AP-55

2nd QTR GW monitoring results

DATE:
September 17, 2010

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

September 17, 2010

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

RE: 2nd Quarter 2010 Groundwater Results
DCP Midstream, LP RR Ext. Pipeline Release (AP #55)
Unit C, Section 19, Township 20 South, Range 37 East
Lea County, New Mexico

Dear Mr. Lowe:

DCP Midstream, LP (DCP) is pleased to submit for your review, one copy of the 2nd Quarter 2010 Groundwater Results for the DCP RR Ext. Pipeline Release located in Lea County, New Mexico (Unit C, Section 19, Township 20 South, Range 37 East).

Also included in the attached report, is a recommendation to install four additional groundwater monitor wells to delineate the extent of groundwater impacts. The proposed drilling locations are present in Figure 10 of the report. DCP is currently working with the State Land Office to amend the current water easement to add the four additional wells. Once DCP receives approval for the amended water easement, DCP will schedule the field activities associated with installing the four additional groundwater monitor wells. DCP will notify the OCD at least 48 hours before field activities are started.

If you have any questions regarding the report and/or the installation of the four additional groundwater monitor wells, please call at 303-605-1718 or e-mail me swweathers@dcpmidstream.com .

Sincerely

DCP Midstream, LP

Stephen Weathers, PG
Principal Environmental Specialist

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

AEC AMERICAN ENVIRONMENTAL CONSULTING, LLC

September 10, 2010

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

Re: Summary of Well Installation and Second Quarter 2010 Groundwater Monitoring Activities at the DCP Midstream RR Ext Pipeline Release
Unit C, Section 19 Township 20 South, Range 37 East (AP #55)

Dear Mr. Weathers:

This letter report summarizes the second quarter 2010 field activities that were completed at the DCP Midstream (DCP) RR Ext Site (Figure 1). The approximate site coordinates are 32.5624 north, 103.2923 west.

The field activities included well installation and groundwater monitoring. The next section summarizes the well installation activities. The third section discusses the groundwater monitoring results. The final section provides recommendations.

MONITORING WELL INSTALLATION

The June 2010 field activities included the installation, development and sampling of groundwater monitoring wells MW-9, MW-10, MW-11 and MW-12 (Figure 2). The activities were originally proposed in a February 16, 2010 work plan that was submitted and approved by the New Mexico Oil Conservation Division (OCD). The work was completed in June 2010 after receiving approval from the State Land Office.

The wells were installed on June 15 and June 16, 2010 with a hollow-stem auger drilling rig using the protocols included in the February 2010 work plan. The four wells were installed to a nominal depth of 38 feet below ground surface (bgs).

Well construction information for the existing and new wells is summarized in Table 1. The surface completion for each well included an above-ground well protector and a minimum 2 foot by 2 foot concrete pad. All cuttings generated during the drilling process were placed on and then covered with visqueen pending appropriate disposal.

The four new wells were developed by bailing a minimum of 10 gallons. The wells were then purged and sampled as part of the quarterly groundwater monitoring event described below.

GROUNDWATER MONITORING

The eight existing and four new wells were purged and sampling on June 17, 2010. The locations are shown on Figure 2. The fluid levels were first measured at each well to calculate the casing volumes. Wells MW-3, MW-4 and MW-5 contained free phase hydrocarbon (FPH) so they were not purged and sampled.

The remaining nine wells were first purged to equilibration using dedicated bailers based on the field parameters of temperature, pH and conductivity. They were then sampled for benzene, toluene, ethylbenzene and xylenes (BTEX) using EPA Method SW846 8260B and for chlorides using Method SM 4500 CL C. A field duplicate from MW-1 and a matrix spike/matrix spike duplicate (MS/MSD) from MW-6 were also collected to evaluate quality control. All affected purge water was disposed of at the DCP Linam Ranch facility.

The depths to water were remeasured on June 29, 2010 to ensure equilibrated conditions. Wells MW-9 and MW-10 now contained FPHs. It was apparent that additional wells would have to be installed in the near future so AEC postponed the surveying activities and preparation of the boring logs until all the next set of monitoring wells are installed.

The June 29, 2010 water gauging data are summarized in Table 2. 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)

Well hydrographs are plotted on Figure 3 for MW-1 to MW-8. Figure 3 indicates that the water table elevation rose across the site at a relatively consistent rate for a second consecutive quarter.

The measured water table elevations from MW-1 to MW-8 were used to generate a groundwater contour map using the Surfer program with a kriging option. This map is included as Figure 4. Groundwater appears to flow almost due south down gradient of MW-5. The generally-southward groundwater flow pattern is similar to that exhibited in the past.

The sampling data are summarized in Table 3. The measured field parameters and a copy of the laboratory report are attached. The quality control evaluation data can be summarized as follows:

- The method blanks were all within their control limits.
- The blank spikes were all within their control limits.
- The individual sample surrogates results were within the method ranges.
- The matrix spike/matrix spike duplicates for MW-6 were within their control ranges.
- The differences between the MW-1 primary and duplicate samples were all less than 20 percent.

The above results indicate that the data are suitable for evaluation for groundwater monitoring purposes.

The New Mexico Water Quality Control Commission (NMWQCC) groundwater standards are included at the top of Table 3. There were no BTEX detections in wells MW-6, MW-7, MW-8, MW-11 and MW-12. Wells MW-1 and MW-2 exceeded the benzene standard.

Wells MW-3 and MW-4 and MW-5 were not sampled because they contained FPH. Wells MW-9 and MW-10 were also sampled on June 17, 2010 but these wells contained 1.33 feet and 0.54 feet respectively of FPH when they were remeasured on June 29, 2010. The BTEX results indicate that the water samples were contaminated with FPH so they are not included on Table 3.

Figure 5 shows the benzene concentrations and locations of the wells that contained FPH for the sampling event. The extent of dissolved phase BTEX effects is delineated to the south, southeast and east by MW-6, MW-7, MW-11 and MW-12. New wells MW-9 and MW-10 both contained FPH so additional characterization is necessary to delineate the extent of the FPH, and probably dissolved phase hydrocarbons, to the southwest and west. The presence of FPH in MW-3 indicates that additional characterization is also necessary to the north of it

All of the BTEX data collected for this project are summarized in Table 4. Figure 6 graphs the benzene concentration verses time for affected wells MW-1 and MW-2. The concentration in MW-1 declined for the second consecutive quarter but it still remains above the historic low concentration. The concentration in MW-2 remains relatively constant.

The concentrations in MW-8 have declined over the duration of the project to the point where the BTEX constituents were undetected for the fourth consecutive sampling event. This trend indicates that the dissolved-phase plume is defined on its up-gradient boundary.

