

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

September 1, 2011

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

RE: 2nd Quarter 2011 Groundwater Monitoring Results
DCP Midstream, LP J-4-2 Pipeline Release (1RP-1728)
Unit C, Section 27, Township 19 South, Range 35 East
Lea County, New Mexico

Dear Mr. Lowe:

DCP Midstream, LP (DCP) is pleased to submit for your review, a copy of the 2nd Quarter 2011 Groundwater Monitoring Results for the DCP J-4-2 Pipeline Release located in Lea County, New Mexico (Unit C, Section 27, Township 19 South, Range 35 East).

If you have any questions regarding the report, please call at 303-605-1718 or e-mail me <a href="mailto:swweathers@dcpmidstream.com">swweathers@dcpmidstream.com</a>.

Sincerely

DCP Midstream, LP.

Stephen Weathers, PG

Principal Environmental Specialist

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

**Environmental Files** 

August 26, 2011

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

Re: Summary of the Second Quarter 2011 Groundwater Monitoring Results for the DCP J-4-2 Pipeline Release, Lea County New Mexico (1RP-1728)
Unit C, Section 27 Township 19 South, Range 35 East

Dear Mr. Weathers:

This report summarizes the second quarter 2011 groundwater monitoring activities that were completed at the J-4-2 release location on June 20, 2011 for DCP Midstream, LP. The site is located in the northeastern quarter of the northwestern quarter (Unit C) of Section 27, Township 19 South, Range 35 East approximately 3 miles south of the of intersection of US Highway 82 and State Highway 483 in Lea County New Mexico (Figure 1). The approximate coordinates are 32.639 degrees north and 103.447 degrees west.

The monitoring network includes the seven groundwater monitoring wells shown on Figure 2. Table 1 summarizes construction information for each well. Monitoring well MW-5 was not installed because of drilling refusal. Five wells were sampled. Wells MW-1 and MW-2 were not sampled because they contained free phase hydrocarbons (FPH).

#### **GROUNDWATER SAMPLING**

The depth to water and, if present, the FPH were measured in each well prior to completing the purging and sampling activities. The water-table elevations for the wells containing FPH were adjusted using the following formula:

 $GWE_{corr} = MGWE + (PT*PD)$ : 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 0.75)

The fluid measurements for this event are summarized in Table 2. The corrected groundwater elevations for all monitoring episodes are summarized in Table 3. FPH was measured at a thickness of 0.19 feet in MW-1 and 0.20 feet in MW-2. The historic FPH thickness values are summarized in Table 4. The residual FPH thickness of less than 0.25 feet in both wells indicates that the majority of mobile FPH has been removed.

Mr. Stephen Weathers J-4-2 Release Site August 26, 2011 Page 2

Wells MW-3, MW-4, MW-6, MW-7 and MW-8 were purged and sampled with dedicated bailers. Purging continued until a minimum of three casing volumes of water was removed and the field parameters temperature, pH and conductivity stabilized. The well purging forms are attached.

Unfiltered samples were collected following stabilization using the dedicated bailers. All samples were placed in an ice-filled chest immediately upon collection and delivered directly to Accutest Laboratories in Wheat Ridge, Colorado using standard chain-of-custody protocol. The samples were analyzed for benzene, toluene, ethylbenzene and total xylenes (BTEX) by method SW846 8260B and chlorides by method SM 4500 CL. The laboratory report is attached.

#### **RESULTS AND INTERPRETATIONS**

A field duplicate sample was collected from MW-4. Matrix spike, matrix spike duplicate samples were collected from MW-7. The QA/QC evaluation included:

- All samples were analyzed within the method holding times.
- All of the individual surrogate spikes were within their control limits.
- The method blanks and blank spikes were all within their respective control limits.
- The matrix spike and matrix spike duplicate results from MW-7 were all within their respective control limits.
- There were no BTEX detects in the trip blank or the primary and field duplicate samples from MW-4.
- The 2.2 relative percentage difference for chlorides between the primary and duplicate samples from MW-4 is acceptable.

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

The laboratory analyses from this sampling event are summarized in Table 5. The New Mexico Water Quality Control Commission (NMWQCC) groundwater standards are reproduced at the top of Table 5. The constituents that exceed these standards are highlighted as bold text. Tables 6, 7, 8 and 9 summarize all of the data collected during this project for benzene, toluene, ethylbenzene and xylenes respectively. Table 10 summarizes the chloride data.

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#### **Groundwater Flow**

Figure 3 shows the hydrographs for the corrected water-table elevations for the site wells. The water table declined approximately 1 foot over the entire site between the first and second quarterly monitoring events. The water table is now at the lowest elevation since the start of the project in 2006.

The water table elevation contours for this event are shown on Figure 4. Groundwater flow is toward the southeast at a consistent gradient. The groundwater flow direction has remained constant over the duration of the project.

#### **Groundwater Chemistry**

Examination of Table 5 shows that none of the BTEX constituents were detected in wells MW-3 to MW-8. The benzene concentrations are plotted on Figure 5 along with wells MW-1 and MW-2 that contained FPH. Comparison of Figure 4 with Figure 5 demonstrates that any dissolved-phase BTEX constituents from MW-1 and MW-2 attenuate to concentrations that are below the method reporting limits before reaching MW-7 or MW-8.

It is also important to note that:

- 1. The toluene, ethylbenzene and total xylenes concentrations have never exceeded the NMWQCC standards in wells MW-3 through MW-8;
- 2. Benzene has not been detected in MW-4 since March 2007; and
- 3. Benzene has never been detected in down-gradient boundary wells MW-6, MW-7 and MW-8.

Examination of Table 10 indicates that the chloride concentrations in all wells have exceeded the NMWQCC groundwater standard of 250 mg/l except for the fourth quarter 2008 value from MW-4 which was anomalously low. The chloride concentrations are plotted verses the sampling dates on Figure 6. The chloride concentrations continue to remain relatively constant.

A chloride isopleth map generated from data for this event is included as Figure 7. The chloride distribution continues to indicate a source to the west and outside of the DCP release area. This pattern has remained constant throughout the duration of the project.

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#### CONCLUSIONS AND RECOMMENDATIONS

Based upon the data collected to date, AEC concludes that:

- 1. Groundwater flow remains constant toward the southeast;
- 2. The residual FPH is probably immobile and only a minimal volume remains given the historic remediation activities;
- 3. The presence of dissolved phase BTEX constituents appears to be limited to the original release area;
- 4. The dissolved-phase hydrocarbon plume associated with the DCP J-4-2 pipeline release is either stable or contracting;
- 5. The data from this event continue to confirm that the chlorides in the groundwater did not originate from the DCP release.

The next groundwater-monitoring event is scheduled for the third quarter of 2011. Do not hesitate to contact me if you have any questions or comments on this letter.

Sincerely,

AMERICAN ENVIRONMENTAL CONSULTING, LLC

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

Muchael H. Stewart

Principal Engineer

MHS/tbm

attachment

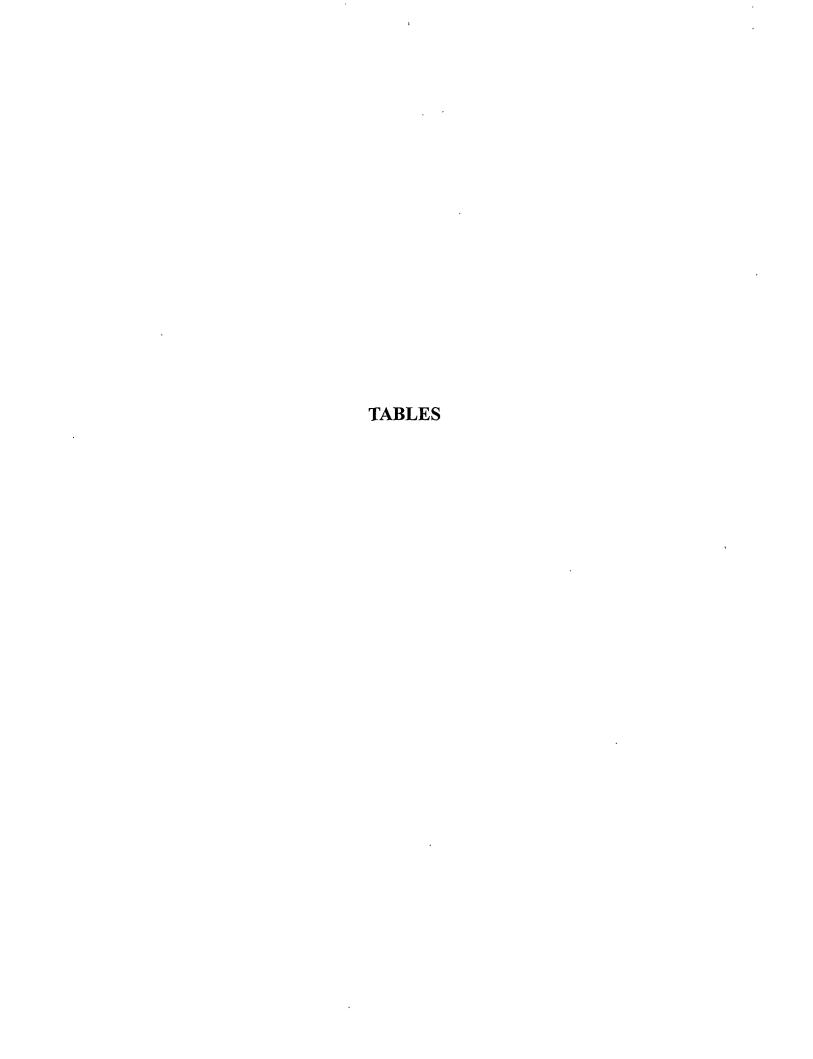


Table 1 – Summary of Monitoring Well Completions at the J-4-2 Site

Name	Date Installed	Stickup	Casing Diameter (inches)	Total Depth (btoc)	Screen Interval (ground)	Sand Interval
MW-1	2/06	3.17	2	43.05	19-39	17-39
MW-2	2/06	3.08	4	43.30	19-39	17-39
MW-3	2/06	3.21	2	43.00	19-39	17-39
MW-4	9/06	3.12	2	38.12	20-35	18-35
MW-5		Not in	stalled beca	use of drill	ing refusal	
MW-6	9/06	3.32	2	38.32	20-35	18-35
MW-7	9/06	2.95	2	39.45	21.5-36.5	19.5-36.5
MW-8	9/06	3.32	2	38.32	20-35	18-35

