

Second Quarter 2014 Groundwater Monitoring Summary Report

X-Line Pipeline Release – Etcheverry Ranch Lea County, New Mexico

1RP-400-0

Prepared for:



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August 4, 2014

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To: [Lowe, Leonard, EMNRD](#)
Cc: [Oberding, Tomas, EMNRD](#)
Subject: DCP X-Line Pipeline Release (1RP 400-00) 2nd Q 2014 Groundwater Monitoring Report and Request for a NFA
Date: Wednesday, August 27, 2014 1:58:37 PM
Attachments: [Xline_2014_Report_Final.pdf](#)
[OCDXlineGWLtr8-26-14.doc](#)

Mr. Lowe

Attached you will find the X-Line Pipeline Release 2nd Quarter 2014 Groundwater Monitoring Report. Based on the review of the 2nd Quarter 2014 analytical results, we now have nine consecutive quarters where BTEX concentrations in all groundwater monitor wells have been below New Mexico Water Quality Control Commissions Groundwater Standards. In the attached cover letter, DCP requests "No Further Action" (NFA) for this site.

Let me know if you have any questions with regards to the NFA request.

Thanks

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B	Laboratory Analytical Report (Electronic Only)
	- Accutest Job #: D59718

1. Introduction

This report summarizes the results of groundwater monitoring activities conducted during the second quarter 2014 at the X-Line Pipeline Release (Site) on the Etcheverry Ranch in Lea County, New Mexico (Figure 1). Tasman Geosciences, LLC (Tasman) performed these activities on behalf of DCP Midstream, LP (DCP). The groundwater monitoring activities described herein were conducted to confirm the groundwater conditions identified and reported during the first quarter 2014 and to comply with a landowner settlement agreement. As reported within the First Quarter 2014 Groundwater Monitoring Summary Report, the first quarter 2014 monitoring effort completed eight (8) quarters of monitoring in which all results were below the groundwater standards established by the New Mexico Water Quality Control Commission (NMWQCC). Results of the supplemental groundwater sampling conducted on July 14, 2014 are presented herein.

2. Site Location and Background

The Site is located in New Mexico Oil Conservation Division (OCD) designated Unit B, Section 7, Township 15 South, Range 34 East (Figure 1). The OCD reference for the Site is 1R-0400. The facility coordinates are 33.036389 degrees north and 103.546667 degrees west. The area is sparsely populated and land use is primarily associated with livestock grazing and oil and gas production and gathering.

Historic documents indicate that a pipeline release occurred at the Site during the latter part of 2001. Soil boring activities conducted by Environmental Plus Incorporated (EPI) estimated that the contaminated soil column was approximately 40-feet in diameter at the surface, tapering to approximately 20-feet in diameter at 37-feet below ground surface (bgs) and extending at that diameter to the top of water table at approximately 75-feet bgs. EPI conducted soil excavation activities between January and March of 2002 which included the removal and disposal of approximately 6,746 cubic yards (yd³) of impacted material to a depth of 37 feet bgs. The material was then disposed of at the OCD approved and permitted Artesia Aeration Landfarm in Maljamar, New Mexico. Subsequent to excavation activities, the open pit was backfilled and compacted with overburden and unaffected materials. It was estimated that approximately 560 yd³ of impacted material remained in place.

Seven groundwater monitoring wells (MW-1 through MW-7) were installed at the Site, the well locations are illustrated in Figure 2. Additionally, one light non-aqueous phase liquid (LNAPL) recovery well was installed and used to extract LNAPL from above the groundwater table. The well was re-drilled and used as a groundwater monitoring well (MW-8) following termination of LNAPL recovery between July 2003 and 2004.

The Site remediation components include a soil vapor extraction (SVE) and air sparge (AS) remediation system (System). Installation activities were completed by EPI and the system became fully functional by mid-June of 2003. The system was operation until the second quarter of 2012 at which time the System was shut off due to negligible contaminant concentrations.

3. Groundwater Monitoring

This section describes the groundwater monitoring activities as well as the laboratory analyses performed during the second quarter 2014 monitoring event. Monitoring activities, including Site-wide groundwater gauging and sampling, were performed on July 14, 2014. Figure 2 illustrates the groundwater monitoring network utilized to perform these activities at the Site.

3.1 Groundwater Elevation Monitoring

Groundwater levels were measured in order to evaluate hydraulic characteristics and provide information regarding seasonal fluctuations in groundwater elevation at the Site. During the second quarter 2014 monitoring groundwater levels were measured at all eight of the monitoring well locations.

Groundwater levels were measured on the north side of the well casing to the nearest 0.01-foot using an oil-water interface probe (IP) and were then converted to elevations (feet above mean sea level [AMSL]).

Groundwater elevations collected during the reporting period as well as historic elevations are presented in Table 1. A second quarter 2014 groundwater elevation contour map, included as Figure 3, indicates that the groundwater flow at the Site trends to the southeast. A groundwater elevations range, average elevation change from the previous monitoring event, and the calculated hydraulic gradient at the Site are summarized in the table below.

Summary of Measured Hydraulic Parameters

	Second Quarter 2014 (7/14/14)
Maximum Elevation (Well ID)	4089.40 (MW-1)
Minimum Elevation (Well ID)	4088.69 (MW-5)
Average Change from Previous Monitoring Event – All Wells	0.05 foot
Hydraulic Gradient (ft/ft) / (Well IDs)	0.0025 (MW-2 to MW-5)

Note:

- Groundwater elevations were not calculated for MW-7 and MW-8 due to missing surveyed top of casing (TOC) elevation.

3.2 Groundwater Quality Monitoring

Subsequent to recording groundwater level measurements, groundwater samples were collected at each of the eight Site monitoring wells. A minimum of three well casing volumes of groundwater were purged from each monitoring well prior to collecting groundwater samples. Groundwater samples were collected using dedicated polyethylene bailers, placed in clean laboratory supplied containers for the selected analytical methods, packed in an ice-filled cooler and maintained at approximately four degrees Celsius (°C) for transportation to the laboratory. Groundwater samples were then shipped under chain-of-custody procedures to Accutest Laboratories (Accutest) in Wheat Ridge, Colorado, for analysis.

Water quality samples were submitted to Accutest for benzene, toluene, ethylbenzene, and total xylenes (BTEX) analyses by United States Environmental Protection Agency (USEPA) Method 8260B.

Table 2 summarizes BTEX concentrations in groundwater samples collected during the reporting period. Historic analytical results up to and including the July 2014 event are included in Appendix A and the laboratory analytical report for the second quarter is included in Appendix B. Analytical results are also displayed on Figure 4.

During the second quarter 2014 monitoring event, BTEX concentrations did not exceed the NMWQCC groundwater standards in any of the eight monitoring wells.

3.3 Data Quality Assurance / Quality Control

A trip blank, matrix spike / matrix spike duplicate (MS/MSD), and field duplicate sample (MW-8) were collected during the sampling event. The data were reviewed for compliance with the analytical method and the associated quality assurance/quality control (QA/QC) procedures. All samples were analyzed using the correct analytical methods and within the correct holding times. Chain of custody forms were in order and properly executed and indicate that samples were received at the proper temperature with no headspace. All data were reported using the correct method number and reporting units. QA/QC items of note for the second quarter 2014 include the following:

- Target analytes were not detected in the trip blank;
- The duplicate sample collected at MW-8 was in compliance with QA/QC standards. MW-8 and the associated duplicate sample exhibited estimated (j-flag) benzene concentrations of 0.00051J mg/L and 0.00053J mg/L, respectively, yielding an RPD of 3.8, which is within acceptable control limits.

The overall QA/QC assessment, based on the data review, indicate that overall data precision and accuracy are acceptable.

4. Remediation System O&M Activities

The air sparge and soil vapor extraction systems were taken out of service during the second quarter 2012 in lieu of continued monitoring of dissolved phase concentration trends within the targeted remediation area. The System has remained off throughout the reporting period.

5. Conclusions

During the second quarter 2014, BTEX concentrations remained below NMWQCC groundwater standards at all eight sample locations for the ninth consecutive monitoring period. As demonstrated by the 2012 and 2013 analytical results, remedial activities have successfully mitigated dissolved phase hydrocarbon impacts.

6. Recommendations

Based on evaluation of data obtained during this reporting period and the previous eight quarters, successful mitigation of dissolved phase hydrocarbon impacts has been demonstrated. Based on these data, and previously submitted quarterly reports, a No Further Action (NFA) determination is being requested from the NMOCD.