The measured FPH thickness values are summarized in Table 5. FPH was first measured at the site in September 2009 in MW-4. FPH has now been present in MW-4 for four consecutive quarters. It is now also present in MW-3 and MW-5. The FPH appears to be relatively fresh based upon its color and odor.

The chloride data are summarized in Table 6. The laboratory measured concentrations between 385 and 650 mg/l in all of the samples except MW-2 (233 mg/l). Figure 7 shows the chlorides concentrations for this event. The anomalously-low value at MW-2 has been an historic phenomenon.

The chloride concentrations verses time are plotted on Figure 8. The concentrations all decreased substantially from the anomalously-high values that were measured in March 2010. The chloride values for the wells without FPH are plotted on Figure 9 with the March 2010 data removed. The graphs indicate that the chloride values are increasing in a uniform fashion in wells that are up-gradient (MW-8), within (MW-1 and MW-2) and down-gradient (MW-6 and MW-7) of the remediated release site. The relevance of this trend is unclear given the relatively low chloride concentrations involved.

RECOMMENDATIONS

AEC recommends that the following four activities be completed based upon the data collected to date. First, continue quarterly monitoring because the FPH and dissolved phase plume boundaries have not been defined. Sampling for chlorides should also continue to assess the apparent increasing trend.

Second, install four additional wells at the approximate locations shown on Figure 10. The wells may have to be moved based upon access conditions as well as the hydrocarbon distribution encountered.

The wells will be completed to tap the same approximate saturated interval as the existing wells. Soil samples will be collected as necessary to characterize hydrocarbon concentrations in the unsaturated subsurface materials. The wells will be developed prior to purging and sampling. Additional wells and/or soil borings may be installed during this program as necessary to complete characterization without having to prepare additional work plans.

Third, survey the locations and elevations of the new wells and recently-installed wells MW-9 through MW-12. Also, prepare boring logs detailing, lithology, staining and odor will be prepared for all wells beginning with MW-9.

Fourth, incorporate the results of these activities into the next quarterly report.

The next sampling event will be completed during the third quarter of 2010. Do not hesitate to contact me if you have any questions or comments on this document.

Respectfully Submitted,
AMERICAN ENVIRONMENTAL CONSULTING, LLC

Michael H. Stewart

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

attachments

TABLES

Table 1 – Summary of Well Construction at the DCP RR Ext Location

Well	Date Installed	Total Depth (ground)	Screen Interval (ground)	Sand Interval
MW-1	3/08	37.5	17.5-37.5	16-37.5
MW-2	3/08	37.5	17.5-37.5	16-37.5
MW-3	3/08	37.5	17.5-37.5	16-37.5
MW-4	3/08	37.5	17.5-37.5	16-37.5
MW-5	3/08	37.5	17.5-37.5	16-37.5
MW-6	6/08	37.5	17.5-37.5	16-37.5
MW-7	6/08	37.5	17.5-37.5	16-37.5
MW-8	6/08	37.5	17.5-37.5	16-37.5
MW-9	6/10	38	18-38	16-38
MW-10	6/10	38	18-38	16-38
MW-11	6/10	38	18-38	16-38
MW-12	6/10	38	18-38	16-38

Notes: Units are feet
All wells are 2-inch diameter
Wells were grouted to the surface with hydrated bentonite pellets and completed with above-ground well protectors

Table 2 - Summary of Second Quarter 2010 Fluids Measurement Data

Well	Depth to Water	Depth to Product	FPH Thickness	Water Table Elevation
MW-1	29.90			3504.67
MW-2	30.68			3504.50
MW-3	32.62	31.68	0.94	3504.66
MW-4	32.15	30.59	1.56	3504.22
MW-5	32.87	31.25	1.62	3504.27
MW-6	31.95			3504.21
MW-7	32.66			3504.43
MW-8	31.61			3504.80
MW-9	30.52	29.19	1.33	NE
MW-10	30.56	30.02	0.54	NE
MW-11	31.89			NE
MW-12	30.12			NE

Units are Feet
NE: not established: Casing elevation not yet measured

Table 3 - RR Ext Second Quarter 2010 Groundwater Sampling Results

Well	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Chlorides
NMWQCC Standards	0.010	0.75	0.75	0.62	250*
MW-1	**0.339**	0.0329	0.0539	0.0079	**518**
MW-1 DUP	**0.353**	0.0395	0.0632	0.0088	**501**
MW-2	**22.9**	0.39J	0.485	0.128J	233
MW-3	Not sampled because free phase hydrocarbons were present				
MW-4	Not sampled because free phase hydrocarbons were present				
MW-5	Not sampled because free phase hydrocarbons were present				
MW-6	<0.001	<0.002	<0.002	<0.004	**402**
MW-7	0.0005J	<0.002	<0.002	<0.004	**385**
MW-8	<0.001	<0.002	<0.002	<0.004	**553**
MW-9	FPH present, results not representative				**532**
MW-10	FPH present, results not representative				**656**
MW-11	<0.001	<0.002	<0.002	<0.004	**407**
MW-12	<0.001	<0.002	<0.002	<0.004	**514**
Trip Blank	<0.001	<0.002	<0.002	<0.004	

Notes: Units mg/l
NMWQCC Standards New Mexico Water Quality Control Commission Groundwater Standards
Bold values exceed the New Mexico Water Quality Control Commission Groundwater Standards
* Chlorides is a secondary (non-health based) standard.