All units are feet except as noted btoc: Below top of casing

Table 2 - Summary of Second Quarter 2011 Fluid Measurements

Well	Depth to Water	Depth to Free Phase Hydrocarbons	Corrected Groundwater Elevation
MW-1	29.50	29.31	3711.09
MW-2	30.55	30.35	3711.03
MW-3	28.76		3710.63
MW-4	29.12		3711.12
MW-6	29.81		3710.15
MW-7	33.14		3707.59
MW-8	31.32		3706.00

Units are feet

Table 3 - Summary of Water Table Elevations for the J-4-2 Site

Well	2/15/06	9/25/06	12/21/06	3/14/07	6/26/07	-9/25/07	11/30/07	3/20/08
MW-1	3713.61	3712.60	3712.63	3712.29	3712.15	3711.86	3712.42	3713.48
MW-2	3713.93	3713.48	3712.49	3712.75		3712.34	3712.91	3713.40
MW-3	3713.36	3712.57	3712.57	3712.55	3712.79	3711.50	3712.09	3713.30
MW-4	,	3712.80	3712.82	3712.78	3713.25	3712.98	3713.48	3713.70
MW-6		3711.76·	3712.00	3711.96	3711.87	3711.56	3711.92	3712.53
MW-7		3711.03	3710.80	3710.73	3710.50	3709.87	3710.33	3711.38
MW-8		3709.22	3708.95	3708.79	3708.54	3708.06	3708.33	3709.17

Well	6/27/08	9/16/08	12/3/08	3/11/09	5/18/09	9/24/09	12/20/09	3/10/10	6/13/10
MW-1	NM	· NM	3711.94	3712.19	3712.05	3711.48	3711.50	3711.45	3711.31
MW-2	NM					3711.28			3710.89
MW-3	3713.09	3712.34	3712.25	3712.10	3711.90	3711.35	3711.28	3711.19	3711.01
MW-4	3713.13	3712.18	3712.10	3712.36	3712.13	3711.69	3711.61	3711.56	3711.41
MW-6	3712.20	3711.86	3711.70	3711.57	3711.42	3711.22	3710.72	3710.67	3710.61
MW-7	3710.95	3710.11	3710.00	3709.84	3709.51	3708.55	3708.37	3708.35	3708.11
MW-8	3708.78	3708.23	3708.13	3707.95	3708.10	3706.79	3706.73	3706.71	3707.46

Well	9/28/10	12/8/10	3/30/11	6/20/11
MW-1	3711.65	3711.66	3711.69	3711.09
MW-2	3711.12	3711.14	3711.35	3710.22
MW-3	3711.24	3711.25	3711.25	3710.63
MW-4	3711.64	3711.72	3711.77	3711.12
MW-6	3710.56	3710.71	3710.91	3710.15
MW-7	3708.23	3708.28	3708.36	3707.59
MW-8	3706.62	3706.70	3706.69	3706.00

Units are feet

Blank cells: wells not installed

NM: Not measured because of probe malfunction.

Table 4 – Summary of Free Phase Hydrocarbon Thickness Values for MW-1 and MW-2

Date	MW-1	: MW-2
The second second second	Section 200 Section 2 to	
02/15/06	0.00	0.57
09/25/06	0.00	0.15
12/21/06	0.09	0.13
03/14/07	0.07	0.10
06/26/07	0.09	0.00
09/25/07	0.09	0.03
11/30/07	0.00	0.00
03/20/08	0.00	0.00
06/27/08	0.04	0.01
09/16/08	0.08	0.02
12/03/08	0.21	0.17
03/11/09	0.32	0.27
05/18/09	0.35	0.26
09/24/09	0.29	0.24
12/20/09	0.00	0.05
03/10/10	0.03	0.04
06/13/10	0.00	0.05
09/29/10	0.40	0.20
12/08/10	0.39	0.25
03/30/11	0.16	0.10
06/20/11	0.19	0.20

Units are feet

Table 5 - Summary of Second Quarter 2011 Groundwater Results

Well  NMWQCC  Groundwater Standard	Benzene	Toluene 0.75	Ethyl-benzene	Xylenes	Chlorides 250
	0.001	0.000	0.000	.0.004	
MW-3	< 0.001	< 0.002	< 0.002	< 0.004	2210
MW-4	< 0.001	< 0.002	< 0.002	< 0.004	2230
MW-6	< 0.001	< 0.002	< 0.002	< 0.004	503
MW-7	< 0.001	<0.002	<0.002	< 0.004	1210
MW-8	< 0.001	< 0.002	< 0.002	< 0.004	444
MW-8 DUP	< 0.001	<0.002	< 0.002	< 0.004	454
Trip Blank	< 0.001	< 0.002	< 0.002	< 0.004	NA

Notes:

Units are mg/l,
MW-1 and MW-2 were not sampled because free phase hydrocarbons were present
MW-5 was not installed because of drilling refusal
NMWQCC: New Mexico Water Quality Control Commission
Values above the NMWQCC standard are highlighted as bold text.

NA: not analyzed

Table 6 – Summary of Benzene Groundwater Data

Well	2/06	9/06	12/06	3/07	6/ <u>0</u> 7	9/07	11/07	3/08	6/08	9/08	12/08	3/11/09	5/18/09	9/24/09
MW-1	0.139	0.0487	FPH	FPH	FPH	0.011	0.107	0.037	FPH	FPH	FPH	FPH	FPH	FPH
MW-2	0.026	0.0045	0.006	0.188	FPH	FPH	FPH	FPH	FPH	FPH	FPH	FPH	FPH	FPH
MW-3	< 0.001	< 0.002	<0.002	< 0.002	0.003	< 0.001	0.0011J	< 0.002	< 0.002	<0.002	< 0.002	< 0.002	< 0.002	< 0.002
MW-4	NI	0.0086	0.025	0.004	< 0.001	< 0.001	<0.002	< 0.002	< 0.002	<0.002	<0.002	<0.002	< 0.002	<0.002
MW-6	NI	< 0.002	< 0.002	< 0.002	< 0.001	< 0.001	< 0.002	< 0.002	<0.002	<0.002	< 0.002	<0.002	< 0.002	<0.002
MW-7	NI	< 0.002	< 0.002	< 0.002	< 0.001	< 0.001	< 0.002	<0.002	<0.002	< 0.002	< 0.002	< 0.002	<0.002	<0.002
MW-8	NI	< 0.002	<0.002	<0.002	< 0.001	< 0.001	<0.002	<0.002	< 0.002	<0.002	< 0.002	<0.002	< 0.002	<0.002

Well	12/20/09	3/10/10	6/13/10	9/29/10	12/8/10	3/30/11	6/20/11
MW-1	< 0.002	FPH	0.0016	FPH	FPH	FPH	FPH
MW-2	FPH	FPH	FPH	FPH	FPH	FPH	FPH
MW-3	< 0.002	< 0.001	< 0.0003	< 0.001	<0.001	< 0.001	< 0.001
MW-4	< 0.002	< 0.001	<0.0003	< 0.001	< 0.001	< 0.001	< 0.001
MW-6	< 0.002	NA	< 0.0003	<0.001	<0.001	<0.001	<0.001
MW-7	< 0.002	< 0.001	< 0.0003	<0.001	<0.001	< 0.001	<0.001
MW-8	< 0.002	< 0.001	< 0.0003	< 0.001	<0.001	< 0.001	<0.001

Units are mg/l, Notes:

MW-5 was not installed

Duplicates are averaged together
J modifiers are not included in this table
FPH: Free phase hydrocarbons present so well not sampled

NI: Well not installed

Table 7 – Summary of Toluene Groundwater Data

Well	2/06	9/06	12/06	-3/07	6/07	9/07	11/07	3/08	6/08	9/08	12/08	3/11/09	5/18/09	9/24/09
MW-1	0.326	0.0058	FPH	FPH	FPH	0.003	0.024	0.0155	FPH	FPH	FPH	FPH	FPH	FPH
MW-2	0.038	< 0.001	0.003	0.006	FPH	FPH	FPH	FPH	FPH	FPH	FPH	FPH	FPH	FPH
MW-3	< 0.001	<0.002	<0.002	<0:002	0.005	< 0.001	<0.002	<0.002	<0.002	<0.002	<0.002	< 0.002	< 0.002	< 0.002
MW-4	NI	0.00093J	0.005	6E-04	< 0.001	< 0.001	<0.002	< 0.002	<0.002	<0.002	< 0.002	< 0.002	< 0.002	< 0.002
MW-6	NI	<0.002	< 0.002	< 0.002	< 0.001	< 0.001	<0.002	<0.002	<0.002	<0.002	<0.002	< 0.002	< 0.002	< 0.002
MW-7	NI	<0.002	< 0.002	< 0.002	< 0.001	< 0.001	<0.002	< 0.002	< 0.002	<0.002	<0.002	< 0.002	< 0.002	< 0.002
MW-8	NI	<0.002	< 0.002	< 0.002	< 0.001	< 0.001	<0.002	< 0.002	< 0.002	<0.002	<0.002	< 0.002	<0.002	<0.002