Tables

TABLE 1
SECOND QUARTER 2014
SUMMARY OF GROUNDWATER ELEVATION DATA
X-LINE PIPELINE RELEASE - ETCHEVERRY RANCH
LEA COUNTY, NEW MEXICO

Location	Date	Depth to Groundwater (1) (feet)	Total Depth (2) (feet)	TOC Elevation (3) (feet amsl)	Groundwater Elevation (feet amsl)	Change in Groundwater Elevation Since Previous Event (4) (feet)
MW-1	6/2/2013	77.45	91.00	4166.82	4089.37	-0.03
MW-1	9/9/2013	77.50	91.00	4166.82	4089.32	-0.05
MW-1	12/2/2013	77.43	91.00	4166.82	4089.39	0.07
MW-1	2/28/2014	77.46	NM	4166.82	4089.36	-0.03
MW-1	7/14/2014	77.42	NM	4166.82	4089.40	0.04
MW-2	6/2/2013	77.45	88.00	4166.66	4089.21	-0.05
MW-2	9/9/2013	77.50	88.00	4166.66	4089.16	-0.05
MW-2	12/2/2013	77.42	88.00	4166.66	4089.24	0.08
MW-2	2/28/2014	77.46	NM	4166.66	4089.20	-0.04
MW-2	7/14/2014	77.40	NM	4166.66	4089.26	0.06
MW-3	6/2/2013	77.47	91.00	4166.17	4088.70	-0.03
MW-3	9/9/2013	77.51	91.00	4166.17	4088.66	-0.04
MW-3	12/2/2013	77.45	91.00	4166.17	4088.72	0.06
MW-3	2/28/2014	77.48	NM	4166.17	4088.69	-0.03
MW-3	7/14/2014	77.42	NM	4166.17	4088.75	0.06
MW-4	6/2/2013	77.60	91.00	4166.40	4088.80	-0.04
MW-4	9/9/2013	77.65	91.00	4166.40	4088.75	-0.05
MW-4	12/2/2013	77.56	91.00	4166.40	4088.84	0.09
MW-4	2/28/2014	77.61	NM	4166.40	4088.79	-0.05
MW-4	7/14/2014	77.56	NM	4166.40	4088.84	0.05
MW-5	6/2/2013	77.26	89.00	4165.90	4088.64	-0.02
MW-5	9/9/2013	77.31	89.00	4165.90	4088.59	-0.05
MW-5	12/2/2013	77.24	89.00	4165.90	4088.66	0.07
MW-5	2/28/2014	77.28	NM	4165.90	4088.62	-0.04
MW-5	7/14/2014	77.21	NM	4165.90	4088.69	0.07
MW-6	6/2/2013	77.20	90.00	4165.94	4088.74	-0.05
MW-6	9/9/2013	77.24	90.00	4165.94	4088.70	-0.04
MW-6	12/2/2013	77.17	90.00	4165.94	4088.77	0.07
MW-6	2/28/2014	77.19	NM	4165.94	4088.75	-0.02
MW-6	7/14/2014	77.15	NM	4165.94	4088.79	0.04
MW-7	6/2/2013	76.75	85.00	NM	NM	NM
MW-7	9/9/2013	76.74	85.00	NM	NM	NM
MW-7	12/2/2013	76.72	85.00	NM	NM	NM
MW-7	2/28/2014	76.76	NM	NM	NM	NM
MW-7	7/14/2014	76.70	NM	NM	NM	NM

TABLE 1
SECOND QUARTER 2014
SUMMARY OF GROUNDWATER ELEVATION DATA
X-LINE PIPELINE RELEASE - ETCHEVERRY RANCH
LEA COUNTY, NEW MEXICO

Location	Date	Depth to Groundwater (1) (feet)	Total Depth (2) (feet)	TOC Elevation (3) (feet amsl)	Groundwater Elevation (feet amsl)	Change in Groundwater Elevation Since Previous Event (4) (feet)
MW-8	6/2/2013	77.40	81.35	NM	NM	NM
MW-8	9/9/2013	77.44	81.35	NM	NM	NM
MW-8	12/2/2013	77.38	81.35	NM	NM	NM
MW-8	2/28/2014	77.42	NM	NM	NM	NM
MW-8	7/14/2014	77.32	NM	NM	NM	NM
Average change in groundwater elevation (2/28/14 to 7/14/14)						0.05

Notes:

1- Depths measured from the north edge of the well casing.

2- Total depths were collected and recorded during the fourth quarter 2013 monitoring event.

3- TOC elevations for monitoring wells MW-7 & MW-8 are not available. Therefore, groundwater elevations for those wells could not be calculated.

4- Changes in groundwater elevation are calculated by subtracting the measurement collected during the previous monitoring event from the measurement collected during the most recent monitoring event.

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

This table includes groundwater elevation data from the previous four monitoring events. Additional historic elevation data are available on request.

amsl - feet above mean sea level.

TOC - top of casing

NM - not measured

TABLE 2
SECOND QUARTER 2014
SUMMARY OF BTEX CONCENTRATIONS IN GROUNDWATER
X-LINE PIPELINE RELEASE - ETCHEVERRY RANCH
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		0.01	0.75	0.75	0.62	
MW-1	7/14/2014	<0.001	<0.002	<0.002	<0.003	
MW-2	7/14/2014	<0.001	<0.002	0.0059	0.0176	
MW-3	7/14/2014	<0.001	<0.002	<0.002	<0.003	
MW-4	7/14/2014	<0.001	<0.002	<0.002	<0.003	
MW-5	7/14/2014	<0.001	<0.002	<0.002	<0.003	
MW-6	7/14/2014	<0.001	<0.002	<0.002	<0.003	
MW-7	7/14/2014	<0.001	<0.002	<0.002	<0.003	
MW-8	7/14/2014	0.00051 J	<0.002	0.001 J	0.003	Duplicate Sample Collected
MW-8 (Duplicate)	7/14/2014	0.00053 J	<0.002	0.00097 J	0.003	
Trip Blank	7/14/2014	<0.001	<0.002	<0.002	<0.003	

Notes:

The environmental cleanup standards for water that are applicable to this Site are the New Mexico Water Quality Control Commission (NMWQCC) Groundwater Standards.

Data are presented for the current reporting period. Historic groundwater analytical data are located in Appendix A.

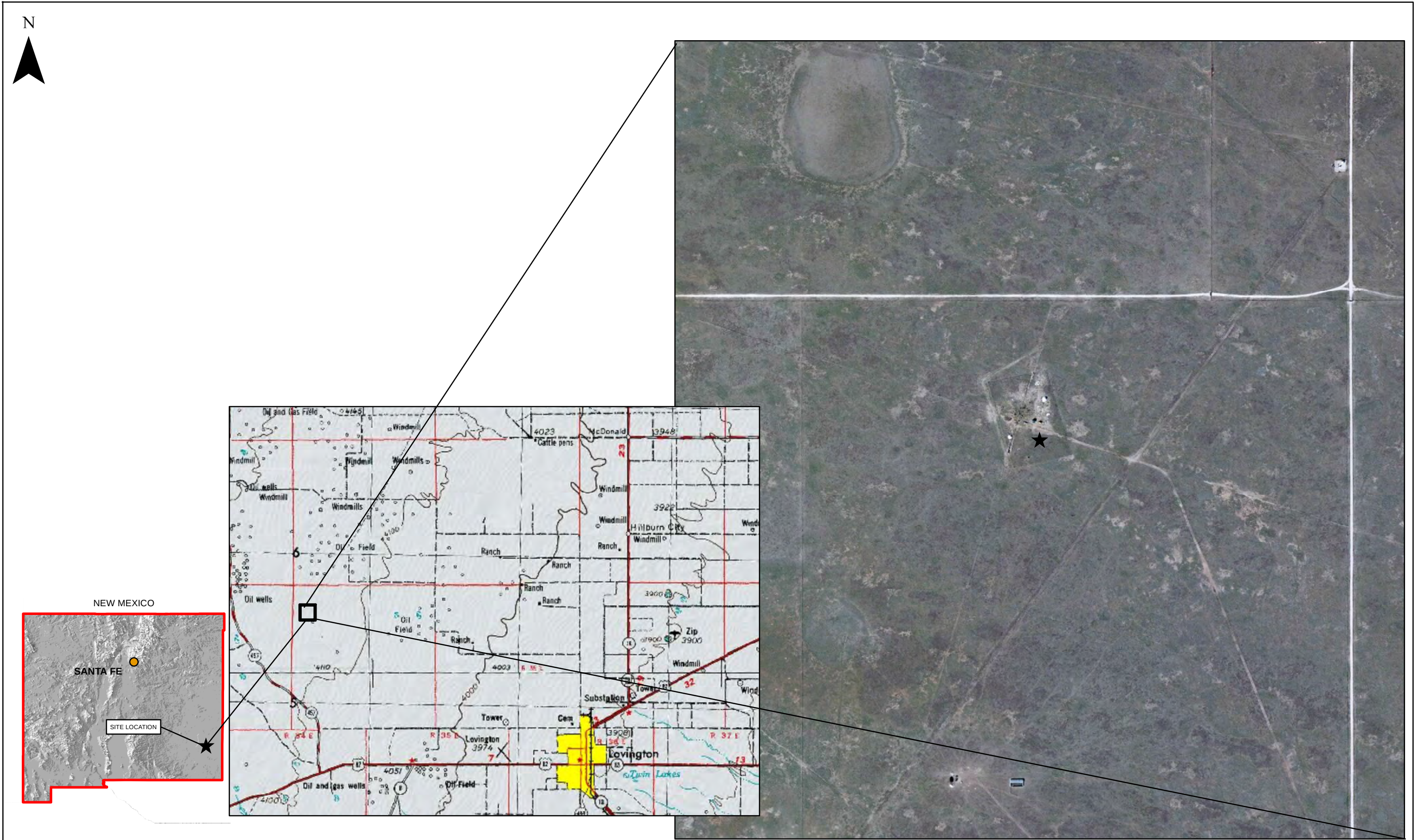
Bold red values indicate an exceedance of the NMWQCC groundwater standards for the Site.

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

mg/L = milligrams per liter.