Table 4 - RR Ext BTEX Groundwater Monitoring Results Summary

Well	Date	Benzene	Toluene	Ethylbenzene	Total Xylenes
NMWQCC Standards		.010	0.75	0.75	0.62
MW-1	3/08	**1.4**	**0.948**	0.0395	0.128
	6/08	**2.75**	**2.17**	0.054	0.232
	9/08	**1.1**	**0.845**	0.0375	0.131
Duplicate	9/08	**1.22**	**0.883**	0.0506	0.197
	12/08	**0.869**	0.581	0.0385	0.0709
	3/09	**0.288**	0.107	0.0149	0.0395
	5/09	**1.38**	0.175	0.0705	0.065
	9/09	0.267	0.0332	0.024	0.0078
	12/09	**0.819**	0.0267	0.088	0.012
	3/10	**0.726**	0.107	0.0879	0.0278J
Duplicate	3/10	**0.431**	0.714	0.64	0.201
	6/10	0.339	0.0329	0.0539	0.0079
Duplicate	6/10	0.353	0.0395	0.0632	0.0088
MW-2	3/08	**8.98**	**6.58**	0.135J	**0.765**
Duplicate	3/08	**10**	**7**	0.156J	**0.93**
	6/08	**24.3**	**18.5**	0.319	**2.58**
Duplicate	6/08	**23.5**	**19.2**	0.309	**2.36**
	9/08	**21.7**	**9.79**	0.443	**4.25**
	12/08	Not sampled: Remediation activities			
	3/09	**23.7**	**2.34**	0.583	**1.25**
Duplicate	3/09	**4.07**	**1.91**	0.268 J	0.49 J
	5/09	**32.7**	**1.31**	**0.791**	**1.69**
Duplicate	5/09	**30.7**	**1.43**	**0.907**	**2.14**
	9/09	29.3	0.771	0.491	0.371J
	12/09	**28.5**	0.347	0.57	0.177J
Duplicate	12/09	**31.8**	0.397J	**0.829**	0.193
	3/10	**23.8**	0.71	0.529	**<1.2**
	6/10	22.9	0.39J	0.485	0.128
MW-3	3/08	**0.759**	**0.849**	0.0355	0.0786
	6/08	**6.18**	**9.46**	0.287	**1.23**
	9/08	**2.45**	**3.62**	0.145	**1.14**
	12/08	**0.761**	**0.938**	0.0492	0.158
	3/09	**4.03**	**2.83**	0.18 J	0.61
	5/09	**14.7**	**12.6**	**0.808**	**1.64**
	9/09	5.5	1.09	0.271	<0.006
	12/09	**13.1**	**9.08**	**1.2**	**2.87**
	3/10	**8.43**	**9.14**	**1.01**	**2.71**
	6/10	**Free Phase Hydrocarbons**			

Notes: Units mg/l and NMWQCC Standards New Mexico Water Quality Control Commission Groundwater Standards
J qualifiers indicate an estimated concentration between the method detection and method reporting limits.
Bold values exceed the New Mexico Water Quality Control Commission Groundwater Standards

Table 4 - RR Ext BTEX Groundwater Monitoring Results Summary (continued)

Well	Date	Benzene	Toluene	Ethylbenzene	Total Xylenes
NMWQCC Standards		.010	0.75	0.75	0.62
MW-4	3/08	0.0102	0.0093	<0.002	0.0023J
	6/08	0.0439	0.0256	0.0068	0.0147
	9/08	0.514	0.443	0.0203	0.125
	12/08	1.32	1.35	0.0812	0.239J
	3/09	3.61	3.4	0.164 J	0.831
	5/09	4.7	2.94	0.428	1.03
	Free Phase Hydrocarbons Since Third Quarter 2009				
MW-5	3/08	0.0019J	0.0012J	<0.002	<0.006
	6/08	0.0037	0.0037	<0.002	<0.006
	9/08	0.0038	0.0037	<0.002	<0.006
	12/08	0.0031	0.004	<0.002	<0.006
	3/09	0.0067	0.0074	<0.002	<0.006
	5/09	0.0064	0.0089	0.0025	0.0045 J
	9/09	0.0082	0.0132	0.00066J	<0.006
	12/09	0.0096	0.0155	0.0013J	0.0021J
	Free Phase Hydrocarbons Since First Quarter 2010				
MW-6	6/08	<0.002	<0.002	<0.002	<0.006
	9/08	<0.002	<0.002	<0.002	<0.006
	12/08	<0.002	<0.002	<0.002	<0.006
	3/09	<0.002	<0.002	<0.002	<0.006
	5/09	<0.002	<0.002	<0.002	<0.006
	9/09	<0.002	<0.002	<0.002	<0.006
	12/09	<0.002	<0.002	<0.002	<0.006
	3/10	<0.002	<0.002	<0.002	<0.006
	6/10	<0.001	<0.002	<0.002	<0.002

Notes: Units mg/l and NMWQCC Standards New Mexico Water Quality Control Commission Groundwater Standards
J qualifiers indicate an estimated concentration between the method detection and method reporting limits.
Bold values exceed the New Mexico Water Quality Control Commission Groundwater Standards

Table 4 - RR Ext BTEX Groundwater Monitoring Results Summary (continued)

Well	Date	Benzene	Toluene	Ethylbenzene	Total Xylenes
NMWQCC Standards		.010	0.75	0.75	0.62
MW-7	6/08	<0.002	<0.002	<0.002	<0.006
	9/08	<0.002	<0.002	<0.002	<0.006
	12/08	<0.002	<0.002	<0.002	<0.006
	3/09	<0.002	<0.002	<0.002	<0.006
	5/09	<0.002	<0.002	<0.002	<0.006
	9/09	<0.002	<0.002	<0.002	<0.006
	12/09	<0.002	<0.002	<0.002	<0.006
	3/10	<0.002	<0.002	<0.002	<0.006
	6/10	0.0005J	<0.002	<0.002	<0.002
MW-8	6/08	**0.0384**	0.0255	0.00049J	0.0016J
	9/08	**0.0301**	0.0161	<0.002	0.002 J
	12/08	**0.0233**	0.011	<0.002	<0.006
Dup	12/08	**0.0122**	0.006	<0.002	<0.006
	3/09	**0.0218**	0.0066	<0.002	<0.006
	5/09	0.0098	0.0049	<0.002	<0.006
	9/09	<0.002	<0.002	<0.002	<0.006
Dup	9/09	<0.4	<0.4	<0.4	<1.2
	12/09	<0.002	<0.002	<0.002	<0.006
	3/10	<0.002	<0.002	<0.002	<0.006
	6/10	<0.001	<0.002	<0.002	<0.002
MW-9	**Free Phase Hydrocarbons at June 2010 Installation**				
MW-10	**Free Phase Hydrocarbons at June 2010 Installation**				
MW-11	6/10	<0.001	<0.002	<0.002	<0.004
MW-12	6/10	<0.001	<0.002	<0.002	<0.004

Notes: Units mg/l
NMWQCC Standards New Mexico Water Quality Control Commission Groundwater Standards
J qualifiers indicate an estimated concentration between the method detection and method reporting limits.
Bold values exceed the New Mexico Water Quality Control Commission Groundwater Standards

Table 5 - Summary of Free Phase Hydrocarbon Thickness

Date	MW-3	MW-4	MW-5	MW-9	MW-10
09/23/09	NP	~1.0	NP	NI	NI
12/20.09	NP	1.88	NP	NI	NI
03/22/10	NP	1.71	0.27	NI	NI
06/30/10	0.94	1.56	1.62	1.33	0.54