Well	12/20/09	3/10/10	6/13//10	9/29/10	12/8/10	3/30/11	6/20/11
MW-1	< 0.002	FPH	<0.001	FPH	FPH	FPH	FPH
MW-2	FPH	FPH	FPH	FPH	FPH	FPH	FPH
MW-3	<0.002	< 0.002	< 0.001	< 0.002	< 0.002	< 0.002	<0.002
MW-4	<0.002	< 0.002	< 0.001	<0.002	< 0.002	<0.002	<0.002
MW-6	< 0.002	NA	< 0.001	< 0.002	< 0.002	< 0.002	< 0.002
MW-7	<0.002	< 0.002	< 0.001	<0.002	< 0.002	< 0.002	<0.002
MW-8	<0.002	< 0.002	< 0.001	<0.002	<0.002	< 0.002	< 0.002

Notes:

Units are mg/l,
MW-5 was not installed
Duplicates are averaged together
J modifiers are not included in this table
FPH: Free phase hydrocarbons present so well not sampled

NI: Well not installed

Table 8 – Summary of Ethylbenzene Groundwater Data

Well	2/06	9/06	12/06	3/07	6/07	9/07	11/07	3/08	6/08	9/08	12/08	3/11/09	5/18/09	9/24/09
) (TV 1	0.24	0.0384	EDIT	EDII	EDII	0.004	0.04	0.014	EDIA	EDII	EDIT	EDII	EDII	EDII
MW-1 MW-2		0.0284		FPH 0.026	FPH FPH	0.004 FPH	0.04 FPH	0.014 FPH	FPH FPH	FPH FPH	FPH FPH	FPH FPH	FPH FPH	FPH FPH
MW-3	< 0.001	<0.002	<0.002	<0.002	0.002	< 0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	< 0.002	<0.002
MW-4	NI	0.0092	<0.002	<0.002	< 0.001	< 0.001	<0.002	<0.002	<0.002	<0.002	<0.002	< 0.002	<0.002	<0.002
MW-6	NI	< 0.002	<0.002	<0.002	< 0.001	<0.001	<0.002	<0.002	< 0.002	<0.002	< 0.002	< 0.002	< 0.002	< 0.002
MW-7	NI	<0.002	<0.002	<0.002	<0.001	< 0.001	<0.002	<0.002	< 0.002	<0.002	< 0.002	< 0.002	< 0.002	<0.002
MW-8	NI	<0.002	<0.002	<0.002	< 0.001	< 0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	< 0.002

Well	12/20/09	3/10/10	6/13/10	9/29/10	12/8/10	3/30/11	6/20/11
MW-1	0.0014J	FPH	< 0.0003	FPH	FPH	FPH	FPH
MW-2	FPH	FPH	FPH	FPH	FPH	FPH	FPH
MW-3	<0.002	< 0.002	< 0.0003	< 0.002	< 0.002	< 0.002	< 0.002
MW-4	< 0.002	< 0.002	< 0.0003	< 0.002	< 0.002	<0.002	< 0.002
MW-6	< 0.002	NA	< 0.0003	< 0.002	<0.002	< 0.002	< 0.002
MW-7	< 0.002	< 0.002	< 0.0003	< 0.002	< 0.002	<0.002	< 0.002
MW-8	< 0.002	< 0.002	< 0.0003	<0.002	< 0.002	< 0.002	< 0.002

Notes: Units are mg/l,

MW-5 was not installed

Duplicates are averaged together
J modifiers are not included in this table
FPH: Free phase hydrocarbons present so well not sampled
NI: Well not installed

Table 9 – Summary of Total Xylenes Groundwater Data

Well	2/06	9/06	12/06	3/07	6/07	9/07	11/07	3/08	6/08	9/08	12/08	3/11/09	5/18/09	9/24/09
MW-1	0.31	0.0694	FPH	FPH	FPH	0.098	0.39	0.215	FPH	FPH	FPH	FPH	FPH	FPH
MW-2	0.335	0.0471	0.0613	0.125	FPH	FPH	FPH	FPH	FPH	FPH	FPH	FPH	FPH	FPH
MW-3	<0.002	<0.006	<0.006	<0.006	0.01	< 0.001	<0.006	<0.006	0.007	<0.006	<0.006	< 0.002	< 0.002	<0.006
MW-4	NI	0.0061	0.0065	0.003	0.003	< 0.001	<0.006	<0.006	<0.006	0.0041J	<0.006	< 0.002	< 0.002	< 0.006
MW-6	NI	<0.006	<0.006	<0.006	< 0.001	< 0.001	<0.006	<0.006	<0.006	<0.006	<0.006	< 0.002	< 0.002	<0.006
MW-7	NI	<0.006	<0.006	<0.006	0.003	< 0.001	<0.006	<0.006	<0.006	< 0.006	<0.006	< 0.002	< 0.002	<0.006
MW-8	NI	<0.006	<0.006	<0.006	<0.001	< 0.001	<0.006	<0.006	<0.006	< 0.006	<0.006	< 0.002	< 0.002	<0.006

Well	12/20/09	3/10/10	6/13/10	9/29/10	12/8/10	3/30/11	6/20/11
MW-1	0.0418	FPH	0.0095	FPH	FPH	FPH	FPH
MW-2	FPH	FPH	FPH	FPH	FPH	FPH	FPH
MW-3	<0.006	< 0.004	<0.0006	<0.004	<0.004	<0.004	<0.004
MW-4	< 0.006	<0.004	<0.0006	<0.004	<0.004	<0.004	<0.004
MW-6	< 0.006	NA	< 0.0006	<0.004	< 0.004	<0.004	<0.004
MW-7	< 0.006	< 0.004	<0.0006	<0.004	<0.004	<0.004	<0.004
MW-8	< 0.006	<0.004	< 0.0006	<0.004	<0.004	<0.004	<0.004

Notes: Units are mg/l,

MW-5 was not installed

Duplicates are averaged together
J modifiers are not included in this table

J modifiers are not included in this table FPH: Free phase hydrocarbons present so well not sampled

NI: Well not installed

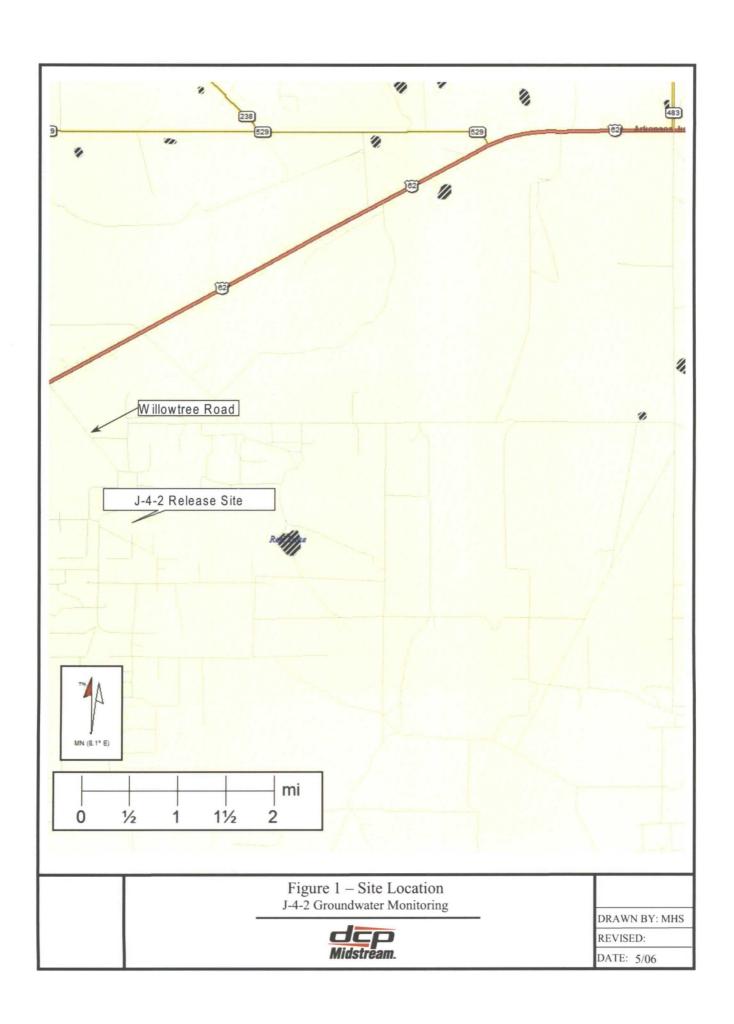
Table 10 – Summary of Chlorides Groundwater Data

