1RP-401

1st Quarter 2013 Semi Annual Groundwater Monitoring Results

DATE:
06.11.13

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

June 11, 2013

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

RE: 1st 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 1st 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

First Half 2013 Semi-Annual Groundwater Monitoring Summary Report

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

Prepared for:

DCP Midstream

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

Prepared by:

TASMAN GEOSCIENCES

6899 Pecos Street, Unit C
Denver, CO 80221

April 25, 2013

Table of Contents

1. Introduction

This report summarizes groundwater monitoring and remediation activities conducted during the first 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 and assessing the presence of light non-aqueous phase liquid (LNAPL) hydrocarbons in the Site subsurface. The data collected during the reporting period were used to develop groundwater elevation maps, and benzene concentration versus time graphs to evaluate current conditions at the Site.

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 first half 2013 semi-annual monitoring event on February 22, 2013. Monitoring activities included Site-wide groundwater gauging, LNAPL gauging, and groundwater sampling. Figure 2 illustrates the groundwater monitoring network utilized to perform these activities at the Site.

3.1 Groundwater and LNAPL 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 first half 2013, 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 first half 2013 monitoring event are presented in Table 1, and a first half 2013 groundwater elevation contour map is illustrated on Figure 3. Groundwater elevations ranged from 3,449.27 feet AMSL at monitoring well MW-8 to 3,451.31 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 0.0048 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 (4) degrees Celsius (^{0}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 B, 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 0.0384 mg/L. Toluene, ethylbenzene, and total xylenes were also detected in MW-1, but concentrations did not exceed their respective NMWQCC standard.

Water quality parameters were collected during the first 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 or 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 0.0065 mg/L and 0.0050 mg/L respectively.

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

LNAPL recovery and SVE at the Site appears to have been successful in controlling dissolved phase petroleum hydrocarbon impacts at the Site as concentrations are stable and/or decreasing over time. Monitored natural attenuation remains an effective remedial strategy in addressing the residual dissolve phase petroleum hydrocarbon plume on Site. BTEX concentrations in point of compliance (POC) wells MW-7, MW-8 and MW-9 remain below laboratory detection limits.

5. Conclusions

Benzene concentrations decreased below NMWQCC Standards in MW-3 during the reporting period. Elevated dissolved phase benzene concentrations persist at MW-1, however; concentrations continue to decline over time. 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 first 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 14, 2007.
- Based on historic groundwater elevations, the potentiometric surface beneath the Site has 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. Concentrations continue to exhibit decreasing trends within this well.
- Dissolved phase petroleum hydrocarbon concentrations continue to decrease over time, likely due to natural attenuation and historical LNAPL recovery and SVE.

6. Recommendations

Based on evaluation of the first half 2013 monitoring results, historical data and Site observations, recommendations have been developed for future activities, as included below:

- Continue semi-annual groundwater monitoring and sampling at monitoring well locations MW-1, MW-2, MW-3, MW-4, MW-5, MW-7, MW-8, and MW-9.
- Evaluation of a near-term Site closure strategy that may include implementation of a polishing technique to decrease residual dissolved phase benzene concentrations to below regulatory thresholds.

Tables

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

Location	Date	Depth to Groundwater (1) (feet)	Depth to Product (feet)	Free Phase Hydrocarbon Thickness (feet)	Total Depth (2) (feet)	TOC Elevation (feet amsl)	Groundwater Elevation (feet amsl)	Change in Groundwater Elevation Since Previous Event (3) (feet)
MW-1	4/25/2011	91.25				3541.21	3449.96	-1.35
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-2	4/25/2011	89.24				3540.91	3451.67	0.12
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-3	4/25/2011	90.41				3541.41	3451.00	0.04
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-4	4/25/2011	90.34				3541.40	3451.06	0.26
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-5	4/25/2011	90.40				3541.45	3451.05	0.36
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-6	4/25/2011	95.78			NM	3543.98	3448.20	0.35
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-7	4/25/2011	91.95				3542.42	3450.47	0.19
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-8	4/25/2011	90.24				3540.29	3450.05	-0.23
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	3540.29 [4]	3449.27	0.19

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

Location	Date	Depth to Groundwater (1) (feet)	Depth to Product (feet)	Free Phase Hydrocarbon Thickness (feet)	Total Depth (2) (feet)	TOC Elevation (feet amsl)	Groundwater Elevation (feet amsl)	Change in Groundwater Elevation Since Previous Event (3) (feet)
MW-9	4/25/2011	89.51				3539.62	3450.11	0.45
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
						Average change in groundwater elevation since the previous monitoring event		-0.23

Notes:

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

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

3- 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 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 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	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-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-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-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-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-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-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-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	

TABLE 2
FIRST 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-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	

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.

