



DCP Midstream
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RECEIVED OCD

February 26, 2014

2014 FEB 28 A 11: 13

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

**RE: 2nd Half 2013 Semi Annual Groundwater Monitoring Results
DCP C-Line Pipeline Release (1RP-401-0)
Lea County, NM (Unit O Section 31, T19S, R37E)**

Dear Mr. Lowe:

DCP Midstream, LP (DCP) is pleased to submit for your review, one copy of the 2nd Half 2013 Semi Annual Groundwater Monitoring Results for the DCP C-Line Pipeline Release Site located in Lea County, New Mexico (Unit O Section 31, T19S, R37E, Latitude 32° 31' 29.7" N Longitude 103° 17' 11.7 W).

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

Sincerely

DCP Midstream, LP

Stephen Weathers, PG
Principal Environmental Specialist

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

Second Half 2013 Semi-Annual Groundwater Monitoring Summary Report

C-Line 50602 Pipeline Release Lea County, New Mexico 1RP-401-0

Prepared for:



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

Prepared by:



6899 Pecos Street, Unit C
Denver, CO 80221

February 3, 2014

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1. Introduction

This report summarizes groundwater monitoring and remediation activities conducted during the second half of 2013 at the C-Line 50602 Pipeline Release (Site) in Lea County, New Mexico (Figure 1). Tasman Geosciences, LLC (Tasman) conducted these activities on behalf of DCP Midstream (DCP). The field activities described herein were performed with the purpose of monitoring groundwater flow and quality conditions in the Site subsurface. Current Site conditions were evaluated from field data and groundwater analytical laboratory results collected on September 11, 2013. The data collected were used to develop groundwater elevation maps, and benzene concentration versus time graphs.

2. Site Location and Background

The Site is located in the southeastern quarter of the southeastern quarter of Section 31, Township 20 South, Range 37 East approximately 6.25 miles south and 1.25 miles west of the town of Monument in Lea County, New Mexico. The approximate field coordinates are 32.5250 degrees north, 103.2867 degrees west. The surrounding area is predominantly uninhabited and used for oil and gas production and gathering and some ranching. Several underground transfer pipelines traverse the Site, two of which are owned by DCP (Figure 2).

Based on review of historical reports from previous site investigations, the original condensate release occurred in early 2002. Environmental Plus Incorporated (EPI) completed remediation activities between April and June 2002, which included excavation of impacted soil, compacted clay barrier installation, and investigative soil boring advancements. These activities were conducted at three Site locations described as C-Line 50602, C-line 52102, and C-Line 52302. Monitoring well MW-1 was installed at or near the original C-Line 50602 pipeline release location to delineate the vertical extent of hydrocarbon impacts. Additional remediation activities including down-gradient monitoring well installation (MW-2 through MW-6), groundwater monitoring and sampling, and investigative remediation tests to evaluate LNAPL removal were conducted between November and December 2002. These activities are described in detail in the February 6, 2003 *Characterization Report: C-Line 50602, 52102, and 52302 Releases* submitted by Remediacon Incorporated.

During the spring of 2003, three additional monitoring wells (MW-7, MW-8 and MW-9) were installed to the southeast of the original release location to further delineate the extent of hydrocarbon migration. MW-1 was also re-drilled and converted from a two-inch diameter to a four-inch diameter LNAPL recovery well. An LNAPL recovery system was installed in mid-November 2003 and operation was initiated on November 26, 2003. In early October 2004 a soil vapor extraction (SVE) system was added to the LNAPL recovery system at MW-1 to facilitate recovery of vapor phase hydrocarbons. Between November 2003 and December 2004 a reported 1,212 gallons of LNAPL was extracted by the recovery system. In 2005, LNAPL recovery and SVE was expanded to MW-4 to further enhance remediation at the Site. Through 2006 a significant decline in LNAPL recovery was observed in wells MW-1 and MW-4

and the remediation system was shut down on June 26, 2006. Ancillary components of the system remain in place and MW-1 and MW-4 are currently utilized as monitoring well locations.

3. Groundwater Monitoring

This section describes the groundwater field and laboratory activities performed during the second half 2013 semi-annual monitoring event on September 11, 2013. Monitoring activities included Site-wide groundwater gauging and sampling. 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 elevations at the Site. During the reporting period, groundwater levels were measured at eight Site monitoring well locations. LNAPL was not detected within any Site monitoring wells.

Groundwater levels were measured on the north side of the well casing to the nearest 0.01-foot using an oil-water interface probe (IP). Measured groundwater levels are presented in Table 1. Groundwater level data were later converted to elevation (feet above mean sea level [AMSL]) by subtracting the measured groundwater level from top of casing elevation survey datum.

Groundwater elevation measurements collected during the second half 2013 monitoring event are presented in Table 1, and a second half 2013 groundwater elevation contour map is illustrated on Figure 3. Groundwater elevations ranged from 3,449.20 feet AMSL at monitoring well MW-9 to 3,451.10 feet AMSL at monitoring well MW-2. As illustrated on Figure 3, groundwater flow at the Site generally trends to the east-southeast with a gradient of approximately 0.0051 foot per foot between monitoring wells MW-2 and MW-9.

3.2 Groundwater Quality Monitoring

Depth to groundwater and total well depth were measured at each of the Site monitoring wells as previously described. A minimum of three well casing volumes of groundwater, (calculated from total depth of the well and groundwater level measurements) were purged from the subject 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 ($^{\circ}\text{C}$) for transportation. Groundwater samples were then shipped under chain-of-custody procedures to Accutest Laboratories (Accutest) in Wheat Ridge, Colorado, for analysis.

Groundwater samples were collected from monitoring wells MW-1 through MW-5, and MW-7 through MW-9. Monitoring well MW-6 was not sampled and has been removed from the groundwater monitoring plan due to historically exhibiting non-detect concentrations of constituents of concern.

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

Table 2 summarizes BTEX concentrations in groundwater samples collected during the reporting period. Laboratory analytical reports for the event are included in Appendix C, and analytical results are summarized on Figure 4.

Benzene was detected in exceedance of the New Mexico Water Quality Control Commission (NMWQCC) groundwater standard (0.01 mg/L) in monitoring well MW-1 at a concentration of 0.0255 mg/L. Toluene, ethylbenzene, and total xylenes were also detected in MW-1, but concentrations did not exceed their respective NMWQCC standard. Benzene was also detected in exceedance of NMWQCC groundwater standard in monitoring well MW-3 at a concentration of 0.0632 mg/L. Ethylbenzene and total xylenes were also detected in MW-3, but concentrations did not exceed their respective NMWQCC standard.

Water quality parameters were collected during the second half 2013 sampling event. Since Site monitoring wells did not require collection of more than three (3) purge volumes to achieve parameter stabilization, the analytical data are considered representative of Site conditions in that a minimum of three purge volumes were removed from all monitoring wells.

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 / matrix spike duplicate (MS/MSD) and field duplicate sample from well MW-3 were collected during the sampling event. The trip blank was fully in control, having no detections of targets.

The duplicate sample collected at MW-3 was in compliance with QA/QC standards. MW-3 and associated duplicate sample returned results for benzene of 0.0632 mg/L and 0.0620 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 Activities

Light non-aqueous phase liquid (LNAPL) has not been present at the Site since March 2006 and soil vapor extraction (SVE) remediation activities were discontinued on June 26, 2006 and the dissolved phase petroleum hydrocarbon impacts are generally decreasing over time.

Due to the Benzene concentrations observed at MW-1, air sparge (AS) remediation activities were initiated in September 2013 at that well. AS activities were conducted using a mobile trailer mounted

185 cubic feet per minute (cfm) air compressor, an AS manifold attached to the top of well casing and an AS “stinger” pipe within the well.

The AS manifold is equipped with an oil coalescing air filter, pressure regulator with condensation air filter, and an air flow meter. The stinger pipe was installed with a well seal packer set at 96-feet below the top of casing (BTOC) of the well and the bottom of the stinger was set at 97.5 feet BTOC. Total depth of the well is 98-feet BTOC and depth to water was measured at 90.85-feet BTOC.

Between September 12 and November 22, 2013, thirteen AS events were conducted at MW-1 on an approximate weekly basis for a total of 222 hours of AS treatment time. AS was conducted with an average flow rate of 48 cfm and average pressure of 15 pounds per square inch (psi).

5. Conclusions

As observed during the second half 2013, elevated benzene concentrations persist in monitoring wells MW-1 and MW-3. However, overall BTEX concentrations have greatly reduced since initial detection levels. Benzene concentrations continue to fluctuate in MW-3 between relatively low levels below NMWQCC standards and concentrations above the NMWQCC standards. Elevated dissolved phase benzene concentrations persist at MW-1, however, concentrations continue to decrease over time indicating that enhanced biodegradation of petroleum hydrocarbons is occurring at that location. Benzene concentrations versus time elevation graphs are included as Attachment A for monitoring wells MW-1, MW-3, and MW-4. As illustrated by the graphs, there does not appear to be a significant relationship between groundwater elevation and fluctuations in benzene concentrations. Additionally, the graphs indicate an overall site-wide decrease in benzene concentrations over time.

Comparison of the second half 2013 monitoring data and historic information provides the following general observations:

- LNAPL has not been detected in any monitoring wells on Site since March 21, 2006.
- Based on historic groundwater elevations, the groundwater levels beneath the Site have shown a declining trend since monitoring was initiated. There has not been significant deviation from this trend during the reporting period.
- Dissolved phase benzene concentrations remain above regulatory standards at MW-1 and continue to fluctuate at MW-3. However, concentrations at MW-1 continue to decrease over time.

- The initiation of the mobile air sparge (AS) unit at MW-1 will address persisting dissolve phase petroleum hydrocarbon concentrations in the northern portion of the Site and enhance biodegradation and natural attenuation of hydrocarbon impacts.

6. Recommendations

Based on evaluation of second half 2013 and historical Site observations and monitoring results, the following recommendations have been developed for future activities:

- Continue semi-annual groundwater monitoring and sampling at the eight monitoring well locations on Site to monitor hydrocarbon concentrations and assess the effectiveness of the current AS remedial strategy.
- Evaluation of a near-term Site closure strategy that may include implementation of a polishing technique supplemental to AS remediation to decrease residual dissolved phase benzene concentrations to below regulatory thresholds at MW-1 and MW-3.