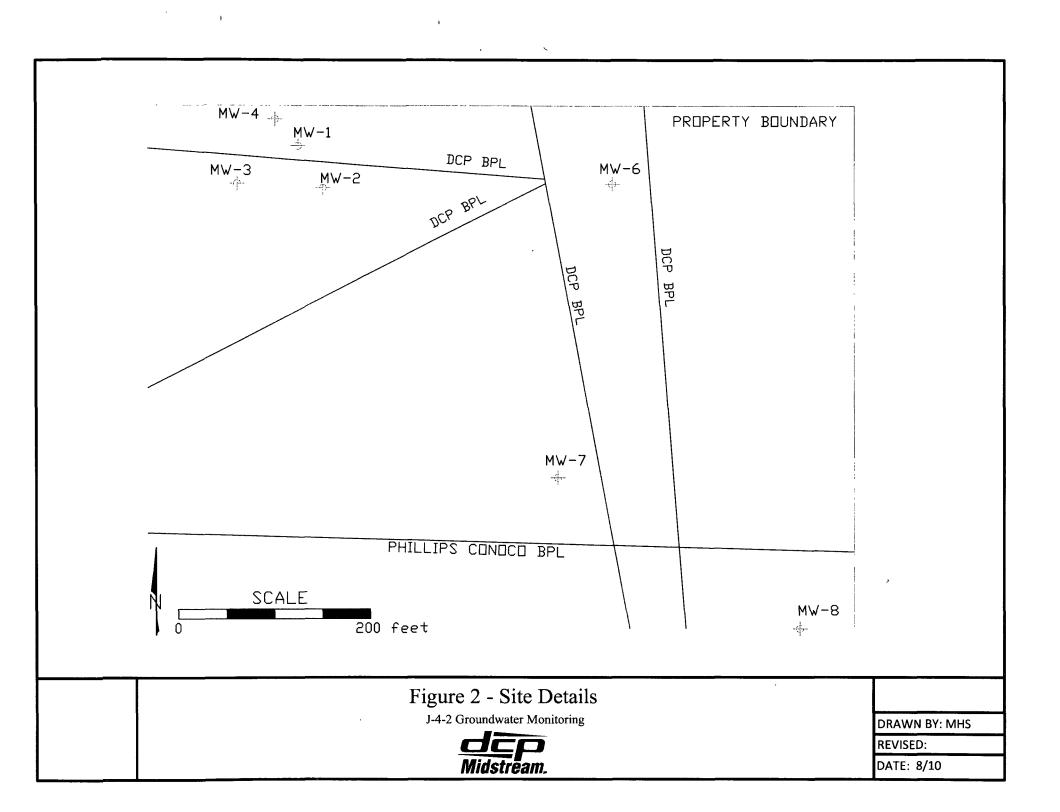
Well	3/14/07	6/26/07	9/16/08	12/3/08	3/11/09	5/18/09	9/24/09	12/20/09	3/10/10	6/13/10	9/29/10	12/8/10	3/30/11	6/20/11
		-												
MW-1	FPH	2,680	FPH	1,800	FPH	FPH	FPH	FPH						
MW-3	7,800	10,800	4,070	2,625	2,860	3,270	3,195	3,605	3,030	2,130	2,220	2,530	2,230	2,210
MW-4	1,300	1,380	1,440	70	1,390	1,440	1,490	1,740	1,950	2,150	2,130	2,470	2,300	2,230
MW-6	669	544	537	391	363	383	373	1,090	NA	533	445	513	491	503
MW-7	1,230	1,150	1,180	1,050	944	1,090	1,140	1,440	1,230	1,280	1,210	1,180	1,210	1,210
MW-8	609	617	735	480	417	378	403	308	414	415	347	336	383	449

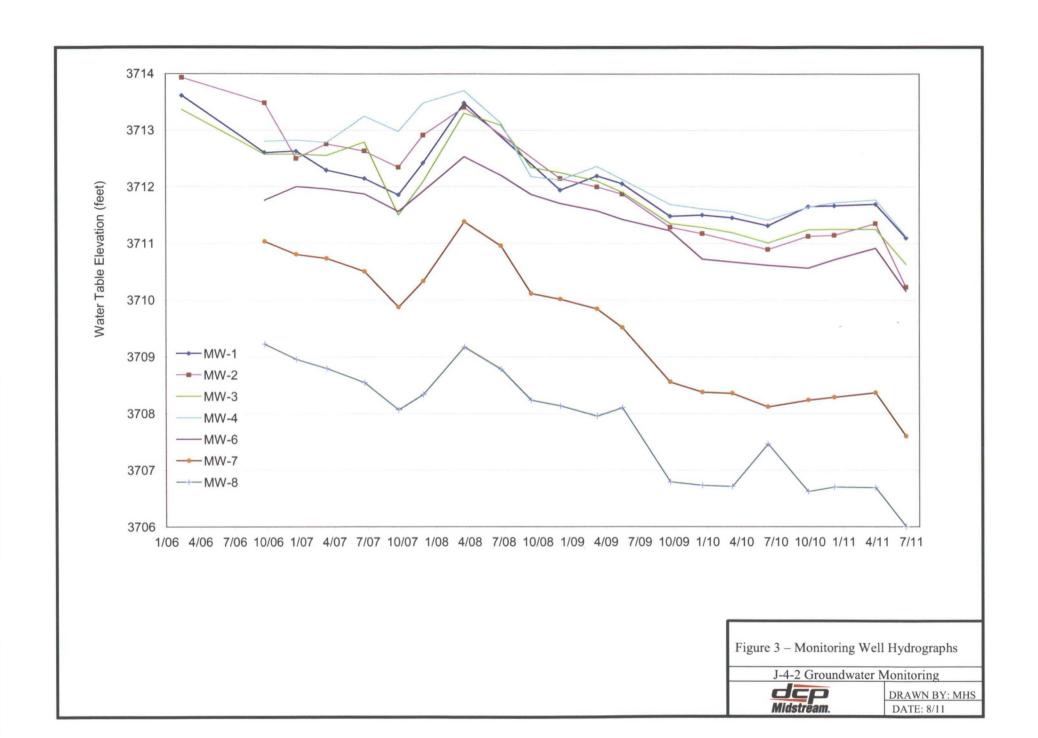
Notes:

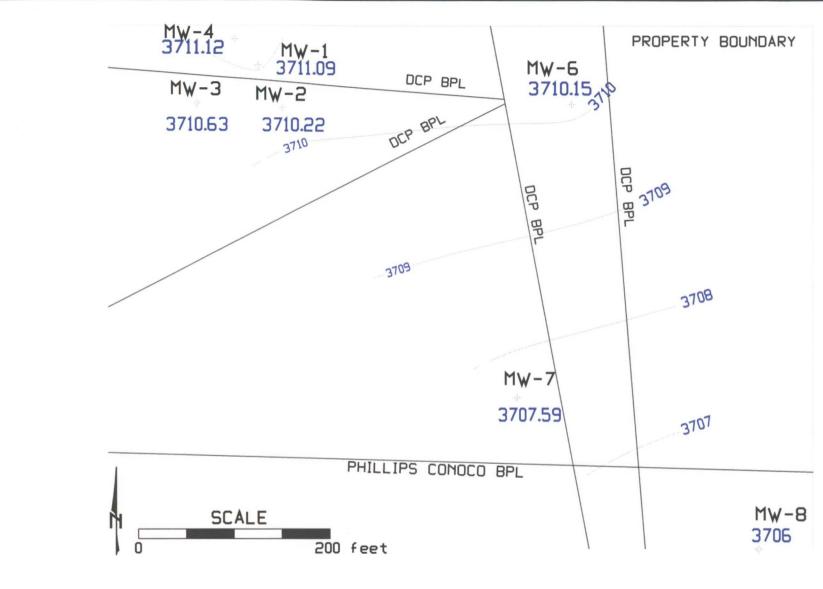
Units are mg/l
Duplicates are averaged together
NA: Not analyzed due to well obstruction

**FIGURES** 









Contour interval is 1 foot

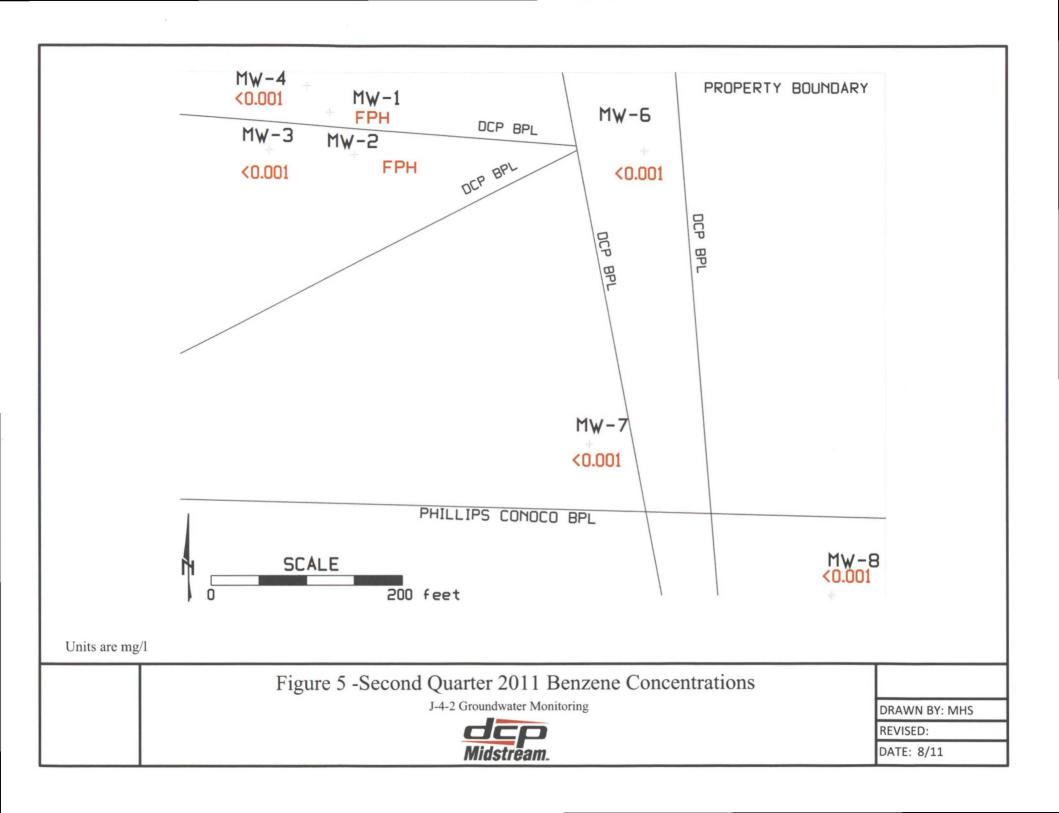
Figure 4 -Second Quarter 2011 Water Table Contours J-4-2 Groundwater Monitoring

