

1RP-400

1st Quarter 2013 Groundwater Monitoring Results

**DATE:
06.11.13**



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

RECEIVED OCD

2013 JUN 12 A 10: 38

June 11, 2013

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

**RE: 1st Quarter 2013 Groundwater Monitoring Results
DCP X-Line Pipeline Release (1RP-400-0)
Unit B, Section 7, T15S, R34E (Lat 33° 02' 11", Long 103° 32' 48")**

Dear Mr. Lowe:

DCP Midstream, LP (DCP) is pleased to submit for your review, one copy of the 1st Quarter 2013 Groundwater Monitoring Results for the DCP X-Line Pipeline Release located within the Etcheverry Ranch, Lea County, New Mexico.

This is the 4th consecutive quarter in which the BTEX concentrations in all groundwater monitor wells have been below New Mexico Water Quality Control Commissions Groundwater Standards.

If you have any questions regarding the report, please call at 303-605-1718 or e-mail me swweathers@dcpmidstream.com.

Sincerely

DCP Midstream, LP

Stephen Weathers, PG
Principal Environmental Specialist

cc: Mrs. Etcheverry, Landowner - Certified Mail 91 7108 2133 3938 9761 6670
Geoffrey Leking, OCD Hobbs District Office (Copy on CD)
Environmental Files

First Quarter 2013 Groundwater Monitoring and Activities Summary Report

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

1RP-400-0

Prepared for:



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

Prepared by:



6899 Pecos Street, Unit C
Denver, Colorado 80221

April 30, 2013

RECEIVED OCD
2013 JUN 12 A 10:38

Table of Contents

1. Introduction	1
2. Site Location and Background.....	1
3. Groundwater Monitoring.....	2
3.1 Groundwater Elevation Monitoring.....	2
3.2 Groundwater Quality Monitoring	2
3.3 Data Quality Assurance / Quality Control.....	3
4. Remediation System O&M Activities.....	3
5. Conclusions	3
6. Recommendations	4

Tables

1	First Quarter 2013 Summary of Groundwater Elevation Data
2	First Quarter 2013 Summary of BTEX Concentrations in Groundwater

Figures

1	Site Location
2	Site Map With Monitoring Well Locations
3	First Quarter 2013 Groundwater Elevation Contour Map – February 20, 2013
4	First Quarter 2013 Analytical Results Map

Appendices

A	Groundwater Laboratory Analytical Report
B	Historical Analytical Results

1. Introduction

This report summarizes the remediation system activities and results of groundwater monitoring activities conducted during the first quarter 2013, at the X-Line Pipeline Release (Site) at the Etcheverry Ranch in Lea County, New Mexico (Figure 1). Tasman Geosciences, LLC (Tasman) conducted these activities on behalf of DCP Midstream, LP (DCP). The purpose of the field activities described herein were to; a) measure groundwater levels; b) obtain groundwater samples for chemical analysis; c) subsequently evaluate and present groundwater flow and quality conditions; and d) assess and conduct remediation system operations and maintenance (O&M) activities. Current Site conditions and remediation system operation were evaluated from field data and analytical laboratory results collected during the reporting period.

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.

Historical 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 which are illustrated on Figure 2. Additionally, one light non-aqueous phase liquid (LNAPL) recovery well was installed and used to extract LNAPL material from the groundwater table. The well was re-drilled and used as a groundwater monitoring well (MW-8) following LNAPL recovery conducted 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 constituent concentrations.

3. Groundwater Monitoring

This section describes the field groundwater monitoring activities as well as the laboratory analyses performed during the first quarter 2013 monitoring event. Monitoring activities included Site-wide groundwater gauging and sampling that were performed on February 20, 2013. 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 at the Site. In addition, wells were measured for total depth and groundwater purge volumes calculated. During the first quarter 2013 monitoring event, 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 first quarter 2013 monitoring event are presented in Table 1, and a first quarter 2013 groundwater elevation contour map is illustrated on Figure 3. Groundwater elevations ranged from 4,088.66 feet AMSL at monitoring well MW-5 to 4,089.40 feet AMSL in monitoring well MW-1. Since surveyed top of casing (TOC) elevations are not available for monitoring wells MW-7 and MW-8, groundwater elevations could not be calculated for those wells. As illustrated on Figure 3, groundwater flow at the Site generally trends to the southeast with a gradient of approximately 0.0024 foot per foot between monitoring wells MW-1 and MW-5.

3.2 Groundwater Quality Monitoring

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

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

Table 2 summarizes BTEX concentrations in groundwater samples collected during the reporting period in addition to concentrations for the previous 4 quarters. Laboratory analytical reports for the event are included in Appendix A and analytical results are summarized on Figure 4. Historical analytical results up

to and including the February 2013 event may be found in Appendix B. During the first quarter 2013 monitoring event, BTEX concentrations did not exceed the New Mexico Water Quality Control Commission (NMWQCC) groundwater standards in any of the eight monitoring wells.

Water quality parameters were collected during the first quarter 2013 monitoring event and utilized to confirm groundwater stabilization prior to sample collection. Parameter stabilization was achieved within three purge volumes. Therefore, the analytical data are considered to be representative of Site conditions.

3.3 Data Quality Assurance / Quality Control

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. A trip blank, matrix spike or matrix spike duplicate (MS/MSD) and field duplicate sample from well MW-8 were collected during the sampling event.

The trip blank was fully in control, having no detections of targets.

The duplicate sample collected from MW-8 was in compliance with QA/QC standards, both samples returning results for benzene below the NMWQCC regulatory standards of 0.01 mg/l.

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

4. Remediation System O&M Activities

The air sparge and soil vapor extraction systems were turned off on during the second quarter 2012 to monitor dissolved phase concentration trends within the targeted remediation area subsequent to system shutdown. It remained off throughout the reporting period.

5. Conclusions

During the first quarter 2013, BTEX concentrations observed at all monitoring wells were below NMWQCC groundwater standards. The Site has exhibited four quarters of dissolved phase petroleum hydrocarbon concentrations below regulatory standards. Remedial activities have been successful in mitigating the residual hydrocarbon impacts on Site as demonstrated by 2012 and 2013 analytical data.

Analytical results were reported above the laboratory detection limits for total xylenes and ethylbenzene in monitoring well MW-2 and benzene, ethylbenzene, and total xylenes in MW-8. However, concentrations in both monitoring wells were below the NMWQCC Groundwater Standards.

6. Recommendations

Based on evaluation of data obtained during this reporting period, historical Site observations, and the remediation system operational parameters, it is recommended that an additional four quarters of groundwater sampling be completed to demonstrate that the residual dissolved phase petroleum hydrocarbon plume has been successfully eliminated.