Tables

TABLE 1
SECOND HALF 2013 SEMI-ANNUAL
SUMMARY OF GROUNDWATER ELEVATION DATA
C-LINE 50602 PIPELINE RELEASE, LEA COUNTY, NEW MEXICO

Location	Date	Depth to Groundwater (feet)	Depth to Product (feet)	Free Phase Hydrocarbon Thickness (feet)	Total Depth (feet)	TOC Elevation (feet amsl)	Groundwater Elevation (feet amsl)	Change in Groundwater Elevation Since Previous Event (feet)
MW-1	9/18/2011	91.57			99.80	3541.21	3449.64	-0.32
MW-1	3/12/2012	91.63			99.80	3541.21	3449.58	-0.06
MW-1	9/8/2012	91.65			99.80	3541.21	3449.56	-0.02
MW-1	2/22/2013	91.63			99.80	3541.21	3449.58	0.02
MW-1	9/11/2013	91.85			99.80	3541.21	3449.36	-0.22
MW-2	9/18/2011	89.44			99.86	3540.91	3451.47	-0.2
MW-2	3/12/2012	89.57			99.86	3540.91	3451.34	-0.13
MW-2	9/8/2012	89.62			99.86	3540.91	3451.29	-0.05
MW-2	2/22/2013	89.60			99.86	3540.91	3451.31	0.02
MW-2	9/11/2013	89.81			99.86	3540.91	3451.10	-0.21
MW-3	9/18/2011	90.84			102.40	3541.41	3450.57	-0.43
MW-3	3/12/2012	90.86			102.40	3541.41	3450.55	-0.02
MW-3	9/8/2012	91.03			102.40	3541.41	3450.38	-0.17
MW-3	2/22/2013	90.95			102.40	3541.41	3450.46	0.08
MW-3	9/11/2013	91.11			102.40	3541.41	3450.30	-0.16
MW-4	9/18/2011	90.84			99.10	3541.40	3450.56	-0.5
MW-4	3/12/2012	90.90			99.10	3541.40	3450.50	-0.06
MW-4	9/8/2012	91.18			99.10	3541.40	3450.22	-0.28
MW-4	2/22/2013	91.00			99.10	3541.40	3450.40	0.18
MW-4	9/11/2013	91.15			99.10	3541.4	3450.25	-0.15
MW-5	9/18/2011	90.92			101.35	3541.45	3450.53	-0.52
MW-5	3/12/2012	90.98			101.35	3541.45	3450.47	-0.06
MW-5	9/8/2012	91.31			101.35	3541.45	3450.14	-0.33
MW-5	2/22/2013	91.08			101.35	3541.45	3450.37	0.23
MW-5	9/11/2013	91.26			101.35	3541.45	3450.19	-0.18
MW-6	9/18/2011	NM			NM	3543.98	NM	NM
MW-6	3/12/2012	NM			NM	3543.98	NM	NM
MW-6	9/8/2012	NM			NM	3543.98	NM	NM
MW-6	2/22/2013	NM			NM	3543.98	NM	NM
MW-6	9/11/2013	NM			NM	3543.98	NM	NM
MW-7	9/18/2011	92.23			100.34	3542.42	3450.19	-0.28
MW-7	3/12/2012	92.45			100.34	3542.42	3449.97	-0.22
MW-7	9/8/2012	92.63			100.34	3542.42	3449.79	-0.18
MW-7	2/22/2013	92.55			100.34	3542.42	3449.87	0.08
MW-7	9/11/2013	92.71			100.34	3542.42	3449.71	-0.16
MW-8	9/18/2011	90.64			100.60	3540.29	3449.65	-0.4
MW-8	3/12/2012	90.76			100.60	3540.29	3449.53	-0.12
MW-8	9/8/2012	91.21			100.60	3540.29	3449.08	-0.45
MW-8	2/22/2013	91.02			100.60	3540.19 ⁽⁴⁾	3449.17	0.09
MW-8	9/11/2013	91.02			100.60	3540.19 ⁽⁴⁾	3449.17	0.00

TABLE 1
SECOND HALF 2013 SEMI-ANNUAL
SUMMARY OF GROUNDWATER ELEVATION DATA
C-LINE 50602 PIPELINE RELEASE, LEA COUNTY, NEW MEXICO

Location	Date	Depth to Groundwater (feet)	Depth to Product (feet)	Free Phase Hydrocarbon Thickness (feet)	Total Depth (feet)	TOC Elevation (feet amsl)	Groundwater Elevation (feet amsl)	Change in Groundwater Elevation Since Previous Event (feet)
MW-9	9/18/2011	89.95			100.52	3539.62	3449.67	-0.44
MW-9	3/12/2012	90.13			100.52	3539.62	3449.49	-0.18
MW-9	9/8/2012	90.53			100.52	3539.62	3449.09	-0.4
MW-9	2/22/2013	90.12			100.52	3539.62	3449.50	0.41
MW-9	9/11/2013	90.42			100.52	3539.62	3449.20	-0.3
Average change in groundwater elevation since the previous monitoring event								-0.17

Notes:

Depths measured from the north edge of the well casing.

Total depths were collected and recorded during the second half 2013 semi-annual monitoring event.

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

4- Following sample collection during the first half 2013 monitoring event, the top of casing elevation at MW-8 was altered to ensure closure of the well stick up monument. The TOC elevation will be decreased by 0.104 feet moving forward.

Monitoring well location MW-6 has been removed from the sampling program due to exhibiting non-detect concentrations.

Data presented for all well locations includes previous four sampling events, when available. Historic groundwater analytical results 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
SECOND HALF 2013 SEMI-ANNUAL
SUMMARY OF BTEX CONCENTRATIONS IN GROUNDWATER
C-LINE 50602 PIPELINE RELEASE, LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		0.01	0.75	0.75	0.62	
MW-1	9/18/2011	0.0638	<0.002	0.0105	0.0093	
MW-1	3/12/2012	0.089	0.0024	0.0333	0.0246	
MW-1	9/8/2012	0.0463	<0.002	0.0066	0.0049	
MW-1	2/22/2013	0.0384	0.0047	0.0154	0.0126	
MW-1	9/11/2013	0.0255	0.0063	0.0102	0.0082	
MW-2	9/18/2011	<0.001	<0.002	<0.002	<0.004	
MW-2	3/12/2012	<0.001	<0.002	<0.002	<0.004	
MW-2	9/8/2012	<0.001	<0.002	<0.002	<0.003	
MW-2	2/22/2013	<0.001	<0.002	<0.002	<0.003	
MW-2	9/11/2013	<0.001	<0.002	<0.002	<0.003	
MW-3	9/18/2011	0.0219	<0.002	<0.002	<0.004	Duplicate sample collected
MW-3	3/12/2012	0.0071	<0.002	<0.002	<0.004	Duplicate sample collected
MW-3	9/8/2012	0.012	<0.002	<0.002	<0.003	Duplicate sample collected
MW-3	2/22/2013	0.0065	<0.002	<0.002	<0.003	Duplicate sample collected
MW-3	9/11/2013	0.0632	<0.002	0.0026	0.0091	Duplicate sample collected
MW-4	9/18/2011	0.0024	<0.004	<0.004	<0.008	
MW-4	3/12/2012	0.00041	<0.002	<0.002	<0.004	
MW-4	9/8/2012	<0.001	<0.002	<0.002	<0.003	
MW-4	2/22/2013	0.00031	<0.002	<0.002	<0.003	
MW-4	9/11/2013	<0.001	<0.002	<0.002	<0.003	
MW-5	9/18/2011	<0.001	<0.002	<0.002	<0.004	
MW-5	3/12/2012	<0.001	<0.002	<0.002	<0.004	
MW-5	9/8/2012	<0.001	<0.002	<0.002	<0.003	
MW-5	2/22/2013	<0.001	<0.002	<0.002	<0.003	
MW-5	9/11/2013	<0.001	<0.002	<0.002	<0.003	
MW-6	9/18/2011	NS	NS	NS	NS	
MW-6	3/12/2012	NS	NS	NS	NS	
MW-6	9/8/2012	NS	NS	NS	NS	
MW-6	2/22/2013	NS	NS	NS	NS	
MW-6	9/11/2013	NS	NS	NS	NS	
MW-7	9/18/2011	<0.001	<0.002	<0.002	<0.004	
MW-7	3/12/2012	<0.001	<0.002	<0.002	<0.004	
MW-7	9/8/2012	<0.001	<0.002	<0.002	<0.003	
MW-7	2/22/2013	0.00027	<0.002	<0.002	<0.003	
MW-7	9/11/2013	<0.001	<0.002	<0.002	<0.003	
MW-8	9/18/2011	<0.001	<0.002	<0.002	<0.004	
MW-8	3/12/2012	<0.001	<0.002	<0.002	<0.004	
MW-8	9/8/2012	<0.001	<0.002	<0.002	<0.003	
MW-8	2/22/2013	<0.001	<0.002	<0.002	<0.003	
MW-8	9/11/2013	<0.001	<0.002	<0.002	<0.003	
MW-9	9/18/2011	<0.001	<0.002	<0.002	<0.004	
MW-9	3/12/2012	<0.001	<0.002	<0.002	<0.004	
MW-9	9/8/2012	<0.001	<0.002	<0.002	<0.003	
MW-9	2/22/2013	<0.001	<0.002	<0.002	<0.003	
MW-9	9/11/2013	<0.001	<0.002	<0.002	<0.003	

Notes:

The environmental cleanup standards for groundwater that are applicable to the C-Line Pipeline Release site are the New Mexico Water Quality Control Commission (NMWQCC) Groundwater Standards.

Monitoring well location MW-6 has been removed from the sampling program due to exhibiting non-detect concentrations.

Data presented for all 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.