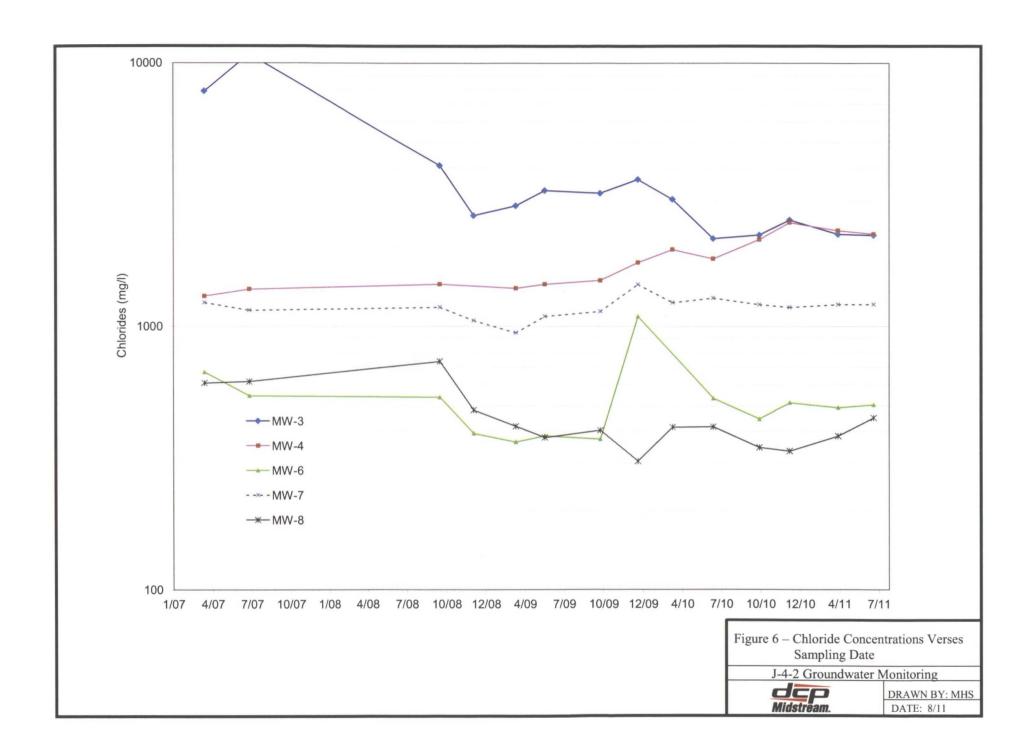


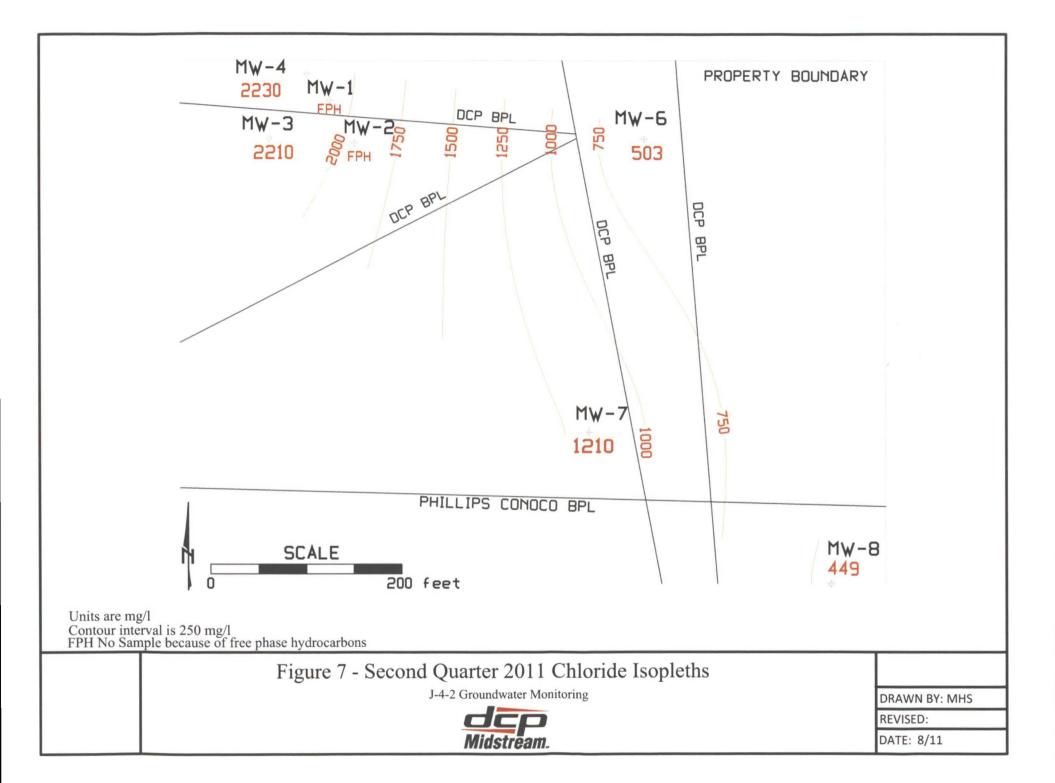
DRAWN BY: MHS

REVISED:

DATE: 8/11







# WELL SAMPLING DATA AND LABORATORY ANALYTICAL REPORT

	CLIENT:	DC	P Midstre	am	_	WELL ID:	MW-1			
s	ITE NAME:		J 4 2		=	DATE:	6/20/2011			
PRO	DJECT NO.				S	AMPLER:	N Quevedo			
					_					
PURGING	METHOD:	:	☐ Hand Bai	iled ∐Pu	mp If Pui	mp, Type:				
SAMPLIN	G METHO	D:	☑ Disposab	le Bailer [	Direct f	rom Disch	narge Hose 🗌 Other:			
DESCRIB	E EQUIPM	ENT DECO	NTAMINATI	ON METHO	DD BEFO	RE SAMP	PLING THE WELL:			
☑ Glove:	s 🗌 Alcono	x	ed Water Rii	nse 🔲 O	ther:					
TOTAL DEPTH OF WELL:  DEPTH TO WATER:  HEIGHT OF WATER COLUMN:  WELL DIAMETER:  2.0 Inch  DO										
TIME	VOLUME PURGED	TEMP.	COND. mS/cm	рН	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS			
	0.0	: Total volu	me purged							
SAMPLE NO.: MW-1										
ANALYSES:										
	MENTS:	Not sample	d FPH			1.5.6.1				

	CLIENT:	DC	Pivilastre	am	_	WELL ID:	IVI VV - Z
S	ITE NAME:		J 4 2		_	DATE:	6/20/2011
PRO	OJECT NO.				_ S	AMPLER:	N Quevedo
PURGING	METHOD	:	☐ Hand Bai	iled 🗌 Pu	mp If Pu	тр, Туре:	
SAMPLIN	G METHO	D:	Disposab	le Bailer [	Direct 1	from Disch	narge Hose  Other:
DESCRIE	E EQUIPM	ENT DECO	NTAMINATI	ON METHO	DD BEFO	RE SAMP	LING THE WELL:
☑ Glove	s 🗌 Alcond	x	ed Water Ri	nse 🔲 C	ther:		
DEPTH T HEIGHT (	O WATER: OF WATER	COLUMN:	43.05 30.40 12.65	Feet		24.8	Minimum Gallons to purge 3 well volumes
WELL DIAMETER: 4.0 Inch							(Water Column Height x 1.96)
TIME	VOLUME PURGED		COND. mS/cm	рН	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
		<u> </u>					
						٠	
				-			
			i				
							•
-4							
				,			
							<b>V</b>
	0.0	: Total volu	me purged				,,
SAMPLE NO.: MW-2							
ANAL	ANALYSES:						
COMN	MENTS:	Not sample	d FPH				