Tables

TABLE 1
FIRST QUARTER 2013
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	3/11/2012	77.43	91.00	4166.82	4089.39	0.03
MW-1	6/8/2012	77.48	91.00	4166.82	4089.34	-0.05
MW-1	9/10/2012	77.46	91.00	4166.82	4089.36	0.02
MW-1	12/7/2012	77.42	91.00	4166.82	4089.40	0.04
MW-1	2/20/2013	77.42	91.00	4166.82	4089.40	0.00
MW-2	3/11/2012	77.42	88.00	4166.66	4089.24	0.04
MW-2	6/8/2012	77.47	88.00	4166.66	4089.19	-0.05
MW-2	9/10/2012	77.44	88.00	4166.66	4089.22	0.03
MW-2	12/7/2012	77.40	88.00	4166.66	4089.26	0.04
MW-2	2/20/2013	77.40	88.00	4166.66	4089.26	0.00
MW-3	3/11/2012	77.45	91.00	4166.17	4088.72	0.01
MW-3	6/8/2012	77.51	91.00	4166.17	4088.66	-0.06
MW-3	9/10/2012	77.48	91.00	4166.17	4088.69	0.03
MW-3	12/7/2012	77.43	91.00	4166.17	4088.74	0.05
MW-3	2/20/2013	77.44	91.00	4166.17	4088.73	-0.01
MW-4	3/11/2012	77.60	91.00	4166.40	4088.80	0.00
MW-4	6/8/2012	77.62	91.00	4166.40	4088.78	-0.02
MW-4	9/10/2012	77.60	91.00	4166.40	4088.80	0.02
MW-4	12/7/2012	77.55	91.00	4166.40	4088.85	0.05
MW-4	2/20/2013	77.56	91.00	4166.40	4088.84	-0.01
MW-5	3/11/2012	77.25	89.00	4165.90	4088.65	0.00
MW-5	6/8/2012	77.30	89.00	4165.90	4088.60	-0.05
MW-5	9/10/2012	77.26	89.00	4165.90	4088.64	0.04
MW-5	12/7/2012	77.21	89.00	4165.90	4088.69	0.05
MW-5	2/20/2013	77.24	89.00	4165.90	4088.66	-0.03
MW-6	3/11/2012	77.17	90.00	4165.94	4088.77	0.10
MW-6	6/8/2012	77.20	90.00	4165.94	4088.74	-0.03
MW-6	9/10/2012	77.18	90.00	4165.94	4088.76	0.02
MW-6	12/7/2012	77.13	90.00	4165.94	4088.81	0.05
MW-6	2/20/2013	77.15	90.00	4165.94	4088.79	-0.02
MW-7	3/11/2012	76.75	85.00	NM	NM	NM
MW-7	6/8/2012	76.80	85.00	NM	NM	NM
MW-7	9/10/2012	76.75	85.00	NM	NM	NM
MW-7	12/7/2012	76.70	85.00	NM	NM	NM
MW-7	2/20/2013	76.71	85.00	NM	NM	NM
MW-8	3/11/2012	75.85	81.35		NM	NM
MW-8	6/8/2012	77.46	81.35	NM	NM	NM
MW-8	9/10/2012	77.42	81.35	NM	NM	NM
MW-8	12/7/2012	77.36	81.35	NM	NM	NM
MW-8	2/20/2013	77.36	81.35	NM	NM	NM
Average change in groundwater elevation since the previous monitoring event						-0.01

Notes:

- 1- Depths measured from the north edge of the well casing.
- 2- Total depths were collected and recorded during the first quarter 2013 monitoring event.
- 3- TOC elevations for monitoring wells MW-7, & MW-8 were not available at the time this report was generated. Therefore, groundwater elevations for those wells could not be calculated.
- 4- Changes in groundwater elevation were calculated by subtracting the measurement collected during the previous monitoring even from the measurement collected during the most recent monitoring event.

Data presented for the well locations includes previous four sampling events, when available. Historic groundwater elevation data for these locations may be found in Appendix B.

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

amsl - feet above mean sea level.

TOC - top of casing

NM - not measured

TABLE 2
FIRST QUARTER 2013
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	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-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-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-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-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-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-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-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

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 presented for the well locations includes previous four sampling events, when available. Historic groundwater analytical results for these locations may be found in Appendix B.

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

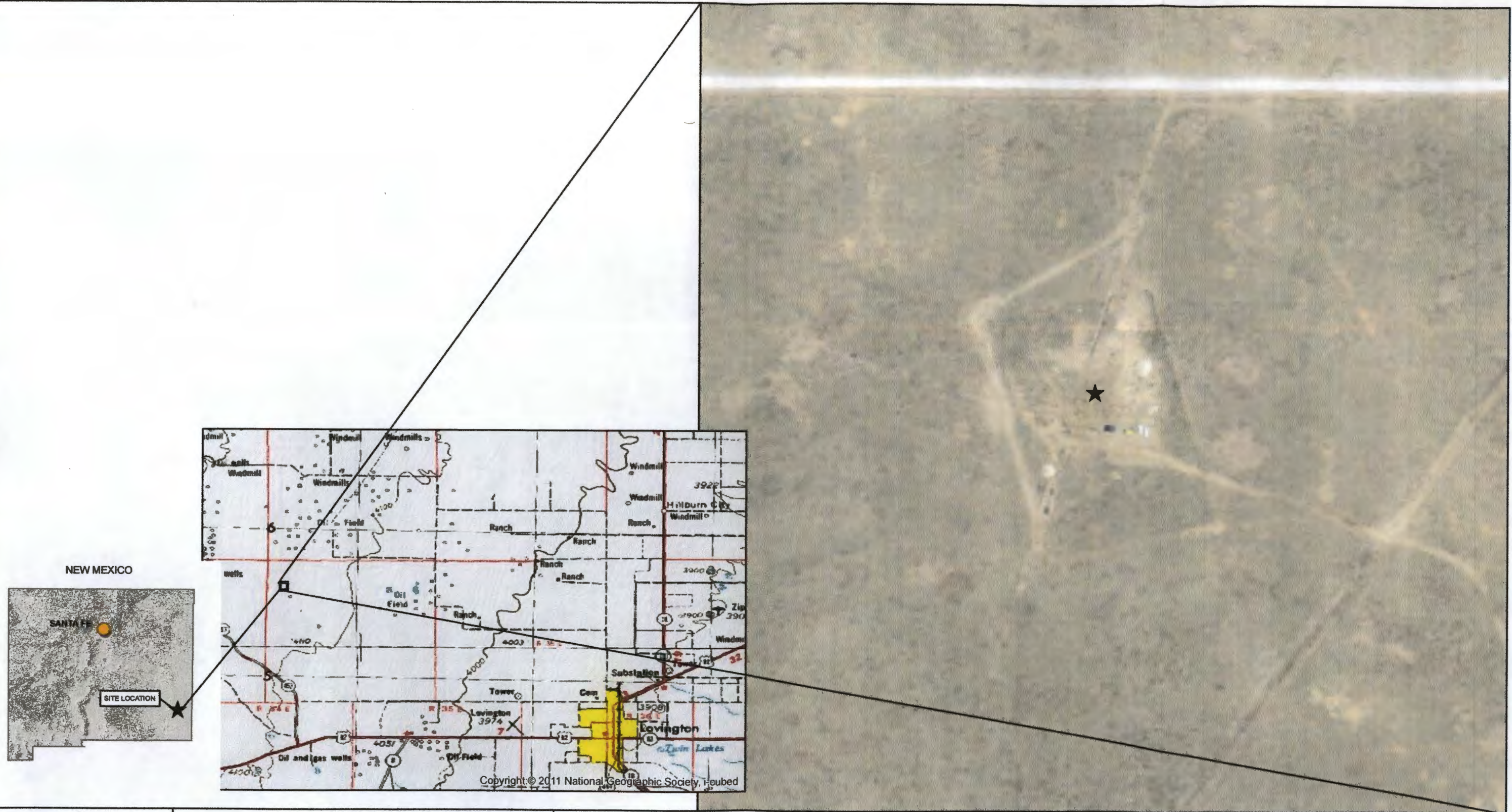
Sample locations are shown on Figure 2 and analytical results are illustrated on Figure 4.