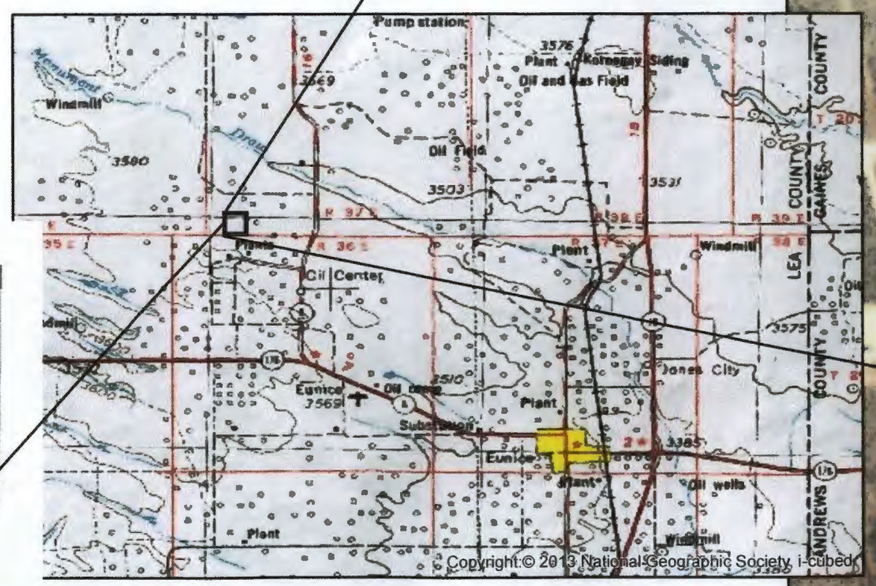
Sample locations are shown on Figure 2 and analytical results are illustrated on Figure 4.

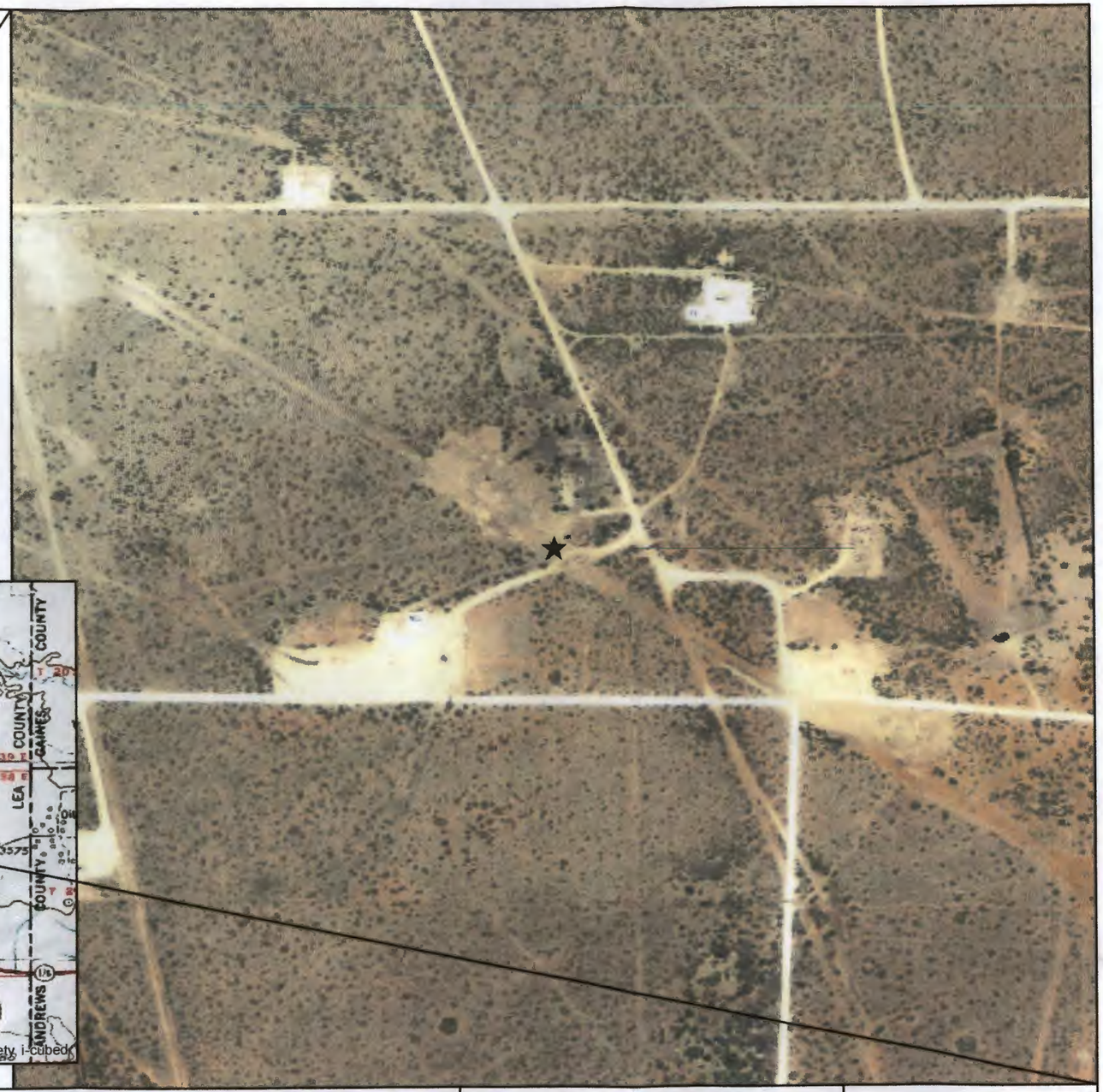
LNAPL = Light Non-Aqueous Phase Liquid

NS = Not sampled.