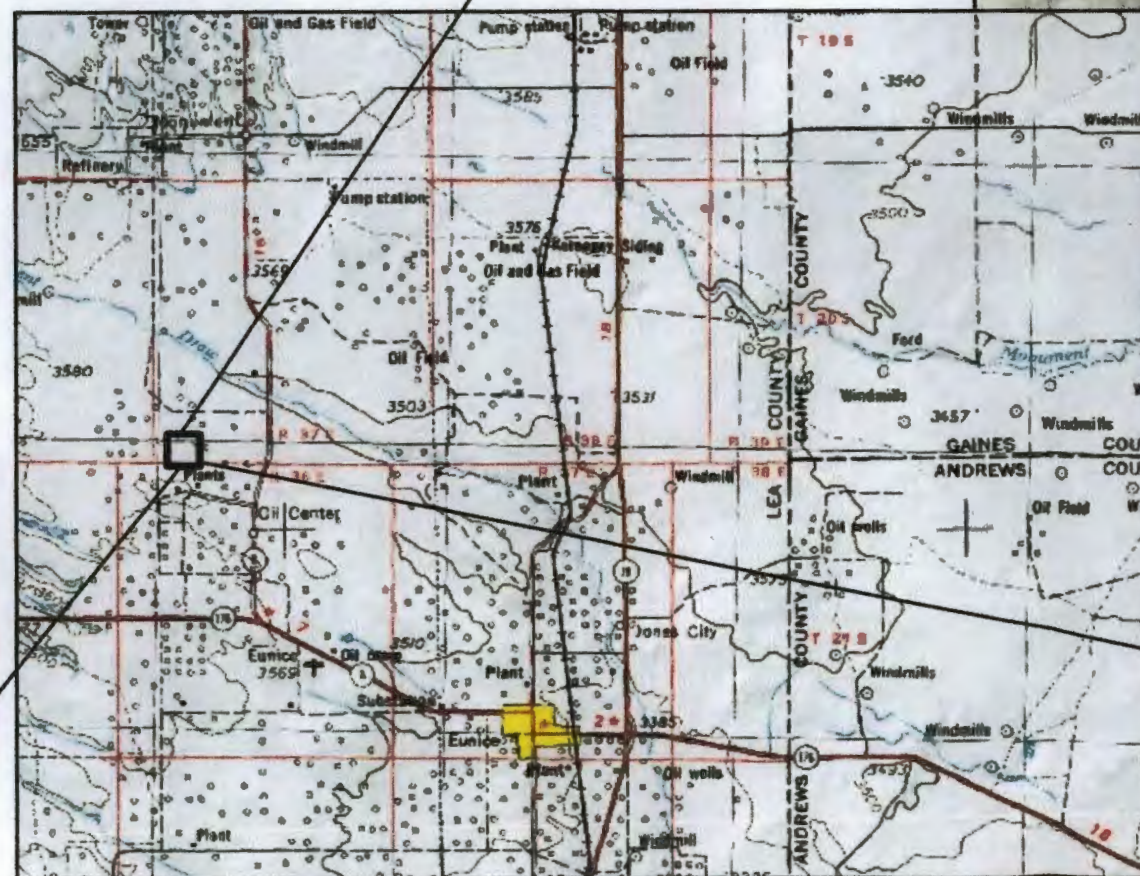
Sample locations are shown on Figure 2 and analytical results are illustrated on Figure 4.

LNAPL = Light Non-Aqueous Phase Liquid

NS = Not sampled.

mg/L = milligrams per liter.

Figures



DATE: January 2014

DESIGNED BY: J. Barker

DRAWN BY: D. Arnold



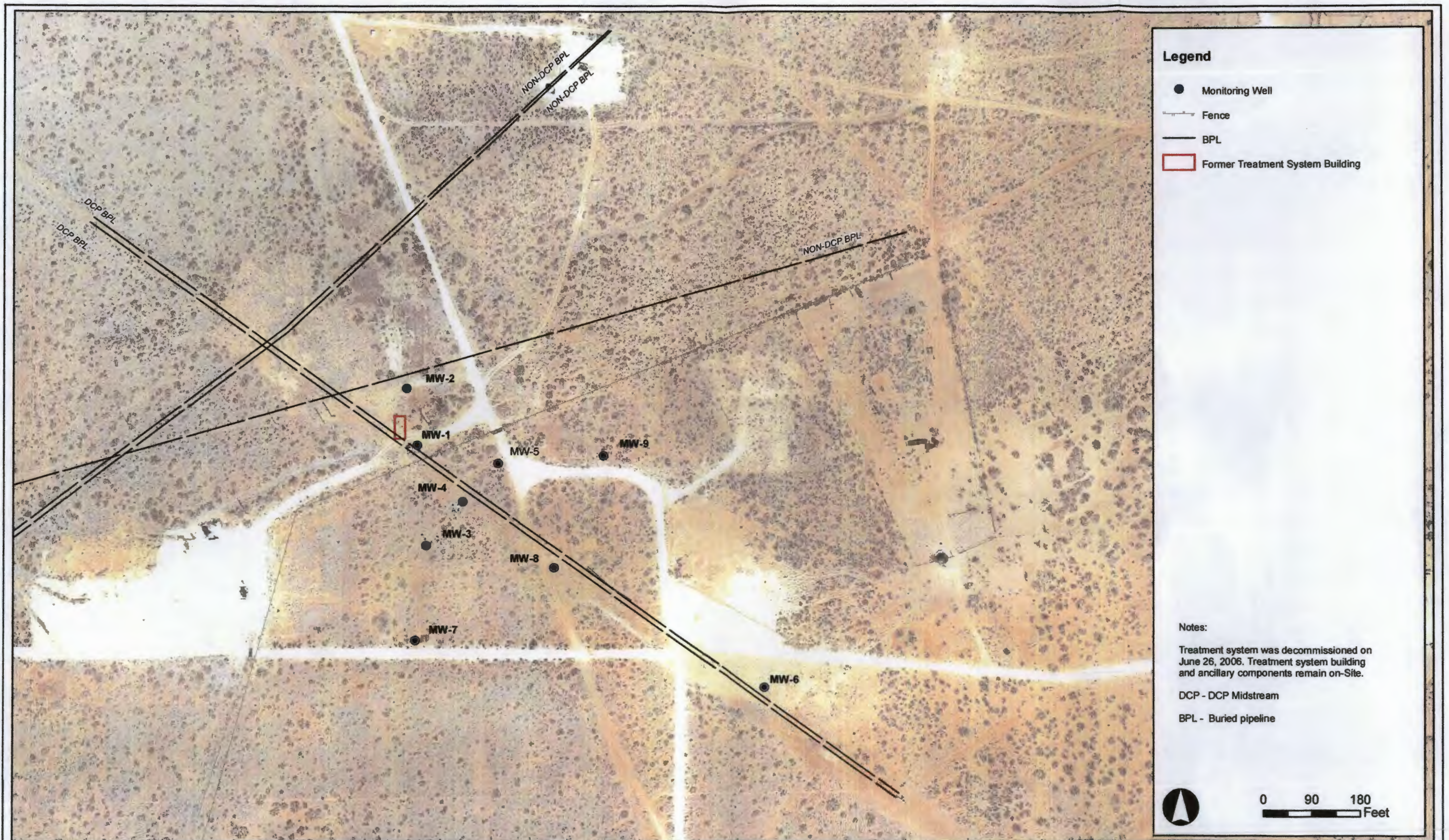
TASMAN
GEOSCIENCES

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

DCP Midstream
C-LINE PIPELINE RELEASE

SITE LOCATION

Figure
1



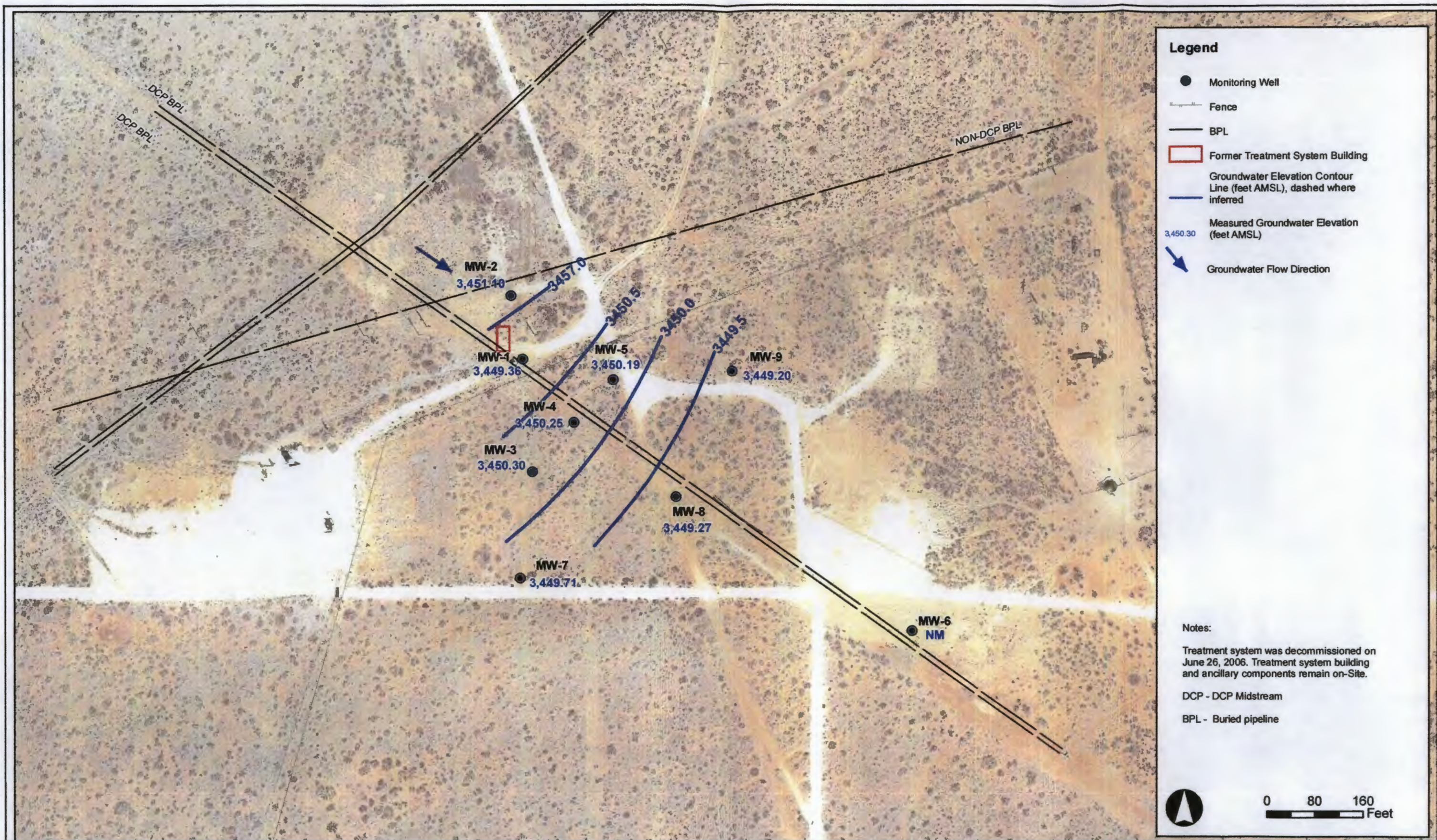
DATE: January 2014
 DESIGNED BY: J. Barker
 DRAWN BY: D. Arnold