NS = Not Sampled.

mg/L = milligrams per liter.

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

Figures



DESIGNED BY: C. Wasko
DRAWN BY: J. Clonts
SHEET CHK'D BY: _____
CROSS CHK'D BY: _____
APPROVED BY: _____
APPROVED BY: _____

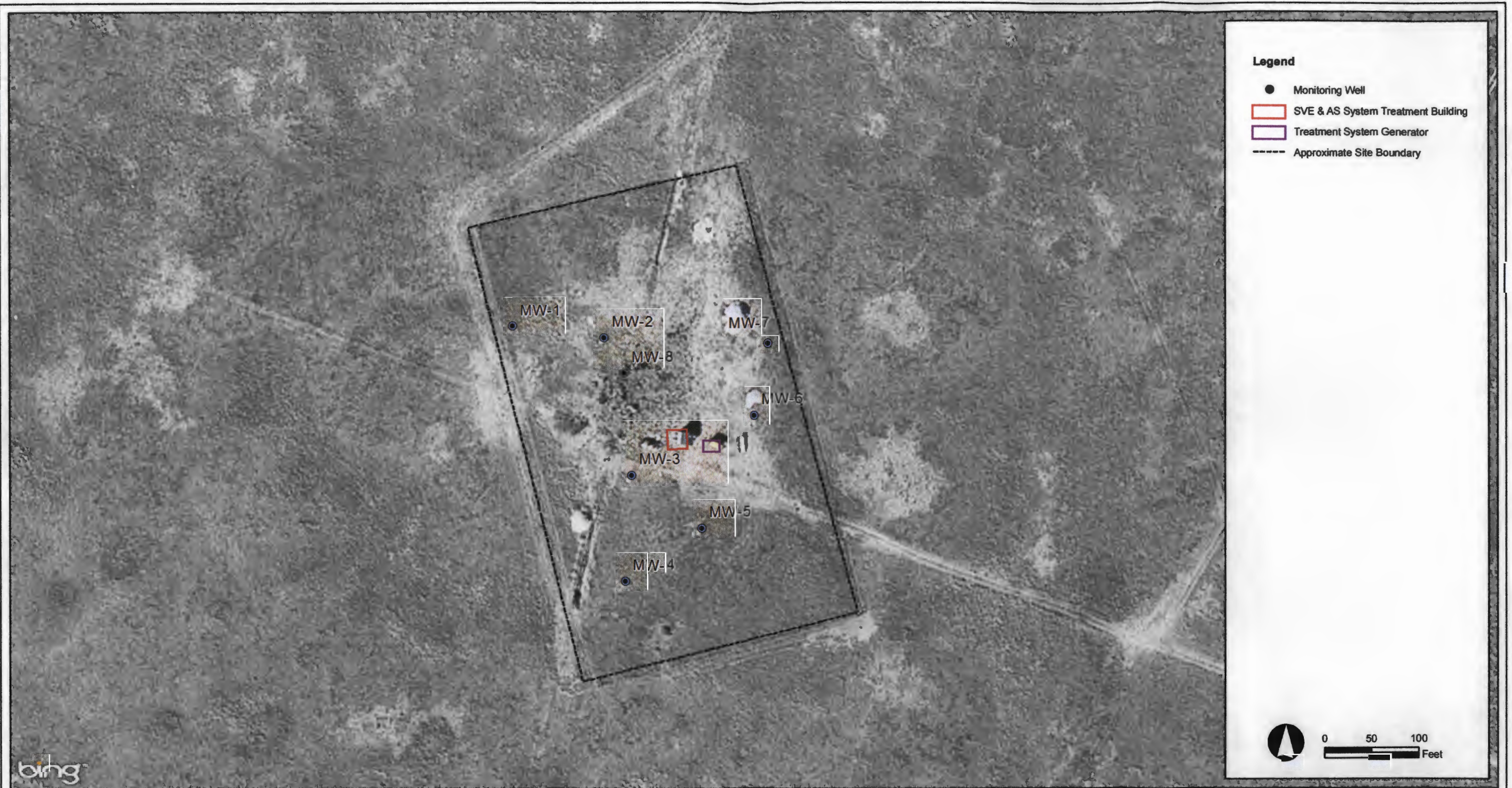


Tasman Geosciences, LLC
6899 Pecos Street - Unit C
Denver, CO 80221
303 487 1228

X-LINE PIPELINE RELEASE

SITE LOCATION

**FIGURE
1**



DESIGNED BY: C. Wasko

DRAWN BY: J. Clonts

SHEET CHK'D BY: _____

CROSS CHK'D BY: _____

APPROVED BY: _____

APPROVED BY: _____



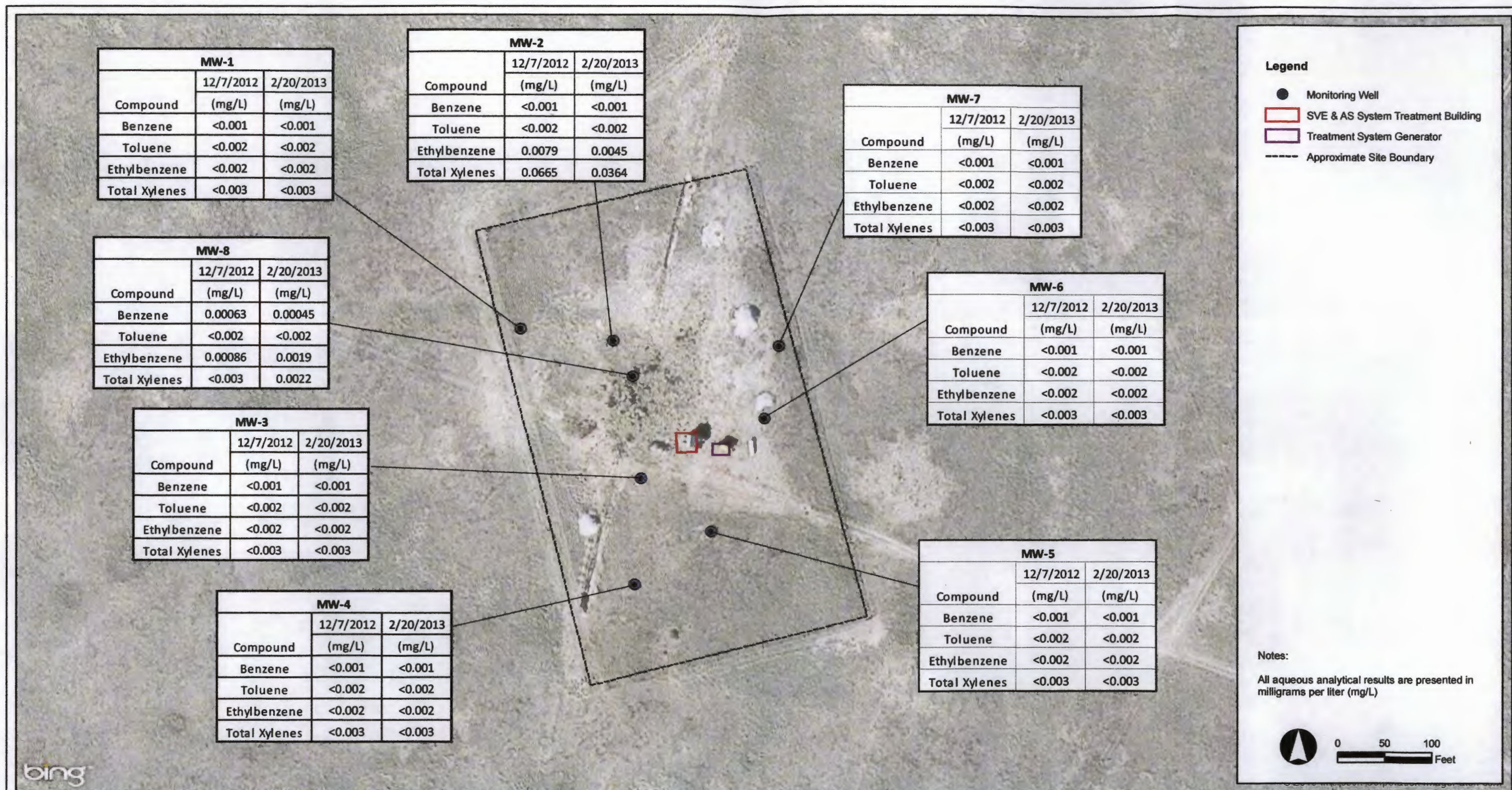
Tasman Geosciences, LLC
6899 Pecos Street - Unit C
Denver, CO 80221
303 487 1228

X-LINE PIPELINE RELEASE

SITE MAP

FIGURE
2





DESIGNED BY: C.Wasko

DRAWN BY: J. Clonts

SHEET CHK'D BY: _____

CROSS CHK'D BY: _____

APPROVED BY: _____

APPROVED BY: _____



Tasman Geosciences, LLC
6899 Pecos Street - Unit C
Denver, CO 80221
303 487 1228

X-LINE PIPELINE RELEASE

First Quarter 2013
Groundwater Monitoring
Summary Report

ANALYTICAL RESULTS MAP

FIGURE
4

Appendix A
Laboratory Analytical Report

•



03/04/13

Technical Report for

DCP Midstream, LP

TASMCOA:DCP XLINE Etcheverry Ranch

RC-GN00 Project-400228028

Accutest Job Number: D43743

Sampling Date: 02/20/13

Report to:

Tasman Geoscience LLC
6899 Pecos Street Unit C
Denver, CO 80221
jimdawe@tasman-geo.com; swweathers@dcpmidstream.com;
cwasko@tasman-geo.com
ATTN: Jim Dawe

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



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

A handwritten signature in black ink, likely belonging to Brad Madadian.

Brad Madadian
Laboratory Director

Client Service contact: Shea Greiner 303-425-6021

Certifications: CO, ID, NE, NM, ND (R-027) (PW), UT (NELAP CO00049), TX (T104704511-12-1)

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

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Summary of Hits	4
Section 3: Sample Results	6
3.1: D43743-1: MW-1	7
3.2: D43743-2: MW-2	8
3.3: D43743-3: MW-3	9
3.4: D43743-4: MW-4	10
3.5: D43743-5: MW-6	11
3.6: D43743-6: MW-7	12
3.7: D43743-7: MW-8	13
3.8: D43743-8: TRIP BLANK	14
3.9: D43743-9: DUP	15