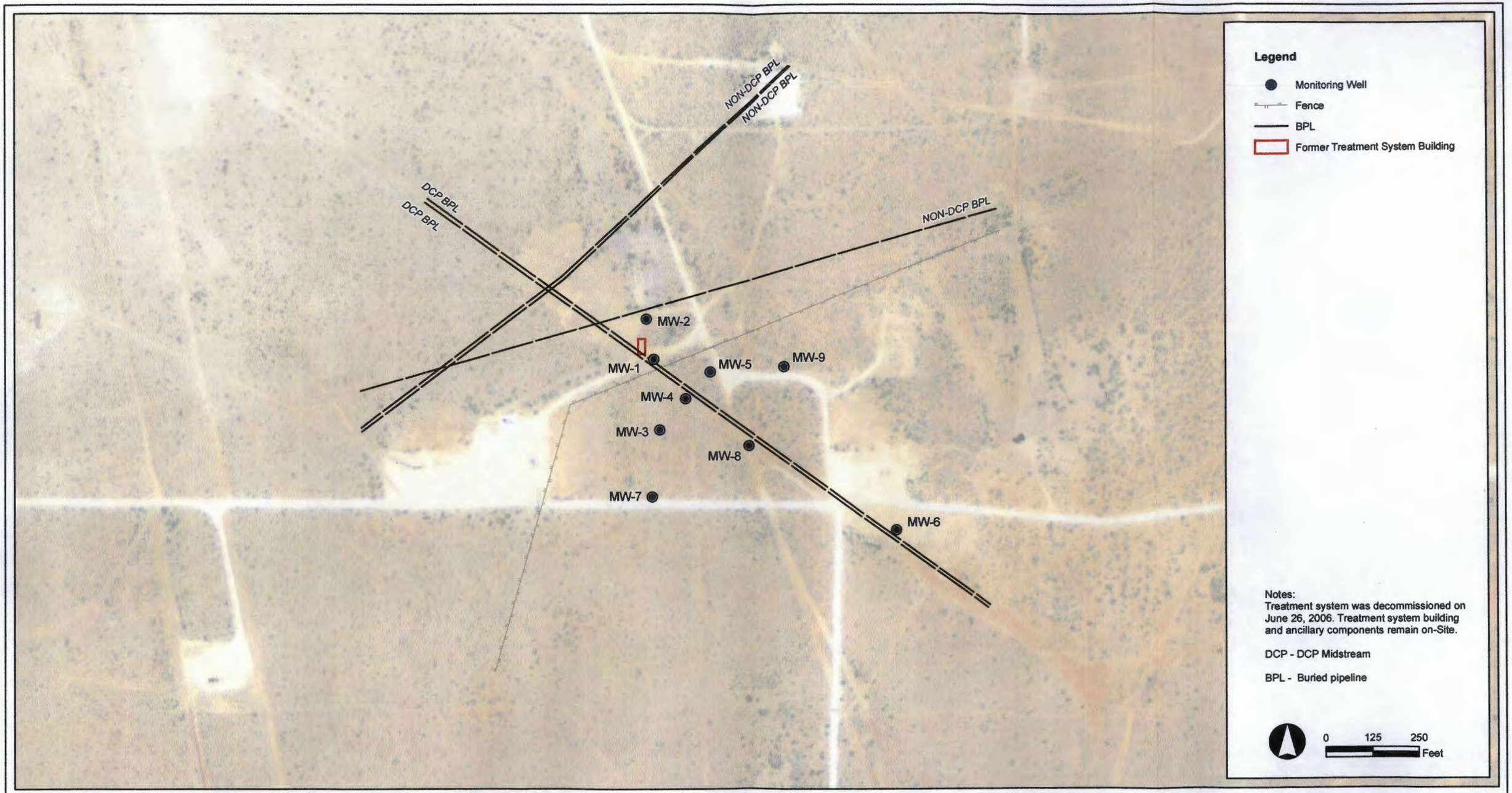
mg/L = milligrams per liter.

Figures





DESIGNED BY: S. Scott DRAWN BY: J. Clonts SHEET CHK'D BY: CROSS CHK'D BY: APPROVED BY: APPROVED BY:	TASMAN GEOSCIENCES Tasman Geosciences, LLC 6899 Pecos Street - Unit C Denver, CO 80221 303 487 1228	**C-LINE PIPELINE RELEASE** *Groundwater Monitoring Summary Report*	SITE LOCATION	FIGURE 1



DESIGNED BY: S. Scott
DRAWN BY: J. Clonts
SHEET CHK'D BY:
CROSS CHK'D BY:
APPROVED BY:
APPROVED BY:

