

**1RP-401-0**

**2<sup>nd</sup> 2010 Semi Annual GW  
monitoring results**

**DATE:**

**December 06, 2010**



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

December 6, 2010

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

**RE: 2nd 2010 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 2010 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**

A handwritten signature in black ink, appearing to read "Stephen Weathers". It is placed over a horizontal line.

Stephen Weathers, PG  
Principal Environmental Specialist

cc: Larry Johnson, OCD Hobbs District Office (Copy on CD)  
Environmental Files

November 22, 2010

Mr. Stephen Weathers  
DCP Midstream, LP  
370 17<sup>th</sup> Street, Suite 2500  
Denver, CO 80202

Re: Second 2010 Semiannual Groundwater Monitoring Report  
DCP C-Line 50602 Release Location in Lea County New Mexico  
**Unit O, Section 31, Township 19 South, Range 37 East (1RP-401-0)**

Dear Mr. Weathers:

This report documents the second semiannual 2010 groundwater monitoring activities completed at the C-Line 50602 release location for DCP Midstream, LP (DCP). The monitoring activities were completed on September 16, 2010. The site is located in the southwestern quarter of the southeastern quarter (Unit O) of Section 31, Township 19 South, Range 37 East (Figure 1). The approximate coordinates are 32.5250 degrees 3 north, 103.2867 degrees west.

The groundwater-monitoring network includes the nine wells shown on Figure 2. Table 1 summarizes construction information for each well.

### SUMMARY OF MONITORING ACTIVITIES

The depth to water and free phase hydrocarbons (FPH), if present, were measured in each well prior to purging and sampling. None of the wells contained FPH. FPH has not been measured in MW-1 since June 2005 and in MW-2 since March 2007.

Eight of the nine wells were purged and sampled. Well MW-6 was not sampled because it is located down gradient from unaffected boundary wells MW-7, MW-8 and MW-9 so it does not provide useful information relative to this study.

The wells were purged using dedicated bailers until a minimum of three casing volumes of groundwater were removed, and the field parameters temperature, pH and conductivity stabilized, or until the water in the well bailed down. The well purging forms are attached. The affected purge water was disposed of at the DCP Linam Ranch facility.

Unfiltered samples were collected following well stabilization using the dedicated bailers. All of the samples were placed in an ice-filled chest immediately upon collection and delivered to the analytical laboratory (AccuTest Laboratory) using standard chain-of-custody protocol. The samples were analyzed for benzene, toluene, ethylbenzene and total xylenes (BTEX) using method SW-846 8260B. The analytical laboratory report is attached.

Matrix spike, matrix spike duplicate samples were collected from MW-7. A duplicate sample was collected from MW-3. The quality control QC evaluations completed for this event include:

- All of the samples were analyzed within the required holding times;
- All of the individual surrogate spikes were within their control limits;
- The method blank and blank spike evaluations were all acceptable;
- The relative percentage difference (RPD) values for the MW-3 primary and duplicate samples were all between 20 and 30 percent; and
- The matrix spike and matrix spike duplicate results were all within their respective control ranges and exhibited good agreement.

The information above indicates that the data is suitable for evaluating groundwater monitoring data.

## RESULTS AND INTERPRETATIONS

The fluid measurements are summarized in Table 2. The calculated groundwater elevations for all monitoring episodes are summarized in Table 3. Figure 3 includes hydrographs for all site wells. The water table elevations declined in all of the wells except MW-2.

Figure 4 shows the calculated groundwater contours as generated using the Surfer® program with the kriging option. The water table exhibits a consistent gradient toward the southeast. This pattern reflects the historic trends.

The BTEX results for this sampling event are summarized in Table 4. The constituents that exceed the New Mexico Water Quality Control Commission (NMWQCC) groundwater standard are highlighted as bold text. Examination of this table indicates that the BTEX constituents were only detected in MW-1 and the primary and duplicate samples from MW-3.

Figure 5 depicts the spatial event benzene distribution. Well MW-3 does not appear to be directly down-gradient from the remediated release area when evaluated relative to the groundwater flow path shown in Figure 4. The benzene concentration is also much higher than that measured in MW-1 that is directly down gradient from the release area.

Summaries of all of the data collected are tabulated in Table 5 for benzene, Table 6 for toluene, Table 7 for ethylbenzene and Table 8 for xylenes. The benzene concentrations are plotted versus time in Figure 6 for MW-1 and MW-3.

Mr. Stephen Weathers

November 22, 2010

Page 3

Groundwater sampling began in MW-1 in December 2005 after removal of the FPH was completed. The benzene concentration in MW-1 has decreased almost continuously since the middle of 2007. The concentration is now at its lowest value since monitoring began, and it is approaching the 0.01 mg/l NMWQCC groundwater standard.

Sampling in MW-3 began in November 2002 at the start of the project. The benzene concentration in this well have exhibited a decreasing trend since 2004, and it has decreased 83 percent since September 2009. The similar patterns in both wells indicate a substantial decrease in the extent of the dissolved-phase benzene plume.

## CONCLUSIONS AND RECOMMENDATIONS

Important conclusions for the C-Line site for this sampling event include:

1. FPH has not been measured in MW-1 or MW-2 for 3.5 years. This circumstance establishes that it has been removed.
2. The historic BTEX data establishes that natural bioremediation processes are attenuating the BTEX constituents down gradient from the source area where the original affected materials were removed.
3. The dissolved-phase BTEX concentrations continue to decline in affected wells MW-1 and MW-3, and concentrations in the remaining wells are all now below the practical quantitation limit. These results verify dissolved-phase plume contraction.

AEC recommends continued monitoring on a semi-annual basis to verify that these trends continue. The next monitoring event is scheduled for the first half of 2011. AEC will provide appropriate notification prior to the sampling activities.

Do not hesitate to contact me with any questions or comments on this report.

Respectfully submitted,

**AMERICAN ENVIRONMENTAL CONSULTING, LLC**

*Michael H. Stewart*

Michael H. Stewart, P.E., C.P.G.

Principal Engineer

MHS/tbm

attachments

TABLES

Table 1 – Summary of Well Construction Information

Well	Top of Casing Elevation	Ground Elevation	Screen Diameter	Screened Interval	Sand Interval	Total Depth
MW-1	3,541.21	3,538.64	4"	82.5-97.5	81-98	98
MW-2	3,540.91	3,537.70	2"	81-101	77-102	102
MW-3	3,541.41	3,539.30	2"	80-100	78-103	103
MW-4	3,541.40	3,538.51	2"	80-100	78-103	103
MW-5	3,541.45	3,538.69	2"	80-100	78-102	102
MW-6	3,543.98	3,540.94	2"	79-99	75-102	102
MW-7	3,542.42	3,540.20	2"	82.5-97.5	77-98*	98
MW-8	3,540.29	3,538.08	2"	82.5-97.5	81-98	98
MW-9	3,539.62	3,537.33	2"	82.5-97.5	81-98	98

All units in feet except as noted

\* Well MW-7 has a natural sand pack from 93 to 98 feet

Table 2 – Second Half 2010 Fluid Measurements

Well	Depth To Water	Water Table Elevation
MW-1	91.35	3451.31
MW-2	89.36	3451.55
MW-3	90.45	3450.96
MW-4	90.60	3450.80
MW-5	90.76	3450.69
MW-6	96.13	3447.85
MW-7	92.14	3450.28
MW-8	90.56	3449.73
MW-9	89.96	3449.66

Units are feet

Table 3 – Summary of Corrected Groundwater Elevations

Well	Nov. 02	Feb. 03	Apr. 03	Oct. 03	Jan. 04	Jun. 04	Sep. 04	Dec. 04	Mar. 05	Jun. 05	Sep. 05	Dec 05	Mar 06
MW-1	3452.01	3451.60	3451.73	3451.35	3451.34	3451.23	3451.19	3450.97	3451.22	3451.99	3451.96	3451.88	3451.96
MW-2	3452.11	3451.97	3451.96	3451.87	3451.84	3451.73	3451.72	3451.91	3452.08	3452.22	3452.19	3452.10	3452.18
MW-3	3452.25	3451.37	3451.33	3451.27	3451.22	3451.06	3451.01	3451.24	3451.37	3451.51	3451.58	3451.46	3451.52
MW-4	3451.56	3451.32	3451.21	3451.25	3451.19	3451.02	3450.88	3451.19	3451.25	3451.26	3451.38	3450.42	3451.34
MW-5	3451.39	3451.21	3451.09	3451.20	3451.11	3450.86	3450.75	3451.10	3451.14	3451.35	3451.18	3451.32	3451.18
MW-6	3448.77	3448.51	3448.38	3448.46	3448.37	3448.14	3448.03	3448.91	3448.64	3448.62	3448.44	3448.50	3448.26
MW-7			3450.76	3450.72	3450.57	3450.47	3450.70	3450.80	3450.80	3450.99	3450.99	3450.86	3450.86
MW-8			3450.35	3450.22	3450.03	3449.85	3450.21	3450.23	3450.41	3450.24	3450.40	3450.40	3450.18
MW-9			3450.21	3450.03	3449.81	3449.67	3450.13	3450.11	3450.38	3450.04	3450.25	3449.99	

Well	Jun 06	Sep-06	Dec-06	Mar-07	Jun-07	Sep-07	Dec-07	Mar-08	Sep-08	Mar-09	Sep-09	Mar-10	Sep-10
MW-1	3451.88	3451.86	3451.82	3451.83	3451.64	3451.62	3451.74	3452.17	3449.64	3451.57	3450.91	3451.47	3451.31
MW-2	3452.13	3452.12	3452.06	3452.07	3452.04	3452.13	3451.91	3451.87	3451.80	3451.87	3451.74	3451.73	3451.55
MW-3	3451.45	3451.43	3451.40	3451.40	3451.21	3451.36	3451.30	3451.14	3451.12	3451.17	3450.92	3451.02	3450.96
MW-4	3451.40	3451.34	3451.33	3451.36	3450.99	3451.07	3451.34	3450.98	3451.02	3451.17	3450.86	3451.26	3450.80
MW-5	3451.16	3451.16	3451.22	3451.27	3450.87	3451.05	3451.32	3450.87	3450.85	3451.09	3450.72	3450.97	3450.69
MW-6	3448.28	3448.27	3448.30	3448.36	3447.97	3448.15	3448.40	3448.04	3447.96	3448.12	3447.81	3447.89	3447.85
MW-7	3450.81	3450.83	3450.78	3450.80	3450.52	3450.72	3450.77	3450.51	3450.53	3450.55	3450.34	3450.47	3450.28
MW-8	3450.14	3450.21	3450.28	3450.35	3449.86	3450.08	3450.32	3449.91	3449.81	3450.10	3449.66	3449.98	3449.73
MW-9	3449.92	3450.02	3450.15	3450.19	3449.79	3449.95	3450.26	3449.80	3449.62	3450.02	3449.57	3449.74	3449.66

Notes:

All units in feet.