3.10: D43743-10: MW-5	16
Section 4: Misc. Forms	17
4.1: Chain of Custody	18
Section 5: GC/MS Volatiles - QC Data Summaries	20
5.1: Method Blank Summary	21
5.2: Blank Spike Summary	22
5.3: Matrix Spike/Matrix Spike Duplicate Summary	23

Sample Summary

DCP Midstream, LP

Job No: D43743

TASMCOA:DCP XLINE Etcheverry Ranch
Project No: RC-GN00 Project-400228028

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
D43743-1	02/20/13	10:40 CW	02/23/13	AQ	Ground Water	MW-1
D43743-2	02/20/13	10:55 CW	02/23/13	AQ	Ground Water	MW-2
D43743-3	02/20/13	10:15 CW	02/23/13	AQ	Ground Water	MW-3
D43743-4	02/20/13	09:45 CW	02/23/13	AQ	Ground Water	MW-4
D43743-5	02/20/13	11:25 CW	02/23/13	AQ	Ground Water	MW-6
D43743-6	02/20/13	11:05 CW	02/23/13	AQ	Ground Water	MW-7
D43743-7	02/20/13	11:15 CW	02/23/13	AQ	Ground Water	MW-8
D43743-8	02/20/13	00:00 CW	02/23/13	AQ	Trip Blank Water	TRIP BLANK
D43743-9	02/20/13	00:00 CW	02/23/13	AQ	Ground Water	DUP
D43743-10	02/20/13	10:00 CW	02/23/13	AQ	Ground Water	MW-5
D43743-10D	02/20/13	10:00 CW	02/23/13	AQ	Water Dup/MSD	MW-5
D43743-10M	02/20/13	10:00 CW	02/23/13	AQ	Water Matrix Spike	MW-5

Summary of Hits

Page 1 of 2

Job Number: D43743
Account: DCP Midstream, LP
Project: TASMCOA:DCP XLINE Etcheverry Ranch
Collected: 02/20/13

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

D43743-1 MW-1

No hits reported in this sample.

D43743-2 MW-2

Ethylbenzene	0.0045	0.0020	0.00033	mg/l	SW846 8260B
Xylene (total)	0.0364	0.0030	0.0020	mg/l	SW846 8260B

D43743-3 MW-3

No hits reported in this sample.

D43743-4 MW-4

No hits reported in this sample.

D43743-5 MW-6

No hits reported in this sample.

D43743-6 MW-7

No hits reported in this sample.

D43743-7 MW-8

Benzene	0.00045 J	0.0010	0.00027	mg/l	SW846 8260B
Ethylbenzene	0.0019 J	0.0020	0.00033	mg/l	SW846 8260B
Xylene (total)	0.0022 J	0.0030	0.0020	mg/l	SW846 8260B

D43743-8 TRIP BLANK

No hits reported in this sample.

D43743-9 DUP

Benzene ^a	0.00045 J	0.0010	0.00027	mg/l	SW846 8260B
Ethylbenzene ^a	0.0018 J	0.0020	0.00033	mg/l	SW846 8260B
Xylene (total) ^a	0.0021 J	0.0030	0.0020	mg/l	SW846 8260B

D43743-10 MW-5

No hits reported in this sample.