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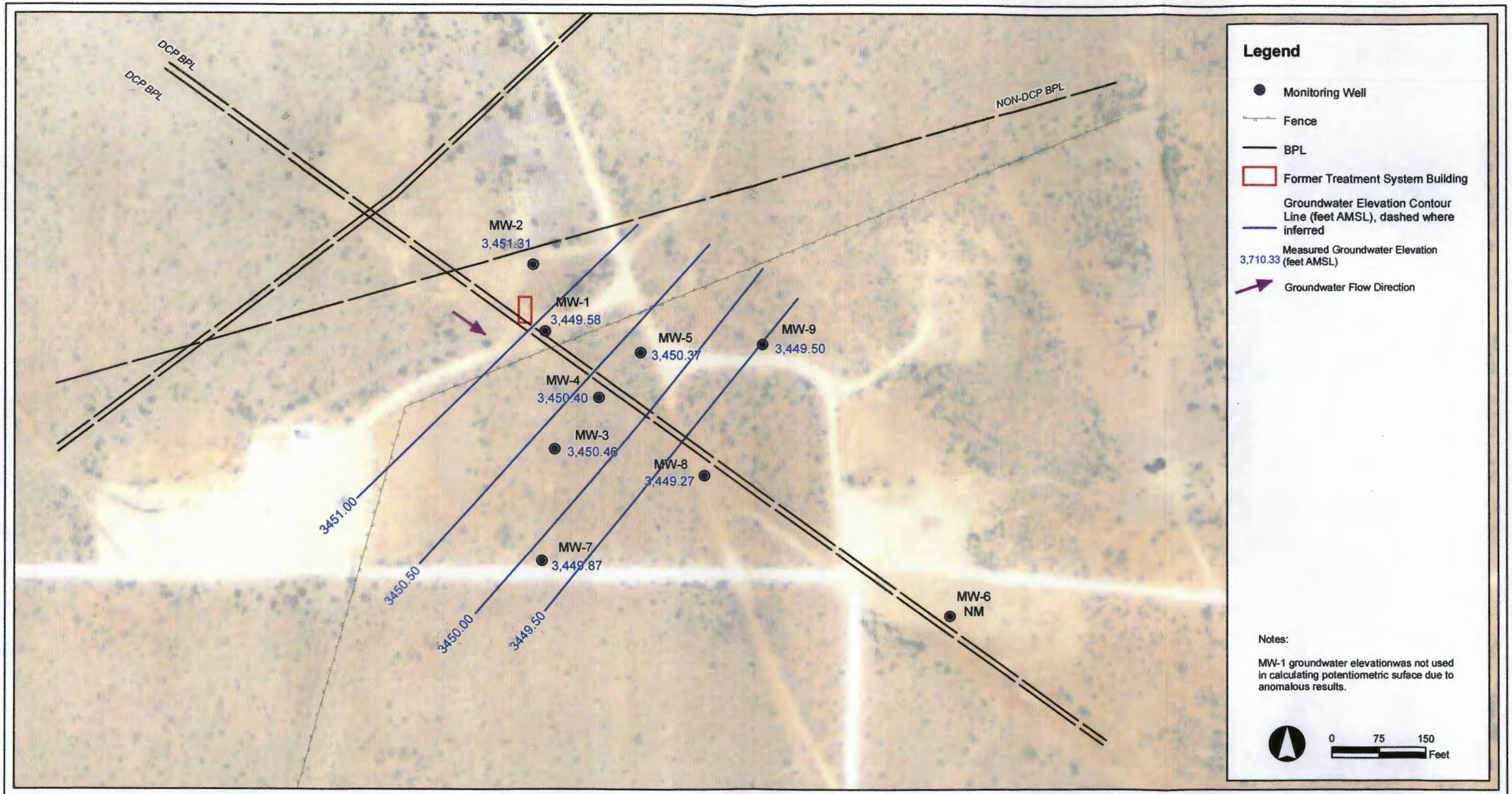
6899 Pecos Street - Unit C
Denver, CO 80221
303 487 1228

C-LINE PIPELINE RELEASE

Groundwater Monitoring Summary Report

SITE MAP

FIGURE 2



DESIGNED BY: C. Wasko
DRAWN BY: J. Clonts
SHEET CHK'D BY:
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APPROVED BY:
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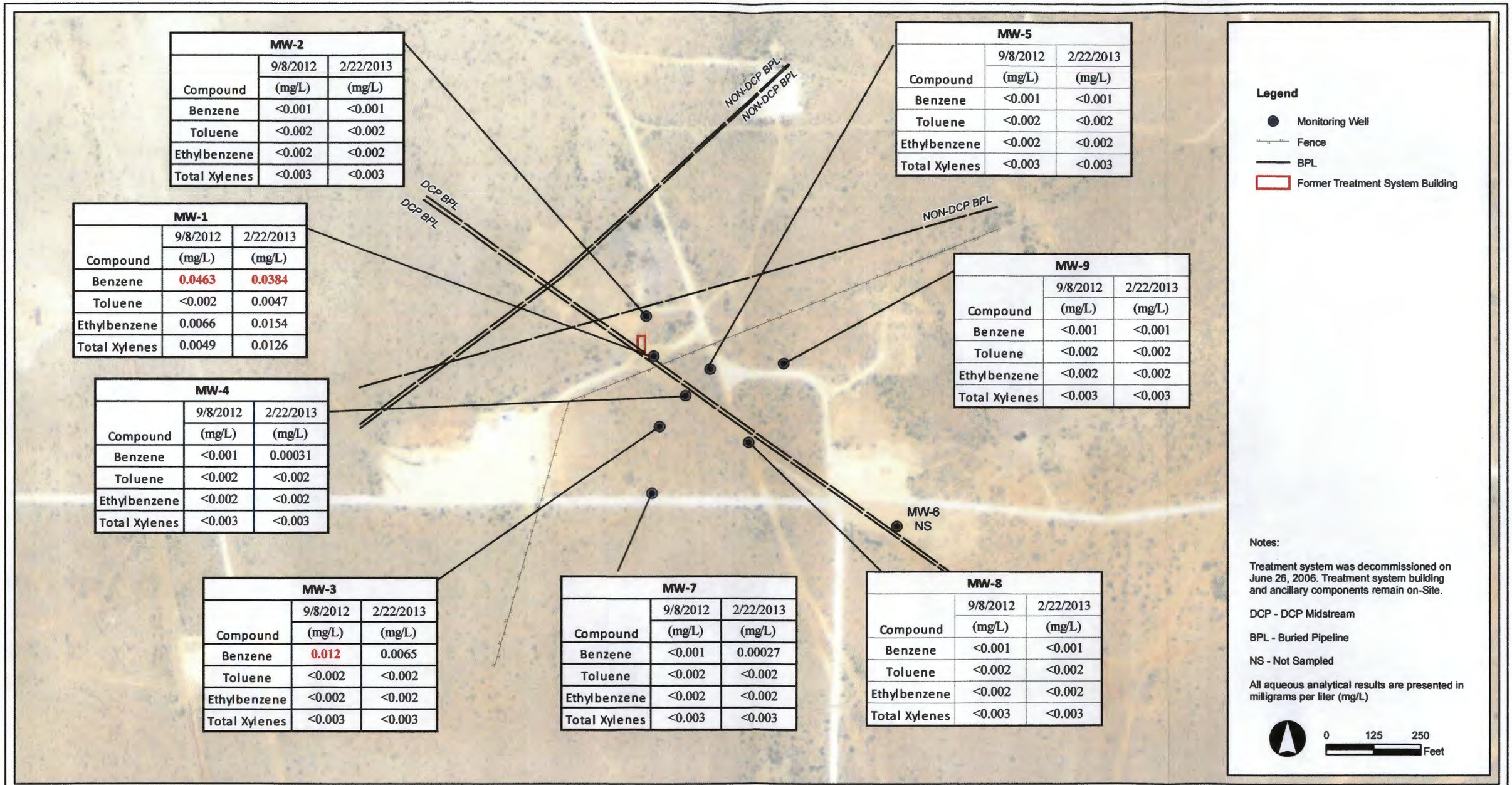
C-LINE PIPELINE RELEASE