J = Indicates an estimated value

Figures



DATE:	April 2014
DESIGNED BY:	T. Johansen
DRAWN BY:	D. Arnold

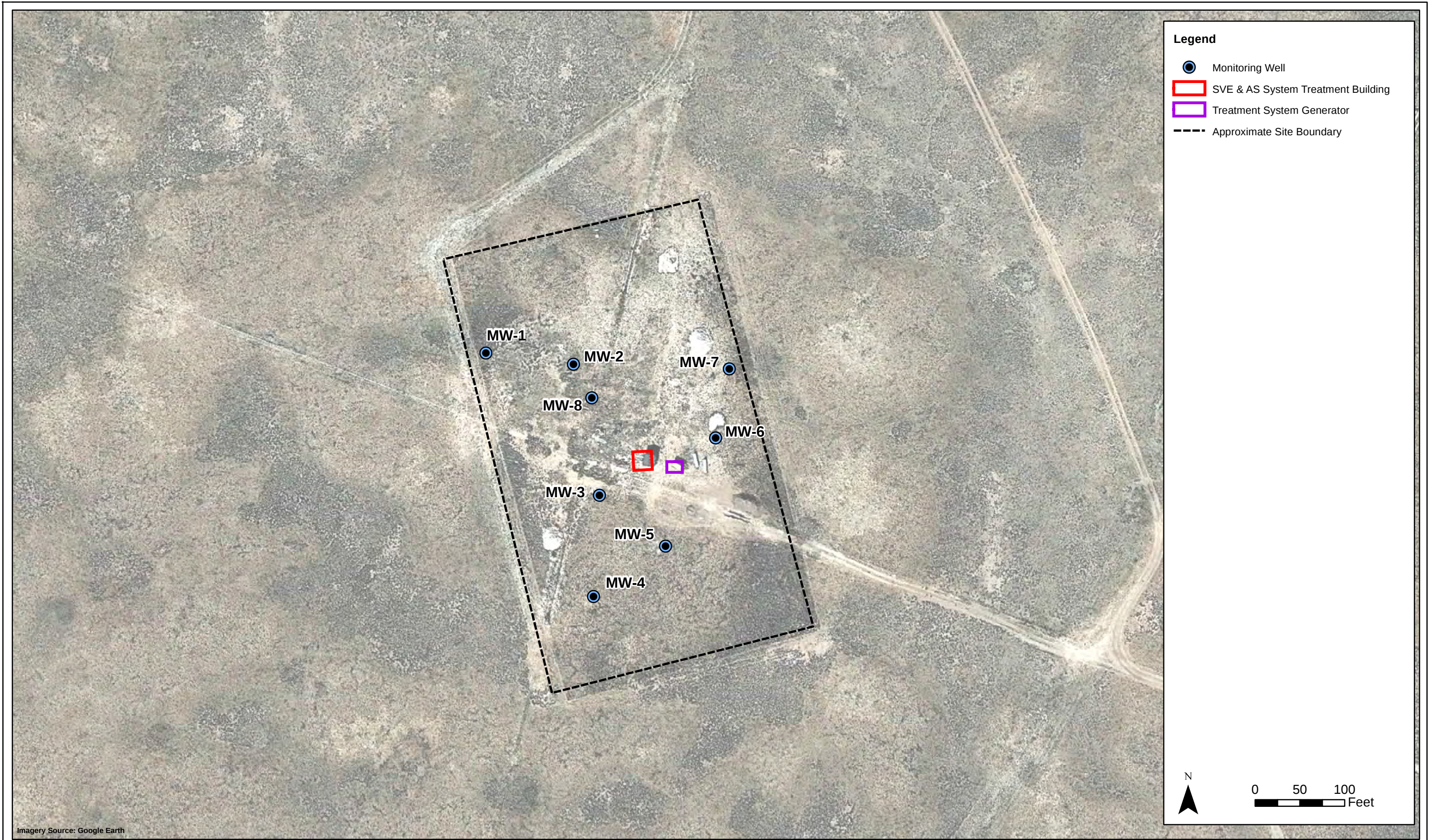


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**DCP Midstream
X-Line Pipeline Release**
Unit B, Section 7, Township 15 South, Range 34 East
Lea County, New Mexico

Site Location
Map

Figure
1



DATE:	June 2014
DESIGNED BY:	T. Johansen
DRAWN BY:	D. Arnold

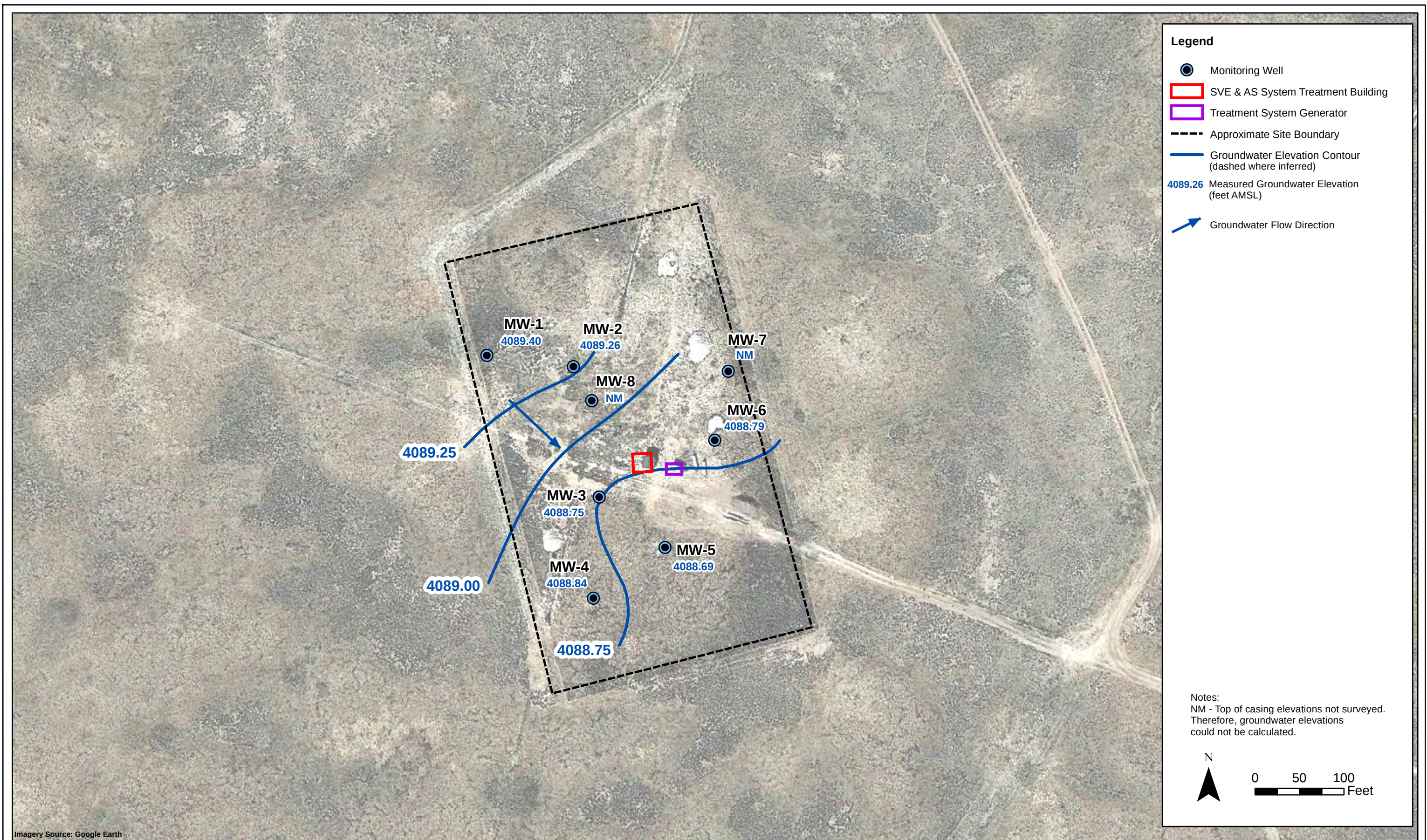


Tasman Geosciences, LLC
6899 Pecos Street - Unit C
Denver, CO 80221

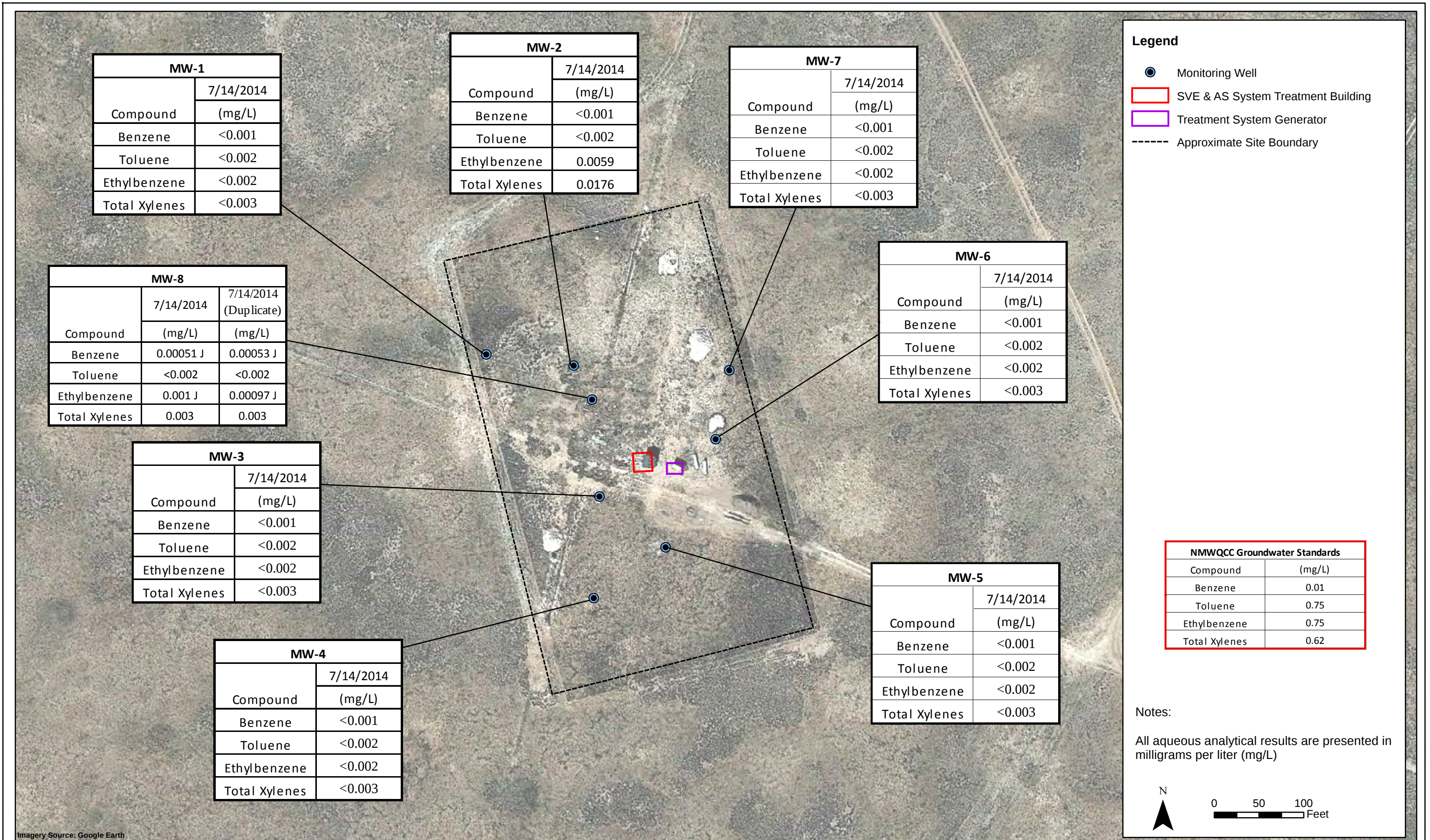
DCP Midstream
X-Line Pipeline Release
Second Quarter 2014
Groundwater Monitoring Summary Report