All units in feet
NP: no free phase hydrocarbons present
NI: well not installed

Table 6 - RR Ext Chlorides Groundwater Monitoring Results Summary

Well	9/08	12/08	3/09	5/09	9/09	12/09	3/10
MW-1	507	447	432	462	422	363	800
MW-2	109	NS	114	109	139	199	700
MW-3	363	301	273	313	363	398	440
MW-4	318	281	229	226	FPH	FPH	FPH
MW-5	373	318	288	363	358	313	FPH
MW-6	363	325	298	308	296	393	700
MW-7	378	348	283	298	273	328	750
MW-8	512	393	472	450	477	472	800

Well	6/10
MW-1	510
MW-2	233
MW-3	FPH
MW-4	FPH
MW-5	FPH
MW-6	402
MW-7	385
MW-8	553
MW-9	532*
MW-10	656*
MW-11	407
MW-12	514

Notes: Units are mg/l
Duplicate values averaged together
FPH free phase hydrocarbons present
* Collected with FPH in the well but believed to be representative

FIGURES

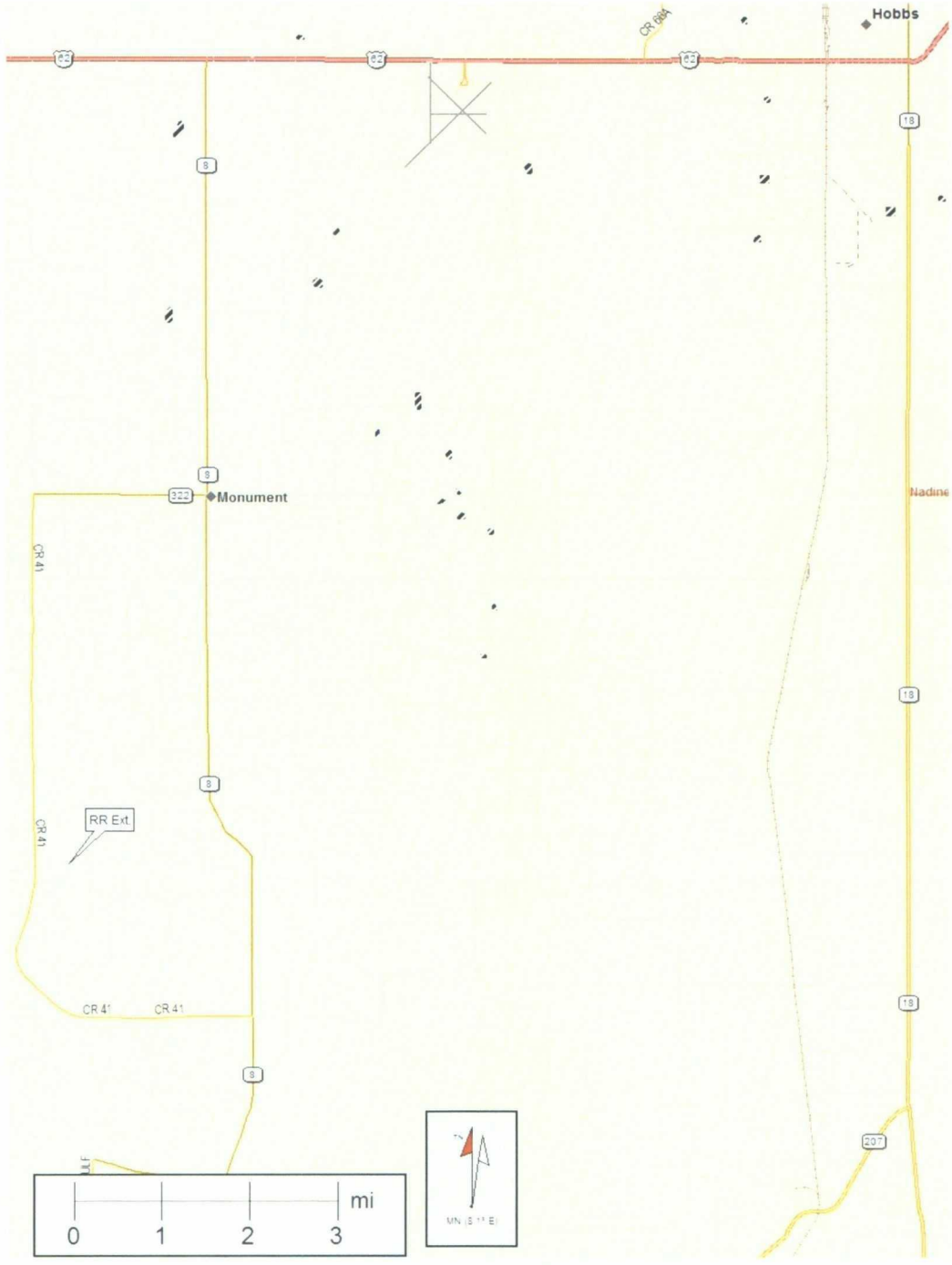


Figure 1 – Site Location

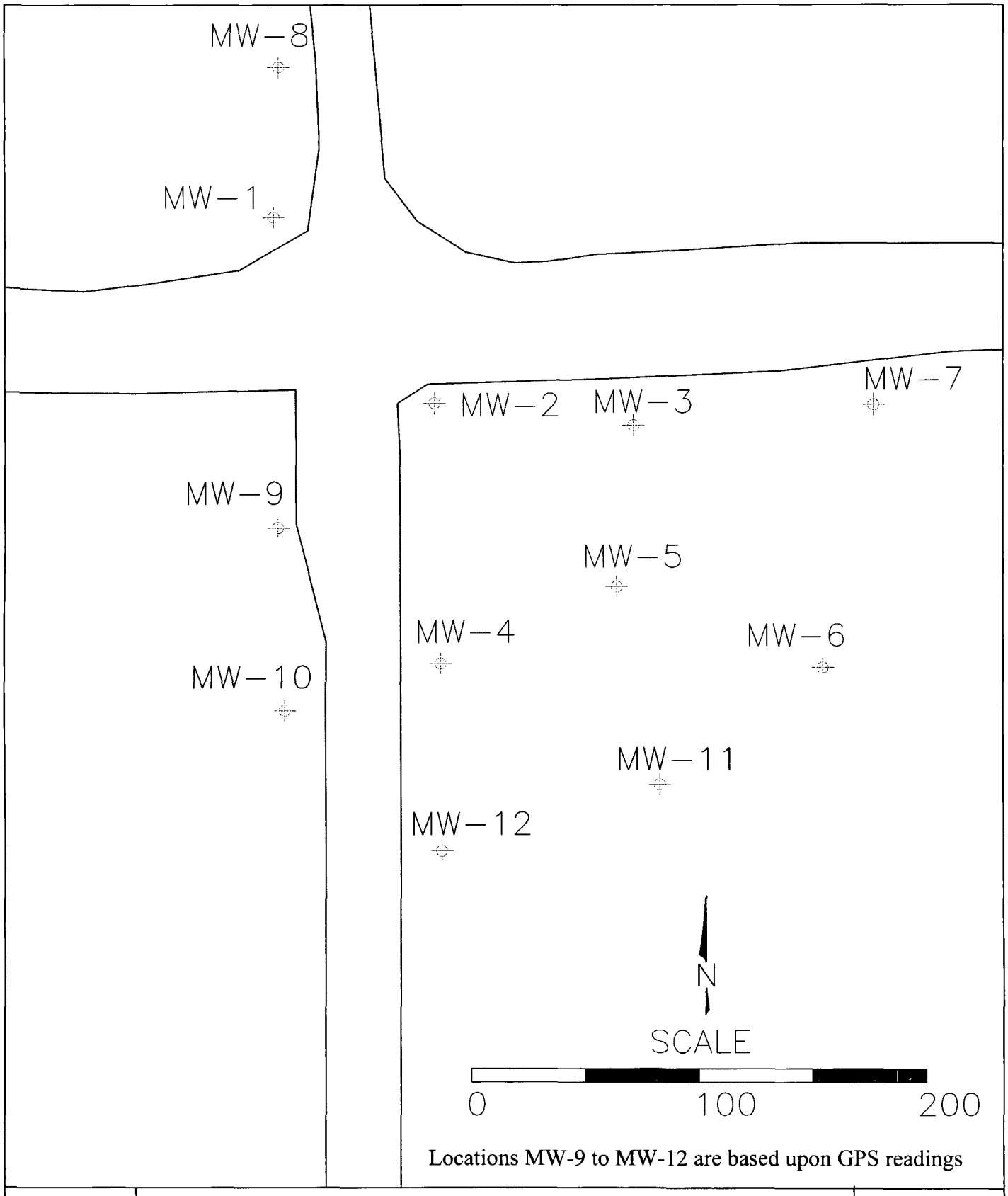
RR Ext - Groundwater Monitoring

dcp Midstream

DRAWN BY: MHS

REVISED:

DATE: 5/06



Locations MW-9 to MW-12 are based upon GPS readings

Figure 2 - Monitoring Well Locations

RR Ext - Groundwater Monitoring

dcp Midstream

DRAWN BY: MHS
REVISED:
DATE: 8/10

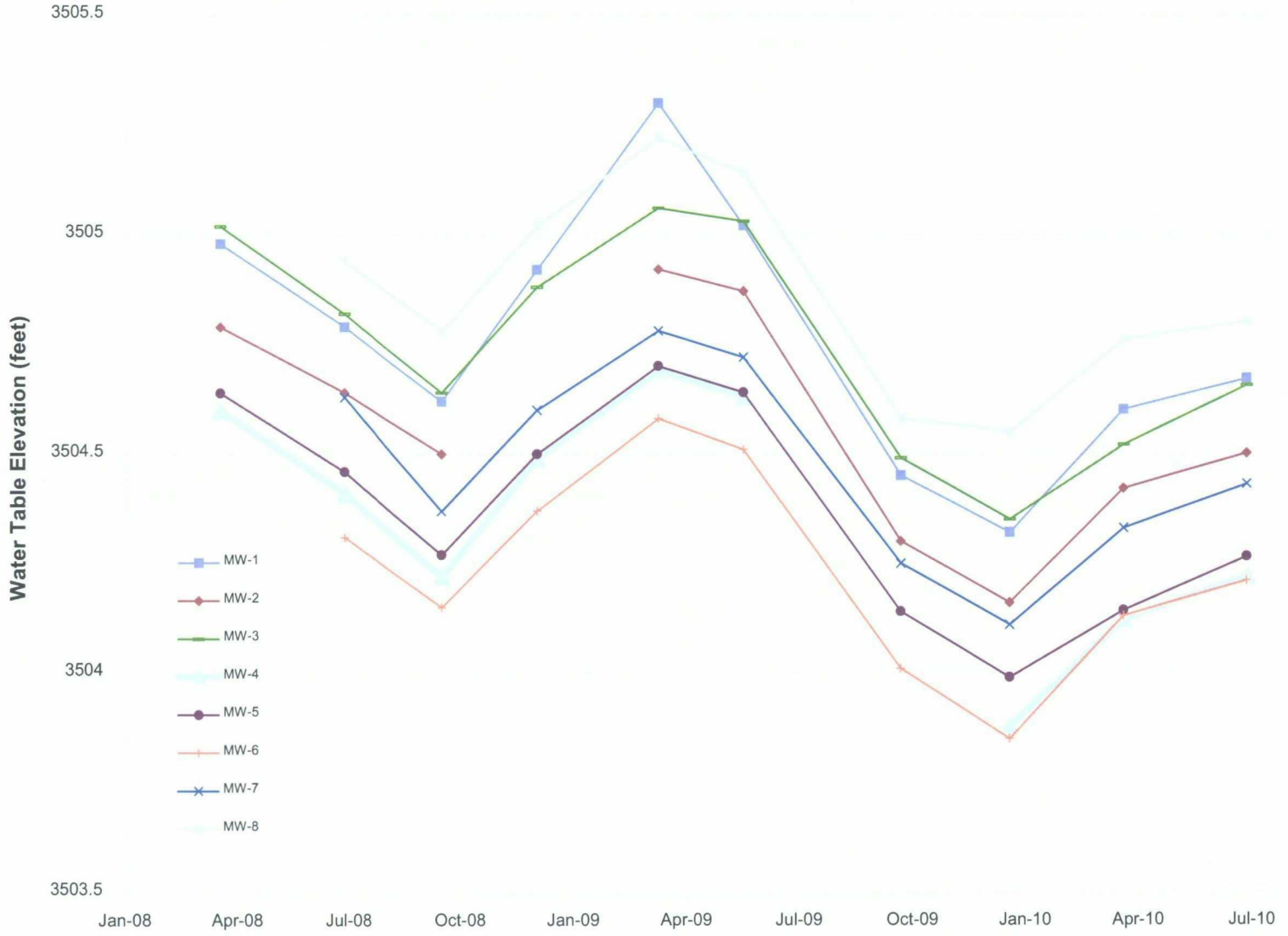


Figure 3 – Monitoring Well Hydrographs

RR Ext - Groundwater Monitoring

dcp Midstream.