Summary of Hits

Job Number: D43743
Account: DCP Midstream, LP
Project: TASMCOA:DCP XLINE Etcheverry Ranch
Collected: 02/20/13

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

(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		
Lab Sample ID:	D43743-1	Date Sampled:	02/20/13
Matrix:	AQ - Ground Water	Date Received:	02/23/13
Method:	SW846 8260B	Percent Solids:	n/a
Project:	TASMSOA:DCP XLINE Etcheverry Ranch		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V18627.D	1	02/26/13	JL	n/a	n/a	V7V1019
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	0.00027	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00033	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	94%		62-130%
2037-26-5	Toluene-D8	99%		70-130%
460-00-4	4-Bromofluorobenzene	94%		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		
Lab Sample ID:	D43743-2	Date Sampled:	02/20/13
Matrix:	AQ - Ground Water	Date Received:	02/23/13
Method:	SW846 8260B	Percent Solids:	n/a
Project:	TASMSOA:DCP XLINE Etcheverry Ranch		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V18628.D	1	02/26/13	JL	n/a	n/a	V7V1019
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	0.00027	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	0.0045	0.0020	0.00033	mg/l	
1330-20-7	Xylene (total)	0.0364	0.0030	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	90%		62-130%
2037-26-5	Toluene-D8	98%		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-3		
Lab Sample ID:	D43743-3	Date Sampled:	02/20/13
Matrix:	AQ - Ground Water	Date Received:	02/23/13
Method:	SW846 8260B	Percent Solids:	n/a
Project:	TASMCOA:DCP XLINE Etcheverry Ranch		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V18629.D	1	02/26/13	JL	n/a	n/a	V7V1019
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	0.00027	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00033	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	94%		62-130%
2037-26-5	Toluene-D8	98%		70-130%
460-00-4	4-Bromofluorobenzene	93%		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						
Lab Sample ID:	D43743-4					Date Sampled:	02/20/13
Matrix:	AQ - Ground Water					Date Received:	02/23/13
Method:	SW846 8260B					Percent Solids:	n/a
Project:	TASMSOA:DCP XLINE Etcheverry Ranch						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V18630.D	1	02/26/13	JL	n/a	n/a	V7V1019
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	0.00027	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00033	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	93%		62-130%
2037-26-5	Toluene-D8	98%		70-130%
460-00-4	4-Bromofluorobenzene	93%		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	Date Sampled:	02/20/13
Lab Sample ID:	D43743-5	Date Received:	02/23/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMSOA:DCP XLINE Etcheverry Ranch		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V18631.D	1	02/26/13	JL	n/a	n/a	V7V1019
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	0.00027	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00033	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	96%		62-130%
2037-26-5	Toluene-D8	98%		70-130%
460-00-4	4-Bromofluorobenzene	93%		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	
Lab Sample ID:	D43743-6	Date Sampled: 02/20/13
Matrix:	AQ - Ground Water	Date Received: 02/23/13
Method:	SW846 8260B	Percent Solids: n/a
Project:	TASMSOA:DCP XLINE Etcheverry Ranch	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V18632.D	1	02/26/13	JL	n/a	n/a	V7V1019
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	0.00027	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00033	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	95%		62-130%
2037-26-5	Toluene-D8	99%		70-130%
460-00-4	4-Bromofluorobenzene	94%		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						
Lab Sample ID:	D43743-7					Date Sampled:	02/20/13
Matrix:	AQ - Ground Water					Date Received:	02/23/13
Method:	SW846 8260B					Percent Solids:	n/a
Project:	TASMSOA:DCP XLINE Etcheverry Ranch						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V18633.D	1	02/26/13	JL	n/a	n/a	V7V1019
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	0.00045	0.0010	0.00027	mg/l	J
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	0.0019	0.0020	0.00033	mg/l	J
1330-20-7	Xylene (total)	0.0022	0.0030	0.0020	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	96%		62-130%
2037-26-5	Toluene-D8	100%		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:	TRIP BLANK	Date Sampled:	02/20/13
Lab Sample ID:	D43743-8	Date Received:	02/23/13
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMSOA:DCP XLINE Etcheverry Ranch		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V18634.D	1	02/26/13	JL	n/a	n/a	V7V1019
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	0.00027	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00033	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	95%		62-130%
2037-26-5	Toluene-D8	100%		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:	DUP	Date Sampled:	02/20/13
Lab Sample ID:	D43743-9	Date Received:	02/23/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMSOA:DCP XLINE Etcheverry Ranch		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	7V18635.D	1	02/26/13	JL	n/a	n/a	V7V1019
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	0.00045	0.0010	0.00027	mg/l	J
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	0.0018	0.0020	0.00033	mg/l	J
1330-20-7	Xylene (total)	0.0021	0.0030	0.0020	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	96%		62-130%
2037-26-5	Toluene-D8	99%		70-130%
460-00-4	4-Bromofluorobenzene	95%		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:	MW-5		
Lab Sample ID:	D43743-10	Date Sampled:	02/20/13
Matrix:	AQ - Ground Water	Date Received:	02/23/13
Method:	SW846 8260B	Percent Solids:	n/a
Project:	TASMSOA:DCP XLINE Etcheverry Ranch		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V18626.D	1	02/26/13	JL	n/a	n/a	V7V1019
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	0.00027	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00033	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	94%		62-130%
2037-26-5	Toluene-D8	98%		70-130%
460-00-4	4-Bromofluorobenzene	94%		69-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

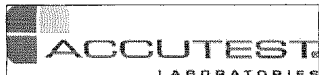
J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY

PAGE 1 OF 1

4036 Youngfield Street, Wheat Ridge, CO 80033
TEL: 303-425-6021 FAX: 303-425-6834
www.accutest.com

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # D43743

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)												Matrix Codes									
Company Name Tasman Geosciences LLC		Project Name: DCP XLINE														DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RS - Rinse Blank TB - Trip Blank									
Street Address 6899 Pecos Street Unit C		Street																							
City Denver CO 80221		City State																							
Project Contact Jim Dawe jimdawe@tasman-geo.com		Project # 400228028																							
Phone # Cell 720-409-9791 cwasko@tasman-geo.com		Client Purchase Order #		Billing Information (If different from Report to)														LAB USE ONLY							
Sampler(s) Name(s) Christine Wasko		Project Manager		Company Name DCP Midstream																					
Field ID / Point of Collection		Attention:		Street Address PO Box 4870																					
MEOH/DI Vial #		City Portland OR 97208-4870		Client Purchase Order #																					
Date		Time		Sampled by CW		Matrix		# of bottles		Number of preserved Bottles															
Date		Time		Matrix		# of bottles		Number of preserved Bottles																	
Date		Time		Matrix		# of bottles		Number of preserved Bottles																	
Date		Time		Matrix		# of bottles		Number of preserved Bottles																	
MW-1		1040		GW		3		3		1														01	
MW-2		1055		GW		3		3		1															
MW-3		1015		GW		3		3		1															
MW-4		0945		GW		3		3		1															
MW-6		1125		GW		3		3		1														04	
MW-7		1105		GW		3		3		1															
MW-8		1115		GW		3		3		1															
MS/MSD		1000		GW		6		6		1															
Trip Blank		1000		GW		2		2		1														08	
DUP		1000		GW		3		3		1															
MW-5		1000		GW		3		3		1															
MW-5		1000		GW		3		3		1															
Turnaround Time (Business days)		Date Deliverable Information		Comments / Special Instructions														Email results to Steve Weathers 2/21/13							
Turnaround Time (Business days)		Date Deliverable Information		Comments / Special Instructions																					
Turnaround Time (Business days)		Date Deliverable Information		Comments / Special Instructions																					
Turnaround Time (Business days)		Date Deliverable Information		Comments / Special Instructions																					
Sample Custody must be documented below each time samples change possession, including courier delivery.		Date Time: 2/22/13 1045		Received By: FedEx		Date Time: 2		Received By: 2														On Ice ☒ Cooler Temp. 4.3			
Date Time: 2/22/13 1045		Received By: FedEx		Date Time: 2		Received By: 2																			
Date Time: 2/22/13 1045		Received By: FedEx		Date Time: 2		Received By: 2																			
Date Time: 2/22/13 1045		Received By: FedEx		Date Time: 2		Received By: 2																			
Relinquished by: 1		Date Time: 2/22/13 1045		Received By: 3		Date Time: 3		Received By: 3														On Ice ☒ Cooler Temp. 4.3			
Relinquished by: 1		Date Time: 2/22/13 1045		Received By: 3		Date Time: 3		Received By: 3																	
Relinquished by: 1		Date Time: 2/22/13 1045		Received By: 3		Date Time: 3		Received By: 3																	
Relinquished by: 1		Date Time: 2/22/13 1045		Received By: 3		Date Time: 3		Received By: 3																	
Relinquished by: 1		Date Time: 2/22/13 1045		Received By: 3		Date Time: 3		Received By: 3														On Ice ☒ Cooler Temp. 4.3			
Relinquished by: 1		Date Time: 2/22/13 1045		Received By: 3		Date Time: 3		Received By: 3																	
Relinquished by: 1		Date Time: 2/22/13 1045		Received By: 3		Date Time: 3		Received By: 3																	
Relinquished by: 1		Date Time: 2/22/13 1045		Received By: 3		Date Time: 3		Received By: 3																	

D43743: Chain of Custody

Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D43743

Client: TASMAN

Immediate Client Services Action Required: No

Date / Time Received: 2/23/2013 11:45:00 AM

No. Coolers: 1

Client Service Action Required at Login: No

Project: XLINE

Airbill #'s: FX

Cooler Security

Y or N

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | ☒ | ☐ | 3. COC Present: | ☒ | ☐ |
| 2. Custody Seals Intact: | ☒ | ☐ | 4. Smpl Dates/Time OK | ☒ | ☐ |

Cooler Temperature

Y or N

- | | | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | ☒ | ☐ |
| 2. Cooler temp verification: | Infrared gun | |
| 3. Cooler media: | Ice (bag) | |

Quality Control Preservation

Y or N

N/A

- | | | | |
|---------------------------------|-------------------------------------|--------------------------|--------------------------|
| 1. Trip Blank present / cooler: | ☒ | ☐ | |
| 2. Trip Blank listed on COC: | ☒ | ☐ | |
| 3. Samples preserved properly: | ☒ | ☐ | |
| 4. VOCs headspace free: | ☒ | ☐ | ☐ |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles: | ☒ | ☐ |
| 2. Container labeling complete: | ☒ | ☐ |
| 3. Sample container label / COC agree: | ☒ | ☐ |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT: | ☒ | ☐ |
| 2. All containers accounted for: | ☒ | ☐ |
| 3. Condition of sample: | Intact | |

Sample Integrity - Instructions

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | ☒ | ☐ | |
| 2. Bottles received for unspecified tests | ☐ | ☒ | |
| 3. Sufficient volume rec'd for analysis: | ☒ | ☐ | |
| 4. Compositing instructions clear: | ☐ | ☐ | ☒ |
| 5. Filtering instructions clear: | ☐ | ☐ | ☒ |

Comments

Accutest Laboratories
V:(303) 425-6021

4036 Youngfield Street
F: (303) 425-6854

Wheat Ridge, CO
www.accutest.com

GC/MS Volatiles

5

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: D43743
Account: DCPMCOA DCP Midstream, LP
Project: TASMCOA:DCP XLINE Etcheverry Ranch

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V7V1019-MB	7V18622.D	1	02/26/13	JL	n/a	n/a	V7V1019

The QC reported here applies to the following samples:

Method: SW846 8260B

D43743-1, D43743-2, D43743-3, D43743-4, D43743-5, D43743-6, D43743-7, D43743-8, D43743-9, D43743-10

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.33	ug/l	
108-88-3	Toluene	ND	2.0	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Limits
17060-07-0	1,2-Dichloroethane-D4	100% 62-130%
2037-26-5	Toluene-D8	98% 70-130%
460-00-4	4-Bromofluorobenzene	95% 69-130%

Blank Spike Summary

Page 1 of 1

Job Number: D43743
Account: DCPMCOA DCP Midstream, LP
Project: TASMCOA:DCP XLINE Etcheverry Ranch

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V7V1019-BS	7V18623.D	1	02/26/13	JL	n/a	n/a	V7V1019

The QC reported here applies to the following samples:

Method: SW846 8260B

D43743-1, D43743-2, D43743-3, D43743-4, D43743-5, D43743-6, D43743-7, D43743-8, D43743-9, D43743-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	48.8	98	70-130
100-41-4	Ethylbenzene	50	49.4	99	70-130
108-88-3	Toluene	50	48.5	97	70-130
1330-20-7	Xylene (total)	150	152	101	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	98%	62-130%
2037-26-5	Toluene-D8	100%	70-130%
460-00-4	4-Bromofluorobenzene	103%	69-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D43743
Account: DCPMCOA DCP Midstream, LP
Project: TASMCOA:DCP XLINE Etcheverry Ranch

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D43743-10MS	7V18624.D	1	02/26/13	JL	n/a	n/a	V7V1019
D43743-10MSD	7V18625.D	1	02/26/13	JL	n/a	n/a	V7V1019
D43743-10	7V18626.D	1	02/26/13	JL	n/a	n/a	V7V1019

The QC reported here applies to the following samples:

Method: SW846 8260B

D43743-1, D43743-2, D43743-3, D43743-4, D43743-5, D43743-6, D43743-7, D43743-8, D43743-9, D43743-10

CAS No.	Compound	D43743-10 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	50	48.5	97	48.6	97	0	62-130/30
100-41-4	Ethylbenzene	ND	50	49.5	99	48.9	98	1	63-130/30
108-88-3	Toluene	ND	50	48.9	98	48.2	96	1	60-130/30
1330-20-7	Xylene (total)	ND	150	153	102	151	101	1	67-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D43743-10	Limits
17060-07-0	1,2-Dichloroethane-D4	100%	100%	94%	62-130%
2037-26-5	Toluene-D8	100%	99%	98%	70-130%
460-00-4	4-Bromofluorobenzene	103%	102%	94%	69-130%

* = Outside of Control Limits.