First Half 2013 Semi-Annual Groundwater Monitoring Summary Report

POTENTIOMETRIC SURFACE MAP (FEBRUARY 22, 2013)

FIGURE 3



MW-2		
Compound	9/8/2012 (mg/L)	2/22/2013 (mg/L)
Benzene	<0.001	<0.001
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.003	<0.003

MW-5		
Compound	9/8/2012 (mg/L)	2/22/2013 (mg/L)
Benzene	<0.001	<0.001
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.003	<0.003

MW-1		
Compound	9/8/2012 (mg/L)	2/22/2013 (mg/L)
Benzene	0.0463	0.0384
Toluene	<0.002	0.0047
Ethylbenzene	0.0066	0.0154
Total Xylenes	0.0049	0.0126

MW-9		
Compound	9/8/2012 (mg/L)	2/22/2013 (mg/L)
Benzene	<0.001	<0.001
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.003	<0.003

MW-4		
Compound	9/8/2012 (mg/L)	2/22/2013 (mg/L)
Benzene	<0.001	0.00031
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.003	<0.003

MW-3		
Compound	9/8/2012 (mg/L)	2/22/2013 (mg/L)
Benzene	0.012	0.0065
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.003	<0.003

MW-7		
Compound	9/8/2012 (mg/L)	2/22/2013 (mg/L)
Benzene	<0.001	0.00027
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.003	<0.003

MW-8		
Compound	9/8/2012 (mg/L)	2/22/2013 (mg/L)
Benzene	<0.001	<0.001
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.003	<0.003

Legend

- Monitoring Well
- Fence
- BPL
- Former Treatment System Building

Notes:

Treatment system was decommissioned on June 26, 2006. Treatment system building and ancillary components remain on-Site.

DCP - DCP Midstream

BPL - Buried Pipeline

NS - Not Sampled

All aqueous analytical results are presented in milligrams per liter (mg/L)