Blank cells: wells not installed

The groundwater elevation values for MW-1 and MW-4 were corrected when free phase hydrocarbons were present using the following formula (all values in feet):

$$GWE_{\text{corr}} = MGWE + (PT * PD) \text{ where}$$

- MGWE is the actual measured groundwater elevation;
- PT is the measured free-phase hydrocarbon thickness; and
- PD is the free phase hydrocarbon density (assumed 0.7).

Table 4 – Second Semiannual 2010 Results

Well	Benzene	Toluene	Ethylbenzene	Total Xylenes
NMWQCC Standards	0.01	0.75	0.75	0.62
MW-1	<b>0.127</b>	0.0319	0.0334	0.0399
MW-2	<0.001	<0.002	<0.002	<0.004
MW-3	<b>1.05</b>	0.205	0.104	0.1197
MW-3 (duplicate)	<b>0.861</b>	0.152	0.0792	0.0921
MW-4	<0.001	<0.002	<0.002	<0.004
MW-5	<0.001	<0.002	<0.002	<0.004
MW-6	<0.001	<0.002	<0.002	<0.004
MW-7	<0.001	<0.002	<0.002	<0.004
MW-8	<0.001	<0.002	<0.002	<0.004
MW-9	<0.001	<0.002	<0.002	<0.004

Notes:

1. All units mg/l
2. NS: Well not sampled
3. NMWQCC Standards: New Mexico Water Quality Control Commission groundwater standards

Table 5 - Summary of Historical Analytical Results for Benzene

	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9
11/15/02	FPH	<0.001	0.017	0.114	<0.001	<0.001			
02/18/03	FPH	0.29	2.52	1.12	0.328	0.001			
04/17/03	FPH	0.175	3.18	0.782	0.128	0.002			
10/28/03	FPH	0.018	5.01	0.077	0.164	<0.001	<0.001	<0.001	<0.001
01/29/04	FPH	0.0848	6.06	0.320	0.226	0.00382	<0.001	0.00139	<0.001
06/29/04	FPH	0.0582	9.84	0.461	0.249	<0.00019	0.000456	0.00248	<0.00019
09/28/04	FPH	0.329	11.2	FPH	0.0336	<0.001	<0.001	<0.001	<0.001
12/06/04	FPH	0.0355	12.0	FPH	0.0137	<0.001	<0.001	<0.001	<0.001
03/16/05	FPH	0.00523	10.9	FPH	0.00371	<0.001	<0.001	<0.001	<0.001
06/06/05	FPH	0.0017	8.83	FPH	0.00169	<0.001	0.000695	0.000955	<0.001
09/20/05	FPH	<0.001	10.75	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
12/15/05	2.14	<0.001	9.57	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
03/21/06	1.32	<0.001	6.55	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
06/26/06	2.17	<0.001	9.67	9.08	<0.001	<0.001	<0.001	<0.001	<0.001
09/16/06	4.27	<0.001	10.55	0.51	<0.001	<0.001	<0.001	<0.001	<0.001
12/11/06	<0.001	<0.001	7.49	0.17	<0.001	<0.001	<0.001	<0.001	<0.001
03/14/07	5.59	<0.001	6.41	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
06/20/07	3.82	<0.001	6.41	1.80	<0.001	NS	<0.001	<0.001	<0.001
09/26/07	1.75	<0.001	5.54	0.43	<0.001	NS	<0.001	<0.001	<0.001
12/27/07	1.92	<0.002	5.89	0.11	<0.002	NS	<0.002	<0.002	<0.002
03/06/08	0.31	<0.002	8.36	<0.002	<0.002	NS	<0.002	<0.002	<0.002
09/17/08	1.06	<0.002	6.14	0.0146	0.00073	NS	<0.002	<0.002	<0.002
03/10/09	0.942	<0.002	5.03	0.0141	0.0005J	NS	<0.002	<0.002	<0.002
9/23/09	0.658	<0.002	5.68	0.0022	<0.002	NS	<0.002	<0.002	<0.002
3/22/10	0.276	<0.002	2.615	0.0129	<0.002	NS	<0.002	<0.002	<0.002
9/16/10	0.127	<0.001	0.9555	<0.001	<0.001	NS	<0.001	<0.001	<0.001

Notes:

1. All units mg/l.
2. Duplicate results averaged.
3. "J" qualifiers are not included in summary
4. Wells not installed where blank cells are present.
5. FPH: free phase hydrocarbons present so no sample collected
6. NS: Well not sampled, see text for explanation

Table 6 - Summary of Historical Analytical Results for Toluene

	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9
11/15/02	FPH	<0.001	0.005	0.039	<0.001	<0.001			
02/18/03	FPH	0.014	0.634	0.436	0.056	<0.001			
04/17/03	FPH	0.007	0.513	0.45	0.007	<0.001			
10/28/03	FPH	0.001	0.275	0.029	0.048	<0.001	<0.001	<0.001	<0.001
01/29/04	FPH	0.0350	0.506	0.169	0.064	0.00140	<0.001	0.00109	<0.001
06/29/04	FPH	0.000219	0.0917	0.0202	0.00172	<0.00014	<0.00014	<0.00014	<0.00014
09/28/04	FPH	0.0174	0.0218	FPH	0.00281	<0.001	<0.001	<0.001	<0.001
12/06/04	FPH	0.0017	0.0438	FPH	0.00318	<0.001	<0.001	<0.001	<0.001
03/16/05	FPH	<0.001	0.013	FPH	.00038	<0.001	<0.001	<0.001	<0.001
06/06/05	FPH	<0.001	0.056	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
9/20/05	FPH	<0.001	0.1355	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
12/15/05	1.37	<0.001	0.414	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
03/21/06	0.931	<0.001	1.575	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
06/26/06	1.42	<0.001	2.93	5.73	<0.001	<0.001	<0.001	<0.001	<0.001
09/16/06	0.508	<0.001	3.48	0.0415	<0.001	<0.001	<0.001	<0.001	<0.001
12/11/06	<0.001	<0.001	3.35	0.139	<0.001	<0.001	<0.001	<0.001	<0.001
03/14/07	0.232	<0.001	2.75	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
06/20/07	0.43	<0.001	3.49	0.98	<0.001	NS	<0.001	<0.001	<0.001
09/26/07	0.097	<0.001	2.555	0.35	<0.001	NS	<0.001	<0.001	<0.001
12/27/07	0.0372	<0.002	2.81	0.145	<0.002	NS	<0.002	<0.002	<0.002
03/06/08	0.07	<0.002	4.36	<0.002	<0.002	NS	<0.002	<0.002	<0.002
09/17/08	0.0555	<0.002	3.3	0.0068	0.0007	NS	<0.002	<0.002	<0.002
03/10/09	0.0178	<0.002	2.5	0.0178	<0.002	NS	<0.002	<0.002	<0.002
9/23/09	0.0197	<0.002	4.32	<0.002	<0.002	NS	<0.002	<0.002	<0.002
3/22/10	0.016	<0.002	1.475	0.0255	0.0037	NS	<0.002	<0.002	<0.002
9/16/10	0.0319	<0.002	0.1785	<0.002	<0.002	NS	<0.002	<0.002	<0.002

Notes:

1. All units mg/l,
2. Duplicate results averaged.
3. "J" qualifiers are not included in summary
4. Wells not installed where blank cells are present.
5. FPH: free phase hydrocarbons present so no sample collected
6. NS: Well not sampled. see text for explanation

Table 7 – Summary of Historical Analytical Results for Ethylbenzene

	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9
11/15/02	FPH	<0.001	<0.001	0.002	<0.001	<0.001			
02/18/03	FPH	0.001	0.021	0.022	0.004	<0.001			
04/17/03	FPH	<0.001	0.028	0.029	<0.001	<0.001			
10/28/03	FPH	<0.001	0.031	0.002	0.002	<0.001	<0.001	<0.001	<0.001
01/29/04	FPH	0.00292	0.0679	0.0203	0.00404	0.00133	<0.001	0.00112	<0.001
06/29/04	FPH	0.00534	0.0873	0.352	0.0603	<0.00013	<0.00013	0.000633	<0.00013
09/28/04	FPH	<0.001	0.105	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
12/06/04	FPH	<0.001	0.154	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
03/16/05	FPH	<0.001	0.150	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
06/06/05	FPH	<0.001	0.1535	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
09/20/05	FPH	<0.001	0.288	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
12/15/05	0.313	<0.001	0.173	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
03/21/06	0.419	<0.001	0.4085	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
06/26/06	0.534	<0.001	0.0333	1.03	<0.001	<0.001	<0.001	<0.001	<0.001
09/16/06	0.153	<0.001	0.288	0.21	<0.001	<0.001	<0.001	<0.001	<0.001
12/11/06	<0.001	<0.001	0.391	0.111	<0.001	<0.001	<0.001	<0.001	<0.001
03/14/07	0.453	<0.001	0.3185	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
06/20/07	0.40	<0.001	0.52	0.61	<0.001	NS	<0.001	<0.001	<0.001
09/26/07	0.37	<0.001	0.35	0.19	<0.001	NS	<0.001	<0.001	<0.001
12/27/07	0.278	<0.002	0.316	0.0837	<0.002	NS	<0.002	<0.002	<0.002
03/06/08	0.94	<0.002	0.57	<0.002	<0.002	NS	<0.002	<0.002	<0.002
09/17/08	0.239	<0.002	0.386	0.0703	<0.002	NS	<0.002	<0.002	<0.002
03/10/09	0.224	<0.002	0.2945	0.0618	<0.002	NS	<0.002	<0.002	<0.002
9/23/09	0.112	<0.002	0.549	0.0243	<0.002	NS	<0.002	<0.002	<0.002
3/22/10	0.0147	<0.002	0.218	0.0107	<0.002	NS	<0.002	<0.002	<0.002
9/16/10	0.0334	<0.002	0.0916	<0.002	<0.002	NS	<0.002	<0.002	<0.002