Site Map with
Monitoring Well Locations

Figure
2



DATE: July 14, 2014 DESIGNED BY: T. Johansen DRAWN BY: D. Arnold	 Tasman Geosciences, LLC 6899 Pecos Street - Unit C Denver, CO 80221	DCP Midstream X-Line Pipeline Release Second Quarter 2014 Groundwater Monitoring Summary Report	Groundwater Elevation Contour Map (July 14, 2014)	Figure 3
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Appendix A

Historic Analytical Results

APPENDIX A
HISTORIC ANALYTICAL RESULTS
BTEX CONCENTRATIONS IN GROUNDWATER
X-LINE PIPELINE RELEASE - ETCHEVERRY RANCH
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		0.01	0.75	0.75	0.62	
MW-1	4/24/2002	<0.002	<0.002	<0.002	<0.006	
MW-1	5/21/2002	0.002	<0.002	0.003	<0.006	
MW-1	4/28/2003	<0.001	<0.001	<0.001	<0.001	
MW-1	6/19/2003	<0.001	<0.001	<0.001	<0.001	
MW-1	7/17/2003	<0.001	<0.001	<0.001	<0.001	
MW-1	8/20/2003	<0.001	<0.001	<0.001	<0.001	
MW-1	9/22/2003	<0.001	<0.001	<0.001	<0.001	
MW-1	10/29/2003	<0.001	<0.001	<0.001	<0.001	
MW-1	11/20/2003	<0.001	<0.001	<0.001	<0.001	
MW-1	2/18/2004	<0.001	<0.001	<0.001	0.0514	
MW-1	6/25/2004	<0.001	<0.001	<0.001	<0.001	
MW-1	10/18/2004	<0.001	<0.001	<0.001	<0.001	
MW-1	12/9/2004	<0.001	<0.001	<0.001	<0.001	
MW-1	3/3/2005	<0.001	<0.001	<0.001	<0.001	
MW-1	6/3/2005	<0.001	<0.001	<0.001	<0.001	
MW-1	9/28/2005	<0.001	<0.001	<0.001	<0.001	
MW-1	12/12/2005	<0.001	<0.001	<0.001	<0.001	
MW-1	3/1/2006	<0.001	<0.001	<0.001	<0.001	
MW-1	6/26/2006	<0.001	<0.001	<0.001	<0.001	
MW-1	9/28/2006	<0.001	<0.001	<0.001	<0.001	
MW-1	12/21/2006	<0.001	<0.001	<0.001	<0.001	
MW-1	3/13/2007	<0.001	<0.001	<0.001	<0.001	
MW-1	6/26/2007	<0.001	<0.001	<0.001	<0.002	
MW-1	9/5/2007	<0.002	<0.002	<0.002	<0.004	
MW-1	12/27/2007	0.00093	<0.002	0.002	0.0028	
MW-1	3/20/2008	<0.002	<0.002	<0.002	<0.006	
MW-1	6/27/2008	<0.002	<0.002	<0.002	<0.002	
MW-1	9/15/2008	<0.002	<0.002	<0.002	<0.006	
MW-1	12/1/2008	<0.002	<0.002	<0.002	<0.006	
MW-1	3/11/2009	<0.002	<0.002	<0.002	<0.006	
MW-1	5/27/2009	<0.002	<0.002	<0.002	<0.006	
MW-1	9/24/2009	<0.002	<0.002	<0.002	<0.006	
MW-1	12/18/2009	<0.002	<0.002	<0.002	<0.006	
MW-1	3/25/2010	<0.001	<0.002	<0.002	<0.004	
MW-1	6/30/2010	<0.0003	<0.0003	<0.001	<0.0006	
MW-1	9/16/2010	<0.001	<0.002	<0.002	<0.004	
MW-1	12/9/2010	<0.001	<0.002	<0.002	<0.004	
MW-1	3/28/2011	<0.001	<0.002	<0.002	<0.004	
MW-1	6/22/2011	<0.001	<0.002	<0.002	<0.004	
MW-1	9/18/2011	<0.001	<0.002	<0.002	<0.004	
MW-1	12/9/2011	<0.0005	<0.001	<0.001	<0.001	
MW-1	3/11/2012	<0.001	<0.002	<0.002	<0.004	Duplicate sample collected
MW-1	6/8/2012	<0.001	<0.002	<0.002	<0.003	Duplicate sample collected
MW-1	9/10/2012	<0.001	<0.002	<0.002	<0.003	
MW-1	12/7/2012	<0.001	<0.002	<0.002	<0.003	
MW-1	2/20/2013	<0.001	<0.002	<0.002	<0.003	
MW-1	6/2/2013	<0.001	<0.002	<0.002	<0.003	
MW-1	9/9/2013	<0.001	<0.002	<0.002	<0.003	
MW-1	12/2/2013	<0.001	<0.002	<0.002	<0.003	
MW-1	2/28/2014	<0.001	<0.002	<0.002	<0.003	
MW-1	7/14/2014	<0.001	<0.002	<0.002	<0.003	

APPENDIX A
HISTORIC ANALYTICAL RESULTS
BTEX CONCENTRATIONS IN GROUNDWATER
X-LINE PIPELINE RELEASE - ETCHEVERRY RANCH
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		0.01	0.75	0.75	0.62	
MW-2	4/24/2002	0.0255	0.013	0.107	0.38	
MW-2	5/21/2002	0.145	0.062	0.833	1.27	
MW-2	4/28/2003	0.182	0.121	0.092	0.133	
MW-2	6/19/2003	0.074	0.069	0.066	0.103	
MW-2	7/17/2003	0.155	0.112	0.15	0.186	
MW-2	8/20/2003	0.024	0.012	0.092	0.179	
MW-2	9/22/2003	0.022	0.012	0.051	0.079	
MW-2	10/29/2003	0.001	0.002	0.004	0.017	
MW-2	11/20/2003	0.013	0.005	0.017	0.034	
MW-2	2/18/2004	<0.001	0.00301	0.00652	0.00067	
MW-2	6/25/2004	0.00156	0.0005	0.00108	0.00106	
MW-2	10/18/2004	0.0103	0.00336	0.00648	0.0052	
MW-2	12/9/2004	0.00342	0.00122	0.00206	<0.001	
MW-2	3/3/2005	<0.001	<0.001	<0.001	<0.001	
MW-2	6/3/2005	<0.001	<0.001	<0.001	<0.001	
MW-2	9/28/2005	<0.001	<0.001	<0.001	<0.001	
MW-2	12/12/2005	<0.001	<0.001	<0.001	<0.001	
MW-2	3/1/2006	<0.001	<0.001	<0.001	<0.001	
MW-2	6/26/2006	0.0006	<0.001	0.00114	0.00125	
MW-2	9/28/2006	0.0007	0.0003	0.00137	0.0014	
MW-2	12/21/2006	<0.001	<0.001	<0.001	<0.001	
MW-2	3/13/2007	0.000674	0.0012	0.00512	0.0077	
MW-2	6/26/2007	<0.001	0.0024	0.0102	0.013	
MW-2	9/5/2007	<0.002	<0.002	0.0075	0.0078	
MW-2	12/27/2007	0.00057	0.00076J	0.0039	0.0051	
MW-2	3/20/2008	<0.002	0.01	0.03	0.06	
MW-2	6/27/2008	0.00096	0.0229	0.0073	0.0229	
MW-2	9/15/2008	0.00096	0.02	0.03	0.12	
MW-2	12/1/2008	<0.002	0.0147	0.0135	0.143	
MW-2	3/11/2009	<0.002	0.0123	0.0048	0.12	
MW-2	5/27/2009	<0.002	0.01	0.01	0.16	
MW-2	9/24/2009	<0.002	0.0096	<0.002	0.103	
MW-2	12/18/2009	<0.002	0.0086	<0.002	0.0916	
MW-2	3/25/2010	<0.001	0.0087	<0.002	0.0923	
MW-2	6/30/2010	<0.0003	0.0062	<0.001	0.0417	
MW-2	9/16/2010	<0.001	0.007	<0.002	0.0786	
MW-2	12/9/2010	0.00049	0.0147	<0.002	0.1317	
MW-2	3/28/2011	<0.001	0.005	<0.002	0.0455	
MW-2	6/22/2011	<0.002	1.002	<0.0164	1.185	
MW-2	9/18/2011	<0.001	<0.002	0.0123	0.14	
MW-2	12/9/2011	<0.0005	<0.001	0.0143	0.128	Duplicate sample collected
MW-2	3/11/2012	<0.001	<0.002	0.0036	0.0372	
MW-2	6/8/2012	<0.001	<0.002	0.00067	0.0056	
MW-2	9/10/2012	<0.001	<0.002	0.0089	0.0721	
MW-2	12/7/2012	<0.001	<0.002	0.0079	0.0665	
MW-2	2/20/2013	<0.001	<0.002	0.0045	0.0364	
MW-2	6/2/2013	<0.001	<0.002	0.0108	0.0856	
MW-2	9/9/2013	<0.001	<0.002	0.0036	0.0213	
MW-2	12/2/2013	<0.001	<0.002	0.0048	0.0119	
MW-2	2/28/2014	<0.001	<0.002	0.0054	0.0245	
MW-2	7/14/2014	<0.001	<0.002	0.0059	0.0176	