0 125 250 Feet

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

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

C-LINE PIPELINE RELEASE

First Half 2013 Semi-Annual Groundwater Monitoring Summary Report

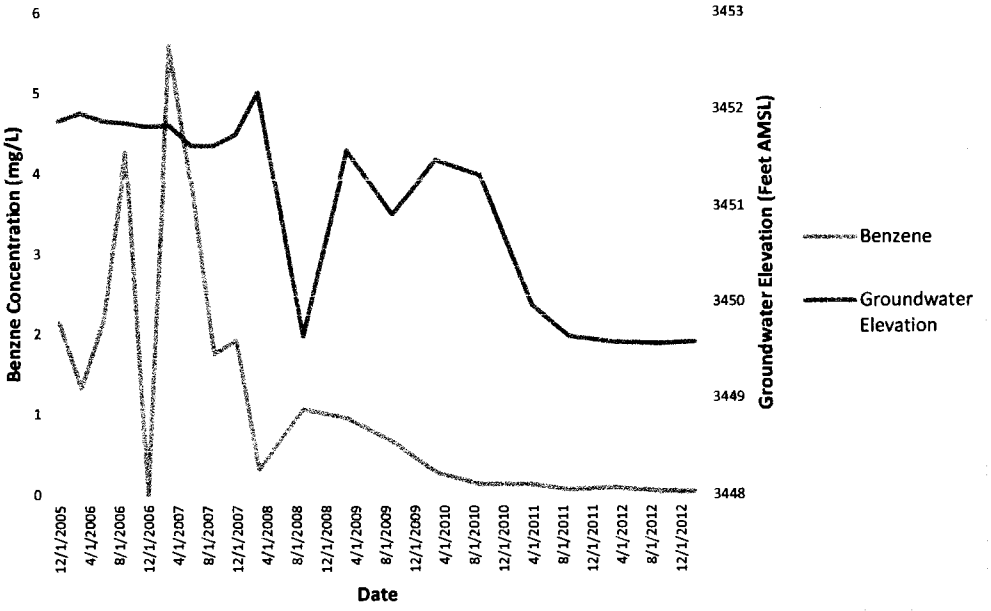
ANALYTICAL RESULTS MAP

FIGURE 4

Appendix A

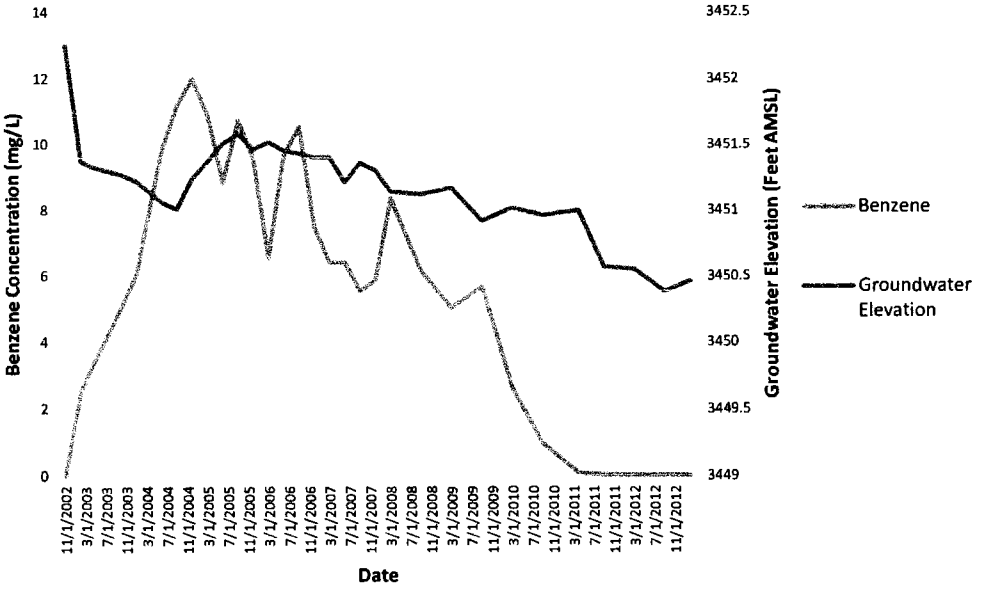
Benzene Concentration versus Time and Groundwater Elevation Graphs

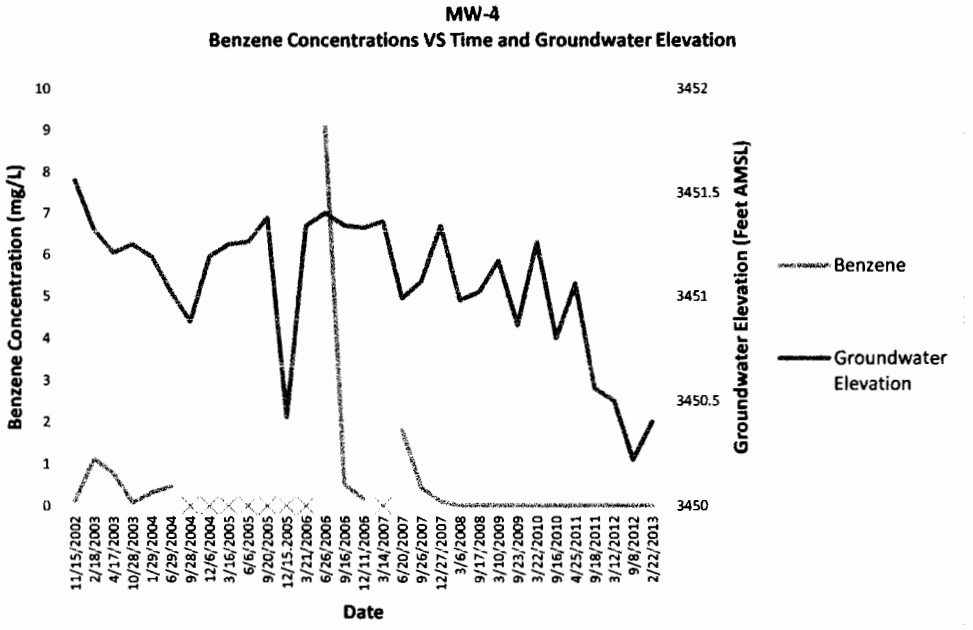
MW-1
Benzene Concentration VS Time and Groundwater Elevation



Note: LNAPL had been historically detected in MW-1 between November 15, 2002 and September 20, 2005.

MW-3
Benzene Concentration VS Time and Groundwater Elevation





Note: Dates that are marked with an X indicate that LNAPL was detected in the well and therefore, the well was not sampled.

Appendix B

Laboratory Analytical Report

Mountain States ACCUTEST LABORATORIES

03/04/13

Technical Report for

DCP Midstream, LP

TASMCOA:C Line

RC-GN00 Project -39026220

Accutest Job Number: D43746

Sampling Date: 02/22/13

Report to:

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

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

ACCREDITED IN ACCORDANCE WITH nelac

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.

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)

Sections: 1 2 3 4 5 6

Table of Contents

Sample Summary

DCP Midstream, LP

Job No: D43746

TASMCOA:C Line
Project No: RC-GN00 Project -39026220

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
D43746-1	02/22/13	11:15	AG	02/23/13	AQ	Ground Water	MW-1
D43746-2	02/22/13	10:55	AG	02/23/13	AQ	Ground Water	MW-2
D43746-3	02/22/13	08:50	AG	02/23/13	AQ	Ground Water	MW-3
D43746-4	02/22/13	09:30	AG	02/23/13	AQ	Ground Water	MW-4
D43746-5	02/22/13	09:50	AG	02/23/13	AQ	Ground Water	MW-5
D43746-6	02/22/13	08:30	AG	02/23/13	AQ	Ground Water	MW-7
D43746-6D	02/22/13	08:30	AG	02/23/13	AQ	Water Dup/MSD	MW-7
D43746-6M	02/22/13	08:30	AG	02/23/13	AQ	Water Matrix Spike	MW-7
D43746-7	02/22/13	10:05	AG	02/23/13	AQ	Ground Water	MW-8
D43746-8	02/22/13	11:40	AG	02/23/13	AQ	Ground Water	MW-9
D43746-9	02/22/13	00:00	AG	02/23/13	AQ	Ground Water	DUP
D43746-10	02/22/13	00:00	AG	02/23/13	AQ	Trip Blank Water	TRIP BLANK