Notes:

1. All units mg/l.
2. Duplicate results averaged.
3. "J" qualifiers are not included in summary
4. Wells not installed where blank cells are present.
5. FPH: free phase hydrocarbons present so no sample collected
6. NS: Well not sampled, see text for explanation

Table 8 – Summary of Historical Analytical Results for Xylenes

	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9
11/15/02	FPH	<0.001	<0.001	0.003	<0.001	<0.001			
02/18/03	FPH	0.001	0.064	0.032	0.004	<0.001			
04/17/03	FPH	<0.001	0.1	0.055	<0.001	<0.001			
10/28/03	FPH	<0.001	0.083	0.008	0.004	<0.001	<0.001	<0.001	<0.001
01/29/04	FPH	0.00474	0.0849	0.053	0.0074	0.00194	<0.001	0.00217	<0.001
06/29/04	FPH	0.001	0.02404	0.074	0.004	<0.0002	<0.0002	<0.0002	<0.0002
09/28/04	FPH	<0.001	0.0213	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
12/06/04	FPH	<0.001	0.0237	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
03/16/05	FPH	<0.001	0.02842	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
06/06/05	FPH	<0.001	0.0502	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
09/20/05	FPH	<0.001	0.221	FPH	<0.001	<0.001	<0.001	<0.001	0.00105
12/15/05	1.334	<0.001	0.177	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
03/21/06	1.379	<0.001	0.9015	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
06/26/06	1.722	<0.001	0.414	5.69	<0.001	<0.001	<0.001	<0.001	<0.001
09/16/06	0.323	<0.001	0.384	1.028	<0.001	<0.001	<0.001	<0.001	<0.001
12/11/06	<0.001	<0.001	0.557	0.466	<0.001	<0.001	<0.001	<0.001	<0.001
03/14/07	0.27	<0.001	0.501	FPH	<0.001	<0.001	<0.001	<0.001	<0.001
06/20/07	0.79	<0.002	0.78	2.65	<0.002	NS	<0.002	<0.002	<0.002
09/26/07	0.47	<0.002	0.515	0.93	<0.002	NS	<0.002	<0.002	<0.002
12/27/07	0.0736	<0.006	0.4615	0.425	<0.006	NS	<0.006	<0.006	<0.006
03/06/08	1.58	<0.006	0.99	<0.006	<0.006	NS	<0.006	<0.006	<0.006
09/17/08	0.0751	<0.006	0.674	0.081	<0.006	NS	<0.006	<0.006	<0.006
03/10/09	0.0926	<0.006	0.913	0.0863	<0.006	NS	<0.006	<0.006	<0.006
9/23/09	0.103	<0.006	1.36	0.0186	<0.006	NS	<0.006	<0.006	<0.006
3/22/10	0.0557	<0.006	0.5415	0.0574	0.0076	NS	<0.006	<0.006	<0.006
9/16/10	0.0399	<0.004	0.1197	0.0921	<0.004	NS	<0.004	<0.004	<0.004

Notes:

1. All units mg/l.
2. Duplicate results averaged.
3. "J" qualifiers are not included in summary
4. Wells not installed where blank cells are present,
5. FPH: free phase hydrocarbons present so no sample collected
6. NS: Well not sampled, see text for explanation