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

**DCP Midstream
 C-LINE PIPELINE RELEASE**

SITE MAP

**Figure
 2**



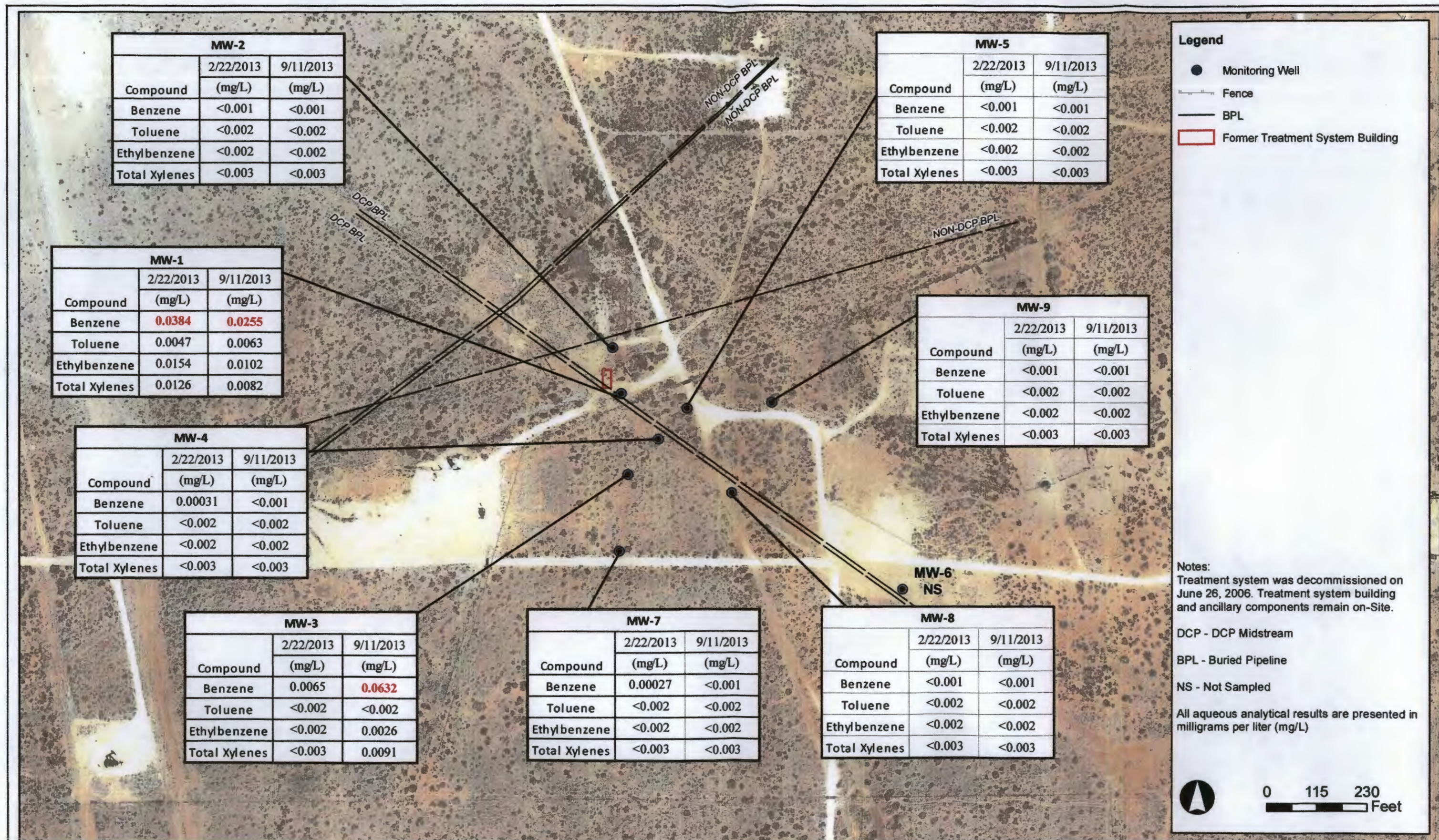
DATE: January 2014
DESIGNED BY: J. Barker
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TASMAN Tasman Geosciences, LLC
6899 Pecos Street - Unit C
Denver, CO 80221

DCP Midstream
C-LINE PIPELINE RELEASE
Second Half 2013 Semi-Annual Groundwater
Monitoring Summary Report

**GROUNDWATER ELEVATION
CONTOUR MAP
(SEPTEMBER 11, 2013)**

**Figure
3**



DATE: January 2014
DESIGNED BY: J. Barker
DRAWN BY: D. Arnold

TASMAN GEOSCIENCES
Tasman Geosciences, LLC
6899 Pecos Street - Unit C
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C-LINE PIPELINE RELEASE
Second Half 2013 Semi-Annual Groundwater
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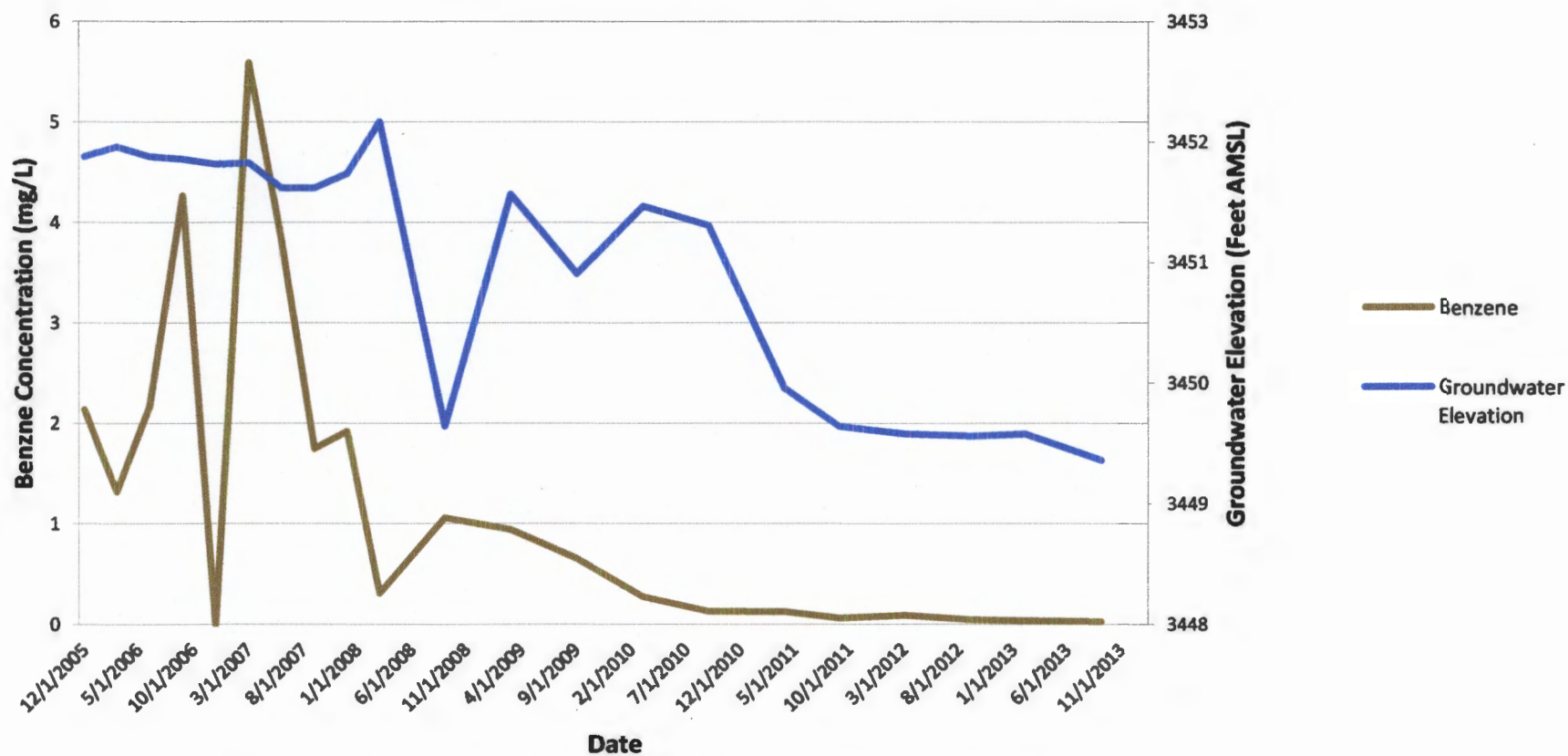
ANALYTICAL RESULTS
MAP