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	DCP Midstream, LP	**Job No**	D43746
Site:	TASMCOA:C Line	**Report Date**	3/4/2013 8:16:18 AM

On 02/23/2013, 9 sample(s), 1 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 3.6 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D43746 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:** V7V1021

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D43746-6MS, D43746-6MSD 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

Job Number: D43746
Account: DCP Midstream, LP
Project: TASMCOA:C Line
Collected: 02/22/13

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
D43746-1	**MW-1**					
Benzene		0.0384	0.0010	0.00027	mg/l	SW846 8260B
Toluene		0.0047	0.0020	0.0010	mg/l	SW846 8260B
Ethylbenzene		0.0154	0.0020	0.00033	mg/l	SW846 8260B
Xylene (total)		0.0126	0.0030	0.0020	mg/l	SW846 8260B
D43746-2	**MW-2**					
No hits reported in this sample.						
D43746-3	**MW-3**					
Benzene		0.0065	0.0010	0.00027	mg/l	SW846 8260B
D43746-4	**MW-4**					
Benzene		0.00031 J	0.0010	0.00027	mg/l	SW846 8260B
D43746-5	**MW-5**					
No hits reported in this sample.						
D43746-6	**MW-7**					
Benzene		0.00027 J	0.0010	0.00027	mg/l	SW846 8260B
D43746-7	**MW-8**					
No hits reported in this sample.						
D43746-8	**MW-9**					
No hits reported in this sample.						
D43746-9	**DUP**					
Benzene		0.0050	0.0010	0.00027	mg/l	SW846 8260B
D43746-10	**TRIP BLANK**					
No hits reported in this sample.						

Mountain States ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	D43746-1	**Date Sampled:**	02/22/13
Matrix:	AQ - Ground Water	**Date Received:**	02/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	TASMCOA:C Line		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V18669.D	1	02/27/13	JL	n/a	n/a	V7V1021
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	0.0384	0.0010	0.00027	mg/l	
108-88-3	Toluene	0.0047	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	0.0154	0.0020	0.00033	mg/l	
1330-20-7	Xylene (total)	0.0126	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	100%		70-130%
460-00-4	4-Bromofluorobenzene	97%		69-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2		
Lab Sample ID:	D43746-2	**Date Sampled:**	02/22/13
Matrix:	AQ - Ground Water	**Date Received:**	02/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	TASMCOA:C Line		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V18670.D	1	02/27/13	JL	n/a	n/a	V7V1021
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	99%		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-3		
Lab Sample ID:	D43746-3	**Date Sampled:**	02/22/13
Matrix:	AQ - Ground Water	**Date Received:**	02/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	TASMCOA:C Line		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V18671.D	1	02/27/13	JL	n/a	n/a	V7V1021
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	0.0065	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	92%		62-130%
2037-26-5	Toluene-D8	97%		70-130%
460-00-4	4-Bromofluorobenzene	95%		69-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-4		
Lab Sample ID:	D43746-4	**Date Sampled:**	02/22/13
Matrix:	AQ - Ground Water	**Date Received:**	02/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	TASMCOA:C Line		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V18672.D	1	02/27/13	JL	n/a	n/a	V7V1021
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	0.00031	0.0010	0.00027	mg/l	J
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	99%		70-130%
460-00-4	4-Bromofluorobenzene	95%		69-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5		
Lab Sample ID:	D43746-5	**Date Sampled:**	02/22/13
Matrix:	AQ - Ground Water	**Date Received:**	02/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	TASMCOA:C Line		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V18673.D	1	02/27/13	JL	n/a	n/a	V7V1021
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	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:	MW-7		
Lab Sample ID:	D43746-6	**Date Sampled:**	02/22/13
Matrix:	AQ - Ground Water	**Date Received:**	02/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	TASMCOA:C Line		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V18668.D	1	02/27/13	JL	n/a	n/a	V7V1021
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	0.00027	0.0010	0.00027	mg/l	J
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	97%		62-130%
2037-26-5	Toluene-D8	99%		70-130%
460-00-4	4-Bromofluorobenzene	92%		69-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8		
Lab Sample ID:	D43746-7	**Date Sampled:**	02/22/13
Matrix:	AQ - Ground Water	**Date Received:**	02/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	TASMCOA:C Line		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V18674.D	1	02/27/13	JL	n/a	n/a	V7V1021
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	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-9		
Lab Sample ID:	D43746-8	**Date Sampled:**	02/22/13
Matrix:	AQ - Ground Water	**Date Received:**	02/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	TASMCOA:C Line		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V18675.D	1	02/27/13	JL	n/a	n/a	V7V1021
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	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:	DUP		
Lab Sample ID:	D43746-9	**Date Sampled:**	02/22/13
Matrix:	AQ - Ground Water	**Date Received:**	02/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	TASMCOA:C Line		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V18676.D	1	02/27/13	JL	n/a	n/a	V7V1021
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	0.0050	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	97%		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:	TRIP BLANK		
Lab Sample ID:	D43746-10	**Date Sampled:**	02/22/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	02/23/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	TASMCOA:C Line		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V18677.D	1	02/27/13	JL	n/a	n/a	V7V1021
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	97%		62-130%
2037-26-5	Toluene-D8	100%		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

Mountain States ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST LABORATORIES