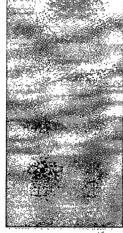
	CLIENT:	DC	P Midstre	am	_ '	WELL ID:	MW-3
s	ITE NAME:		J 4 2		_	DATE:	6/20/2011
PRO	DJECT NO.				_ S/	AMPLER:	N Quevedo
PURGING	METHOD:	;	✓ Hand Bai	led ∐Pu	mp If Pur	mp, Type:	
SAMPLIN	G METHOD	<b>)</b> :	☑ Disposab	le Bailer [	Direct f	rom Disch	narge Hose 🗌 Other:
DESCRIB	E EQUIPMI	ENT DECO	NTAMINATI	ON METHO	DD BEFO	RE SAMP	PLING THE WELL:
☑ Glove:	s 🗌 Alcono	x Distill	ed Water Rii	nse 🔲 C	ther:		
HEIGHT (	OF WATER	VELL: COLUMN: 2.0	43.00 28.76 14.24 Inch	Feet Feet Feet		7.0	Minimum Gallons to purge 3 well volumes (Water Column Height x 0.49)
TIME	VOLUME PURGED	TEMP.	COND. mS/cm	рН	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
	2.4	24.7	1.67	7.17			
	4.8	26.9	1.68	7.15			
	7.2	25.6	1.57	7.16			
4							
,							
7.2 : Total volume purged							
SAMPLE NO.: MW-3							
ANAL	ANALYSES: BTEX (8260)						
COM	COMMENTS:						

	CLIENT:	DC	am					
S	SITE NAME:		J 4 2		_	DATE:	6/20/2011	
						AMPLER:	N Quevedo	
					_			
PURGING	3 METHOD:	:	☑ Hand Bai	iled □Pu	mp If Pui	тр, Туре:		
SAMPLIN	IG METHOE	):	☑ Disposab	le Bailer [	Direct 1	rom Discl	narge Hose 🗌 Other:	
DESCRIE	BE EQUIPM	ENT DECO	NTAMINATI	ON METHO	DD BEFO	RE SAMF	PLING THE WELL:	
☑ Glove	s 🗹 Alcono	x ☑Distill	ed Water Rii	nse 🔲 C	ther:			
DEPTH T HEIGHT (	O WATER:	COLUMN: 2.0	9.00	Feet		4.4	Minimum Gallons to purge 3 well volumes (Water Column Height x 0.49)	
TIME	VOLUME PURGED	TEMP. °C	COND. mS/cm	pН	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS	
	1.6	21.6	1.94	7.39				
	3.2	21.3	1.94	7.38				
	4.8	21.5	1.94	7.38				
							;	
<u>.</u>								
<del></del>	4.8	: Total volu	me purged					
SAMPLE NO.: <u>MW-4</u>								
ANAL	ANALYSES: BTEX (8260)							
COMN	MENTS:	Duplicate s	ample collec	ted				

	CLIENT:	DC	P Miastre	am	WELLID:					
s	ITE NAME:		J 4 2			DATE:	6/20/2011			
PRO	DJECT NO.		<u>-</u>		S	AMPLER:	N Quevedo			
PURGING	METHOD:		☑ Hand Bai	led 🗌 Pui	mp If Pur	тр, Туре:				
SAMPLIN		<b>)</b> :	☑ Disposab	le Bailer [	Direct f	from Disch	narge Hose 🔲 Other:			
DESCRIB	E EQUIPME	ENT DECO	NTAMINATIO	ON METHO	D BEFO	RE SAMF	PLING THE WELL:			
☑ Glove:	s 🗌 Alcono	x Distille	ed Water Rir	nse 🗌 O	ther:		4-7			
DEPTH TO	O WATER:	COLUMN:	34.35 29.81 4.54 Inch		2.2	Minimum Gallons to purge 3 well volumes (Water Column Height x 0.49)				
TIME	VOLUME PURGED	TEMP. °C	COND. mS/cm	рН	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS			
	1.4	21	1.29	7.56						
	2.8	21.2	1.29	7:54						
	4.2	21.1	1.29	7.50						
i				!						
		<u>.</u>								
		i								
		:								
4.2 : Total volume purged										
SAMPLE NO.:										
ANALYSES: BTEX (8260)										
COMN	MENTS:									

	CLIENT:	DC	P Midstre	am	WELL ID: MW-7				
SI	TE NAME:		J 4 2		-	DATE:	6/20/2011		
						AMPLER:	N Quevedo		
PURGING	METHOD	:	☑ Hand Bai	led 🗌 Pu	mp If Pur	тр, Туре:			
SAMPLING	G МЕТНОІ	<b>D</b> :	✓ Disposab	le Bailer [	Direct f	rom Disch	narge Hose 🗌 Other:		
DESCRIB	E EQUIPM	ENT DECO	NTAMINATIO	ON METHO	D BEFO	RE SAMP	LING THE WELL:		
☑ Gloves	S Alcono	x Distill	ed Water Rii	nse 🔲 O	ther:		· · · · · · · · · · · · · · · · · · ·		
DEPTH TO	O WATER: OF WATER METER:	COLUMN:	6.31 Inch		3.1	Minimum Gallons to purge 3 well volumes (Water Column Height x 0.49)			
TIME	VOLUME PURGED	TEMP.	COND. mS/cm	рН	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS		
	1.2	22.7	2.26	7.49					
	2.4	22.1	2.27	7.50		_			
	3.6	21.0	2.26	7.45					
•	3.6	: Total volui	me puraed		·				
SAMPLE NO.: MW-7									
ANALYSES: BTEX (8260)									
СОММ	•	Collected M							

	CLIENT:	DC	P Midstre	am	_ '	WELL ID:	MW-8
s	ITE NAME:		J 4 2	·	-	DATE:	6/20/2011
PRO	DJECT NO.				S	AMPLER:	N Quevedo
PURGING	METHOD:		☑ Hand Bai	led □Pu	mp If Pur	пр, Туре:	
SAMPLIN	G METHOD	<b>)</b> :	☑ Disposab	le Bailer [	Direct f	rom Discl	harge Hose  Other:
DESCRIB	E EQUIPMI	ENT DECO	NTAMINATIO	ON METHO	DD BEFO	RE SAMF	PLING THE WELL:
☑ Glove:	s 🗌 Alcono	x Distill	ed Water Rii	nse 🔲 O	ther:		
HEIGHT (	OF WATER	/ELL: COLUMN: 2.0	38.32 31.32 7.00 Inch	Feet Feet Feet		3.4	Minimum Gallons to purge 3 well volumes (Water Column Height x 0.49)
TIME	VOLUME PURGED	TEMP. °C	COND. mS/cm	рН	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
	1.3	21.4	1.32	7.49			
	2.6	21.0	1.32	7.48			
	3.9	21.0	1.32	7.49			
						<u> </u>	
				-			
		-					
<del> </del>				····			
	3.9	: Total volu	me purged				
SAMPLE NO.: MW-8							
ANALYSES: BTEX (8260)							
COMN	MENTS:						





# Technical Report for

DCP Midstream, LP

AECCOL: J-4-2 Proj#390660601

RC-GN00

Accutest Job Number: D24763

Sampling Date: 06/20/11

### Report to:

American Environmental Consulting, LLC

mstewart@aecdenver.com

ATTN: Michael Stewart

Total number of pages in report: 29



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.

Client Service contact: Shea Greiner 303-425-6021

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

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

1 of 29
ACCUTESTS
D24763

John Hamilton

**Laboratory Director** 

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# Sample Summary

7. 3

DCP Midstream, LP

AECCOL: J-4-2 Proj#390660601 Project No: RC-GN00

Job No: D24763

Sample Number	Collected Date	Time	Self-Market Market Comments of the	Received	Matri Code	<del></del> -	Client Sample ID
D24763-1	06/20/11	16:00	NQ	06/23/11	AQ	Ground Water	MW-3
D24763-2	06/20/11	16:20	NQ	06/23/11	AQ	Ground Water	MW-4
D24763-3	06/20/11	17:00	NQ	06/23/11	AQ	Ground Water	MW:6
D24763-4	06/20/11	17:20	NQ	06/23/11	AQ	Ground Water	MW-7
D24763-4D	06/20/11	17:20	NQ	06/23/11	AQ	Water Dup/MSD	MW-7
D24763-4M	06/20/11	17:20	NQ	06/23/11	AQ	Water Matrix Spike	MW-7
D24763-5	06/20/11	17:50	NQ	06/23/11	AQ	Ground Water	MW-8
D24763-6	06/20/11	00:00	NQ	06/23/11	AQ	Ground Water	DUP.
D2476347	06/20/11	00:00	NQ	06/23/11	AQ	Ground Water	TRIP BEANK



#### CASE NARRATIVE / CONFORMANCE SUMMARY

DCP Midstream, LP Client:

Job No

D24763

Site:

AECCOL: J-4-2 Proj#390660601

Report Date

6/30/2011 5:04:20 PM

On 06/23/2011, 7 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 5.9 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D24763 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: V7V392

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D24763-4MS, D24763-4MSD were used as the QC samples indicated.

#### Wet Chemistry By Method EPA 300/SW846 9056

Matrix AQ

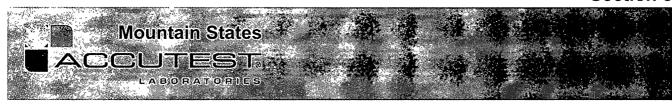
Batch ID: GP4758

- All samples were prepared and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D24741-1MS, D24741-1MSD were used as the QC samples for the Chloride analysis.