APPENDIX A
HISTORIC ANALYTICAL RESULTS
BTEX CONCENTRATIONS IN GROUNDWATER
X-LINE PIPELINE RELEASE - ETCHEVERRY RANCH
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		0.01	0.75	0.75	0.62	
MW-3	4/24/2002	0.061	0.023	<0.002	0.189	
MW-3	5/21/2002	0.176	0.023	0.004	0.451	
MW-3	4/28/2003	0.099	0.03	0.005	0.039	
MW-3	6/19/2003	0.047	0.02	<0.001	0.006	
MW-3	7/17/2003	0.063	0.023	0.002	0.007	
MW-3	8/20/2003	0.017	0.006	<0.001	0.001	
MW-3	9/22/2003	0.049	0.02	<0.001	0.001	
MW-3	10/29/2003	0.044	0.018	<0.001	0.001	
MW-3	11/20/2003	0.048	0.017	0.003	0.004	
MW-3	2/18/2004	0.028	0.0138	<0.001	<0.001	
MW-3	6/25/2004	0.0173	0.0136	0.000158	0.000118	
MW-3	10/18/2004	0.00584	0.00692	<0.001	0.0015	
MW-3	12/9/2004	0.006137	0.00884	<0.001	<0.001	
MW-3	3/3/2005	0.00167	0.00167	<0.001	0.00044	
MW-3	6/3/2005	0.00332	0.00574	<0.001	0.00173	
MW-3	9/28/2005	<0.001	0.00101	0.000482	0.000997	
MW-3	12/12/2005	<0.001	<0.001	<0.001	<0.001	
MW-3	3/1/2006	<0.001	<0.001	<0.001	<0.001	
MW-3	6/26/2006	<0.001	<0.001	<0.001	<0.001	
MW-3	9/28/2006	<0.001	<0.001	<0.001	<0.001	
MW-3	12/21/2006	<0.001	<0.001	<0.001	<0.001	
MW-3	3/13/2007	<0.001	<0.001	<0.001	<0.001	
MW-3	6/26/2007	<0.001	<0.0011	<0.001	<0.002	
MW-3	9/5/2007	<0.002	<0.002	<0.002	<0.004	
MW-3	12/27/2007	<0.002	<0.002	0.0012	<0.006	
MW-3	3/20/2008	<0.002	<0.002	<0.002	<0.006	
MW-3	6/27/2008	<0.002	<0.002	<0.002	<0.002	
MW-3	9/15/2008	<0.002	<0.002	<0.002	<0.006	
MW-3	12/1/2008	<0.002	<0.002	<0.002	<0.006	
MW-3	3/11/2009	<0.002	<0.002	<0.002	<0.006	
MW-3	5/27/2009	<0.002	<0.002	<0.002	<0.006	
MW-3	9/24/2009	<0.002	<0.002	<0.002	<0.006	
MW-3	12/18/2009	<0.002	<0.002	<0.002	<0.006	
MW-3	3/25/2010	<0.001	<0.002	<0.002	<0.004	
MW-3	6/30/2010	<0.0003	<0.0003	<0.001	<0.0006	
MW-3	9/16/2010	<0.001	<0.002	<0.002	<0.004	
MW-3	12/9/2010	<0.001	<0.002	<0.002	<0.004	
MW-3	3/28/2011	<0.001	<0.002	<0.002	<0.004	
MW-3	6/22/2011	<0.001	<0.002	<0.002	<0.004	
MW-3	9/18/2011	<0.001	<0.002	<0.002	<0.004	
MW-3	12/9/2011	<0.0005	<0.001	<0.001	<0.001	
MW-3	3/11/2012	<0.001	<0.002	<0.002	<0.004	
MW-3	6/8/2012	<0.001	<0.002	<0.002	<0.003	
MW-3	9/10/2012	<0.001	<0.002	<0.002	<0.003	
MW-3	12/7/2012	<0.001	<0.002	<0.002	<0.003	
MW-3	2/20/2013	<0.001	<0.002	<0.002	<0.003	
MW-3	6/2/2013	<0.001	<0.002	<0.002	<0.003	
MW-3	9/9/2013	<0.001	<0.002	<0.002	<0.003	
MW-3	12/2/2013	<0.001	<0.002	<0.002	<0.003	
MW-3	2/28/2014	<0.001	<0.002	<0.002	<0.003	
MW-3	7/14/2014	<0.001	<0.002	<0.002	<0.003	

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Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		0.01	0.75	0.75	0.62	
MW-4	4/24/2002	<0.002	<0.002	<0.002	<0.006	
MW-4	5/21/2002	<0.002	<0.002	<0.002	<0.006	
MW-4	4/28/2003	<0.001	<0.001	<0.001	<0.001	
MW-4	6/19/2003	<0.001	<0.001	<0.001	<0.001	
MW-4	7/17/2003	<0.001	<0.001	<0.001	<0.001	
MW-4	8/20/2003	<0.001	<0.001	<0.001	<0.001	
MW-4	9/22/2003	<0.001	<0.001	<0.001	<0.001	
MW-4	10/29/2003	<0.001	<0.001	<0.001	<0.001	
MW-4	11/20/2003	<0.001	<0.001	<0.001	<0.001	
MW-4	2/18/2004	<0.001	<0.001	<0.001	<0.001	
MW-4	6/25/2004	<0.001	<0.001	<0.001	<0.001	
MW-4	10/18/2004	<0.001	<0.001	<0.001	<0.001	
MW-4	12/9/2004	<0.001	<0.001	<0.001	<0.001	
MW-4	3/3/2005	<0.001	<0.001	<0.001	<0.001	
MW-4	6/3/2005	<0.001	<0.001	<0.001	<0.001	
MW-4	9/28/2005	<0.001	<0.001	<0.001	<0.001	
MW-4	12/12/2005	<0.001	<0.001	<0.001	<0.001	
MW-4	3/1/2006	<0.001	<0.001	<0.001	<0.001	
MW-4	6/26/2006	<0.001	<0.001	<0.001	<0.001	
MW-4	9/28/2006	<0.001	<0.001	<0.001	<0.001	
MW-4	12/21/2006	<0.001	<0.001	<0.001	<0.001	
MW-4	3/13/2007	<0.001	<0.001	<0.001	<0.001	
MW-4	6/26/2007	<0.001	<0.001	<0.001	<0.002	
MW-4	9/5/2007	<0.002	<0.002	<0.002	<0.004	
MW-4	12/27/2007	0.00053	<0.002	0.001	0.0016	
MW-4	3/20/2008	<0.002	<0.002	<0.002	<0.006	
MW-4	6/27/2008	<0.002	<0.002	<0.002	<0.002	
MW-4	9/15/2008	<0.002	<0.002	<0.002	<0.006	
MW-4	12/1/2008	<0.002	<0.002	<0.002	<0.006	
MW-4	3/11/2009	<0.002	<0.002	<0.002	<0.006	
MW-4	5/27/2009	<0.002	<0.002	<0.002	<0.006	
MW-4	9/24/2009	<0.002	<0.002	<0.002	<0.006	
MW-4	12/18/2009	<0.002	<0.002	<0.002	<0.006	
MW-4	3/25/2010	<0.001	<0.002	<0.002	<0.004	
MW-4	6/30/2010	<0.0003	<0.0003	<0.001	<0.0006	
MW-4	9/16/2010	<0.001	<0.002	<0.002	<0.004	
MW-4	12/9/2010	<0.001	<0.002	<0.002	<0.004	
MW-4	3/28/2011	<0.001	<0.002	<0.002	<0.004	
MW-4	6/22/2011	<0.001	<0.002	<0.002	<0.004	
MW-4	9/18/2011	<0.001	<0.002	<0.002	<0.004	
MW-4	12/9/2011	<0.0005	<0.001	<0.001	<0.001	
MW-4	3/11/2012	<0.001	<0.002	<0.002	<0.004	
MW-4	6/8/2012	<0.001	<0.002	<0.002	<0.003	
MW-4	9/10/2012	<0.001	<0.002	<0.002	<0.003	
MW-4	12/7/2012	<0.001	<0.002	<0.002	<0.003	
MW-4	2/20/2013	<0.001	<0.002	<0.002	<0.003	
MW-4	6/2/2013	<0.001	<0.002	<0.002	<0.003	
MW-4	9/9/2013	<0.001	<0.002	<0.002	<0.003	
MW-4	12/2/2013	<0.001	<0.002	<0.002	<0.003	
MW-4	2/28/2014	<0.001	<0.002	<0.002	<0.003	
MW-4	7/14/2014	<0.001	<0.002	<0.002	<0.003	