4036 Youngfield Street, Wheat Ridge, CO 80033
TEL. 303-425-6021 FAX: 303-425-6854
www.accutest.com

PAGE 1 OF 1

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: D43746

Client / Reporting Information

Company Name: Tasman Geosciences
Street Address: 6899 Pecos Street Unit C
City: Denver CO 80221
Project Contact: Jim Dawe jimdawe@tasman-geo.com
Phone #: Cell 720-409-8791 cwasko@tasman-geo.com
Sampler(s) Name(s): Amber Groves

Project Information

Project Name: C LINE
Street: West of Oil Center
City: State:
Project #: RC - GN00 Project - 390262220
Client Purchase Order #:
Project Manager: Stephen Weathers 303-605-1718

Billing Information (If different from Report to)

Company Name: DCP Midstream
Street Address: PO Box 4870
City: Portland OR 97208-4870
Attention: Steve Weathers SWWeathers@dcpmidstream.com

Requested Analysis (see TEST CODE sheet)

Matrix Codes: 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; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	V8260BTX	MS/MSD for V8260BTX	LAB USE ONLY
	MW-1	N/A	2/22/13	11:15		GW	3	3								X		01
	MW-2	N/A	2/22/13	10:55		GW	3	3								X		02
	MW-3	N/A	2/22/13	8:50		GW	3	3								X		03
	MW-4	N/A	2/22/13	9:30		GW	3	3								X		04
	MW-5	N/A	2/22/13	9:50		GW	3	3								X		05
	MW-7	N/A	2/22/13	8:30		GW	3	3								X		06
	MW-8	N/A	2/22/13	10:05		GW	3	3								X		07
	MW-9	N/A	2/22/13	11:40		GW	3	3								X		08
						GW	3	3								X		~~09~~
	DUP	N/A	—	—		GW	3	3								X		09
	Trip Blank						1	1								X		10
	MS/MSD	N/A	2/22/13	8:35		GW	6	6									X	06 MS/MSD

Turnaround Time (Business days)

- [ ] Std. 15 Business Days
- [ ] Std. 10 Business Days
- [ ] 6 Day RUSH
- [ ] 3 Day Emergency
- [ ] 2 Day Emergency
- [ ] 1 Day Emergency
- [x] STD 5 business Days per contract

Emergency & Rush T/A data available VIA Labilink

Approved By (Accutest PM): / Date:

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [x] COMMBN
- [ ] COMMBN+
- [ ] State Forms Required
- [ ] Send Forms to State
- [ ] Report by Fax
- [x] Report by PDF
- [ ] EDD Format

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
Commercial BN = Results/QC/Narrative (+ = chromatograms)

Comments / Special Instructions

Email results to Steve Weathers 2/23/13

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		2/22/13 1545	FedEx	2		2
3	Relinquished by Sampler:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	[ ] Intact [ ] Not Intact	Preserved where applicable [ ] On Ice [x] Cooler Temp. 3.6

D43746: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D43746 **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: C LINE **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:	Infared 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

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D43746: Chain of Custody
Page 2 of 2

Mountain States ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: D43746
Account: DCPMCODN DCP Midstream, LP
Project: TASMCOA:C Line

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V7V1021-MB	7V18664.D	1	02/27/13	JL	n/a	n/a	V7V1021

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

D43746-1, D43746-2, D43746-3, D43746-4, D43746-5, D43746-6, D43746-7, D43746-8, D43746-9, D43746-10

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	95%	62-130%
2037-26-5	Toluene-D8	100%	70-130%
460-00-4	4-Bromofluorobenzene	95%	69-130%

Blank Spike Summary

Job Number: D43746
Account: DCPMCODN DCP Midstream, LP
Project: TASMCOA:C Line

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V7V1021-BS	7V18665.D	1	02/27/13	JL	n/a	n/a	V7V1021

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

D43746-1, D43746-2, D43746-3, D43746-4, D43746-5, D43746-6, D43746-7, D43746-8, D43746-9, D43746-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	46.4	93	70-130
100-41-4	Ethylbenzene	50	48.0	96	70-130
108-88-3	Toluene	50	46.9	94	70-130
1330-20-7	Xylene (total)	150	148	99	70-130

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D43746
Account: DCPMCODN DCP Midstream, LP
Project: TASMCOA:C Line

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D43746-6MS	7V18666.D	1	02/27/13	JL	n/a	n/a	V7V1021
D43746-6MSD	7V18667.D	1	02/27/13	JL	n/a	n/a	V7V1021
D43746-6	7V18668.D	1	02/27/13	JL	n/a	n/a	V7V1021

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

D43746-1, D43746-2, D43746-3, D43746-4, D43746-5, D43746-6, D43746-7, D43746-8, D43746-9, D43746-10

CAS No.	Compound	D43746-6 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	0.27	J	50	47.2	94	46.2	92	2	62-130/30
100-41-4	Ethylbenzene	ND		50	48.7	97	47.5	95	2	63-130/30
108-88-3	Toluene	ND		50	47.2	94	46.8	94	1	60-130/30
1330-20-7	Xylene (total)	ND		150	150	100	147	98	2	67-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D43746-6	Limits
17060-07-0	1,2-Dichloroethane-D4	97%	98%	97%	62-130%
2037-26-5	Toluene-D8	97%	98%	99%	70-130%
460-00-4	4-Bromofluorobenzene	102%	101%	92%	69-130%

* = Outside of Control Limits.

Appendix C

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-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	12/15.05	<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	

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	12/15.05	<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	

Notes:

1.) 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.

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

3.) 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.