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

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

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





Sample Resu	ilts	
Report of An	alysis	

By

DC

Client Sample ID: MW-3

File ID

7V07411.D

Lab Sample ID: Matrix:

D24763-1

AQ - Ground Water

Date Sampled: Date Received:

06/20/11 06/23/11

Method:

SW846 8260B

Percent Solids: n/a

Project:

AECCOL: J-4-2 Proj#390660601

DF

1

Analytical Batch Prep Date Prep Batch V7V392 n/a

Run #1 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 Toluene	ND ND	0.0010	0.00025	mg/l	

Analyzed

06/24/11

Ethylbenzene 100-41-4 1330-20-7 Xylene (total)

0.0020 0.00050 mg/l 0.0040 0.0020 mg/l

CAS No. Surrogate Recoveries Run#2 Run#1

63-130%

17060-07-0 1,2-Dichloroethane-D4 2037-26-5 Toluene-D8 460-00-4 4-Bromofluorobenzene



68-130% 61-130%

Limits

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



Page 1 of 1

Client Sample ID: MW-3

Lab Sample ID:

D24763-1

Matrix:

AQ - Ground Water

Date Sampled:

06/20/11

Date Received: 0

d: 06/23/11

Percent Solids: n/a

Project:

AECCOL: J-4-2 Proj#390660601

2210 50

General Chemistry

Analyte

Chloride

Result

RL

Units

mg/l

DF

100

Analyzed

06/24/11 09:43 GH

Method

\_\_\_



Page 1 of 1

Client Sample ID: MW-4

Lab Sample ID:

D24763-2

Matrix: Method: Project: AQ - Ground Water

DF

1

AECCOL: J-4-2 Proj#390660601

SW846 8260B

By

DC

Date Sampled: Date Received:

06/20/11 06/23/11

n/a

Q

Percent Solids: n/a

Prep Batch

**Analytical Batch** 

V7V392

Run #1 Run #2

Purge Volume

File ID

7V07412.D

Run #1 5.0 ml

Run #2

Purgeable Aromatics

CAS No. Compound

71-43-2 Benzene

108-88-3 Toluene 100-41-4 Ethylbenzene

1330-20-7 Xylene (total)

CAS No. Surrogate Recoveries

17060-07-0 1,2-Dichloroethane-D4

2037-26-5 Toluene-D8

460-00-4 4-Bromofluorobenzene Result

ND

ND -

Analyzed

06/24/11

RL

**MDL** 

Prep Date

n/a

Units

0.0010 0.00025 mg/l

0.0010 0.0020 mg/l 0.0020 0.00050 mg/l

0.0040 0.0020 mg/l

Run#1 Run#2

95%

102%

86%

63-130%

Limits

68-130% 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





Client Sample ID: MW-4

Lab Sample ID: Matrix:

D24763-2

AQ - Ground Water

Date Sampled:

06/20/11 06/23/11

Project:

AECCOL: J-4-2 Proj#390660601

Date Received: Percent Solids: n/a

General Chemistry

Analyte

Result

RL

Units

DF

Analyzed Ву

Method

Chloride

2230 50

mg/l

100

06/24/11 09:54 GH



Page 1 of 1

Client Sample ID: MW-6

Lab Sample ID:

D24763-3

Matrix: Method: Project:

AQ - Ground Water SW846 8260B

AECCOL: J-4-2 Proj#390660601

Date Sampled: 06/20/11 Date Received: 06/23/11

Percent Solids: n/a

**Analytical Batch** File ID DF Prep Date Prep Batch Analyzed By Run #1 DC V7V392 7V07413.D 06/24/11 1 n/a

Run #2

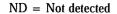
Purge Volume

Run #1 5.0 ml

Run #2

#### Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)	ND ND ND ND	0.0010 0.0020 0.0020 0.0040	0.00025 0.0010 0.00050 0.0020	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts	
17060-07-0 2037-26-5 460-00-4	1,2-Dichloroethane-D4 Toluene-D8 4-Bromofluorobenzene	98% 102% 87%		63-13 68-13 61-13	80%	



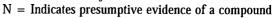
MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank







Client Sample ID: MW-6

Lab Sample ID: D24763-3

Matrix:

AQ - Ground Water

Date Sampled: 06/20/11 Date Received: 06/23/11

Project:

AECCOL: J-4-2 Proj#390660601

Percent Solids: n/a

General Chemistry

Analyte

Result

RL

Units

DF

Analyzed

Method

Chloride 503 10 20 mg/l 06/24/11 10:05 GH EPA 300/SW846 9056



Page 1 of 1

Client Sample ID: MW-7

Lab Sample ID:

D24763-4

Matrix: Method: AQ - Ground Water

SW846 8260B

DF

1

Date Sampled: Date Received:

06/20/11 06/23/11

Percent Solids:

Project:

AECCOL: J-4-2 Proj#390660601

Prep Batch **Analytical Batch** 

Analyzed By Prep Date 06/24/11 DC n/a n/a V7V392

Run #1 Run #2

Purge Volume

Run #1

5.0 ml

File ID

7V07408.D

Run #2

CAS No.

**Purgeable Aromatics** 

CAS No. Compound Result RLMDL Units Q

ND

71-43-2 Benzene 108-88-3 Toluene 100-41-4 Ethylbenzene 1330-20-7 Xylene (total)

0.0020 ND) 0.0010ND 0.0020 0.00050 mg/l 0.0040 0.0020 mg/l ND

Run#2

0.0010

Surrogate Recoveries

17060-07-0 1,2-Dichloroethane-D4

2037-26-5 Toluene-D8

460-00-4 4-Bromofluorobenzene 93%

Run#1

63-130%

Limits

0.00025 mg/l

68-130%

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





Page 1 of 1

Client Sample ID: MW-7

Lab Sample ID:

D24763-4

Matrix:

AQ - Ground Water

Date Sampled: 06/20/11

Date Received: 06/23/11

Percent Solids: n/a

Project:

AECCOL: J-4-2 Proj#390660601

General Chemistry

Analyte

Result

RL

25

Units

DF

Analyzed

Method Ву

Chloride

1210

mg/l

50

06/24/11 10:16 GH



Ву

DC

Page 1 of 1

Client Sample ID: MW-8

Lab Sample ID: D24763-5

File ID

7V07414.D

Matrix:

AQ - Ground Water SW846 8260B

DF

1

Date Sampled: Date Received:

06/20/11

Percent Solids: n/a

06/23/11

n/a

Method: Project:

AECCOL: J-4-2 Proj#390660601

Analytical Batch Prep Date Prep Batch

V7V392

Run #1 Run #2

Purge Volume Run #1 5.0 ml

Run #2

CAS No.

Purgeable Aromatics

CAS No. Compound Result RLMDL Units Q

Analyzed

06/24/11

71-43-2 Benzene 108-88-3 Toluene 100-41-4 Ethylbenzene 1330-20-7 Xylene (total)

Surrogate Recoveries

17060-07-0 1,2-Dichloroethane-D4

Toluene-D8 2037-26-5

460-00-4 4-Bromofluorobenzene

0.0010 0.00025 mg/l ND 0.0020 0.0010 mg/l 0.0020 0.00050 mg/l

0.0040 0.0020 mg/l

63-130%

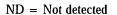
68-130%

61-130%

n/a

Run#1 Run#2 Limits

98% 101% 86%



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





Client Sample ID: MW-8

Lab Sample ID:

D24763-5

Matrix:

AQ - Ground Water

Date Sampled: 06/20/11

Date Received: 06/23/11

06/24/11 10:28 GH

Percent Solids: n/a

Project:

Chloride

AECCOL: J-4-2 Proj#390660601

444

General Chemistry

Analyte Result

RL

10

Units DF

20

mg/l

Analyzed

Method

By

DC

Client Sample ID: DUP

Lab Sample ID: D24763-6

File ID

7V07415.D

SW846 8260B

AQ - Ground Water

DF

1

AECCOL: J-4-2 Proj#390660601

Date Sampled: Date Received:

06/20/11 06/23/11

Percent Solids: n/a

Analytical Batch Prep Date Prep Batch V7V392 n/a n/a

Run #1 Run #2

Matrix:

Method:

Project:

Purge Volume

Run #1 5.0 ml

Run #2

Purgeable Aromatics

CAS No. Compound Result RL MDL Units Q

ND

Analyzed

06/24/11

71-43-2 Benzene 108-88-3 **Toluene** 100-41-4 Ethylbenzene 1330-20-7 Xylene (total)

0.0020 0.0010 0.0020 0.00050 mg/l 0.0040 0.0020 mg/l ND

CAS No. Surrogate Recoveries Run#1 Run#2 Limits

0.0010

17060-07-0 1,2-Dichloroethane-D4 2037-26-5 Toluene-D8

460-00-4 4-Bromofluorobenzene

63-130% 68-130% 61-130%

0.00025 mg/l

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





Client Sample ID: DUP

Lab Sample ID:

D24763-6

Matrix:

AQ - Ground Water

Date Sampled: 06/20/11

Date Received: 06/23/11

Project:

AECCOL: J-4-2 Proj#390660601

Percent Solids: n/a

General Chemistry

Analyte

Result

RL

Units

mg/l

DF

Analyzed

Method

Chloride

454

10

20

06/24/11 10:39 GH

Client Sample ID: TRIP BLANK Lab Sample ID: D24763-7 Date Sampled: 06/20/11

Matrix: Method: AQ - Ground Water SW846 8260B

Date Received: 06/23/11

Percent Solids: n/a

Project: AECCOL: J-4-2 Proj#390660601

File ID Prep Date Prep Batch Analytical Batch DF Analyzed By Run #1 7V07416.D 06/24/11 DC V7V392 1 n/a n/a