## FIGURES

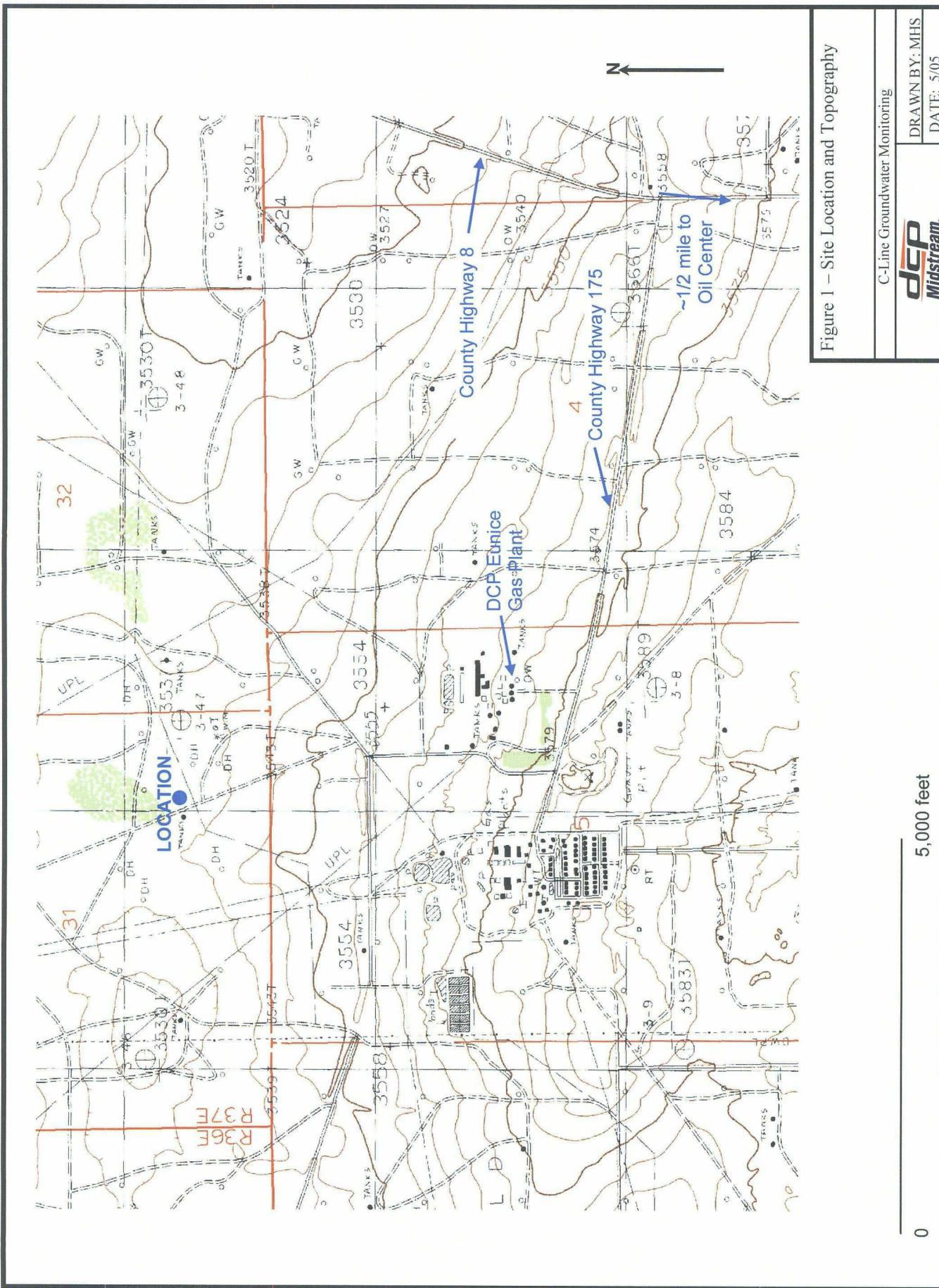


Figure 1 – Site Location and Topography

C-Line Groundwater Monitoring	DRAWN BY: MHS
<b>dcf Midstream</b>	DATE: 5/05

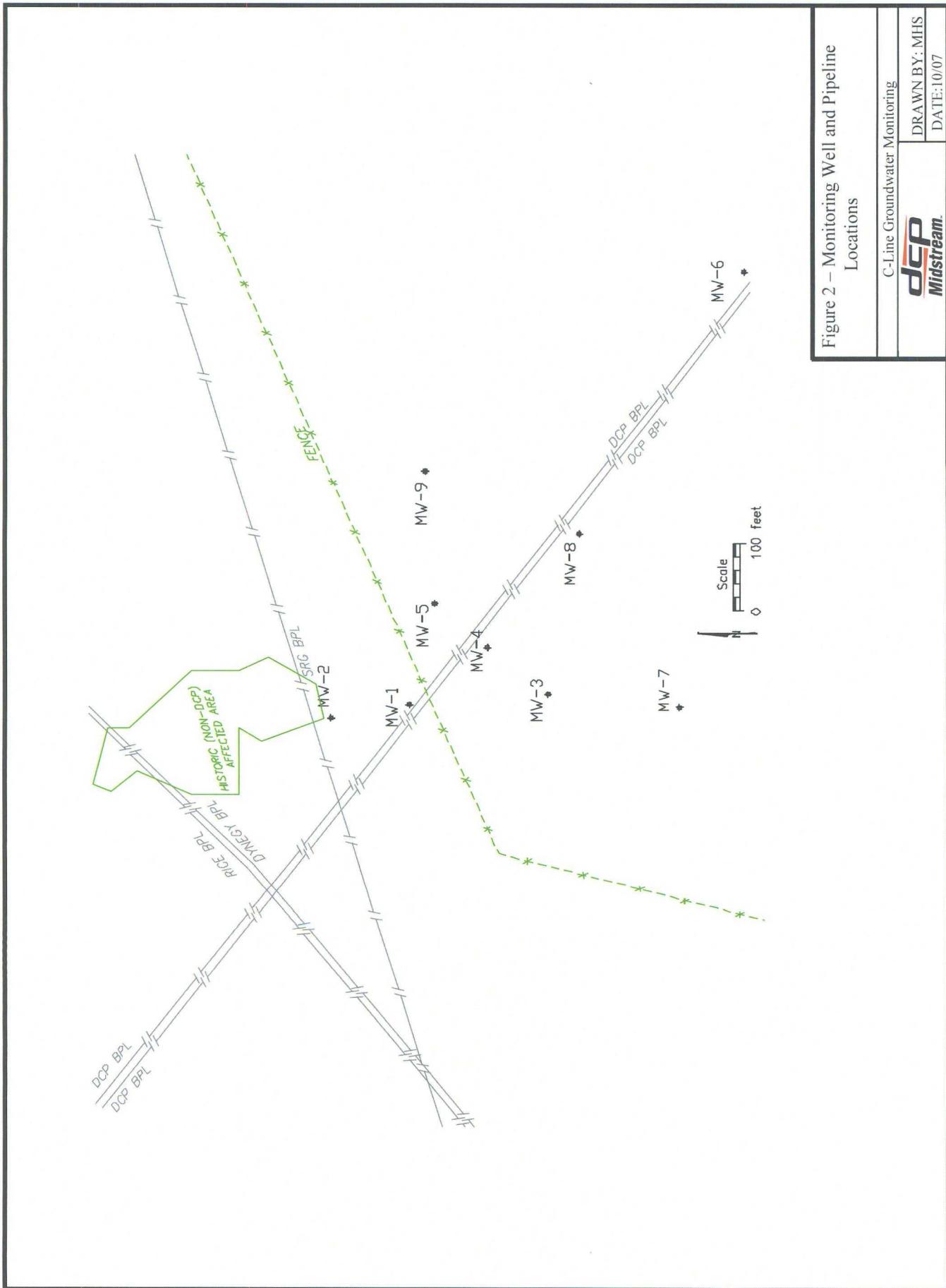
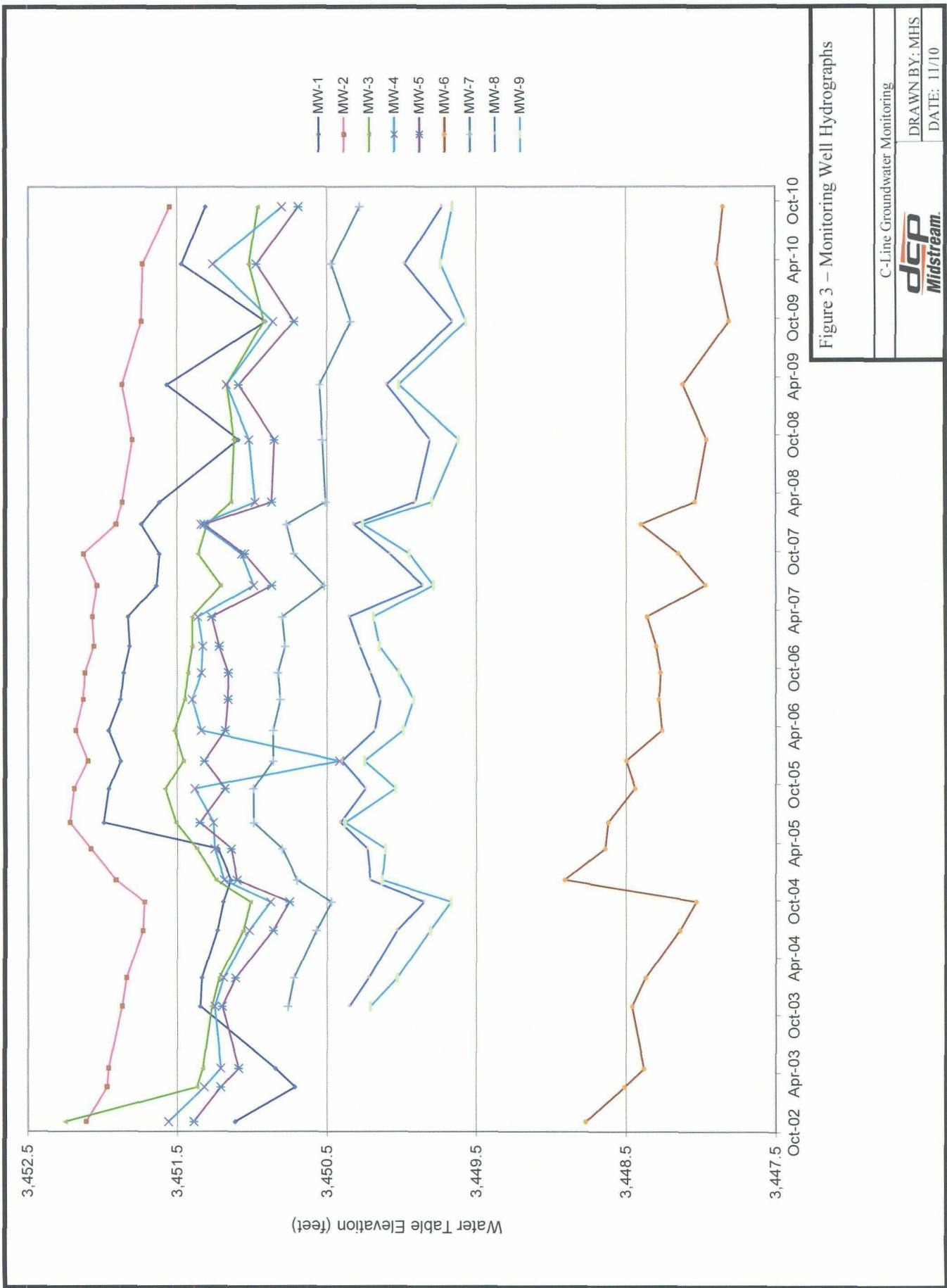
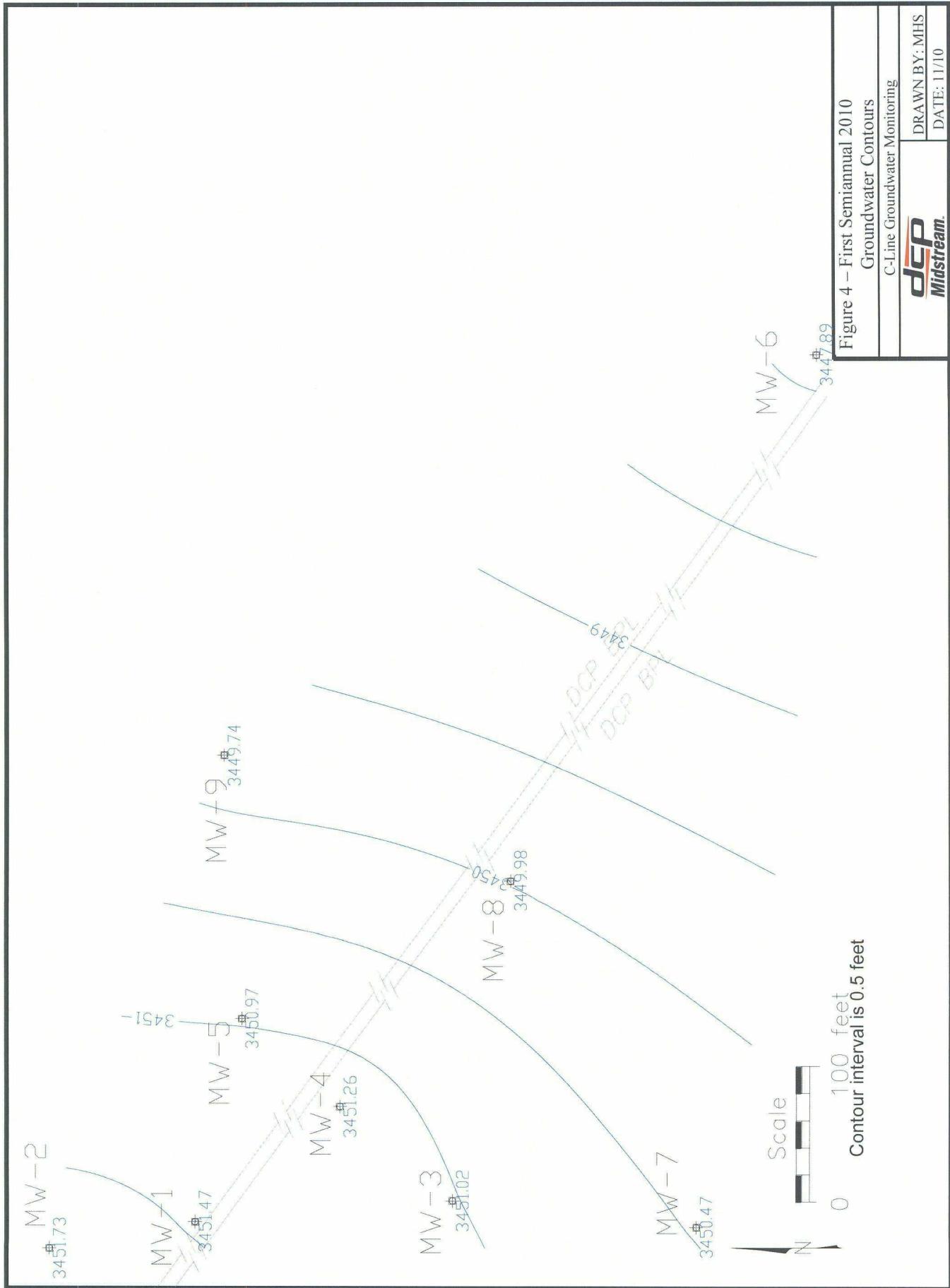