Figure
4

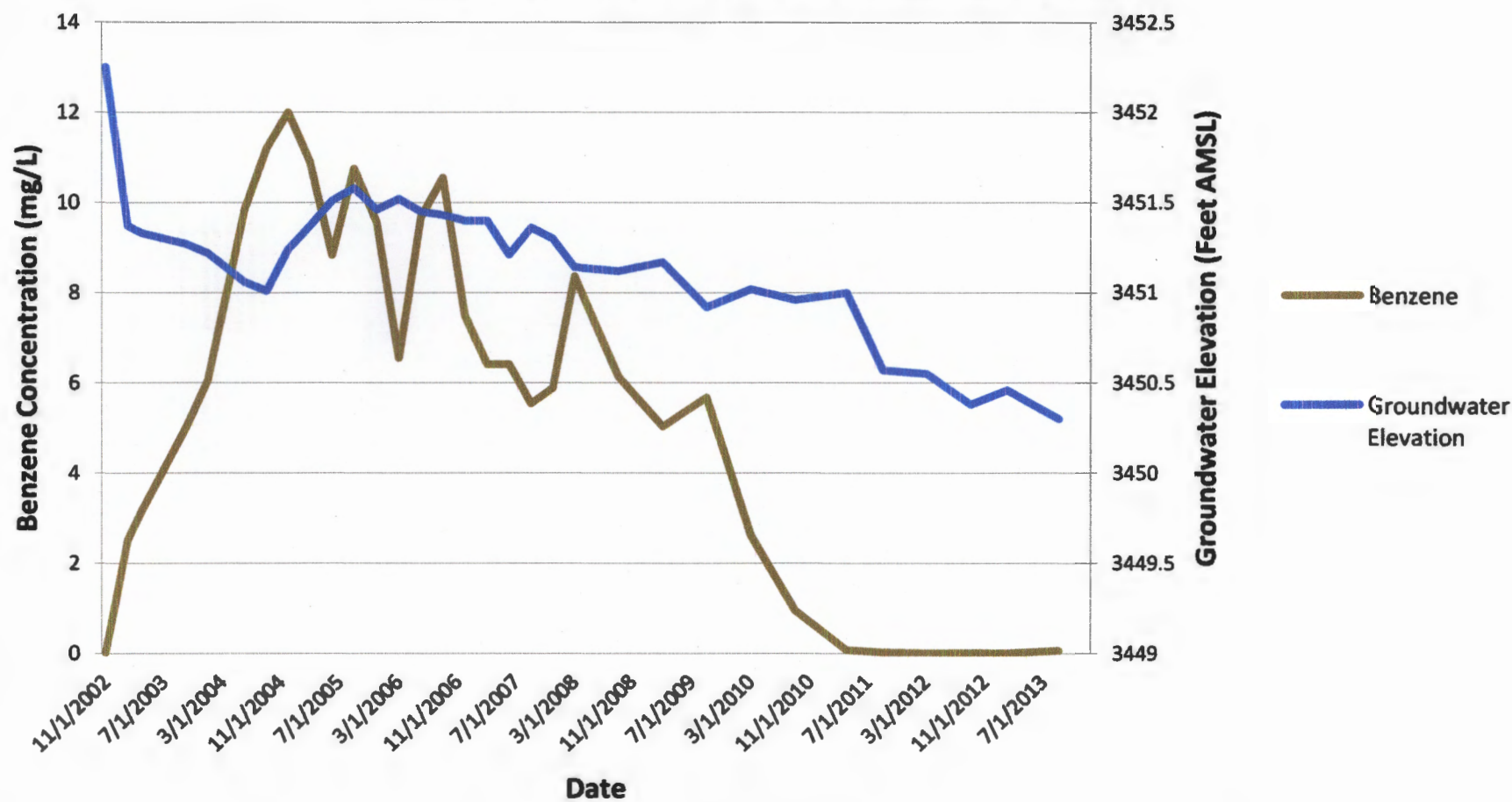
Appendix A

Benzene Concentration versus Time and Groundwater Elevation Graphs

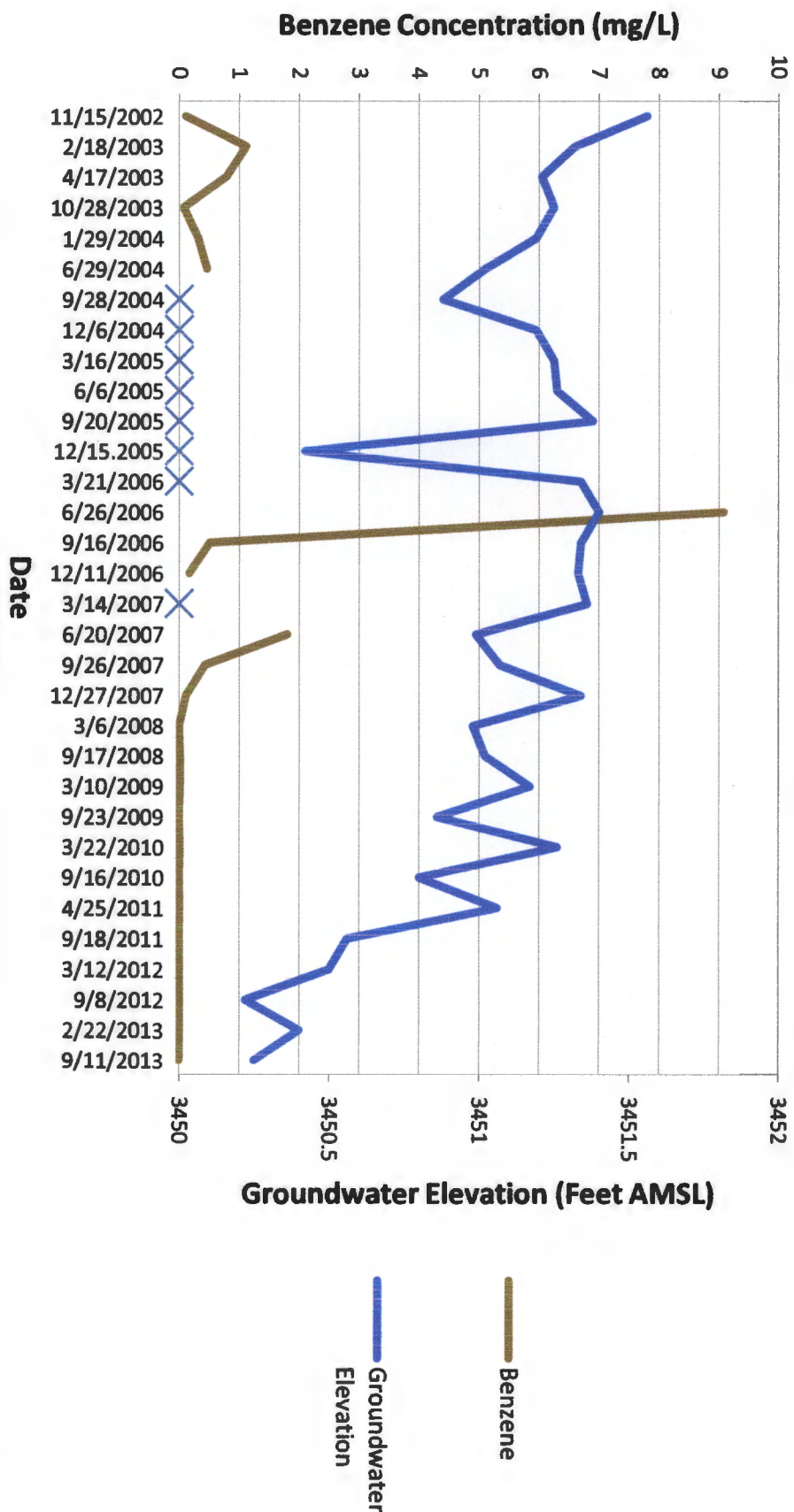
MW-1
Benzene Concentration VS Time and Groundwater Elevation



MW-3
Benzene Concentration VS Time and Groundwater Elevation



MW-4 Benzene Concentrations VS Time and Groundwater Elevation



Appendix B
Historical Analytical Results

APPENDIX B
HISTORICAL DATA
SUMMARY OF BTEX CONCENTRATIONS IN GROUNDWATER
C-LINE 50602 PIPELINE RELEASE, 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	11/15/2002	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	2/18/2003	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	4/17/2003	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	10/28/2003	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	1/29/2004	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	6/29/2004	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	9/28/2004	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	12/6/2004	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	3/16/2005	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	6/6/2005	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	9/20/2005	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	12/15/2005	2.14	1.37	0.313	1.334	
MW-1	3/21/2006	1.32	0.931	0.419	1.379	
MW-1	6/26/2006	2.17	1.42	0.534	1.722	
MW-1	9/16/2006	4.27	0.508	0.153	0.323	
MW-1	12/11/2006	<0.001	<0.001	<0.001	<0.001	
MW-1	3/14/2007	5.59	0.232	0.453	0.27	
MW-1	6/20/2007	3.82	0.43	0.4	0.79	
MW-1	9/26/2007	1.75	0.097	0.37	0.47	
MW-1	12/27/2007	1.92	0.0372	0.278	0.0736	
MW-1	3/6/2008	0.31	0.07	0.94	1.58	
MW-1	9/17/2008	1.06	0.0555	0.239	0.0751	
MW-1	3/10/2009	0.942	0.0178	0.224	0.0926	
MW-1	9/23/2009	0.658	0.0197	0.112	0.103	
MW-1	3/22/2010	0.276	0.016	0.0147	0.0557	
MW-1	9/16/2010	0.127	0.0319	0.0334	0.0399	
MW-1	4/25/2011	0.125	0.0416	0.0315	0.171	
MW-1	9/18/2011	0.0638	<0.002	0.0105	0.0093	
MW-1	3/12/2012	0.089	0.0024	0.0333	0.0246	
MW-1	9/8/2012	0.0463	<0.002	0.0066	0.0049	
MW-1	2/22/2013	0.0384	0.0047	0.0154	0.0126	
MW-1	9/11/2013	0.0255	0.0063	0.0102	0.0082	

**APPENDIX B
HISTORICAL DATA
SUMMARY OF BTEX CONCENTRATIONS IN GROUNDWATER
C-LINE 50602 PIPELINE RELEASE, 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	11/15/2002	<0.001	<0.001	<0.001	<0.001	
MW-2	2/18/2003	0.29	0.014	0.001	0.001	
MW-2	4/17/2003	0.175	0.007	<0.001	<0.001	
MW-2	10/28/2003	0.018	0.001	<0.001	<0.001	
MW-2	1/29/2004	0.0848	0.035	0.00292	0.00474	
MW-2	6/29/2004	0.0582	0.000219	0.00534	0.001	
MW-2	9/28/2004	0.329	0.0174	<0.001	<0.001	
MW-2	12/6/2004	0.0355	0.0017	<0.001	<0.001	
MW-2	3/16/2005	0.00523	<0.001	<0.001	<0.001	
MW-2	6/6/2005	0.0017	<0.001	<0.001	<0.001	
MW-2	9/20/2005	<0.001	<0.001	<0.001	<0.001	
MW-2	12/15/05	<0.001	<0.001	<0.001	<0.001	
MW-2	3/21/2006	<0.001	<0.001	<0.001	<0.001	
MW-2	6/26/2006	<0.001	<0.001	<0.001	<0.001	
MW-2	9/16/2006	<0.001	<0.001	<0.001	<0.001	
MW-2	12/11/2006	<0.001	<0.001	<0.001	<0.001	
MW-2	3/14/2007	<0.001	<0.001	<0.001	<0.001	
MW-2	6/20/2007	<0.001	<0.001	<0.001	<0.002	
MW-2	9/26/2007	<0.001	<0.001	<0.001	<0.002	
MW-2	12/27/2007	<0.002	<0.002	<0.002	<0.006	
MW-2	3/6/2008	<0.002	<0.002	<0.002	<0.006	
MW-2	9/17/2008	<0.002	<0.002	<0.002	<0.006	
MW-2	3/10/2009	<0.002	<0.002	<0.002	<0.006	
MW-2	9/23/2009	<0.002	<0.002	<0.002	<0.006	
MW-2	3/22/2010	<0.002	<0.002	<0.002	<0.006	
MW-2	9/16/2010	<0.001	<0.002	<0.002	<0.004	
MW-2	4/25/2011	<0.001	<0.002	<0.002	<0.002	
MW-2	9/18/2011	<0.001	<0.002	<0.002	<0.004	
MW-2	3/12/2012	<0.001	<0.002	<0.002	<0.004	
MW-2	9/8/2012	<0.001	<0.002	<0.002	<0.003	
MW-2	2/22/2013	<0.001	<0.002	<0.002	<0.003	
MW-2	9/11/2013	<0.001	<0.002	<0.002	<0.003	