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Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		0.01	0.75	0.75	0.62	
MW-5	4/24/2002	<0.002	<0.002	<0.002	0.011	
MW-5	5/21/2002	<0.002	<0.002	<0.002	<0.006	
MW-5	4/28/2003	0.005	<0.001	<0.001	0.003	
MW-5	6/19/2003	<0.001	<0.001	<0.001	0.003	
MW-5	7/17/2003	<0.001	<0.001	<0.001	0.002	
MW-5	8/20/2003	<0.001	<0.001	<0.001	<0.001	
MW-5	9/22/2003	<0.001	<0.001	<0.001	<0.001	
MW-5	10/29/2003	<0.001	<0.001	<0.001	<0.001	
MW-5	11/20/2003	<0.001	<0.001	<0.001	<0.001	
MW-5	2/18/2004	<0.001	<0.001	<0.001	<0.001	
MW-5	6/25/2004	<0.001	<0.001	<0.001	<0.001	
MW-5	10/18/2004	<0.001	<0.001	<0.001	<0.001	
MW-5	12/9/2004	<0.001	<0.001	<0.001	<0.001	
MW-5	3/3/2005	<0.001	<0.001	<0.001	<0.001	
MW-5	6/3/2005	<0.001	<0.001	<0.001	<0.001	
MW-5	9/28/2005	<0.001	<0.001	<0.001	<0.001	
MW-5	12/12/2005	<0.001	<0.001	<0.001	<0.001	
MW-5	3/1/2006	<0.001	<0.001	<0.001	<0.001	
MW-5	6/26/2006	<0.001	<0.001	<0.001	<0.001	
MW-5	9/28/2006	<0.001	<0.001	<0.001	<0.001	
MW-5	12/21/2006	<0.001	<0.001	<0.001	<0.001	
MW-5	3/13/2007	<0.001	<0.001	<0.001	<0.001	
MW-5	6/26/2007	<0.001	<0.001	<0.001	<0.002	
MW-5	9/5/2007	<0.002	<0.002	<0.002	<0.004	
MW-5	12/27/2007	<0.002	<0.002	0.00098	<0.006	
MW-5	3/20/2008	<0.002	<0.002	<0.002	<0.006	
MW-5	6/27/2008	<0.002	<0.002	<0.002	<0.002	
MW-5	9/15/2008	<0.002	<0.002	<0.002	<0.006	
MW-5	12/1/2008	<0.002	<0.002	<0.002	<0.006	
MW-5	3/11/2009	<0.002	<0.002	<0.002	<0.006	
MW-5	5/27/2009	<0.002	<0.002	<0.002	<0.006	
MW-5	9/24/2009	<0.002	<0.002	<0.002	<0.006	
MW-5	12/18/2009	<0.002	<0.002	<0.002	<0.006	
MW-5	3/25/2010	<0.001	<0.002	<0.002	<0.004	
MW-5	6/30/2010	<0.0003	<0.0003	<0.001	<0.0006	
MW-5	9/16/2010	<0.001	<0.002	<0.002	<0.004	
MW-5	12/9/2010	<0.001	<0.002	<0.002	<0.004	
MW-5	3/28/2011	<0.001	<0.002	<0.002	0.012	
MW-5	6/22/2011	<0.001	<0.002	<0.002	<0.004	
MW-5	9/18/2011	<0.001	<0.002	<0.002	<0.004	
MW-5	12/9/2011	<0.0005	<0.001	<0.001	<0.001	
MW-5	3/11/2012	<0.001	<0.002	<0.002	<0.004	
MW-5	6/8/2012	<0.001	<0.002	<0.002	<0.003	
MW-5	9/10/2012	<0.001	<0.002	<0.002	<0.003	
MW-5	12/7/2012	<0.001	<0.002	<0.002	<0.003	
MW-5	2/20/2013	<0.001	<0.002	<0.002	<0.003	
MW-5	6/2/2013	<0.001	<0.002	<0.002	<0.003	
MW-5	9/9/2013	<0.001	<0.002	<0.002	<0.003	
MW-5	12/2/2013	<0.001	<0.002	<0.002	<0.003	
MW-5	2/28/2014	<0.001	<0.002	<0.002	<0.003	
MW-5	7/14/2014	<0.001	<0.002	<0.002	<0.003	

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Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		0.01	0.75	0.75	0.62	
MW-6	4/24/2002	<0.002	0.004	<0.002	0.123	
MW-6	5/21/2002	0.002	0.002	<0.002	0.047	
MW-6	4/28/2003	0.003	0.002	<0.001	0.01	
MW-6	6/19/2003	<0.001	<0.001	<0.001	<0.001	
MW-6	7/17/2003	<0.001	0.004	<0.001	0.004	
MW-6	8/20/2003	<0.001	<0.001	<0.001	<0.001	
MW-6	9/22/2003	<0.001	<0.001	<0.001	<0.001	
MW-6	10/29/2003	<0.001	<0.001	<0.001	0.003	
MW-6	11/20/2003	<0.001	<0.001	<0.001	<0.001	
MW-6	2/18/2004	<0.001	<0.001	<0.001	<0.001	
MW-6	6/25/2004	<0.001	<0.001	<0.001	<0.001	
MW-6	10/18/2004	<0.001	<0.001	<0.001	<0.001	
MW-6	12/9/2004	<0.001	<0.001	<0.001	<0.001	
MW-6	3/3/2005	<0.001	<0.001	<0.001	<0.001	
MW-6	6/3/2005	<0.001	<0.001	<0.001	<0.001	
MW-6	9/28/2005	<0.001	<0.001	<0.001	<0.001	
MW-6	12/12/2005	<0.001	<0.001	<0.001	<0.001	
MW-6	3/1/2006	<0.001	<0.001	<0.001	<0.001	
MW-6	6/26/2006	<0.001	<0.001	<0.001	<0.001	
MW-6	9/28/2006	<0.001	0.001	<0.001	<0.001	
MW-6	12/21/2006	<0.001	<0.001	<0.001	<0.001	
MW-6	3/13/2007	<0.001	<0.001	<0.001	<0.001	
MW-6	6/26/2007	<0.001	<0.001	<0.001	<0.002	
MW-6	9/5/2007	<0.002	<0.002	<0.002	<0.004	
MW-6	12/27/2007	0.00074	0.0033	0.0013J	<0.006	
MW-6	3/20/2008	<0.002	<0.002	<0.002	<0.006	
MW-6	6/27/2008	<0.002	<0.002	0.00098	<0.002	
MW-6	9/15/2008	<0.002	0.0031	<0.002	<0.006	
MW-6	12/1/2008	<0.002	<0.002	<0.002	<0.006	
MW-6	3/11/2009	<0.002	<0.002	<0.002	<0.006	
MW-6	3/25/2010	<0.001	<0.002	<0.002	<0.004	
MW-6	6/30/2010	<0.0003	<0.0003	<0.001	<0.0006	
MW-6	3/28/2011	<0.001	<0.002	<0.002	<0.004	
MW-6	6/22/2011	<0.001	<0.002	<0.002	<0.004	
MW-6	9/18/2011	<0.001	<0.002	<0.002	<0.004	
MW-6	12/9/2011	<0.0005	<0.001	<0.001	<0.001	
MW-6	3/11/2012	<0.001	<0.002	<0.002	<0.004	
MW-6	6/8/2012	<0.001	<0.002	<0.002	<0.003	
MW-6	9/10/2012	<0.001	<0.002	<0.002	<0.003	
MW-6	12/7/2012	<0.001	<0.002	<0.002	<0.003	
MW-6	2/20/2013	<0.001	<0.002	<0.002	<0.003	
MW-6	6/2/2013	<0.001	<0.002	<0.002	<0.003	
MW-6	9/9/2013	<0.001	<0.002	<0.002	<0.003	
MW-6	12/2/2013	<0.001	<0.002	<0.002	<0.003	
MW-6	12/18/2009	<0.002	<0.002	<0.002	<0.006	
MW-6	12/9/2010	<0.001	<0.002	<0.002	<0.004	
MW-6	5/27/2009	<0.002	<0.002	<0.002	<0.006	
MW-6	9/16/2010	<0.001	<0.002	<0.002	<0.004	
MW-6	9/24/2009	<0.002	<0.002	<0.002	<0.006	
MW-6	2/28/2014	<0.001	<0.002	<0.002	<0.003	
MW-6	7/14/2014	<0.001	<0.002	<0.002	<0.003	

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Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		0.01	0.75	0.75	0.62	
MW-7	4/24/2002	NI	NI	NI	NI	
MW-7	5/21/2002	NI	NI	NI	NI	
MW-7	4/28/2003	<0.001	<0.001	<0.001	<0.001	
MW-7	6/19/2003	<0.001	<0.001	<0.001	<0.001	
MW-7	7/17/2003	<0.001	<0.001	<0.001	<0.001	
MW-7	8/20/2003	<0.001	<0.001	<0.001	<0.001	
MW-7	9/22/2003	<0.001	<0.001	<0.001	<0.001	
MW-7	10/29/2003	0.001	0.001	0.001	0.006	
MW-7	11/20/2003	0.001	<0.001	<0.001	0.001	
MW-7	2/18/2004	<0.001	<0.001	<0.001	<0.001	
MW-7	6/25/2004	<0.001	<0.001	<0.001	<0.001	
MW-7	10/18/2004	<0.001	<0.001	<0.001	<0.001	
MW-7	12/9/2004	<0.001	<0.001	<0.001	<0.001	
MW-7	3/3/2005	<0.001	<0.001	<0.001	<0.001	
MW-7	6/3/2005	<0.001	<0.001	<0.001	<0.001	
MW-7	9/28/2005	<0.001	<0.001	<0.001	<0.001	
MW-7	12/12/2005	<0.001	<0.001	<0.001	<0.001	
MW-7	3/1/2006	<0.001	<0.001	<0.001	<0.001	
MW-7	6/26/2006	<0.001	<0.001	<0.001	<0.001	
MW-7	9/28/2006	<0.001	<0.001	<0.001	<0.001	
MW-7	12/21/2006	<0.001	<0.001	<0.001	<0.001	
MW-7	3/13/2007	<0.001	<0.001	<0.001	<0.001	
MW-7	6/26/2007	<0.001	<0.001	<0.001	<0.002	
MW-7	9/5/2007	<0.002	<0.002	<0.002	<0.004	
MW-7	12/27/2007	<0.002	<0.002	<0.002	<0.006	
MW-7	3/20/2008	<0.002	<0.002	<0.002	<0.006	
MW-7	6/27/2008	<0.002	<0.002	<0.002	<0.002	
MW-7	9/15/2008	<0.002	<0.002	<0.002	<0.006	
MW-7	12/1/2008	<0.002	<0.002	<0.002	<0.006	
MW-7	3/11/2009	<0.002	<0.002	<0.002	<0.006	
MW-7	5/27/2009	<0.002	<0.002	<0.002	<0.006	
MW-7	9/24/2009	<0.002	<0.002	<0.002	<0.006	
MW-7	12/18/2009	<0.002	<0.002	<0.002	<0.006	
MW-7	3/25/2010	<0.001	<0.002	<0.002	<0.004	
MW-7	6/30/2010	<0.0003	<0.002	<0.001	<0.0006	
MW-7	9/16/2010	<0.001	<0.002	<0.002	<0.004	
MW-7	12/9/2010	<0.001	<0.003	<0.002	<0.004	
MW-7	3/28/2011	<0.001	<0.002	<0.002	<0.004	
MW-7	6/22/2011	<0.001	<0.002	<0.002	<0.004	
MW-7	9/18/2011	<0.001	<0.002	<0.002	<0.004	
MW-7	12/9/2011	<0.0005	<0.001	<0.001	<0.001	
MW-7	3/11/2012	<0.001	<0.002	<0.002	<0.004	
MW-7	6/8/2012	<0.001	<0.002	<0.002	<0.003	
MW-7	9/10/2012	<0.001	<0.002	<0.002	<0.003	
MW-7	12/7/2012	<0.001	<0.002	<0.002	<0.003	
MW-7	2/20/2013	<0.001	<0.002	<0.002	<0.003	
MW-7	6/2/2013	<0.001	<0.002	<0.002	<0.003	
MW-7	9/9/2013	<0.001	<0.002	<0.002	<0.003	
MW-7	12/2/2013	<0.001	<0.002	<0.002	<0.003	
MW-7	2/28/2014	<0.001	<0.002	<0.002	<0.003	
MW-7	7/14/2014	<0.001	<0.002	<0.002	<0.003	