Figure 2 – Monitoring Well and Pipeline Locations





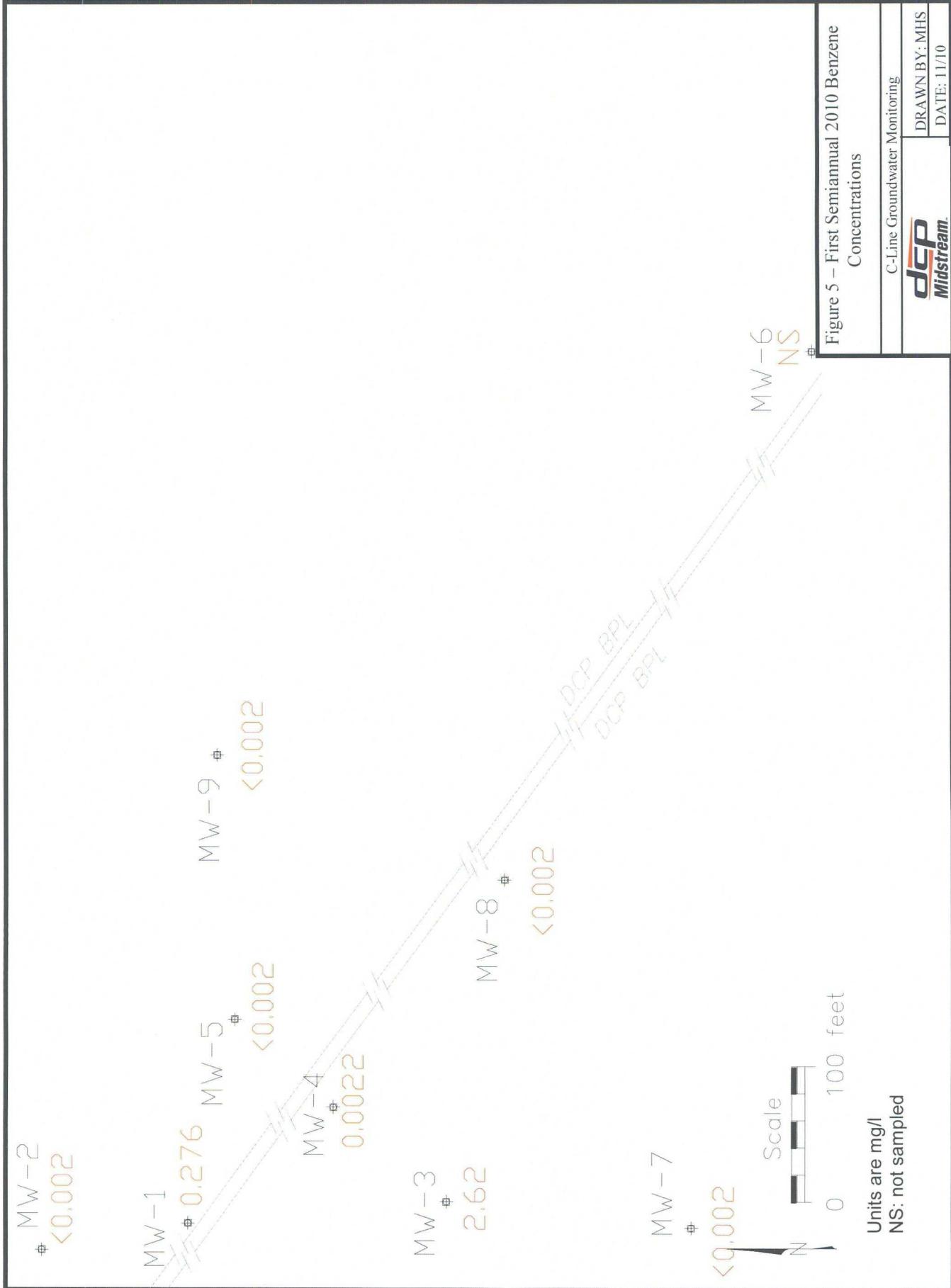


Figure 5 – First Semiannual 2010 Benzene Concentrations

C-Line Groundwater Monitoring



DRAWN BY: MHS

DATE: 11/10

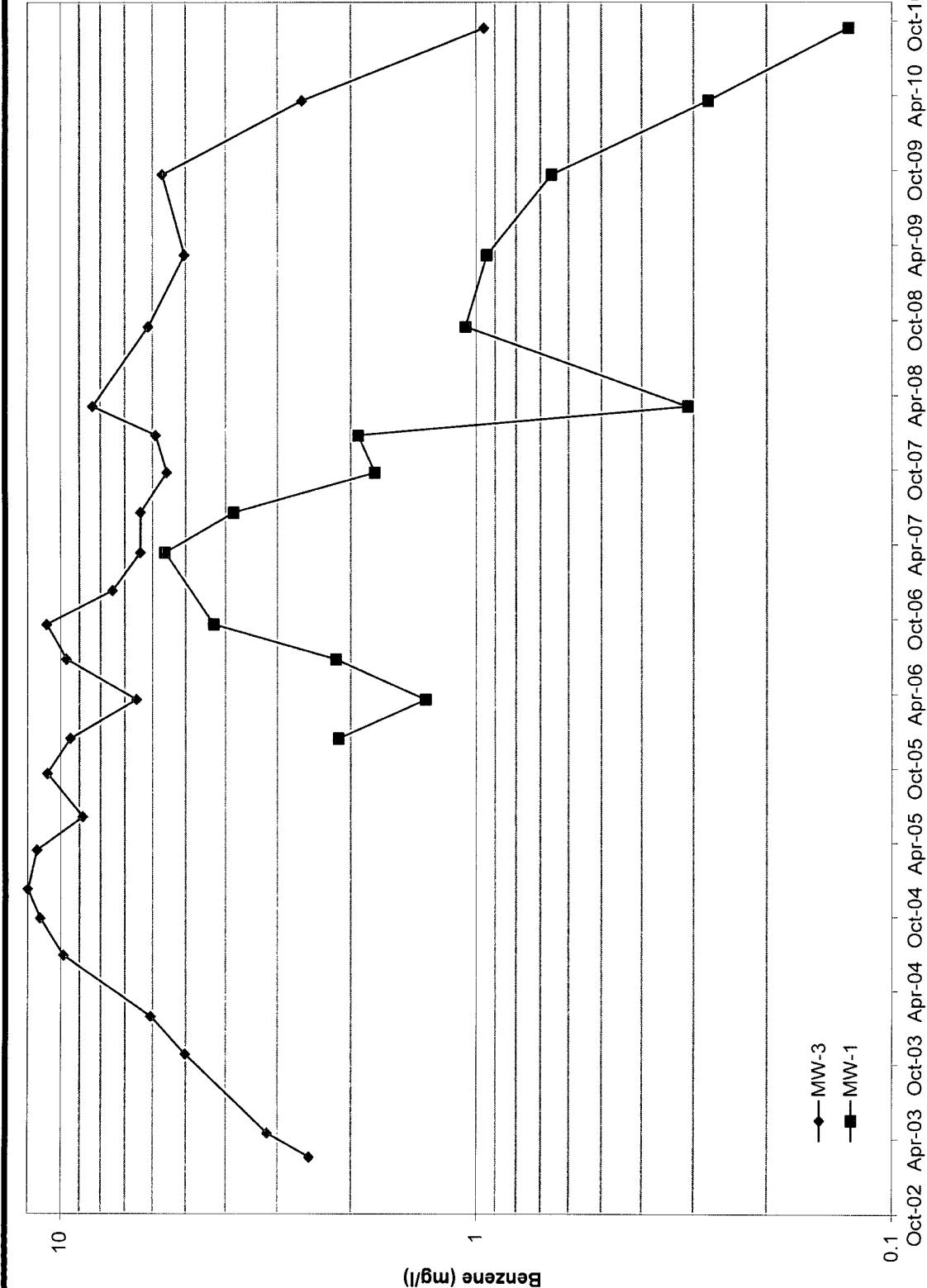


Figure 6 – Benzene Concentrations in  
MW-1 and MW-3

C-Line Groundwater Monitoring

**MDP**  
Midstream

DRAWN BY: MHS

DATE: 11/10

WELL SAMPLING DATA  
AND  
ANALYTICAL LABORATORY REPORT

# WELL SAMPLING DATA FORM

CLIENT: DCP Midstream WELL ID: MW-1  
SITE NAME: C Line DATE: 9/16/2010  
PROJECT NO.:  SAMPLER: M Stewart/ N Quevedo

PURGING METHOD:  Hand Bailed  Pump If Pump, Type: \_\_\_\_\_

SAMPLING METHOD:  Disposable Bailer  Direct from Discharge Hose  Other: \_\_\_\_\_

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

Gloves  Alconox  Distilled Water Rinse  Other: \_\_\_\_\_

TOTAL DEPTH OF WELL: 101.50 Feet

DEPTH TO WATER: 91.35 Feet

HEIGHT OF WATER COLUMN: 10.15 Feet

WELL DIAMETER: 4.0 Inch

19.9 Minimum Gallons to  
purge 3 well volumes  
(Water Column Height x 1.96)

TIME	VOLUME PURGED	TEMP. °C	COND. mS/cm	pH	DO mg/L	Turb	PHYSICAL APPEARANCE AND REMARKS
1100	15.0	26	250	4.49			Bailed down at 15 gallons
	15.0	Total Vol (gal)					

SAMPLE NO.: MW-1

ANALYSES: BTEX (8260)

COMMENTS: No field measurements due to meter problems.

# WELL SAMPLING DATA FORM

CLIENT: DCP Midstream WELL ID: MW-2  
SITE NAME: C Line DATE: 9/16/2010  
PROJECT NO. SAMPLER: M Stewart/ N Quevedo

PURGING METHOD:  Hand Bailed  Pump If Pump, Type: \_\_\_\_\_

SAMPLING METHOD:  Disposable Bailer  Direct from Discharge Hose  Other: \_\_\_\_\_

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

Gloves  Alconox  Distilled Water Rinse  Other: \_\_\_\_\_

TOTAL DEPTH OF WELL: 100.94 Feet

DEPTH TO WATER: 89.36 Feet

HEIGHT OF WATER COLUMN: 11.58 Feet

WELL DIAMETER: 2.0 Inch

5.7 Minimum Gallons to  
purge 3 well volumes  
(Water Column Height x 0.49)

TIME	VOLUME PURGED	TEMP. °F	COND. mS/cm	pH	DO mg/L	Turb	PHYSICAL APPEARANCE AND REMARKS
	2.0	25.5	2.57	7.08			
	4.0	23.6	2.546	7.34			
1120	6.0	23.0	2.50	7.13			
	6.0	Total Vol (gal)					

SAMPLE NO.: MW-2

ANALYSES: BTEX (8260)

COMMENTS: \_\_\_\_\_

\_\_\_\_\_

# WELL SAMPLING DATA FORM

CLIENT: DCP Midstream WELL ID: MW-3  
 SITE NAME: C Line DATE: 9/16/2010  
 PROJECT NO. SAMPLER: M Stewart/ N Quevedo

PURGING METHOD:  Hand Bailed  Pump If Pump, Type: \_\_\_\_\_

SAMPLING METHOD:  Disposable Bailer  Direct from Discharge Hose  Other: \_\_\_\_\_