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C-LINE 50602 PIPELINE RELEASE, 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	11/15/2002	0.017	0.005	<0.001	<0.001	
MW-3	2/18/2003	2.52	0.634	0.021	0.064	
MW-3	4/17/2003	3.18	0.513	0.028	0.1	
MW-3	10/28/2003	5.01	0.275	0.031	0.083	
MW-3	1/29/2004	6.06	0.506	0.0679	0.0849	
MW-3	6/29/2004	9.84	0.0917	0.0873	0.02404	
MW-3	9/28/2004	11.2	0.0218	0.105	0.0213	
MW-3	12/6/2004	12	0.0438	0.154	0.0237	
MW-3	3/16/2005	10.9	0.013	0.15	0.02842	
MW-3	6/6/2005	8.83	0.056	0.1535	0.0502	
MW-3	9/20/2005	10.75	0.1355	0.288	0.221	
MW-3	12/15/2005	9.57	0.414	0.173	0.177	
MW-3	3/21/2006	6.55	1.575	0.4085	0.9015	
MW-3	6/26/2006	9.67	2.93	0.0333	0.414	
MW-3	9/16/2006	10.55	3.48	0.288	0.384	
MW-3	12/11/2006	7.49	3.35	0.391	0.557	
MW-3	3/14/2007	6.41	2.75	0.3185	0.501	
MW-3	6/20/2007	6.41	3.49	0.52	0.78	
MW-3	9/26/2007	5.54	2.555	0.35	0.515	
MW-3	12/27/2007	5.89	2.81	0.316	0.4615	
MW-3	3/6/2008	8.36	4.36	0.57	0.99	
MW-3	9/17/2008	6.14	3.3	0.386	0.674	
MW-3	3/10/2009	5.03	2.5	0.3945	0.913	
MW-3	9/23/2009	5.68	4.32	0.549	1.36	
MW-3	3/22/2010	2.615	1.475	0.218	0.5415	
MW-3	9/16/2010	0.9555	0.1785	0.0916	0.1197	
MW-3	4/25/2011	0.0798	<0.02	0.0111	0.0249	
MW-3	9/18/2011	0.0219	<0.002	<0.002	<0.004	Duplicate sample collected
MW-3	3/12/2012	0.0071	<0.002	<0.002	<0.004	Duplicate sample collected
MW-3	9/8/2012	0.012	<0.002	<0.002	<0.003	Duplicate sample collected
MW-3	2/22/2013	0.0065	<0.002	<0.002	<0.003	Duplicate sample collected
MW-3	9/11/2013	0.0632	<0.002	0.0026	0.0091	Duplicate sample collected

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HISTORICAL DATA
SUMMARY OF BTEX CONCENTRATIONS IN GROUNDWATER
C-LINE 50602 PIPELINE RELEASE, 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	11/15/2002	0.114	0.039	0.002	0.003	
MW-4	2/18/2003	1.12	0.436	0.022	0.032	
MW-4	4/17/2003	0.782	0.45	0.029	0.055	
MW-4	10/28/2003	0.077	0.029	0.002	0.008	
MW-4	1/29/2004	0.32	0.169	0.0203	0.053	
MW-4	6/29/2004	0.461	0.0202	0.352	0.074	
MW-4	9/28/2004	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	12/6/2004	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	3/16/2005	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	6/6/2005	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	9/20/2005	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	12/15/05	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	3/21/2006	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	6/26/2006	9.08	5.73	1.03	5.69	
MW-4	9/16/2006	0.51	0.0415	0.21	1.028	
MW-4	12/11/2006	0.17	0.139	0.111	0.466	
MW-4	3/14/2007	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	6/20/2007	1.8	0.98	0.61	2.65	
MW-4	9/26/2007	0.43	0.35	0.19	0.93	
MW-4	12/27/2007	0.11	0.145	0.0837	0.425	
MW-4	3/6/2008	<0.002	<0.002	<0.002	<0.006	
MW-4	9/17/2008	0.0146	0.0068	0.0703	0.081	
MW-4	3/10/2009	0.0141	0.0178	0.0618	0.0863	
MW-4	9/23/2009	0.0022	<0.002	0.0243	0.0186	
MW-4	3/22/2010	0.0129	0.0255	0.0107	0.0574	
MW-4	9/16/2010	<0.001	<0.002	<0.002	0.0921	
MW-4	4/25/2011	0.00925	0.02905	0.00365	0.102	
MW-4	9/18/2011	0.0024	<0.004	<0.004	<0.008	
MW-4	3/12/2012	0.00041	<0.002	<0.002	<0.004	
MW-4	9/8/2012	<0.001	<0.002	<0.002	<0.003	
MW-4	2/22/2013	0.00031	<0.002	<0.002	<0.003	
MW-4	9/11/2013	<0.001	<0.002	<0.002	<0.003	

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C-LINE 50602 PIPELINE RELEASE, 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	11/15/2002	<0.001	<0.001	<0.001	<0.001	
MW-5	2/18/2003	0.328	0.056	0.004	0.004	
MW-5	4/17/2003	0.128	0.007	<0.001	<0.001	
MW-5	10/28/2003	0.164	0.048	0.002	0.004	
MW-5	1/29/2004	0.226	0.064	0.00404	0.0074	
MW-5	6/29/2004	0.249	0.00172	0.0603	0.004	
MW-5	9/28/2004	0.0336	0.00281	<0.001	<0.001	
MW-5	12/6/2004	0.0137	0.00318	<0.001	<0.001	
MW-5	3/16/2005	0.00371	0.00038	<0.001	<0.001	
MW-5	6/6/2005	0.00169	<0.001	<0.001	<0.001	
MW-5	9/20/2005	<0.001	<0.001	<0.001	<0.001	
MW-5	12/15/2005	<0.001	<0.001	<0.001	<0.001	
MW-5	3/21/2006	<0.001	<0.001	<0.001	<0.001	
MW-5	6/26/2006	<0.001	<0.001	<0.001	<0.001	
MW-5	9/16/2006	<0.001	<0.001	<0.001	<0.001	
MW-5	12/11/2006	<0.001	<0.001	<0.001	<0.001	
MW-5	3/14/2007	<0.001	<0.001	<0.001	<0.001	
MW-5	6/20/2007	<0.001	<0.001	<0.001	<0.002	
MW-5	9/26/2007	<0.001	<0.001	<0.001	<0.002	
MW-5	12/27/2007	<0.002	<0.002	<0.002	<0.006	
MW-5	3/6/2008	<0.002	<0.002	<0.002	<0.006	
MW-5	9/17/2008	0.00073	0.0007	<0.002	<0.006	
MW-5	3/10/2009	.0005J	<0.002	<0.002	<0.006	
MW-5	9/23/2009	<0.002	<0.002	<0.002	<0.006	
MW-5	3/22/2010	<0.002	0.0037	<0.002	0.0076	
MW-5	9/16/2010	<0.001	<0.002	<0.002	<0.004	
MW-5	4/25/2011	0.0017	0.0028	0.00043	0.0109	
MW-5	9/18/2011	<0.001	<0.002	<0.002	<0.004	
MW-5	3/12/2012	<0.001	<0.002	<0.002	<0.004	
MW-5	9/8/2012	<0.001	<0.002	<0.002	<0.003	
MW-5	2/22/2013	<0.001	<0.002	<0.002	<0.003	
MW-5	9/11/2013	<0.001	<0.002	<0.002	<0.003	

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C-LINE 50602 PIPELINE RELEASE, 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-6	11/15/2002	<0.001	<0.001	<0.001	<0.001	
MW-6	2/18/2003	0.001	<0.001	<0.001	<0.001	
MW-6	4/17/2003	0.002	<0.001	<0.001	<0.001	
MW-6	10/28/2003	<0.001	<0.001	<0.001	<0.001	
MW-6	1/29/2004	0.00382	0.0014	0.00133	0.00194	
MW-6	6/29/2004	<0.00019	<0.00014	<0.00013	<0.0002	
MW-6	9/28/2004	<0.001	<0.001	<0.001	<0.001	
MW-6	12/6/2004	<0.001	<0.001	<0.001	<0.001	
MW-6	3/16/2005	<0.001	<0.001	<0.001	<0.001	
MW-6	6/6/2005	<0.001	<0.001	<0.001	<0.001	
MW-6	9/20/2005	<0.001	<0.001	<0.001	<0.001	
MW-6	12/15/2005	<0.001	<0.001	<0.001	<0.001	
MW-6	3/21/2006	<0.001	<0.001	<0.001	<0.001	
MW-6	6/26/2006	<0.001	<0.001	<0.001	<0.001	
MW-6	9/16/2006	<0.001	<0.001	<0.001	<0.001	
MW-6	12/11/2006	<0.001	<0.001	<0.001	<0.001	
MW-6	3/14/2007	<0.001	<0.001	<0.001	<0.001	
MW-6	6/20/2007	NS	NS	NS	NS	
MW-6	9/26/2007	NS	NS	NS	NS	
MW-6	12/27/2007	NS	NS	NS	NS	
MW-6	3/6/2008	NS	NS	NS	NS	
MW-6	9/17/2008	NS	NS	NS	NS	
MW-6	3/10/2009	NS	NS	NS	NS	
MW-6	9/23/2009	NS	NS	NS	NS	
MW-6	3/22/2010	NS	NS	NS	NS	
MW-6	9/16/2010	NS	NS	NS	NS	
MW-6	4/25/2011	<0.001	<0.002	<0.002	<0.002	
MW-6	9/18/2011	NS	NS	NS	NS	
MW-6	3/12/2012	NS	NS	NS	NS	
MW-6	9/8/2012	NS	NS	NS	NS	
MW-6	2/22/2013	NS	NS	NS	NS	
MW-6	9/11/2013	NS	NS	NS	NS	

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SUMMARY OF BTEX CONCENTRATIONS IN GROUNDWATER
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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	10/28/2003	<0.001	<0.001	<0.001	<0.001	
MW-7	1/29/2004	<0.001	<0.001	<0.001	<0.001	
MW-7	6/29/2004	0.000456	<0.00014	<0.00013	<0.0002	
MW-7	9/28/2004	<0.001	<0.001	<0.001	<0.001	
MW-7	12/6/2004	<0.001	<0.001	<0.001	<0.001	
MW-7	3/16/2005	<0.001	<0.001	<0.001	<0.001	
MW-7	6/6/2005	0.000695	<0.001	<0.001	<0.001	
MW-7	9/20/2005	<0.001	<0.001	<0.001	<0.001	
MW-7	12/15/2005	<0.001	<0.001	<0.001	<0.001	
MW-7	3/21/2006	<0.001	<0.001	<0.001	<0.001	
MW-7	6/26/2006	<0.001	<0.001	<0.001	<0.001	
MW-7	9/16/2006	<0.001	<0.001	<0.001	<0.001	
MW-7	12/11/2006	<0.001	<0.001	<0.001	<0.001	
MW-7	3/14/2007	<0.001	<0.001	<0.001	<0.001	
MW-7	6/20/2007	<0.001	<0.001	<0.001	<0.002	
MW-7	9/26/2007	<0.001	<0.001	<0.001	<0.002	
MW-7	12/27/2007	<0.002	<0.002	<0.002	<0.006	
MW-7	3/6/2008	<0.002	<0.002	<0.002	<0.006	
MW-7	9/17/2008	<0.002	<0.002	<0.002	<0.006	
MW-7	3/10/2009	<0.002	<0.002	<0.002	<0.006	
MW-7	9/23/2009	<0.002	<0.002	<0.002	<0.006	
MW-7	3/22/2010	<0.002	<0.002	<0.002	<0.006	
MW-7	9/16/2010	<0.001	<0.002	<0.002	<0.004	
MW-7	4/25/2011	<0.001	<0.002	<0.002	<0.002	
MW-7	9/18/2011	<0.001	<0.002	<0.002	<0.004	
MW-7	3/12/2012	<0.001	<0.002	<0.002	<0.004	
MW-7	9/8/2012	<0.001	<0.002	<0.002	<0.003	
MW-7	2/22/2013	0.00027	<0.002	<0.002	<0.003	
MW-7	9/11/2013	<0.001	<0.002	<0.002	<0.003	

