Y	N
1. Custody Seals Present:	☑	☐	3. COC Present:	☑	☐
2. Custody Seals Intact:	☑	☐	4. Smpl Dates/Time OK	☑	☐

Cooler Temperature	Y	N
1. Temp criteria achieved:	☑	☐
2. Cooler temp verification:		
3. Cooler media:	Ice (Bag)	

Quality Control Preservation	Y	N	N/A	WTB	STB
1. Trip Blank present / cooler:	☐	☑	☐	☐	☐
2. Trip Blank listed on COC:	☐	☑	☐		
3. Samples preserved properly:	☑	☐			
4. VOCs headspace free:	☑	☐	☐		

Sample Integrity - Documentation	Y	N
1. Sample labels present on bottles:	☑	☐
2. Container labeling complete:	☑	☐
3. Sample container label / COC agree:	☑	☐

Sample Integrity - Condition	Y	N
1. Sample recvd within HT:	☑	☐
2. All containers accounted for:	☑	☐
3. Condition of sample:	Intact	

Sample Integrity - Instructions	Y	N	N/A
1. Analysis requested is clear:	☑	☐	
2. Bottles received for unspecified tests	☐	☑	
3. Sufficient volume recvd for analysis:	☑	☐	
4. Compositing instructions clear:	☐	☐	☑
5. Filtering instructions clear:	☐	☐	☑

Comments

Accutest Laboratories
V:713.271.4700

10165 Harwin Drive
F: 713.271.4770

Houston, TX 77036
www/accutest.com

TC41698: Chain of Custody
Page 2 of 3

Sample Receipt Log

Job #: TC41698 **Date / Time Received:** 12/26/2013 11:00:00 AM **Initials:** tb

Client: CRA

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TC41698-1	40ml	1	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	3.2	0	3.2
1	TC41698-1	40ml	2	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	3.2	0	3.2
1	TC41698-1	40ml	3	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	3.2	0	3.2

TC41698: Chain of Custody
Page 3 of 3

Gulf Coast ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: TC41698
Account: DUKE DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG1161-MB	G0246958.D	1	12/27/13	SC	n/a	n/a	VG1161

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC41698-1

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	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	105%	72-122%
17060-07-0	1,2-Dichloroethane-D4	98%	68-124%
2037-26-5	Toluene-D8	107%	80-119%
460-00-4	4-Bromofluorobenzene	96%	72-126%

Method Blank Summary

Job Number: TC41698
Account: DUKE DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VX2134-MB	X0097155.D	1	12/30/13	AK	n/a	n/a	VX2134

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC41698-1

CAS No.	Compound	Result	RL	MDL	Units	Q
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	83%	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	96%	72-126%

Blank Spike Summary

Job Number: TC41698
Account: DUKE DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG1161-BS	G0246956.D	1	12/27/13	SC	n/a	n/a	VG1161

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC41698-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	25	23.0	92	68-119
100-41-4	Ethylbenzene	25	27.0	108	71-117

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	106%	72-122%
17060-07-0	1,2-Dichloroethane-D4	101%	68-124%
2037-26-5	Toluene-D8	109%	80-119%
460-00-4	4-Bromofluorobenzene	93%	72-126%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: TC41698
Account: DUKE DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VX2134-BS	X0097153.D	1	12/30/13	AK	n/a	n/a	VX2134

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC41698-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-88-3	Toluene	25	23.2	93	73-119
1330-20-7	Xylene (total)	75	74.1	99	74-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	86%	72-122%
17060-07-0	1,2-Dichloroethane-D4	88%	68-124%
2037-26-5	Toluene-D8	91%	80-119%
460-00-4	4-Bromofluorobenzene	91%	72-126%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC41698
Account: DUKE DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC41435-10MS	G0246966.D	50	12/27/13	SC	n/a	n/a	VG1161
TC41435-10MSD	G0246967.D	50	12/27/13	SC	n/a	n/a	VG1161
TC41435-10	G0246964.D	1	12/27/13	SC	n/a	n/a	VG1161
TC41435-10	G0246965.D	50	12/27/13	SC	n/a	n/a	VG1161

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC41698-1

CAS No.	Compound	TC41435-10 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	1660 [a]		1250	2810	50*	2700	41*	4	68-119/12
100-41-4	Ethylbenzene	1610 [a]		1250	2910	53*	2840	47*	2	71-117/12

CAS No.	Surrogate Recoveries	MS	MSD	TC41435-10	TC41435-10	Limits
1868-53-7	Dibromofluoromethane	106%	110%	106%	109%	72-122%
17060-07-0	1,2-Dichloroethane-D4	102%	98%	104%	103%	68-124%
2037-26-5	Toluene-D8	110%	112%	110%	111%	80-119%
460-00-4	4-Bromofluorobenzene	94%	96%	99%	94%	72-126%

(a) Result is from Run #2.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC41698
Account: DUKE DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC41698-1MS	X0097162.D	10	12/30/13	AK	n/a	n/a	VX2134
TC41698-1MSD	X0097163.D	10	12/30/13	AK	n/a	n/a	VX2134
TC41698-1	X0097161.D	10	12/30/13	AK	n/a	n/a	VX2134

The QC reported here applies to the following samples: **Method:** SW846 8260C

TC41698-1

CAS No.	Compound	TC41698-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-88-3	Toluene	413		250	656	97	623	84	5	73-119/13
1330-20-7	Xylene (total)	751		750	1570	109	1500	100	5	74-119/13

CAS No.	Surrogate Recoveries	MS	MSD	TC41698-1	Limits
1868-53-7	Dibromofluoromethane	79%	80%	81%	72-122%
17060-07-0	1,2-Dichloroethane-D4	88%	88%	92%	68-124%
2037-26-5	Toluene-D8	92%	90%	92%	80-119%
460-00-4	4-Bromofluorobenzene	93%	96%	97%	72-126%

* = Outside of Control Limits.