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

Gloves  Alconox  Distilled Water Rinse  Other: \_\_\_\_\_

TOTAL DEPTH OF WELL: 102.44 Feet

DEPTH TO WATER: 90.45 Feet

HEIGHT OF WATER COLUMN: 11.99 Feet

WELL DIAMETER: 2.0 Inch

5.9 Minimum Gallons to  
purge 3 well volumes  
(Water Column Height x 0.49)

TIME	VOLUME PURGED	TEMP. °C	COND. mS/cm	pH	DO mg/L	Turb	PHYSICAL APPEARANCE AND REMARKS
2.0	20.3	2.321	7.26				
4.0	20.3	2.32	7.34				
6.0	20.3	2.32	7.36				
6.0	Total Vol (gal)						

SAMPLE NO.: MW-3

ANALYSES: BTEX (8260)

COMMENTS: Collected Duplicate Sample

# WELL SAMPLING DATA FORM

CLIENT: DCP MidstreamWELL ID: MW-4SITE NAME: C LineDATE: 9/16/2010PROJECT NO. SAMPLER: M Stewart/ N QuevedoPURGING METHOD:  Hand Bailed  Pump If Pump, Type: \_\_\_\_\_SAMPLING METHOD:  Disposable Bailer  Direct from Discharge Hose  Other: \_\_\_\_\_

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

 Gloves  Alconox  Distilled Water Rinse  Other: \_\_\_\_\_TOTAL DEPTH OF WELL: 103.42 FeetDEPTH TO WATER: 90.6 FeetHEIGHT OF WATER COLUMN: 12.82 FeetWELL DIAMETER: 2.0 Inch6.3 Minimum Gallons to  
purge 3 well volumes  
(Water Column Height x 0.49)

TIME	VOLUME PURGED	TEMP. °C	COND. mS/cm	pH	DO mg/L	Turb	PHYSICAL APPEARANCE AND REMARKS
2.0	21	2.488	7.59				
4	21.1	2.512	7.51				
6	21.3	2.642	7.55				
6.0	:Total Vol (gal)						

SAMPLE NO.: MW-4ANALYSES: BTEX (8260)

COMMENTS: \_\_\_\_\_

\_\_\_\_\_

## WELL SAMPLING DATA FORM

CLIENT: DCP MidstreamWELL ID: MW-5SITE NAME: C LineDATE: 9/16/2010PROJECT NO. SAMPLER: M Stewart/ N QuevedoPURGING METHOD:  Hand Bailed  Pump If Pump, Type: \_\_\_\_\_SAMPLING METHOD:  Disposable Bailer  Direct from Discharge Hose  Other: \_\_\_\_\_

## DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

 Gloves  Alconox  Distilled Water Rinse  Other: \_\_\_\_\_TOTAL DEPTH OF WELL: 102.05 FeetDEPTH TO WATER: 90.76 FeetHEIGHT OF WATER COLUMN: 11.29 FeetWELL DIAMETER: 2.0 Inch5.5 Minimum Gallons to  
purge 3 well volumes  
(Water Column Height x 0.49)

TIME	VOLUME PURGED	TEMP. °C	COND. mS/cm	pH	DO mg/L	Turb	PHYSICAL APPEARANCE AND REMARKS
	2.0	21	3.05	7.34			
	4.0	21.4	2.9	7.51			
930	6.0	21.4	2.82	7.33			
	6.0	:Total Vol (gal)					

SAMPLE NO.: MW-5ANALYSES: BTEX (8260)

COMMENTS: \_\_\_\_\_

\_\_\_\_\_

# WELL SAMPLING DATA FORM

CLIENT: DCP Midstream WELL ID: MW-6  
SITE NAME: C Line DATE: 9/16/2010  
PROJECT NO. SAMPLER: M Stewart/ N Quevedo

PURGING METHOD:  Hand Bailed  Pump If Pump, Type: \_\_\_\_\_

SAMPLING METHOD:  Disposable Bailer  Direct from Discharge Hose  Other: \_\_\_\_\_

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

Gloves  Alconox  Distilled Water Rinse  Other: \_\_\_\_\_

TOTAL DEPTH OF WELL: 103.20 Feet

DEPTH TO WATER: 96.13 Feet

HEIGHT OF WATER COLUMN: 7.07 Feet

WELL DIAMETER: 2.0 Inch

3.5 Minimum Gallons to  
purge 3 well volumes  
(Water Column Height x 0.49)

TIME	VOLUME PURGED	TEMP. °C	COND. mS/cm	pH	DO mg/L	Turb	PHYSICAL APPEARANCE AND REMARKS
	0.0	:Total Vol (gal)					

SAMPLE NO.: MW-6

ANALYSES: BTEX (8260)

COMMENTS: Did Not Purge & Sample

# WELL SAMPLING DATA FORM

CLIENT: DCP Midstream WELL ID: MW-7  
 SITE NAME: C Line DATE: 9/16/2010  
 PROJECT NO. SAMPLER: M Stewart/ N Quevedo

PURGING METHOD:  Hand Bailed  Pump If Pump, Type: \_\_\_\_\_

SAMPLING METHOD:  Disposable Bailer  Direct from Discharge Hose  Other: \_\_\_\_\_

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

Gloves  Alconox  Distilled Water Rinse  Other: \_\_\_\_\_

TOTAL DEPTH OF WELL: 100.40 Feet

DEPTH TO WATER: 92.14 Feet

HEIGHT OF WATER COLUMN: 8.26 Feet

WELL DIAMETER: 2.0 Inch

4.0 Minimum Gallons to  
purge 3 well volumes  
(Water Column Height x 0.49)

TIME	VOLUME PURGED	TEMP. °C	COND. mS/cm	pH	DO mg/L	Turb	PHYSICAL APPEARANCE AND REMARKS
	1.3	20.6	2.153	7.34			
	2.6	20.2	2.17	7.38			
	3.9	20.1	2.17	7.43			
	3.9	Total Vol (gal)					

SAMPLE NO.: MW-7

ANALYSES: BTEX (8260)

COMMENTS: MS / MSD sample collected

# WELL SAMPLING DATA FORM

CLIENT: DCP Midstream WELL ID: MW-8  
SITE NAME: C Line DATE: 9/16/2010  
PROJECT NO. SAMPLER: M Stewart/ N Quevedo

PURGING METHOD:  Hand Bailed  Pump If Pump, Type: \_\_\_\_\_

SAMPLING METHOD:  Disposable Bailer  Direct from Discharge Hose  Other: \_\_\_\_\_

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

Gloves  Alconox  Distilled Water Rinse  Other: \_\_\_\_\_

TOTAL DEPTH OF WELL: 100.50 Feet

DEPTH TO WATER: 90.56 Feet

HEIGHT OF WATER COLUMN: 9.94 Feet

WELL DIAMETER: 2.0 Inch

4.9 Minimum Gallons to  
purge 3 well volumes  
(Water Column Height x 0.49)

TIME	VOLUME PURGED	TEMP. °C	COND. mS/cm	pH	DO mg/L	Turb	PHYSICAL APPEARANCE AND REMARKS
	2	21.8	2.58	7.45			
	3.2	21.8	2.53	7.44			
1015	4.8	21.7	2.53	7.51			
	4.8	Total Vol (gal)					

SAMPLE NO.: MW-8

ANALYSES: BTEX (8260)

COMMENTS: \_\_\_\_\_

\_\_\_\_\_

# WELL SAMPLING DATA FORM

CLIENT: DCP Midstream WELL ID: MW-9  
 SITE NAME: C Line DATE: 9/16/2010  
 PROJECT NO. SAMPLER: M Stewart/ N Quevedo

PURGING METHOD:  Hand Bailed  Pump If Pump, Type: \_\_\_\_\_

SAMPLING METHOD:  Disposable Bailer  Direct from Discharge Hose  Other: \_\_\_\_\_

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

Gloves  Alconox  Distilled Water Rinse  Other: \_\_\_\_\_

TOTAL DEPTH OF WELL: 100.50 Feet

DEPTH TO WATER: 89.96 Feet

HEIGHT OF WATER COLUMN: 10.54 Feet

WELL DIAMETER: 2.0 Inch

5.2 Minimum Gallons to  
purge 3 well volumes  
(Water Column Height x 0.49)

TIME	VOLUME PURGED	TEMP. °C	COND. mS/cm	pH	DO mg/L	Turb	PHYSICAL APPEARANCE AND REMARKS
	1.6	22.7	2.81	7.34			
	3.2	22.4	2.80	7.50			
1015	4.8	21.7	2.80	7.42			
	4.8	:Total Vol (gal)					

SAMPLE NO.: MW-9

ANALYSES: BTEX (8260)

COMMENTS: \_\_\_\_\_

\_\_\_\_\_



LABORATORIES

11/04/10

## Technical Report for

**DCPIMidstream, LLP**

**AECCOL:ICLINE MONITORING ID#90262220**

**Project ID#GN00**

**Accutest Job Number: ID#17502**

**Sampling Dates: ID#9/15/10 ID#9/16/10**

### Report To:

**American Environmental Consulting, LLC**

**mstewart@aecdenver.com**

**ATTN: Michael Stewart**

**Total Number of Pages in Report: ID#20**



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.

  
**John Hamilton**  
**Laboratory Director**

**Client Service Contact: ISheal Greiner ID#03-425-6021**

Certifications: ISO, ID, INE, INM, IND (IR-027) IIPW) ID#UTQELAPICO00049)  
This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.  
Test results relate only to samples analyzed.