APPENDIX A
HISTORIC ANALYTICAL RESULTS
BTEX CONCENTRATIONS IN GROUNDWATER
X-LINE PIPELINE RELEASE - ETCHEVERRY RANCH
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		0.01	0.75	0.75	0.62	
MW-8	4/24/2002	NI	NI	NI	NI	
MW-8	5/21/2002	NI	NI	NI	NI	
MW-8	4/28/2003	FPH	FPH	FPH	FPH	
MW-8	6/19/2003	FPH	FPH	FPH	FPH	
MW-8	7/17/2003	FPH	FPH	FPH	FPH	
MW-8	8/20/2003	FPH	FPH	FPH	FPH	
MW-8	9/22/2003	FPH	FPH	FPH	FPH	
MW-8	10/29/2003	FPH	FPH	FPH	FPH	
MW-8	11/20/2003	FPH	FPH	FPH	FPH	
MW-8	2/18/2004	FPH	FPH	FPH	FPH	
MW-8	6/25/2004	FPH	FPH	FPH	FPH	
MW-8	10/18/2004	FPH	FPH	FPH	FPH	
MW-8	12/9/2004	FPH	FPH	FPH	FPH	
MW-8	3/3/2005	NS	NS	NS	NS	
MW-8	6/3/2005	FPH	FPH	FPH	FPH	
MW-8	9/28/2005	FPH	FPH	FPH	FPH	
MW-8	12/12/2005	0.561	0.928	2.98	9.89	
MW-8	3/1/2006	FPH	FPH	FPH	FPH	
MW-8	6/26/2006	FPH	FPH	FPH	FPH	
MW-8	9/28/2006	0.24	0.239	0.791	2.27	
MW-8	12/21/2006	FPH	FPH	FPH	FPH	
MW-8	3/13/2007	0.42	0.437	0.977	3.35	
MW-8	6/26/2007	FPH	FPH	FPH	FPH	
MW-8	9/5/2007	FPH	FPH	FPH	FPH	
MW-8	12/27/2007	FPH	FPH	FPH	FPH	
MW-8	3/20/2008	0.28	0.15	0.35	2.8	
MW-8	6/27/2008	0.18	0.0971	0.388	0.388	
MW-8	9/15/2008	0.14	0.17	0.25	2.42	
MW-8	12/1/2008	FPH	FPH	FPH	FPH	
MW-8	3/11/2009	0.219	0.133	0.257	3.76	
MW-8	5/27/2009	0.719*	0.233*	2.00*	4.72*	
MW-8	9/24/2009	0.775	0.238	2.52	5.1	
MW-8	12/18/2009	0.409	0.114	1.11	5.24	
MW-8	3/25/2010	0.691	45.6	63.4	2220	
MW-8	6/30/2010	0.549	0.145	1.48	3.49	
MW-8	9/16/2010	0.653	0.165	1.07	6.37	
MW-8	12/9/2010	NS	NS	NS	NS	
MW-8	3/28/2011	0.443	0.0817	0.717	2.34	
MW-8	6/22/2011	0.204	0.444	0.0822	2.72	
MW-8	9/18/2011	0.682	0.699	0.112	3.03	
MW-8*	12/9/2011	NS	NS	NS	NS	
MW-8	3/11/2012	0.0112	0.0227	<0.02	0.0333	
MW-8	6/8/2012	<0.001	<0.002	<0.002	<0.003	
MW-8	9/10/2012	0.00086	<0.002	0.00066	0.002	Duplicate Sample Collected
MW-8	12/7/2012	0.00063	<0.002	0.00086	<0.003	Duplicate Sample Collected
MW-8	2/20/2013	0.00045	<0.002	0.0019	0.0022	Duplicate Sample Collected
MW-8	6/2/2013	0.00043	<0.002	0.00098	0.0037	Duplicate Sample Collected
MW-8	9/9/2013	0.00037	<0.002	<0.002	<0.003	Duplicate Sample Collected
MW-8	12/2/2013	0.00044	<0.002	<0.002	0.0028	Duplicate Sample Collected
MW-8	2/28/2014	0.00042 J	<0.002	0.00036 J	0.0034	Duplicate Sample Collected
MW-8 (Duplicate)	2/28/2014	0.00045 J	<0.002	0.00026 J	0.0028 J	
MW-8	7/14/2014	0.00051 J	<0.002	0.001 J	0.003	Duplicate Sample Collected
MW-8 (Duplicate)	7/14/2014	0.00053 J	<0.002	0.00097 J	0.003	

**APPENDIX A
HISTORIC ANALYTICAL RESULTS
BTEX CONCENTRATIONS IN GROUNDWATER
X-LINE PIPELINE RELEASE - ETCHEVERRY RANCH
LEA COUNTY, NEW MEXICO**

Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		0.01	0.75	0.75	0.62	
Trip Blank	7/14/2014	<0.001	<0.002	<0.002	<0.003	

Notes:

The environmental cleanup standards for water that are applicable to this Site are the New Mexico Water Quality Control Commission (NMWQCC) Groundwater Standards.

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

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

NS = Not Sampled.

mg/L = milligrams per liter.

J = Indicates an estimated value

* Monitoring well MW-8 was converted to an Air Sparge Injection point prior to the fourth quarter 2011 groundwater monitoring event.

Appendix B

Laboratory Analytical Report

- Accutest Job #: D59718



07/22/14

Technical Report for

DCP Midstream, LP

TASMCOA:DCP XLINE Pipeline Release

Accutest Job Number: D59718

Sampling Date: 07/14/14

Report to:

Tasman Geoscience LLC
6899 Pecos st-Unit C
Denver, CO 80221
dbaggus@tasman-geo.com; tjohansen@tasman-geo.com

ATTN: Don Baggus

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



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 'Scott Heideman'.

Scott Heideman
Laboratory Director

Client Service contact: Renea Jackson 303-425-6021

Certifications: CO (CO00049), ID, NE (CO00049), ND (R-027), NJ (CO 0007), OK (D9942), UT (NELAP CO00049), TX (T104704511)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.

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Sample Summary

DCP Midstream, LP

Job No: D59718

TASMCOA:DCP XLINE Pipeline Release

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
D59718-1	07/14/14	13:35 JDBN	07/15/14	AQ	Ground Water	MW-1 071414
D59718-2	07/14/14	14:03 JDBN	07/15/14	AQ	Ground Water	MW-2 071414
D59718-3	07/14/14	13:05 JDBN	07/15/14	AQ	Ground Water	MW-3 071414
D59718-3D	07/14/14	13:05 JDBN	07/15/14	AQ	Water Dup/MSD	MW-3 071414
D59718-3M	07/14/14	13:05 JDBN	07/15/14	AQ	Water Matrix Spike	MW-3 071414
D59718-4	07/14/14	12:25 JDBN	07/15/14	AQ	Ground Water	MW-4 071414
D59718-5	07/14/14	11:50 JDBN	07/15/14	AQ	Ground Water	MW-5 071414
D59718-6	07/14/14	14:38 JDBN	07/15/14	AQ	Ground Water	MW-6 071414
D59718-7	07/14/14	14:20 JDBN	07/15/14	AQ	Ground Water	MW-7 071414
D59718-8	07/14/14	14:55 JDBN	07/15/14	AQ	Ground Water	MW-8 071414
D59718-9	07/14/14	00:00 JDBN	07/15/14	AQ	Ground Water	DUP-071414
D59718-10	07/14/14	11:30 JDBN	07/15/14	AQ	Trip Blank Water	TRIP BLANK



CASE NARRATIVE / CONFORMANCE SUMMARY

Client: DCP Midstream, LP

Job No D59718

Site: TASMCOA:DCP XLINE Pipeline Release

Report Date 7/22/2014 9:09:41 AM

On 07/15/2014, 9 sample(s), 1 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 4.9 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D59718 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ

Batch ID: V6V1469

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D59718-3MS, D59718-3MSD were used as the QC samples indicated.
- D59718-8,-9: The pH of the sample aliquot for VOA analysis was >2 at time of analysis.