DRAWN BY: MHS

DATE: 8/10

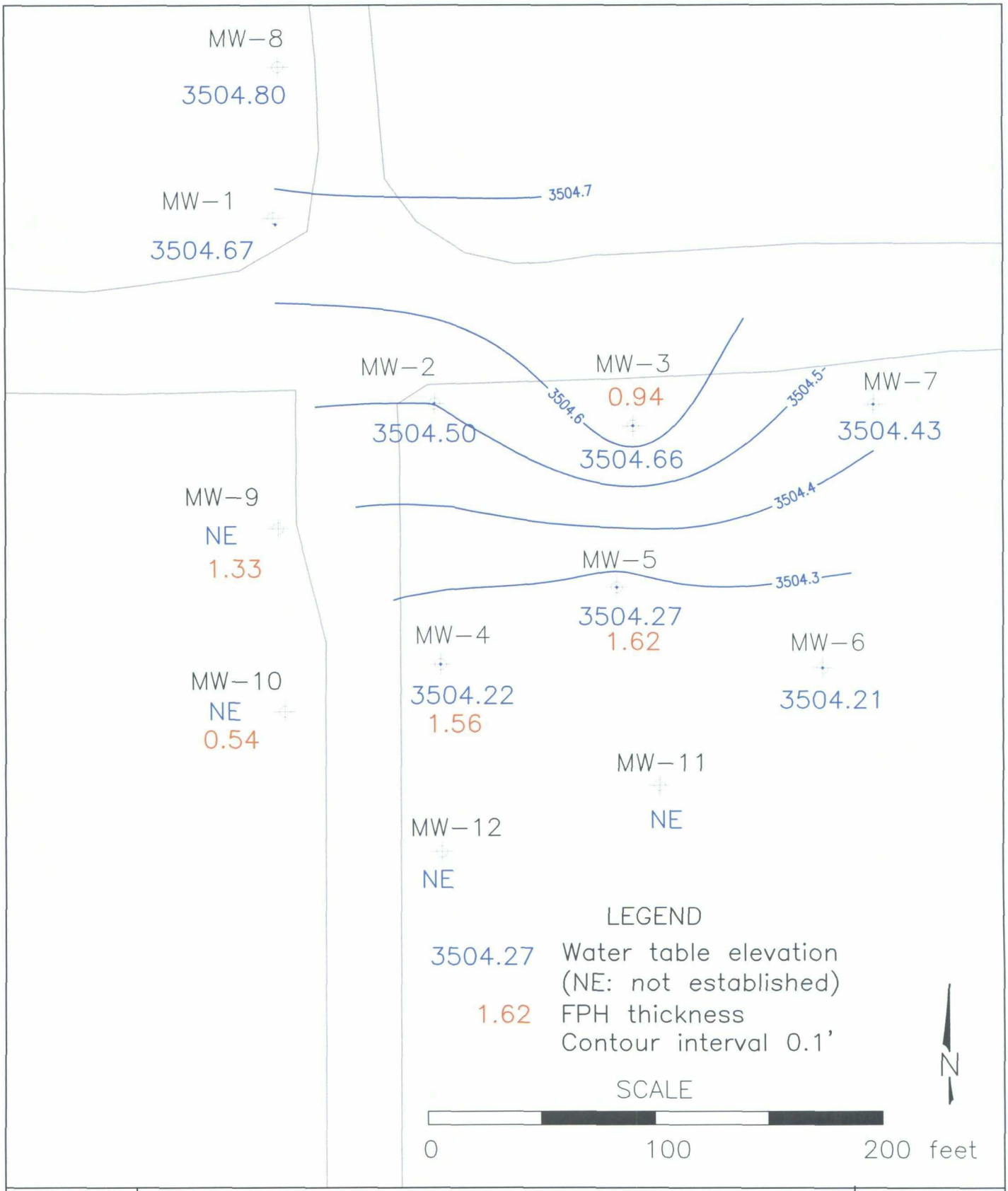


Figure 4 - Water Table Contours and FPH Thickness

RR Ext - Groundwater Monitoring

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REVISED:
DATE: 8/10

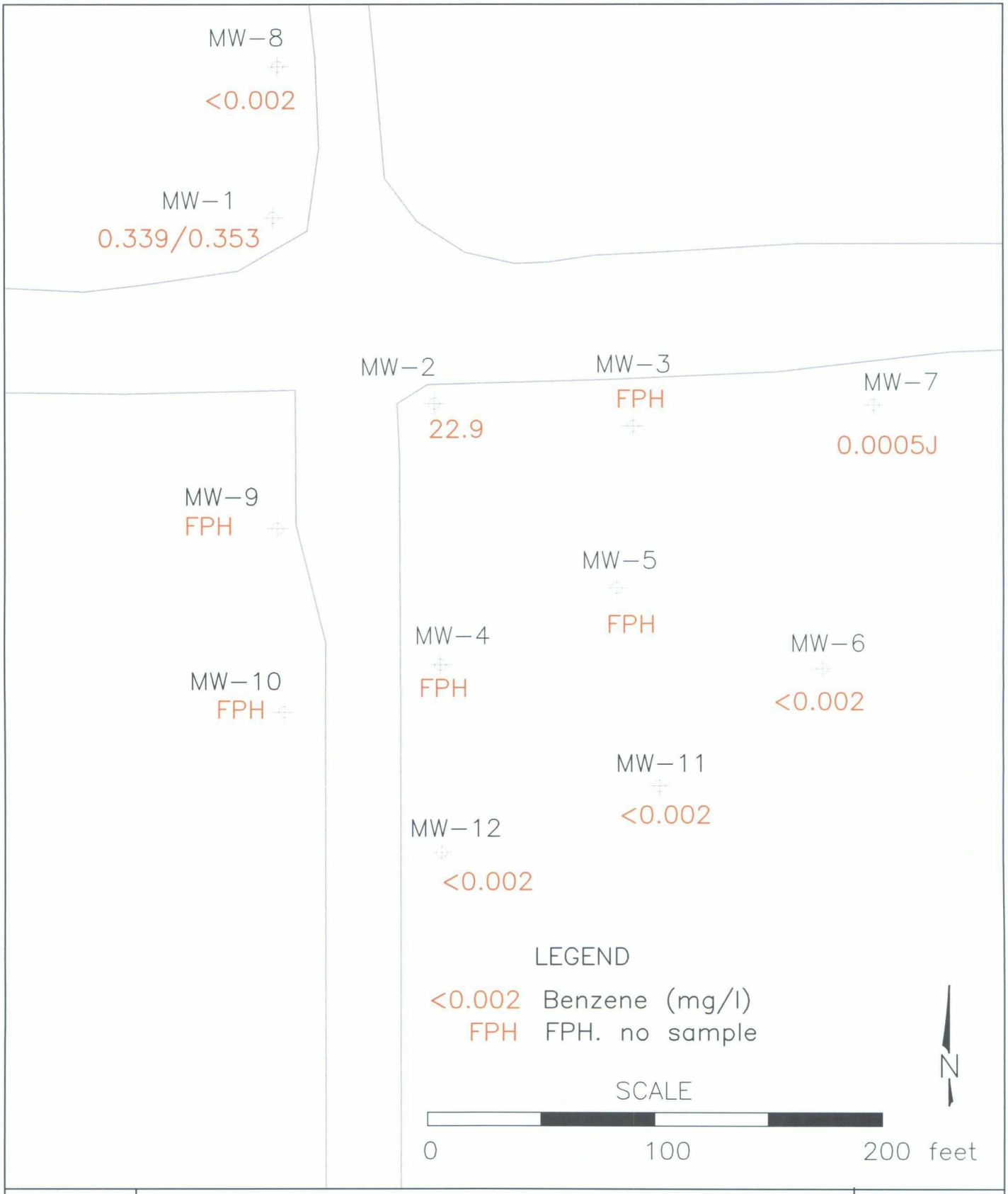

Figure 5 - Second Quarter 2010 Benzene Concentrations