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SUMMARY OF BTEX CONCENTRATIONS IN GROUNDWATER
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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-8	10/28/2003	<0.001	<0.001	<0.001	<0.001	
MW-8	1/29/2004	0.00139	0.00109	0.00112	0.00217	
MW-8	6/29/2004	0.00248	<0.00014	0.000633	<0.0002	
MW-8	9/28/2004	<0.001	<0.001	<0.001	<0.001	
MW-8	12/6/2004	<0.001	<0.001	<0.001	<0.001	
MW-8	3/16/2005	<0.001	<0.001	<0.001	<0.001	
MW-8	6/6/2005	0.000955	<0.001	<0.001	<0.001	
MW-8	9/20/2005	<0.001	<0.001	<0.001	<0.001	
MW-8	12/15/2005	<0.001	<0.001	<0.001	<0.001	
MW-8	3/21/2006	<0.001	<0.001	<0.001	<0.001	
MW-8	6/26/2006	<0.001	<0.001	<0.001	<0.001	
MW-8	9/16/2006	<0.001	<0.001	<0.001	<0.001	
MW-8	12/11/2006	<0.001	<0.001	<0.001	<0.001	
MW-8	3/14/2007	<0.001	<0.001	<0.001	<0.001	
MW-8	6/20/2007	<0.001	<0.001	<0.001	<0.002	
MW-8	9/26/2007	<0.001	<0.001	<0.001	<0.002	
MW-8	12/27/2007	<0.002	<0.002	<0.002	<0.006	
MW-8	3/6/2008	<0.002	<0.002	<0.002	<0.006	
MW-8	9/17/2008	<0.002	<0.002	<0.002	<0.006	
MW-8	3/10/2009	<0.002	<0.002	<0.002	<0.006	
MW-8	9/23/2009	<0.002	<0.002	<0.002	<0.006	
MW-8	3/22/2010	<0.002	<0.002	<0.002	<0.006	
MW-8	9/16/2010	<0.001	<0.002	<0.002	<0.004	
MW-8	4/25/2011	<0.001	<0.002	<0.002	<0.002	
MW-8	9/18/2011	<0.001	<0.002	<0.002	<0.004	
MW-8	3/12/2012	<0.001	<0.002	<0.002	<0.004	
MW-8	9/8/2012	<0.001	<0.002	<0.002	<0.003	
MW-8	2/22/2013	<0.001	<0.002	<0.002	<0.003	
MW-8	9/11/2013	<0.001	<0.002	<0.002	<0.003	

**APPENDIX B
HISTORICAL DATA
SUMMARY OF BTEX CONCENTRATIONS IN GROUNDWATER
C-LINE 50602 PIPELINE RELEASE, 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-9	10/28/2003	<0.001	<0.001	<0.001	<0.001	
MW-9	1/29/2004	<0.001	<0.001	<0.001	<0.001	
MW-9	6/29/2004	<0.00019	<0.00014	<0.00013	<0.0002	
MW-9	9/28/2004	<0.001	<0.001	<0.001	<0.001	
MW-9	12/6/2004	<0.001	<0.001	<0.001	<0.001	
MW-9	3/16/2005	<0.001	<0.001	<0.001	<0.001	
MW-9	6/6/2005	<0.001	<0.001	<0.001	<0.001	
MW-9	9/20/2005	<0.001	<0.001	<0.001	0.00105	
MW-9	12/15/2005	<0.001	<0.001	<0.001	<0.001	
MW-9	3/21/2006	<0.001	<0.001	<0.001	<0.001	
MW-9	6/26/2006	<0.001	<0.001	<0.001	<0.001	
MW-9	9/16/2006	<0.001	<0.001	<0.001	<0.001	
MW-9	12/11/2006	<0.001	<0.001	<0.001	<0.001	
MW-9	3/14/2007	<0.001	<0.001	<0.001	<0.001	
MW-9	6/20/2007	<0.001	<0.001	<0.001	<0.002	
MW-9	9/26/2007	<0.001	<0.001	<0.001	<0.002	
MW-9	12/27/2007	<0.002	<0.002	<0.002	<0.006	
MW-9	3/6/2008	<0.002	<0.002	<0.002	<0.006	
MW-9	9/17/2008	<0.002	<0.002	<0.002	<0.006	
MW-9	3/10/2009	<0.002	<0.002	<0.002	<0.006	
MW-9	9/23/2009	<0.002	<0.002	<0.002	<0.006	
MW-9	3/22/2010	<0.002	<0.002	<0.002	<0.006	
MW-9	9/16/2010	<0.001	<0.002	<0.002	<0.004	
MW-9	4/25/2011	<0.001	<0.002	<0.002	<0.002	
MW-9	9/18/2011	<0.001	<0.002	<0.002	<0.004	
MW-9	3/12/2012	<0.001	<0.002	<0.002	<0.004	
MW-9	9/8/2012	<0.001	<0.002	<0.002	<0.003	
MW-9	2/22/2013	<0.001	<0.002	<0.002	<0.003	
MW-9	9/11/2013	<0.001	<0.002	<0.002	<0.003	

Notes:

The environmental cleanup standards for groundwater that are applicable to the C-Line Pipeline Release site are the New Mexico Water Quality Control Commission (NMWQCC) Groundwater Standards.

Monitoring well location MW-6 has been removed from the sampling program due to exhibiting non-detect concentrations.

Data presented for all other well locations includes previous four sampling events, when available. Historic groundwater analytical results for these locations are available upon request.

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

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

LNAPL = Light Non-Aqueous Phase Liquid

NS = Not sampled.

mg/L = milligrams per liter.

Appendix C

Laboratory Analytical Report



09/18/13

Technical Report for

DCP Midstream, LP

TASMCOA:C Line

RC-GN00 390262220

Accutest Job Number: D50458

Sampling Date: 09/11/13

Report to:

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

Total number of pages in report: 27



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, appearing to read "Scott Heideman".

Scott Heideman
Laboratory Director

Client Service contact: Shea Greiner 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: D50458

TASMCOA:C Line

Project No: RC-GN00 390262220

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
D50458-1	09/11/13	13:40 JB	09/12/13	AQ	Ground Water	MW-1
D50458-2	09/11/13	13:00 JB	09/12/13	AQ	Ground Water	MW-2
D50458-3	09/11/13	13:30 JB	09/12/13	AQ	Ground Water	MW-3
D50458-4	09/11/13	11:15 JB	09/12/13	AQ	Ground Water	MW-4
D50458-5	09/11/13	11:00 JB	09/12/13	AQ	Ground Water	MW-5
D50458-6	09/11/13	13:45 JB	09/12/13	AQ	Ground Water	MW-7
D50458-6D	09/11/13	13:45 JB	09/12/13	AQ	Water Dup/MSD	MW-7
D50458-6M	09/11/13	13:45 JB	09/12/13	AQ	Water Matrix Spike	MW-7
D50458-7	09/11/13	12:00 JB	09/12/13	AQ	Ground Water	MW-8
D50458-8	09/11/13	12:45 JB	09/12/13	AQ	Ground Water	MW-9
D50458-9	09/11/13	00:00 JB	09/12/13	AQ	Ground Water	DUP
D50458-10	09/11/13	00:00 JB	09/12/13	AQ	Trip Blank Water	TRIP BLANK



CASE NARRATIVE / CONFORMANCE SUMMARY

Client: DCP Midstream, LP

Job No D50458

Site: TASMCOA:C Line

Report Date 9/18/2013 9:58:22 AM

On 09/12/2013, 9 sample(s), 1 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 3 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D50458 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:	V3V1561
--------	----	-----------	---------

- 99 All samples were analyzed within the recommended method holding time.
- 42 All method blanks for this batch meet method specific criteria.
- 70 Sample(s) D50458-6MS, D50458-6MSD were used as the QC samples indicated.

Matrix	AQ	Batch ID:	V7V1247
--------	----	-----------	---------

- 99 All samples were analyzed within the recommended method holding time.
- 42 All method blanks for this batch meet method specific criteria.
- 70 Sample(s) D48565-20MS, D48565-20MSD were used as the QC samples indicated.

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

Page 1 of 2

Job Number: D50458
Account: DCP Midstream, LP
Project: TASMCOA:C Line
Collected: 09/11/13

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
D50458-1	MW-1					
Benzene		0.0255	0.0010	0.00025	mg/l	SW846 8260B
Toluene		0.0063	0.0020	0.0010	mg/l	SW846 8260B
Ethylbenzene		0.0102	0.0020	0.00025	mg/l	SW846 8260B
Xylene (total)		0.0082	0.0030	0.0020	mg/l	SW846 8260B
D50458-2	MW-2					
No hits reported in this sample.						
D50458-3	MW-3					
Benzene		0.0632	0.0010	0.00025	mg/l	SW846 8260B
Ethylbenzene		0.0026	0.0020	0.00025	mg/l	SW846 8260B
Xylene (total)		0.0091	0.0030	0.0020	mg/l	SW846 8260B
D50458-4	MW-4					
No hits reported in this sample.						
D50458-5	MW-5					
No hits reported in this sample.						
D50458-6	MW-7					
No hits reported in this sample.						
D50458-7	MW-8					
No hits reported in this sample.						
D50458-8	MW-9					
No hits reported in this sample.						
D50458-9	DUP					
Benzene		0.0620	0.0010	0.00025	mg/l	SW846 8260B
Ethylbenzene		0.0025	0.0020	0.00025	mg/l	SW846 8260B
Xylene (total)		0.0088	0.0030	0.0020	mg/l	SW846 8260B

Summary of Hits

Page 2 of 2

Job Number: D50458
Account: DCP Midstream, LP
Project: TASMCOA:C Line
Collected: 09/11/13

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

D50458-10 **TRIP BLANK**

No hits reported in this sample.