AMS certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting AMS's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

AMS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by AMS indicated via signature on the report cover.

Summary of Hits

Job Number: D59718
Account: DCP Midstream, LP
Project: TASMCOA:DCP XLINE Pipeline Release
Collected: 07/14/14



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

D59718-1 MW-1 071414

No hits reported in this sample.

D59718-2 MW-2 071414

Ethylbenzene	0.0059	0.0020	0.00031	mg/l	SW846 8260B
Xylene (total)	0.0176	0.0030	0.0015	mg/l	SW846 8260B

D59718-3 MW-3 071414

No hits reported in this sample.

D59718-4 MW-4 071414

No hits reported in this sample.

D59718-5 MW-5 071414

No hits reported in this sample.

D59718-6 MW-6 071414

No hits reported in this sample.

D59718-7 MW-7 071414

No hits reported in this sample.

D59718-8 MW-8 071414

Benzene ^a	0.00051 J	0.0010	0.00025	mg/l	SW846 8260B
Ethylbenzene ^a	0.0010 J	0.0020	0.00031	mg/l	SW846 8260B
Xylene (total) ^a	0.0030	0.0030	0.0015	mg/l	SW846 8260B

D59718-9 DUP-071414

Benzene ^a	0.00053 J	0.0010	0.00025	mg/l	SW846 8260B
Ethylbenzene ^a	0.00097 J	0.0020	0.00031	mg/l	SW846 8260B
Xylene (total) ^a	0.0030	0.0030	0.0015	mg/l	SW846 8260B

D59718-10 TRIP BLANK

No hits reported in this sample.

Summary of Hits

Page 2 of 2

Job Number: D59718
Account: DCP Midstream, LP
Project: TASMCOA:DCP XLINE Pipeline Release
Collected: 07/14/14



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

(a) The pH of the sample aliquot for VOA analysis was > 2 at time of analysis.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-1 071414	Date Sampled:	07/14/14
Lab Sample ID:	D59718-1	Date Received:	07/15/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:DCP XLINE Pipeline Release		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V25981.D	1	07/15/14	BR	n/a	n/a	V6V1469
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	0.00025	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00031	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	111%		62-130%
2037-26-5	Toluene-D8	96%		70-130%
460-00-4	4-Bromofluorobenzene	95%		69-130%

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-2 071414	
Lab Sample ID:	D59718-2	Date Sampled: 07/14/14
Matrix:	AQ - Ground Water	Date Received: 07/15/14
Method:	SW846 8260B	Percent Solids: n/a
Project:	TASMCOA:DCP XLINE Pipeline Release	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V25982.D	1	07/15/14	BR	n/a	n/a	V6V1469
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	0.00025	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	0.0059	0.0020	0.00031	mg/l	
1330-20-7	Xylene (total)	0.0176	0.0030	0.0015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	115%		62-130%
2037-26-5	Toluene-D8	99%		70-130%
460-00-4	4-Bromofluorobenzene	100%		69-130%

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-3 071414	Date Sampled:	07/14/14
Lab Sample ID:	D59718-3	Date Received:	07/15/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:DCP XLINE Pipeline Release		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V25983.D	1	07/15/14	BR	n/a	n/a	V6V1469
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	0.00025	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00031	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	120%		62-130%
2037-26-5	Toluene-D8	99%		70-130%
460-00-4	4-Bromofluorobenzene	97%		69-130%

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-4 071414	Date Sampled:	07/14/14
Lab Sample ID:	D59718-4	Date Received:	07/15/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:DCP XLINE Pipeline Release		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V25986.D	1	07/15/14	BR	n/a	n/a	V6V1469
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	0.00025	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00031	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	114%		62-130%
2037-26-5	Toluene-D8	99%		70-130%
460-00-4	4-Bromofluorobenzene	95%		69-130%

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-5 071414	
Lab Sample ID:	D59718-5	Date Sampled: 07/14/14
Matrix:	AQ - Ground Water	Date Received: 07/15/14
Method:	SW846 8260B	Percent Solids: n/a
Project:	TASMCOA:DCP XLINE Pipeline Release	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V25987.D	1	07/15/14	BR	n/a	n/a	V6V1469
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	0.00025	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00031	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	121%		62-130%
2037-26-5	Toluene-D8	99%		70-130%
460-00-4	4-Bromofluorobenzene	97%		69-130%

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-6 071414	Date Sampled:	07/14/14
Lab Sample ID:	D59718-6	Date Received:	07/15/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:DCP XLINE Pipeline Release		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V25988.D	1	07/15/14	BR	n/a	n/a	V6V1469
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	0.00025	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00031	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	122%		62-130%
2037-26-5	Toluene-D8	99%		70-130%
460-00-4	4-Bromofluorobenzene	96%		69-130%

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-7 071414	Date Sampled:	07/14/14
Lab Sample ID:	D59718-7	Date Received:	07/15/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:DCP XLINE Pipeline Release		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V25989.D	1	07/15/14	BR	n/a	n/a	V6V1469
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	0.00025	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00031	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	126%		62-130%
2037-26-5	Toluene-D8	97%		70-130%
460-00-4	4-Bromofluorobenzene	95%		69-130%

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-8 071414	Date Sampled:	07/14/14
Lab Sample ID:	D59718-8	Date Received:	07/15/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:DCP XLINE Pipeline Release		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	6V25990.D	1	07/15/14	BR	n/a	n/a	V6V1469
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	0.00051	0.0010	0.00025	mg/l	J
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	0.0010	0.0020	0.00031	mg/l	J
1330-20-7	Xylene (total)	0.0030	0.0030	0.0015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	120%		62-130%
2037-26-5	Toluene-D8	97%		70-130%
460-00-4	4-Bromofluorobenzene	99%		69-130%

(a) The pH of the sample aliquot for VOA analysis was > 2 at time of analysis.

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-071414	Date Sampled:	07/14/14
Lab Sample ID:	D59718-9	Date Received:	07/15/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:DCP XLINE Pipeline Release		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	6V25991.D	1	07/15/14	BR	n/a	n/a	V6V1469
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	0.00053	0.0010	0.00025	mg/l	J
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	0.00097	0.0020	0.00031	mg/l	J
1330-20-7	Xylene (total)	0.0030	0.0030	0.0015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	119%		62-130%
2037-26-5	Toluene-D8	97%		70-130%
460-00-4	4-Bromofluorobenzene	99%		69-130%

(a) The pH of the sample aliquot for VOA analysis was > 2 at time of analysis.

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	Date Sampled:	07/14/14
Lab Sample ID:	D59718-10	Date Received:	07/15/14
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:DCP XLINE Pipeline Release		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V25992.D	1	07/15/14	BR	n/a	n/a	V6V1469
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	0.00025	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00031	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	120%		62-130%
2037-26-5	Toluene-D8	99%		70-130%
460-00-4	4-Bromofluorobenzene	92%		69-130%

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

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

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

Page 1 of 1

Job Number: D59718
Account: DCPMCOA DCP Midstream, LP
Project: TASMCOA:DCP XLINE Pipeline Release

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6V1469-MB	6V25976.D	1	07/15/14	BR	n/a	n/a	V6V1469

The QC reported here applies to the following samples:

Method: SW846 8260B

D59718-1, D59718-2, D59718-3, D59718-4, D59718-5, D59718-6, D59718-7, D59718-8, D59718-9, D59718-10

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.31	ug/l	
108-88-3	Toluene	ND	2.0	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.5	ug/l	

CAS No.	Surrogate Recoveries	Limits
17060-07-0	1,2-Dichloroethane-D4	107% 62-130%
2037-26-5	Toluene-D8	99% 70-130%
460-00-4	4-Bromofluorobenzene	101% 69-130%

Blank Spike Summary

Page 1 of 1

Job Number: D59718
Account: DCPMCOA DCP Midstream, LP
Project: TASMCOA:DCP XLINE Pipeline Release

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6V1469-BS	6V25977.D	1	07/15/14	BR	n/a	n/a	V6V1469

The QC reported here applies to the following samples:

Method: SW846 8260B

D59718-1, D59718-2, D59718-3, D59718-4, D59718-5, D59718-6, D59718-7, D59718-8, D59718-9, D59718-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	53.1	106	70-130
100-41-4	Ethylbenzene	50	51.3	103	70-130
108-88-3	Toluene	50	52.3	105	70-130
1330-20-7	Xylene (total)	150	149	99	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	107%	62-130%
2037-26-5	Toluene-D8	101%	70-130%
460-00-4	4-Bromofluorobenzene	107%	69-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D59718
Account: DCPMCO DN DCP Midstream, LP
Project: TASMCOA:DCP XLINE Pipeline Release

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D59718-3MS	6V25984.D	1	07/15/14	BR	n/a	n/a	V6V1469
D59718-3MSD	6V25985.D	1	07/15/14	BR	n/a	n/a	V6V1469
D59718-3	6V25983.D	1	07/15/14	BR	n/a	n/a	V6V1469

The QC reported here applies to the following samples:

Method: SW846 8260B

D59718-1, D59718-2, D59718-3, D59718-4, D59718-5, D59718-6, D59718-7, D59718-8, D59718-9, D59718-10

CAS No.	Compound	D59718-3 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	50	52.2	104	50	54.6	109	4	62-130/30
100-41-4	Ethylbenzene	ND	50	52.8	106	50	52.6	105	0	63-130/30
108-88-3	Toluene	ND	50	53.1	106	50	53.3	107	0	60-130/30
1330-20-7	Xylene (total)	ND	150	154	103	150	155	103	1	67-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D59718-3	Limits
17060-07-0	1,2-Dichloroethane-D4	118%	112%	120%	62-130%
2037-26-5	Toluene-D8	103%	102%	99%	70-130%
460-00-4	4-Bromofluorobenzene	108%	106%	97%	69-130%

* = Outside of Control Limits.