RR Ext - Groundwater Monitoring

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REVISED:
DATE: 8/10

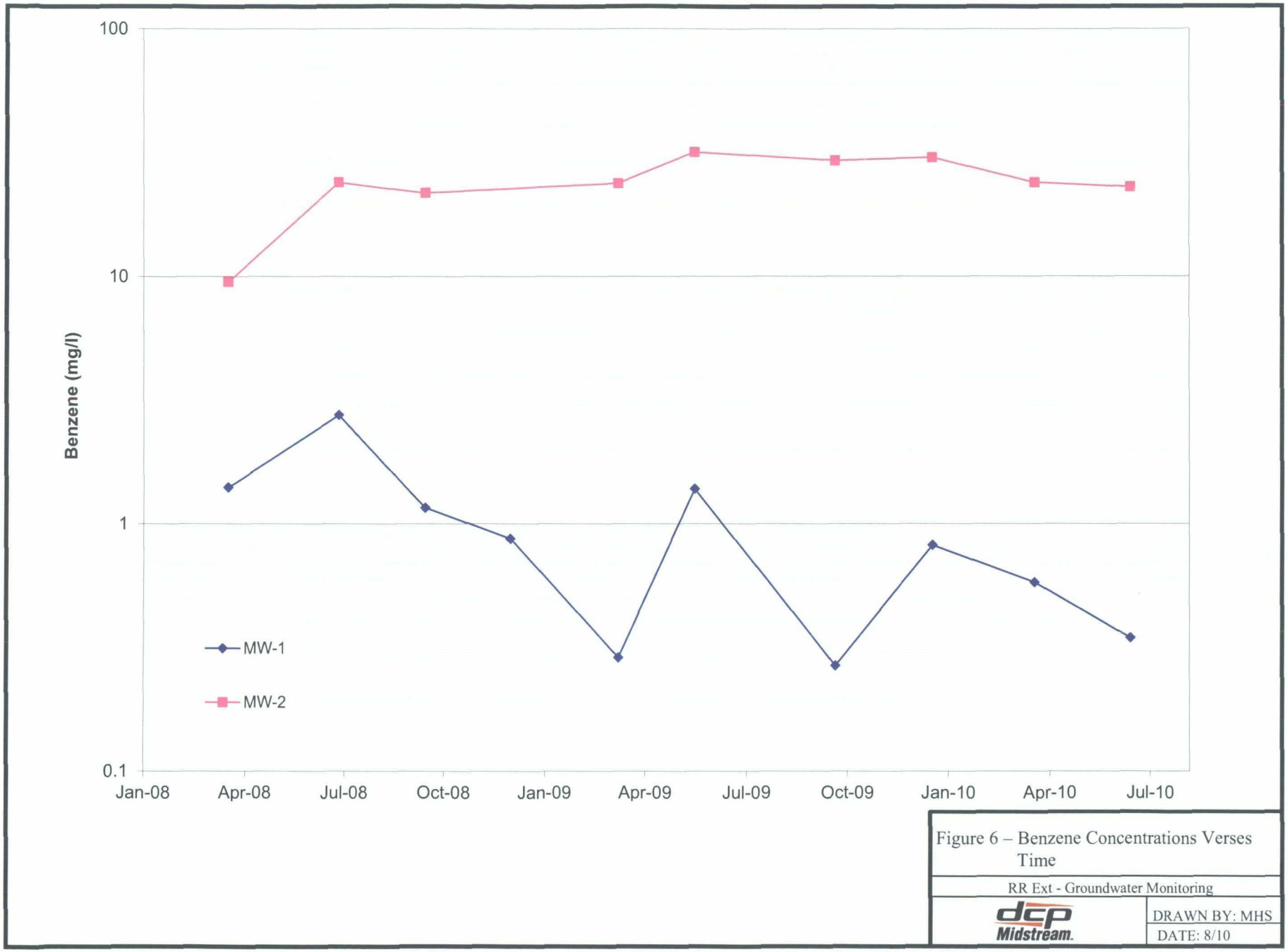

Figure 6 – Benzene Concentrations Verses Time

RR Ext - Groundwater Monitoring

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DRAWN BY: MHS

DATE: 8/10

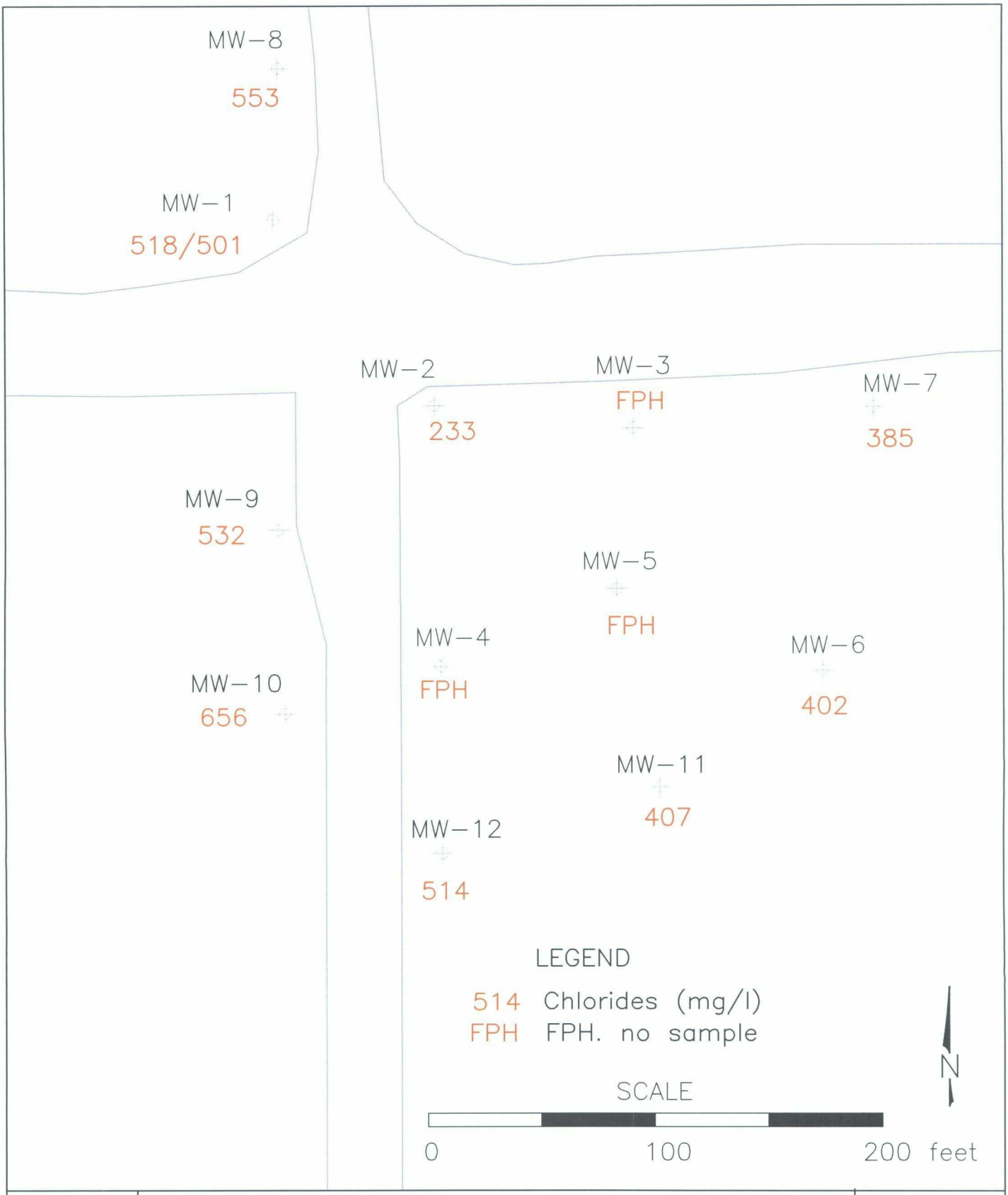