Sample Results

Report of Analysis

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-1	Date Sampled:	09/11/13
Lab Sample ID:	D50458-1	Date Received:	09/12/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:C Line		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V22656.D	1	09/14/13	JL	n/a	n/a	V7V1247
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	0.0255	0.0010	0.00025	mg/l	
108-88-3	Toluene	0.0063	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	0.0102	0.0020	0.00025	mg/l	
1330-20-7	Xylene (total)	0.0082	0.0030	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	104%		62-130%
2037-26-5	Toluene-D8	104%		70-130%
460-00-4	4-Bromofluorobenzene	88%		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	Date Sampled:	09/11/13
Lab Sample ID:	D50458-2	Date Received:	09/12/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:C Line		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V22657.D	1	09/14/13	JL	n/a	n/a	V7V1247
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	0.00025	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	101%		62-130%
2037-26-5	Toluene-D8	104%		70-130%
460-00-4	4-Bromofluorobenzene	82%		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

Page 1 of 1

Client Sample ID:	MW-3	Date Sampled:	09/11/13
Lab Sample ID:	D50458-3	Date Received:	09/12/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:C Line		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V22658.D	1	09/14/13	JL	n/a	n/a	V7V1247
Run #2							

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

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.0632	0.0010	0.00025	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	0.0026	0.0020	0.00025	mg/l	
1330-20-7	Xylene (total)	0.0091	0.0030	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	98%		62-130%
2037-26-5	Toluene-D8	106%		70-130%
460-00-4	4-Bromofluorobenzene	90%		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

Page 1 of 1

Client Sample ID: MW-4
Lab Sample ID: D50458-4
Matrix: AQ - Ground Water
Method: SW846 8260B
Project: TASMCOA:C Line

Date Sampled: 09/11/13
Date Received: 09/12/13
Percent Solids: n/a

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V22659.D	1	09/14/13	JL	n/a	n/a	V7V1247
Run #2							

Run #	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	0.00025	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	103%		62-130%
2037-26-5	Toluene-D8	102%		70-130%
460-00-4	4-Bromofluorobenzene	85%		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

Page 1 of 1

Client Sample ID:	MW-5	Date Sampled:	09/11/13
Lab Sample ID:	D50458-5	Date Received:	09/12/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:C Line		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V22660.D	1	09/14/13	JL	n/a	n/a	V7V1247
Run #2							

Run #	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	0.00025	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	103%		62-130%
2037-26-5	Toluene-D8	104%		70-130%
460-00-4	4-Bromofluorobenzene	84%		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

Page 1 of 1

Client Sample ID:	MW-7	Date Sampled:	09/11/13
Lab Sample ID:	D50458-6	Date Received:	09/12/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:C Line		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V26700.D	1	09/14/13	BR	n/a	n/a	V3V1561
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	0.00025	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	124%		62-130%
2037-26-5	Toluene-D8	107%		70-130%
460-00-4	4-Bromofluorobenzene	84%		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

Page 1 of 1

Client Sample ID:	MW-8	Date Sampled:	09/11/13
Lab Sample ID:	D50458-7	Date Received:	09/12/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:C Line		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V22661.D	1	09/14/13	JL	n/a	n/a	V7V1247
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	0.00025	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	99%		62-130%
2037-26-5	Toluene-D8	104%		70-130%
460-00-4	4-Bromofluorobenzene	86%		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

Page 1 of 1

Client Sample ID: MW-9
Lab Sample ID: D50458-8
Matrix: AQ - Ground Water
Method: SW846 8260B
Project: TASMCOA:C Line

Date Sampled: 09/11/13
Date Received: 09/12/13
Percent Solids: n/a

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V22662.D	1	09/14/13	JL	n/a	n/a	V7V1247
Run #2							

Run #	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	0.00025	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	103%		62-130%
2037-26-5	Toluene-D8	104%		70-130%
460-00-4	4-Bromofluorobenzene	83%		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

Page 1 of 1

Client Sample ID:	DUP	Date Sampled:	09/11/13
Lab Sample ID:	D50458-9	Date Received:	09/12/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:C Line		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V22663.D	1	09/14/13	JL	n/a	n/a	V7V1247
Run #2							

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

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.0620	0.0010	0.00025	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	0.0025	0.0020	0.00025	mg/l	
1330-20-7	Xylene (total)	0.0088	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	103%		70-130%
460-00-4	4-Bromofluorobenzene	89%		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

Page 1 of 1

Client Sample ID:	TRIP BLANK	Date Sampled:	09/11/13
Lab Sample ID:	D50458-10	Date Received:	09/12/13
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:C Line		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V22664.D	1	09/14/13	JL	n/a	n/a	V7V1247
Run #2							

Run #	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	0.00025	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	101%		62-130%
2037-26-5	Toluene-D8	103%		70-130%
460-00-4	4-Bromofluorobenzene	82%		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



Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D50458

Client: TASMAN

Immediate Client Services Action Required: No

Date / Time Received: 9/12/2013 10:10:00 AM

No. Coolers: 1

Client Service Action Required at Login: No

Project: C LINE

Airbill #'s: FX

Cooler Security

Y or N

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | Infrared gun | |
| 3. Cooler media: | Ice (bag) | |

Quality Control Preservation

Y or N N/A

- | | | | |
|---------------------------------|-------------------------------------|--------------------------|--------------------------|
| 1. Trip Blank present / cooler: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. Trip Blank listed on COC: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample: | Intact | |

Sample Integrity - Instructions

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume rec'd for analysis: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Comments

Accutest Laboratories
V: (303) 425-6021

4036 Youngfield Street
F: (303) 425-6854

Wheat Ridge, CO
www.accutest.com

D50458: Chain of Custody
Page 2 of 2

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: D50458

Account: DCPM CODN DCP Midstream, LP

Project: TASMCOA:C Line

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V7V1247-MB	7V22647.D	1	09/14/13	JL	n/a	n/a	V7V1247

The QC reported here applies to the following samples:

Method: SW846 8260B

D50458-1, D50458-2, D50458-3, D50458-4, D50458-5, D50458-7, D50458-8, D50458-9, D50458-10

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	0.25	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	107%
2037-26-5	Toluene-D8	102%
460-00-4	4-Bromofluorobenzene	83%

Method Blank Summary

Page 1 of 1

Job Number: D50458

Account: DCPMCOA DCP Midstream, LP

Project: TASMCOA:C Line

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3V1561-MB	3V26692.D	1	09/14/13	BR	n/a	n/a	V3V1561

The QC reported here applies to the following samples:

Method: SW846 8260B

D50458-6

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	0.25	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	109%	62-130%
2037-26-5	Toluene-D8	109%	70-130%
460-00-4	4-Bromofluorobenzene	90%	69-130%

Blank Spike Summary

Page 1 of 1

Job Number: D50458

Account: DCPMCDN DCP Midstream, LP

Project: TASMCOA:C Line

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V7V1247-BS	7V22648.D	1	09/14/13	JL	n/a	n/a	V7V1247

The QC reported here applies to the following samples:

Method: SW846 8260B

D50458-1, D50458-2, D50458-3, D50458-4, D50458-5, D50458-7, D50458-8, D50458-9, D50458-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	52.7	105	70-130
100-41-4	Ethylbenzene	50	55.3	111	70-130
108-88-3	Toluene	50	54.6	109	70-130
1330-20-7	Xylene (total)	150	172	115	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	99%	62-130%
2037-26-5	Toluene-D8	100%	70-130%
460-00-4	4-Bromofluorobenzene	104%	69-130%

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 1

Job Number: D50458

Account: DCPM CODN DCP Midstream, LP

Project: TASMCOA:C Line

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3V1561-BS	3V26693.D	1	09/14/13	BR	n/a	n/a	V3V1561

The QC reported here applies to the following samples:

Method: SW846 8260B

D50458-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	45.5	91	70-130
100-41-4	Ethylbenzene	50	44.6	89	70-130
108-88-3	Toluene	50	47.1	94	70-130
1330-20-7	Xylene (total)	150	142	95	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	103%	62-130%
2037-26-5	Toluene-D8	105%	70-130%
460-00-4	4-Bromofluorobenzene	91%	69-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D50458

Account: DCPMCO DN DCP Midstream, LP

Project: TASMCOA:C Line

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D48565-20MS	7V22649.D	1	09/14/13	JL	n/a	n/a	V7V1247
D48565-20MSD	7V22650.D	1	09/14/13	JL	n/a	n/a	V7V1247
D48565-20	7V22651.D	1	09/14/13	JL	n/a	n/a	V7V1247

The QC reported here applies to the following samples:

Method: SW846 8260B

D50458-1, D50458-2, D50458-3, D50458-4, D50458-5, D50458-7, D50458-8, D50458-9, D50458-10

CAS No.	Compound	D48565-20 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	50	55.7	111	55.3	111	1	62-130/30
100-41-4	Ethylbenzene	ND	50	55.1	110	55.3	111	0	63-130/30
108-88-3	Toluene	ND	50	56.1	112	54.7	109	3	60-130/30
1330-20-7	Xylene (total)	ND	150	169	113	167	111	1	67-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D48565-20	Limits
17060-07-0	1,2-Dichloroethane-D4	106%	102%	99%	62-130%
2037-26-5	Toluene-D8	105%	101%	101%	70-130%
460-00-4	4-Bromofluorobenzene	107%	101%	83%	69-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D50458

Account: DCPMCO DN DCP Midstream, LP

Project: TASMCOA:C Line

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D50458-6MS	3V26701.D	1	09/14/13	BR	n/a	n/a	V3V1561
D50458-6MSD	3V26702.D	1	09/14/13	BR	n/a	n/a	V3V1561
D50458-6	3V26700.D	1	09/14/13	BR	n/a	n/a	V3V1561

The QC reported here applies to the following samples:

Method: SW846 8260B

D50458-6

CAS No.	Compound	D50458-6 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	50	47.5	95	47.3	95	0	62-130/30
100-41-4	Ethylbenzene	ND	50	42.9	86	44.8	90	4	63-130/30
108-88-3	Toluene	ND	50	48.0	96	52.4	105	9	60-130/30
1330-20-7	Xylene (total)	ND	150	137	91	154	103	12	67-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D50458-6	Limits
17060-07-0	1,2-Dichloroethane-D4	106%	94%	124%	62-130%
2037-26-5	Toluene-D8	110%	111%	107%	70-130%
460-00-4	4-Bromofluorobenzene	97%	108%	84%	69-130%

* = Outside of Control Limits.