Appendix B

Historical Groundwater Analytical Results

APPENDIX B
HISTORICAL DATA
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		0.01	0.75	0.75	0.62	
Groundwater Standards (mg/L)						
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	12/29/2007	0.00093	0.002	<0.00045	0.0028	
MW-1	3/20/2008	<0.002	<0.002	<0.002	<0.006	
MW-1	3/20/2008	<0.00046	<0.00048	<0.00045	<0.0014	
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	12/1/2008	<0.00046	<0.00048	<0.00045	<0.0014	
MW-1	3/11/2009	<0.002	<0.002	<0.002	<0.006	
MW-1	3/11/2009	<0.00046	<0.00048	<0.00045	<0.0014	
MW-1	5/27/2009	<0.002	<0.002	<0.002	<0.006	
MW-1	5/27/2009	<0.00046	<0.00048	<0.00045	<0.0014	
MW-1	9/24/2009	<0.002	<0.002	<0.002	<0.006	
MW-1	9/24/2009	<0.00050	<0.00043	<0.00055	<0.0017	
MW-1	12/18/2009	<0.00050	<0.00043	<0.00055	<0.0017	
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	9/13/2010	<0.00030	<0.0010	<0.00030	-	
MW-1	3/25/2010	<0.40	<1.0	<1.0	-	
MW-1	6/30/2010	<0.30	<1.0	<0.30	-	
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	12/9/2010	<0.00030	<0.0010	<0.00030	-	
MW-1	3/28/2011	<0.00030	<0.0010	<0.00030	0.00099	
MW-1	3/28/2011	<0.001	<0.002	<0.002	<0.004	
MW-1	6/22/2011	<0.00025	<0.0010	<0.00050	<0.0020	
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	

APPENDIX B
HISTORICAL DATA
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		0.01	0.75	0.75	0.62	
Groundwater Standards (mg/L)						
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	12/29/2007	0.00057	0.0039	0.00076	0.0051	
MW-2	3/20/2008	<0.002	0.01	0.03	0.06	
MW-2	3/20/2008	<0.00046	0.0318	0.0064	0.0568	
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	12/1/2008	<0.00046	0.0135	0.0147	0.143	
MW-2	3/11/2009	<0.002	0.0123	0.0048	0.12	
MW-2	3/11/2009	<0.00046	0.0048	0.0123	0.12	
MW-2	5/27/2009	<0.002	0.01	0.01	0.16	
MW-2	5/27/2009	<0.00046	0.0055	0.0125	0.159	
MW-2	9/24/2009	<0.002	0.0096	<0.002	0.103	
MW-2	9/24/2009	<0.00050	<0.00043	0.0079	0.0837	
MW-2	12/18/2009	<0.002	0.0086	<0.002	0.0916	
MW-2	12/18/2009	<0.00050	<0.00043	0.0086	0.0916	
MW-2	3/25/2010	<0.001	0.0087	<0.002	0.0923	
MW-2	3/25/2010	<0.40	<1.0	0.0087	-	
MW-2	6/30/2010	<0.0003	0.0062	<0.001	0.0417	
MW-2	6/30/2010	<0.30	<1.0	0.0062	-	
MW-2	9/13/2010	<0.00030	<0.0010	0.007	-	
MW-2	9/16/2010	<0.001	0.007	<0.002	0.0786	
MW-2	12/9/2010	0.00049	<0.0010	0.0147	-	
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	3/28/2011	<0.00030	<0.0010	0.005	0.0455	
MW-2	6/22/2011	<0.002	1.002	<0.0164	1.185	
MW-2	6/22/2011	<0.00025	<0.0010	0.0164	0.185	
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	

**APPENDIX B
HISTORICAL DATA
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-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	12/29/2007	<0.00046	0.0012	<0.00045	<0.0014	
MW-3	3/20/2008	<0.002	<0.002	<0.002	<0.006	
MW-3	3/20/2008	<0.00046	<0.00048	<0.00045	<0.0014	
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	12/1/2008	<0.00046	<0.00048	<0.00045	<0.0014	
MW-3	5/27/2009	<0.00046	<0.00048	<0.00045	<0.0014	
MW-3	3/11/2009	<0.002	<0.002	<0.002	<0.006	
MW-3	3/11/2009	<0.00046	<0.00048	<0.00045	<0.0014	
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	9/24/2009	<0.00050	<0.00043	<0.00055	<0.0017	
MW-3	12/18/2009	<0.002	<0.002	<0.002	<0.006	
MW-3	12/18/2009	<0.00050	<0.00043	<0.00055	<0.0017	
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	9/13/2010	<0.00030	<0.0010	<0.00030	-	
MW-3	12/9/2010	<0.00030	<0.0010	<0.00030	-	
MW-3	12/9/2010	<0.001	<0.002	<0.002	<0.004	
MW-3	3/25/2010	<0.40	<1.0	<1.0	-	
MW-3	6/30/2010	<0.30	<1.0	<0.30	-	
MW-3	3/28/2011	<0.001	<0.002	<0.002	<0.004	
MW-3	3/28/2011	<0.00030	<0.0010	<0.00030	0.0011	
MW-3	6/22/2011	<0.001	<0.002	<0.002	<0.004	
MW-3	6/22/2011	<0.00025	<0.0010	<0.00050	<0.0020	
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	

APPENDIX B
HISTORICAL DATA
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-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	12/29/2007	0.00053	0.001	<0.00045	0.0016	
MW-4	3/20/2008	<0.002	<0.002	<0.002	<0.006	
MW-4	3/20/2008	<0.00046	<0.00048	<0.00045	<0.0014	
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	12/1/2008	<0.00046	<0.00048	<0.00045	<0.0014	
MW-4	3/11/2009	<0.002	<0.002	<0.002	<0.006	
MW-4	3/11/2009	<0.00046	<0.00048	<0.00045	<0.0014	
MW-4	5/27/2009	<0.002	<0.002	<0.002	<0.006	
MW-4	5/27/2009	<0.00046	<0.00048	<0.00045	<0.0014	
MW-4	9/24/2009	<0.002	<0.002	<0.002	<0.006	
MW-4	9/24/2009	<0.00050	<0.00043	<0.00055	<0.0017	
MW-4	12/18/2009	<0.002	<0.002	<0.002	<0.006	
MW-4	12/18/2009	<0.00050	<0.00043	<0.00055	<0.0017	
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	9/13/2010	<0.00030	<0.0010	<0.00030	-	
MW-4	3/25/2010	<0.40	<1.0	<1.0	-	
MW-4	6/30/2010	<0.30	<1.0	<0.30	-	
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	12/9/2010	<0.00030	<0.0010	<0.00030	-	
MW-4	3/28/2011	<0.001	<0.002	<0.002	<0.004	
MW-4	3/28/2011	<0.00030	<0.0010	<0.00030	0.00078	
MW-4	6/22/2011	<0.001	<0.002	<0.002	<0.004	
MW-4	6/22/2011	<0.00025	<0.0010	<0.00050	<0.0020	
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	