# Table of Contents

-1-

<b>Section 1: Sample Summary.....</b>	<b>3</b>
<b>Section 2: Case Narrative/Conformance Summary.....</b>	<b>4</b>
<b>Section 3: Sample Results.....</b>	<b>5</b>
3.1: D17502-1: mMW-1m.....	6
3.2: D17502-2: mMW-2m.....	7
3.3: D17502-3: mMW-3m.....	8
3.4: D17502-4: mMW-4m.....	9
3.5: D17502-5: mMW-5m.....	10
3.6: D17502-6: mMW-7m.....	11
3.7: D17502-7: mMW-8m.....	12
3.8: D17502-8: mMW-9m.....	13
3.9: D17502-9: mDUPm.....	14
<b>Section 4: Misc. Forms.....</b>	<b>15</b>
4.1: mChain of Custody.....	16
<b>Section 5: GC/MS Volatiles QC Data Summaries.....</b>	<b>17</b>
5.1: Method Blank Summary.....	18
5.2: Blank Spike Summary.....	19
5.3: Matrix Spike/Matrix Spike Duplicate Summary.....	20

## Sample Summary

**DCP Midstream, LP**

**Job No:** D17502

**AECCOL: CLINE MONITORING 390262220**

**Project No:** Project GN00

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	ClientC SampleID
D17502-1	09/16/10	11:00	09/20/10	AQ	GroundWater	MW-1
D17502-2	09/16/10	11:20	09/20/10	AQ	GroundWater	MW-2
D17502-3	09/16/10	08:30	09/20/10	AQ	GroundWater	MW-3
D17502-4	09/16/10	09:30	09/20/10	AQ	GroundWater	MW-4
D17502-5	09/16/10	09:30	09/20/10	AQ	GroundWater	MW-5
D17502-6	09/15/10	08:20	09/20/10	AQ	GroundWater	MW-7
D17502-6D	09/15/10	08:20	09/20/10	AQ	WaterMatrixSpike	MW-7
D17502-6M	09/15/10	08:20	09/20/10	AQ	WaterDup/MSD	MW-7
D17502-7	09/16/10	10:15	09/20/10	AQ	GroundWater	MW-8
D17502-8	09/16/10	10:15	09/20/10	AQ	GroundWater	MW-9
D17502-9	09/16/10	00:00	09/20/10	AQ	GroundWater	DUP



## CASE NARRATIVE & CONFORMANCE SUMMARY

**Client:** DCP Midstream, LP

**Job No:** D17502

**Site:** AECCOL: CLINE MONITORING #90262220

**Report Date:** 9/23/2010 1:26:26 AM

On 09/20/2010, nine (9) samples, 0 Trip Blanks, and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 5.2°C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D17502 was assigned to the project. The lab sample IDs, client sample IDs, and dates 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 260B

**Matrix:** AQ

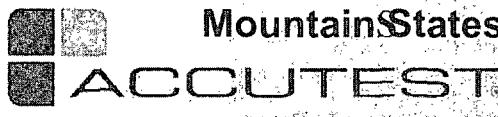
**Batch ID:** V5V569

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Samples D17502-6MS and D17502-6MSD were used as 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 tasks and implicit or standard methods. Acceptable uncertainty requires tested parameter Quality Control data to meet method criteria.

AMS is responsible for data quality assumptions of partial reports used and recommends that this report be used in its entirety. This report is authorized by AMS indicated via signature on the report cover.



## Sample Results

---

## Report of Analysis

---

**Report of Analysis**

Page 1 of 1

**Client Sample ID:** MW-1C  
**Lab Sample ID:** D17502-1  
**Matrix:** AQCC Ground Water  
**Method:** SW846 8260B  
**Project:** AECCOL:CLINE MONITORING 90262220

**Date Sampled:** 09/16/10C  
**Date Received:** 09/20/10C  
**Percent Solids:** n/aC

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V10348.D	5	09/20/10	DC	n/a	n/a	V5V569
Run #2							

	Purge Volume
Run #1	5.0 Gnl
Run #2	

**Purgeable Aromatics**

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.127	0.0050	0.0015	mg/l	
108-88-3	Toluene	0.0319	0.010	0.0050	mg/l	
100-41-4	Ethylbenzene	0.0334	0.010	0.0015	mg/l	
	m,p-Xylene	0.0356	0.020	0.0030	mg/l	
95-47-6	o-Xylene	0.0043	0.010	0.0030	mg/l	J

CAS No.	Surrogate Recoveries	Run #1	Run #2	Limits
17060-07-0	1,2-Dichloroethane-D4	88%		63-130%
2037-26-5	Toluene-D8	88%		68-130%
460-00-4	4-Bromofluorobenzene	88%		61-130%

ND = Not Detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates Value Exceeds Calibration Range

J = Indicates an Estimated Value  
 BG = Indicates Analyte Found in Associated Blank  
 NG = Indicates Presumptive Evidence of Compound

**Report of Analysis**

Page 1 of 1

<b>Client Sample ID:</b>	MW-2C	<b>Date Sampled:</b>	09/16/10C
<b>Lab Sample ID:</b>	D17502-2	<b>Date Received:</b>	09/20/10C
<b>Matrix:</b>	AQC Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	AECCOL:CLINE MONITORING 90262220		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V10349.D	1	09/20/10	DC	n/a	n/a	V5V569
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	0.00030	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00030	mg/l	
	m,p-Xylene	ND	0.0040	0.00060	mg/l	
95-47-6	o-Xylene	ND	0.0020	0.00060	mg/l	

CAS No.	Surrogate Recoveries	Run #1	Run #2	Limits
17060-07-0	1,2-Dichloroethane-D4	91%		63-130%
2037-26-5	Toluene-D8	85%		68-130%
460-00-4	4-Bromofluorobenzene	89%		61-130%

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-3C  
**Lab Sample ID:** D17502-3  
**Matrix:** AQCC Ground Water  
**Method:** SW846§260B  
**Project:** AECCOL:CLINE MONITORING§90262220

**Date Sampled:** 09/16/10C  
**Date Received:** 09/20/10C  
**Percent Solids:** n/aC

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run#1	5V10352.D	10	09/20/10	DC	n/a	n/a	V5V569
Run#2							

	Purge Volume
Run#1	5.0 Gnl
Run#2	

**Purgeable Aromatics**

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	1.05	0.010	0.0030	mg/l	
108-88-3	Toluene	0.205	0.020	0.010	mg/l	
100-41-4	Ethylbenzene	0.104	0.020	0.0030	mg/l	
	m,p-Xylene	0.0456	0.040	0.0060	mg/l	
95-47-6	o-Xylene	0.0741	0.020	0.0060	mg/l	

CAS No.	Surrogate Recoveries	Run#1	Run#2	Limits
17060-07-0	1,2-Dichloroethane-D4	91%		63-130%
2037-26-5	Toluene-D8	86%		68-130%
460-00-4	4-Bromofluorobenzene	86%		61-130%

ND = Not Detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates Value Exceeds Calibration Range

J = Indicates an Estimated Value  
 BG = Indicates Analyte Found in Associated Blank  
 NE = Indicates Presumptive Evidence of a Compound

**Report of Analysis**

Page 1 of 1

<b>Client Sample ID:</b>	MW-4C	<b>Date Sampled:</b>	09/16/10C
<b>Lab Sample ID:</b>	D17502-4	<b>Date Received:</b>	09/20/10C
<b>Matrix:</b>	AQC Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	AECCOL: CLINE MONITORING 90262220		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V10353.D	1	09/20/10	DC	n/a	n/a	V5V569
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	0.00030	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00030	mg/l	
	m,p-Xylene	ND	0.0040	0.00060	mg/l	
95-47-6	o-Xylene	ND	0.0020	0.00060	mg/l	

CAS No.	Surrogate Recoveries	Run #D	Run #Q	Limits
17060-07-0	1,2-Dichloroethane-D4	93%		63-130%
2037-26-5	Toluene-D8	87%		68-130%
460-00-4	4-Bromofluorobenzene	90%		61-130%

ND = Not Detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates Value Exceeds Calibration Range

J = Indicates an Estimated Value  
 B = Indicates an Analyte Found in Associated Method Blank  
 N = Indicates Presumptive Evidence of a Compound

**Report of Analysis**

Page 1 of 1

<b>Client Sample ID:</b>	MW-5C	<b>Date Sampled:</b>	09/16/10C
<b>Lab Sample ID:</b>	D17502-5	<b>Date Received:</b>	09/20/10C
<b>Matrix:</b>	AQC Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	AECCOL: CLINE MONITORING 90262220		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run#1	5V10347.D	1	09/20/10	DC	n/a	n/a	V5V569
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	0.00030	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00030	mg/l	
	m,p-Xylene	ND	0.0040	0.00060	mg/l	
95-47-6	o-Xylene	ND	0.0020	0.00060	mg/l	

CAS No.	Surrogate Recoveries	Run#1	Run#2	Limits
17060-07-0	1,2-Dichloroethane-D4	91%		63-130%
2037-26-5	Toluene-D8	86%		68-130%
460-00-4	4-Bromofluorobenzene	88%		61-130%

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 Compound

**Report of Analysis**

Page 1 of 1

<b>Client Sample ID:</b>	MW-7C	<b>Date Sampled:</b>	09/15/10C
<b>Lab Sample ID:</b>	D17502-6	<b>Date Received:</b>	09/20/10C
<b>Matrix:</b>	AQC Ground Water	<b>Percent Solids:</b>	n/aC
<b>Method:</b>	SW846@260B		
<b>Project:</b>	AECCOL:CLINE MONITORING 90262220		

Run#	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run#1	5V10346.D	1	09/20/10	DC	n/a	n/a	V5V569
Run#2							

Run#	Purge Volume
Run#1	5.0 Gnl
Run#2	

**Purgeable Aromatics**

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0010	0.00030	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00030	mg/l	
	m, p-Xylene	ND	0.0040	0.00060	mg/l	
95-47-6	o-Xylene	ND	0.0020	0.00060	mg/l	

CAS No.	Surrogate Recoveries	Run#1	Run#2	Limits
17060-07-0	1,2-Dichloroethane-D4	93%		63-130%
2037-26-5	Toluene-D8	83%		68-130%
460-00-4	4-Bromofluorobenzene	88%		61-130%

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 Compound

**Report of Analysis**

Page 1 of 1

<b>Client Sample ID:</b>	MW-8C	<b>Date Sampled:</b>	09/16/10C
<b>Lab Sample ID:</b>	D17502-7	<b>Date Received:</b>	09/20/10C
<b>Matrix:</b>	AQG Ground Water	<b>Percent Solids:</b>	n/aC
<b>Method:</b>	SW846 Q260B		
<b>Project:</b>	AECCOL:CLINE MONITORING 90262220		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V10354.D	1	09/20/10	DC	n/a	n/a	V5V569
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	0.00030	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00030	mg/l	
	m, p-Xylene	ND	0.0040	0.00060	mg/l	
95-47-6	o-Xylene	ND	0.0020	0.00060	mg/l	