Run #2

Purge Volume

Run #1 5.0 ml

Run #2

#### Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)	ND ND ND ND	0.0010 0.0020 0.0020 0.0040	0.00025 0.0010 0.00050 0.0020	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts	
17060-07-0 2037-26-5 460-00-4	1,2-Dichloroethane-D4 Toluene-D8 4-Bromofluorobenzene	102% 104% 88%		63-13 68-13 61-13	80%	



MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

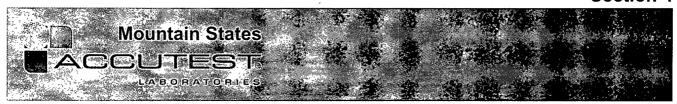
J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound







Misc. Forms		

**Custody Documents and Other Forms** 

Includes the following where applicable:

• Chain of Custody



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				TEL. 30:		21 FAX.		5854						Accute	st Quote	#				Accute	st Job # .	<u>7</u>	<u> </u>	<del>1</del> 7	63
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	erican Environmental Consulting	1													<b>\</b>	{	1			1		1	{		DW - Drinking Water GW - Ground Water
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Project (	eton CO 80128 Contact	Project #			Street A									1		I٠		ľ						i i	OI - Oil UQ - Other Liquid
1 .	hael Stewart mstewart@aecdenver.com		Project - 390660	601	POI	Box 4870	0									16				ł				1	AIR - Air SOL - Other Solid
Phone #		Client Purchase			City									1		🗟								1	WP - Wipe
	605-1718					dand OF	R 97208	-4870						]	Ì	≌	Ì	Ì	1	Ì	]				FB-Field Blank EB-Equipment Blank
Sample	r(s) Name(s)	Project Manager			Attentio									l≚		MS/MSD for V8260BTX				l	'				RB-Rinse Blank TB-Trip Blank
<del></del>			ı	Collection	Stev	Neather	s SWWe:	thers				n.com	~	V8260BTX		١٥				l					10.114
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Accuteet Bemple 9	Field ID / Point of Collection	MECH/DI VIal 8	Date	Time	Sampled	Matrix	# of bottle	₹	¥ 8	Š	NON	MECH	8	8	동	Σ								_	LAB USE ONLY
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D24763: Chain of Custody Page 1 of 2







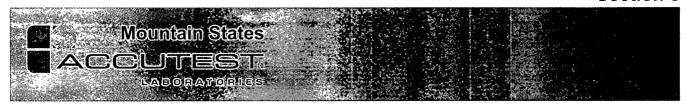
### Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D24763 Client: AMERICAN ENV. C	ONSULTING	Immediate Client Services	Action Re	quired:	No
Date / Time Received: 6/23/2011 11:00:00 AM No. Coolers:	1	Client Service Action Re	equired at	Login:	No
Project: DCP J-4-2	· Airbill #'s:	HD			
Cooler Security         Y         or         N         Y         or         or	N Sample Integrity  1. Sample labels pr 2 Container labelin	resent on bottles:	Y or	<u>N</u>	
Cooler Temperature Y or N		r label / COC agree:	V		
1. Temp criteria achieved:  2. Cooler temp verification.  3. Cooler media:  Infared gun  Ice (bag)	Sample Integrity  1. Sample recvd wr  2. All containers acc	thin HT	Y or	<u>N</u>	
Quality Control Preservation Y or N N/A	3. Condition of sam	ple:	Intac	t	_
1 Trip Blank present / cooler	Sample Integrity  1. Analysis reques  2. Bottles received		Y or	N □ ☑	N/A
4. VOCs headspace free:   ☑ □ □	Sufficient volum     Compositing ins     Filtering instructi				Z Z
Comments					
Accutest Laboratories V (303) 425-6021	4036 Youngfield Street F (303) 425-6854		Wheat Ridge, www/accutes		

D24763: Chain of Custody

Page 2 of 2





GC/MS Volatiles

**QC Data Summaries** 

Includes the following where applicable:

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

# Method Blank Summary Job Number: D24763

Account:

DCPMCODN DCP Midstream, LP

Project:

AECCOL: J-4-2 Proj#390660601

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V7V392-MB	7V07405.D	1	06/24/11	DC	n/a	n/a	V7V392

The QC reported here applies to the following samples:

Method: SW846 8260B

D24763-1, D24763-2, D24763-3, D24763-4, D24763-5, D24763-6, D24763-7

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 100-41-4 108-88-3 1330-20-7	Benzene Ethylbenzene Toluene Xylene (total)	ND ND ND ND	1.0 2.0 2.0 4.0	0.25 0.50 1.0 2.0	ug/l ug/l ug/l ug/l	
CAS No.	Surrogate Recoveries		Limits			
17060-07-0 2037-26-5 460-00-4	1,2-Dichloroethane-D4 Toluene-D8 4-Bromofluorobenzene	91% 101% 87%	63-130 68-130 61-130	%		

Page 1 of 1

# Blank Spike Summary Job Number: D24763

Account: Project:

DCPMCODN DCP Midstream, LP AECCOL: J-4-2 Proj#390660601

File ID DF Prep Date Prep Batch Analytical Batch Sample Analyzed Ву V7V392-BS 7V07406.D 1 06/24/11 DC n/a n/a V7V392

The QC reported here applies to the following samples:

Method: SW846 8260B

D24763-1, D24763-2, D24763-3, D24763-4, D24763-5, D24763-6, D24763-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2 100-41-4 108-88-3 1330-20-7	Benzene Ethylbenzene Toluene Xylene (total)	50 50 50 100	51.1 55.5 49.8 105	102 111 100 105	70-130 70-130 70-140 55-134
CAS No.	Surrogate Recoveries	BSP	Li	mits	
17060-07-0 2037-26-5 460-00-4	1,2-Dichloroethane-D4 Toluene-D8 4-Bromofluorobenzene	87% 101% 98%	68	-130% -130% -130%	



Page 1 of 1

Account: Project:

DCPMCODN DCP Midstream, LP AECCOL: J-4-2 Proj#390660601

Sample	File ID	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
D24763-4MS	7V07409.D	1	06/24/11	DC	n/a ¯	n/a	V7V392
D24763-4MSD	7V07410.D	1	06/24/11	DC	n/a	n/a	V7V392
D24763-4	7V07408.D	1	06/24/11	DC	n/a	n/a	V7V392

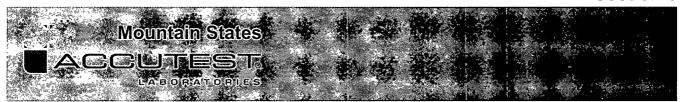
The QC reported here applies to the following samples:

Method: SW846 8260B

D24763-1, D24763-2, D24763-3, D24763-4, D24763-5, D24763-6, D24763-7

CAS No.	Compound	D24763-4 ug/l Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2 100-41-4 108-88-3 1330-20-7	Benzene Ethylbenzene Toluene Xylene (total)	ND ND ND ND	50 50 50 100	52.2 57.6 51.0 107	104 145 102 107	51.5 56.5 50.0 107	STATE OF THE STATE	1 2 2 2 0	59-132/30 68-130/30 56-142/30 36-146/30
CAS No.	Surrogate Recoveries	MS	MSD	D2	4763-4	Limits			
17060-07-0 2037-26-5 460-00-4	1,2-Dichloroethane-D4 Toluene-D8 4-Bromofluorobenzene	90% 103% 101%	90% 103% 101%	939 102 889	2%	63-1309 68-1309 61-1309	6		





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# QC Data Summaries

# Includes the following where applicable:

- Method Blank and Blank Spike SummariesDuplicate Summaries
- Matrix Spike Summaries

# METHOD BLANK AND SPIKE RESULTS SUMMARY GENERAL CHEMISTRY

manufacture of and

Login Number: D24763 Account: DCPMCODN - DCP Midstream, LP Project: AECCOL: J-4-2 Proj#390660601

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP4758/GN10225	0.50	0.0	mg/l	20	21.4	1070	90-110%

Associated Samples: Batch GP4758: D24763-1, D24763-2, D24763-3, D24763-4, D24763-5, D24763-6 (\*) Outside of QC limits



# MATRIX SPIKE RESULTS SUMMARY GENERAL CHEMISTRY

Login Number: D24763
Account: DCPMCODN - DCP Midstream, LP
Project: AECCOL: J-4-2 Proj#390660601

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP4758/GN10225	D24741-1	mg/l	2.3	10	13.1	108.0	80-120%

Associated Samples:
Batch GP4758: D24763-1, D24763-2, D24763-3, D24763-4, D24763-5, D24763-6
(\*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits



# MATRIX SPIKE DUPLICATE RESULTS SUMMARY GENERAL CHEMISTRY

Login Number: D24763
Account: DCPMCODN - DCP Midstream, LP
Project: AECCOL: J-4-2 Proj#390660601

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chloride	GP4758/GN10225	D24741-1	mg/l	2.3	10	13.2	0.8	20%

Associated Samples:

Batch GP4758: D24763-1, D24763-2, D24763-3, D24763-4, D24763-5, D24763-6

(\*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