**APPENDIX B
HISTORICAL DATA
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-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	12/29/2007	<0.00046	0.00098	<0.00045	<0.0014	
MW-5	3/20/2008	<0.002	<0.002	<0.002	<0.006	
MW-5	3/20/2008	<0.00046	<0.00048	<0.00045	<0.0014	
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	12/1/2008	<0.00046	<0.00048	<0.00045	<0.0014	
MW-5	3/11/2009	<0.002	<0.002	<0.002	<0.006	
MW-5	3/11/2009	<0.00046	<0.00048	<0.00045	<0.0014	
MW-5	5/27/2009	<0.002	<0.002	<0.002	<0.006	
MW-5	5/27/2009	<0.00046	<0.00048	<0.00045	<0.0014	
MW-5	9/24/2009	<0.002	<0.002	<0.002	<0.006	
MW-5	9/24/2009	<0.00050	<0.00043	<0.00055	<0.0017	
MW-5	12/18/2009	<0.002	<0.002	<0.002	<0.006	
MW-5	12/18/2009	<0.00050	<0.00043	<0.00055	<0.0017	
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	9/13/2010	<0.00030	<0.0010	<0.00030	-	
MW-5	3/25/2010	<0.40	<1.0	<1.0	-	
MW-5	6/30/2010	<0.30	<1.0	<0.30	-	
MW-5	9/16/2010	<0.001	<0.002	<0.002	<0.004	
MW-5	12/9/2010	<0.00030	<0.0010	<0.00030	-	
MW-5	3/28/2011	<0.00030	<0.0010	<0.00030	0.0012	
MW-5	6/22/2011	<0.00025	<0.0010	<0.00050	<0.0020	
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	

APPENDIX B
HISTORICAL DATA
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		0.01	0.75	0.75	0.62	
Groundwater Standards (mg/L)						
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	12/29/2007	0.00074	0.0013	0.0033	<0.0014	
MW-6	3/20/2008	<0.002	<0.002	<0.002	<0.006	
MW-6	3/20/2008	<0.00046	<0.00048	<0.00045	<0.0014	
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	12/1/2008	<0.00046	<0.00048	<0.00045	<0.0014	
MW-6	3/11/2009	<0.002	<0.002	<0.002	<0.006	
MW-6	3/11/2009	<0.00046	<0.00048	<0.00045	<0.0014	
MW-6	5/27/2009	<0.002	<0.002	<0.002	<0.006	
MW-6	5/27/2009	<0.00046	<0.00048	<0.00045	<0.0014	
MW-6	9/24/2009	<0.002	<0.002	<0.002	<0.006	
MW-6	9/24/2009	<0.00050	<0.00043	<0.00055	<0.0017	
MW-6	12/18/2009	<0.002	<0.002	<0.002	<0.006	
MW-6	12/18/2009	<0.00050	<0.00043	<0.00055	<0.0017	
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	9/13/2010	<0.00030	<0.0010	<0.00030	-	
MW-6	3/25/2010	<0.40	<1.0	<1.0	-	
MW-6	6/30/2010	<0.30	<1.0	<0.30	-	
MW-6	9/16/2010	<0.001	<0.002	<0.002	<0.004	
MW-6	12/9/2010	<0.001	<0.002	<0.002	<0.004	
MW-6	12/9/2010	<0.00030	<0.0010	<0.00030	-	
MW-6	3/28/2011	<0.001	<0.002	<0.002	<0.004	
MW-6	3/28/2011	<0.00030	<0.0010	<0.00030	0.00077	
MW-6	6/22/2011	<0.001	<0.002	<0.002	<0.004	
MW-6	6/22/2011	<0.00025	<0.0010	<0.00050	<0.0020	
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	

APPENDIX B
HISTORICAL DATA
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		0.01	0.75	0.75	0.62	
Groundwater Standards (mg/L)						
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	12/29/2007	<0.00046	<0.00048	<0.00045	<0.0014	
MW-7	3/20/2008	<0.002	<0.002	<0.002	<0.006	
MW-7	3/20/2008	<0.00046	<0.00048	<0.00045	<0.0014	
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	12/1/2008	<0.00046	<0.00048	<0.00045	<0.0014	
MW-7	3/11/2009	<0.002	<0.002	<0.002	<0.006	
MW-7	3/11/2009	<0.00046	<0.00048	<0.00045	<0.0014	
MW-7	5/27/2009	<0.002	<0.002	<0.002	<0.006	
MW-7	5/27/2009	<0.00046	<0.00048	<0.00045	<0.0014	
MW-7	9/24/2009	<0.002	<0.002	<0.002	<0.006	
MW-7	9/24/2009	<0.00050	<0.00043	<0.00055	<0.0017	
MW-7	12/18/2009	<0.002	<0.002	<0.002	<0.006	
MW-7	12/18/2009	<0.00050	<0.00043	<0.00055	<0.0017	
MW-7	3/25/2010	<0.001	<0.002	<0.002	<0.004	
MW-7	3/25/2010	<0.40	<1.0	<1.0	-	
MW-7	6/30/2010	<0.0003	<0.002	<0.001	<0.0006	
MW-7	6/30/2010	<0.30	<1.0	<0.30	-	
MW-7	9/13/2010	<0.00030	<0.0010	<0.00030	<0.00060	
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	12/9/2010	<0.00030	<0.0010	0.00056	-	
MW-7	3/28/2011	<0.001	<0.002	<0.002	<0.004	
MW-7	3/28/2011	<0.00030	<0.0010	<0.00030	0.00065	
MW-7	6/22/2011	<0.001	<0.002	<0.002	<0.004	
MW-7	6/22/2011	<0.00025	<0.0010	<0.00050	<0.0020	
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	

**APPENDIX B
HISTORICAL DATA
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-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	3/20/2008	0.249	0.338	0.144	2.83	
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	3/11/2009	0.219	0.257	0.133	3.76	
MW-8	5/27/2009	0.719*	0.233*	2.00*	4.72*	
MW-8	8/7/2009	0.719	2.00	0.233	4.72	
MW-8	9/24/2009	0.775	0.238	2.52	5.1	
MW-8	9/24/2009	0.775	2.52	0.238	5.1	
MW-8	12/18/2009	0.409	0.114	1.11	5.24	
MW-8	12/18/2009	0.436	1.12	0.141	5.17	
MW-8	3/25/2010	0.691	45.6	63.4	2220	
MW-8	3/25/2010	0.69	63.4	45.6	-	
MW-8	6/30/2010	0.549	0.145	1.48	3.49	
MW-8	6/30/2010	0.59	1.5	0.15	-	
MW-8	9/13/2010	0.653	1.07	0.165	-	
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	3/28/2011	0.448	0.712	0.0829	2.38	
MW-8	6/22/2011	0.204	0.444	0.0822	2.72	
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

**APPENDIX B
HISTORICAL DATA
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	

Notes:

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

2.) Data presented for the well locations includes previous four sampling events, when available.

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.

* Monitoring well MW-8 was converted to an Air Sparge Injection point prior to the fourth quarter 2011 groundwater monitoring event. Therefore, groundwater samples were not collected from that well.