CAS No.	Surrogate Recoveries	Run #1	Run #2	Limits
17060-07-0	1,2-Dichloroethane-D4	96%		63-130%
2037-26-5	Toluene-D8	87%		68-130%
460-00-4	4-Bromofluorobenzene	89%		61-130%

ND = Not Detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates Value Exceeds Calibration Range

J = Indicates an Estimated Value  
 B = Indicates an Analyte Found in Associated Method Blank  
 N = Indicates Presumptive Evidence of Compound

**Report of Analysis**

Page 1 of 1

<b>Client Sample ID:</b>	MW-9C	<b>Date Sampled:</b>	09/16/10C
<b>Lab Sample ID:</b>	D17502-8	<b>Date Received:</b>	09/20/10C
<b>Matrix:</b>	AQC Ground Water	<b>Percent Solids:</b>	n/aC
<b>Method:</b>	SW846§260B		
<b>Project:</b>	AECCOL:CLINE MONITORING 90262220		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	5V10355.D	1	09/20/10	DC	n/a	n/a	V5V569
Run #2							

	<b>Purge Volume</b>
Run #1	5.0 ml
Run #2	

**Purgeable Aromatics**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>MDL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	0.0010	0.00030	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00030	mg/l	
	m,p-Xylene	ND	0.0040	0.00060	mg/l	
95-47-6	o-Xylene	ND	0.0020	0.00060	mg/l	

<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run #1</b>	<b>Run #2</b>	<b>Limits</b>
17060-07-0	1,2-Dichloroethane-D4	101%		63-130%
2037-26-5	Toluene-D8	89%		68-130%
460-00-4	4-Bromofluorobenzene	93%		61-130%

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 Compound

**Report of Analysis**

Page 1 of 1

<b>ClientSampleID:</b>	DUPC	<b>DateSampled:</b>	09/16/10C
<b>LabSampleID:</b>	D17502-9	<b>DateReceived:</b>	09/20/10C
<b>Matrix:</b>	AQC Ground Water	<b>PercentSolids:</b>	n/aC
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	AECCOL:CLINE MONITORING 90262220		

	FileID	DF	Analyzed	By	PrepDate	PrepBatch	AnalyticalBatch
Run#1	5V10356.D	10	09/20/10	DC	n/a	n/a	V5V569
Run#2							

	PurgeVolume
Run#1	5.0ml
Run#2	

**PurgeableAromatics**

CASNo.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.861	0.010	0.0030	mg/l	
108-88-3	Toluene	0.152	0.020	0.010	mg/l	
100-41-4	Ethylbenzene	0.0792	0.020	0.0030	mg/l	
	m,p-Xylene	0.0318	0.040	0.0060	mg/l	J
95-47-6	o-Xylene	0.0603	0.020	0.0060	mg/l	

CASNo.	SurrogateRecoveries	Run#1	Run#2	Limits
17060-07-0	1,2-Dichloroethane-D4	86%		63-130%
2037-26-5	Toluene-D8	84%		68-130%
460-00-4	4-Bromofluorobenzene	86%		61-130%

ND= Not Detected

MDL= Method Detection Limit

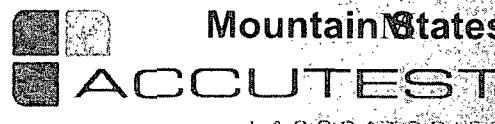
RL= Reporting Limit

E= Indicates Value Exceeds Calibration Range

J= Indicates An Estimated Value

B= Indicates Analyte Found in Associated Method Blank

N= Indicates Presumptive Evidence of Compound



### **Misc. Norms**

---

#### **Custody Documents and Other Norms**

---

**Includes the following where applicable:**

- Chain of Custody

# CHAIN OF CUSTODY

4036 Youngfield Street  
Wheat Ridge CO 80033  
303-425-6021 Phone 303-425-6854 Fax

D17502

Accutest Job #:	390262220
Accutest Quote #:	

Client Information		Facility Information		Analytical Information								
DCP Midstream		American Environmental Consulting, LP										
Name <b>370 Seventeenth Street, Suite 2500</b>		Project Name <b>Cline Monitoring</b>										
Address <b>Denver CO 80202</b>		Location <b>West of Oil Center</b>										
City <b>Stephen Weathers</b>	State <b>CO</b>	Zip <b>80001</b>	Project/PO #: <b>GN00</b>									
Send Report to: <b>Phone #: 303.605.1718</b>	FAX #:											
		Collection		Preservation								
Field ID / Point of Collection	Date	Time	Sampled By	Matrix	# of bottles	HCl	NaOH	NaNO3	Na2SO4	None		
MW-1	9-16	1100		GW	3			X				01
MW-2	9-16	1120		GW	3			X				02
MW-3	9-16	1230		GW	3			X				03
MW-4	9-16	1230		GW	3			X				04
MW-5	9-16	1230		GW	3			X				05
MW-7	9-16	1230	MS	GW	3			X				06
MW-8	9-16	1015		GW	3			X				07
MW-9	9-16	1015		GW	3			X				08
DUP	9-16	0000		GW	3			X				09
Trip Blank	LNB			GW	1			X				
MW-7 MS/MSD	9-16	1230	MS		6							X 06 ms + SD
Turnaround Information				Data Deliverable Information				Comments / Remarks				
<input type="checkbox"/> 21 Day Standard	Approved By:	<input type="checkbox"/> NJ Reduced	<input type="checkbox"/> Commercial "A"	<input type="checkbox"/> NJ Full	<input checked="" type="checkbox"/> Commercial "B"	<input type="checkbox"/> FULL CLP	<input type="checkbox"/> ASP Category B	<input type="checkbox"/> Disk Deliverable	<input type="checkbox"/> State Forms	<input type="checkbox"/> Other (Specify)	Accutest to invoice DCP Midstream, Attn: Steve Weathers and email the results to him upon completion.	
<input type="checkbox"/> 14 Day												
<input type="checkbox"/> 7 Days												
<input type="checkbox"/> Other _____ (Days)												
RUSH TAT is for FAX data unless previously approved.												
<b>Sample Custody must be documented below each time samples change possession, including courier delivery.</b>												
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:							
1	9-20-10 740	1 2011-9-20-12 500 AM TR			2							
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:							
3		3	4		4							
Relinquished by Sampler:	Date Time:	Received By:	Seal #	Preserved where applicable	On Ice:							
5		5			(Y) 5.2							

**D17502: Chain of Custody**

**Page 1 of 1**



## 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: D17502

Account: DCPMCODN DCP Midstream, LP

Project: AECCOL: CLINE MONITORING 390262220

Sample	FileID	DF	Analyzed	By	PrepDate	PrepBatch	AnalyticalBatch
V5V569-MB1	5V10344.D	1	09/20/10	DC	n/a	n/a	V5V569

The QC reported here applies to the following samples:

Method: pSW846p8260B

D17502-1, pD17502-2, pD17502-3, pD17502-4, pD17502-5, pD17502-6, pD17502-7, pD17502-8, pD17502-9

CASNo.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.30	ug/l	
108-88-3	Toluene	ND	2.0	1.0	ug/l	
	m, p-Xylene	ND	4.0	0.60	ug/l	
95-47-6	o-Xylene	ND	2.0	0.60	ug/l	

CASNo.	Surrogate Recoveries	Limits
17060-07-0	1,2-Dichloroethane-D4	95% 63-130%
2037-26-5	Toluene-D8	89% 68-130%
460-00-4	4-Bromofluorobenzene	93% 61-130%

# Blank Spike Summary

Page 1 of 1

Job Number: D17502

Account: DCPMCODN DCP Midstream, LP

Project: AECCOL: CLINE MONITORING 390262220

Sample	FileID	DF	Analyzed	By	PrepDate	PrepBatch	AnalyticalBatch
V5V569-BS1	5V10345.D	1	09/20/10	DC	n/a	n/a	V5V569

The QC reported here applies to the following samples:

Method: HSW846B260B

D17502-1, D17502-2, D17502-3, D17502-4, D17502-5, D17502-6, D17502-7, D17502-8, D17502-9

CASNo.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	52.3	105	70-130
100-41-4	Ethylbenzene	50	54.7	109	70-130
108-88-3	Toluene	50	52.4	105	70-140
	m, p-Xylene	50	49.9	100	55-134
95-47-6	o-Xylene	50	48.8	98	55-134

CASNo.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	88%	63-130%
2037-26-5	Toluene-D8	83%	68-130%
460-00-4	4-Bromofluorobenzene	99%	61-130%

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D17502

Account: DCPCMODN DCP Midstream, LP

Project: AECCOL: CLINE MONITORING 390262220

Sample	FileID	DF	Analyzed	By	PrepIDate	PrepBatch	AnalyticalBatch
D17502-6MS	5V10350.D	1	09/20/10	DC	n/a	n/a	V5V569
D17502-6MSD	5V10351.D	1	09/20/10	DC	n/a	n/a	V5V569
D17502-6	5V10346.D	1	09/20/10	DC	n/a	n/a	V5V569

The QC reported here applies to the following samples:

Method: HSW846B260B

D17502-1, D17502-2, D17502-3, D17502-4, D17502-5, D17502-6, D17502-7, D17502-8, D17502-9

CASNo.	Compound	D17502-6		Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q							
71-43-2	Benzene	ND	50	49.1	98	50.9	102	4	59-132/30	
100-41-4	Ethylbenzene	ND	50	52.7	105	54.4	109	3	68-130/30	
108-88-3	Toluene	ND	50	51.4	103	52.4	105	2	56-142/30	
	m,p-Xylene	ND	50	47.6	95	48.6	97	2	36-146/30	
95-47-6	o-Xylene	ND	50	46.5	93	47.3	95	2	36-146/30	

CASNo.	Surrogate Recoveries	MS	MSD	D17502-6	Limits
17060-07-0	1,2-Dichloroethane-D4	88%	89%	93%	63-130%
2037-26-5	Toluene-D8	87%	87%	83%	68-130%
460-00-4	4-Bromofluorobenzene	100%	102%	88%	61-130%