Figure 7 - Second Quarter 2010 Chloride Concentrations

RR Ext - Groundwater Monitoring

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REVISED:
DATE: 8/10

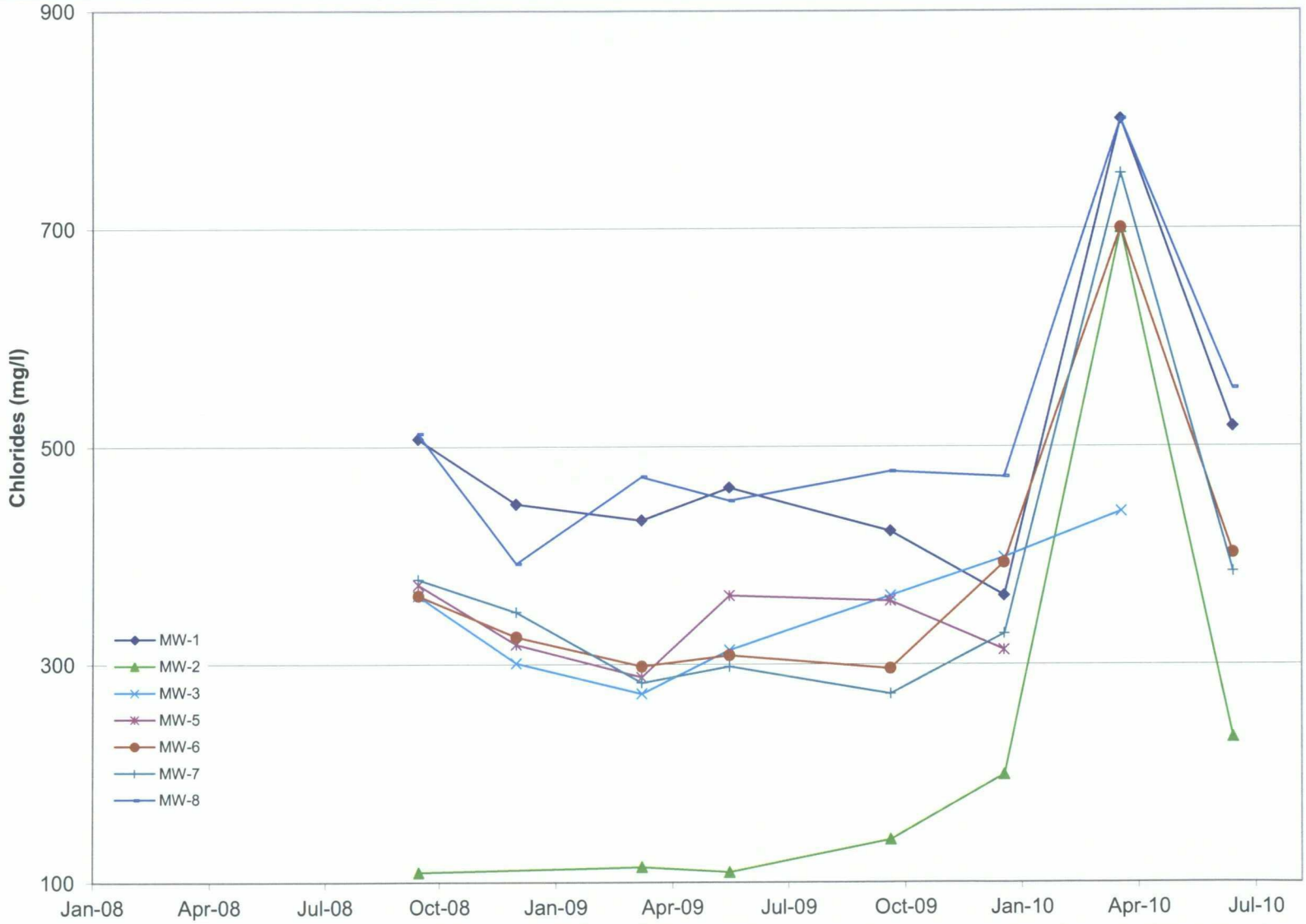


Figure 8 – Chloride Concentrations Verses Time

RR Ext - Groundwater Monitoring

dcp Midstream

DRAWN BY: MHS

DATE: 8/10

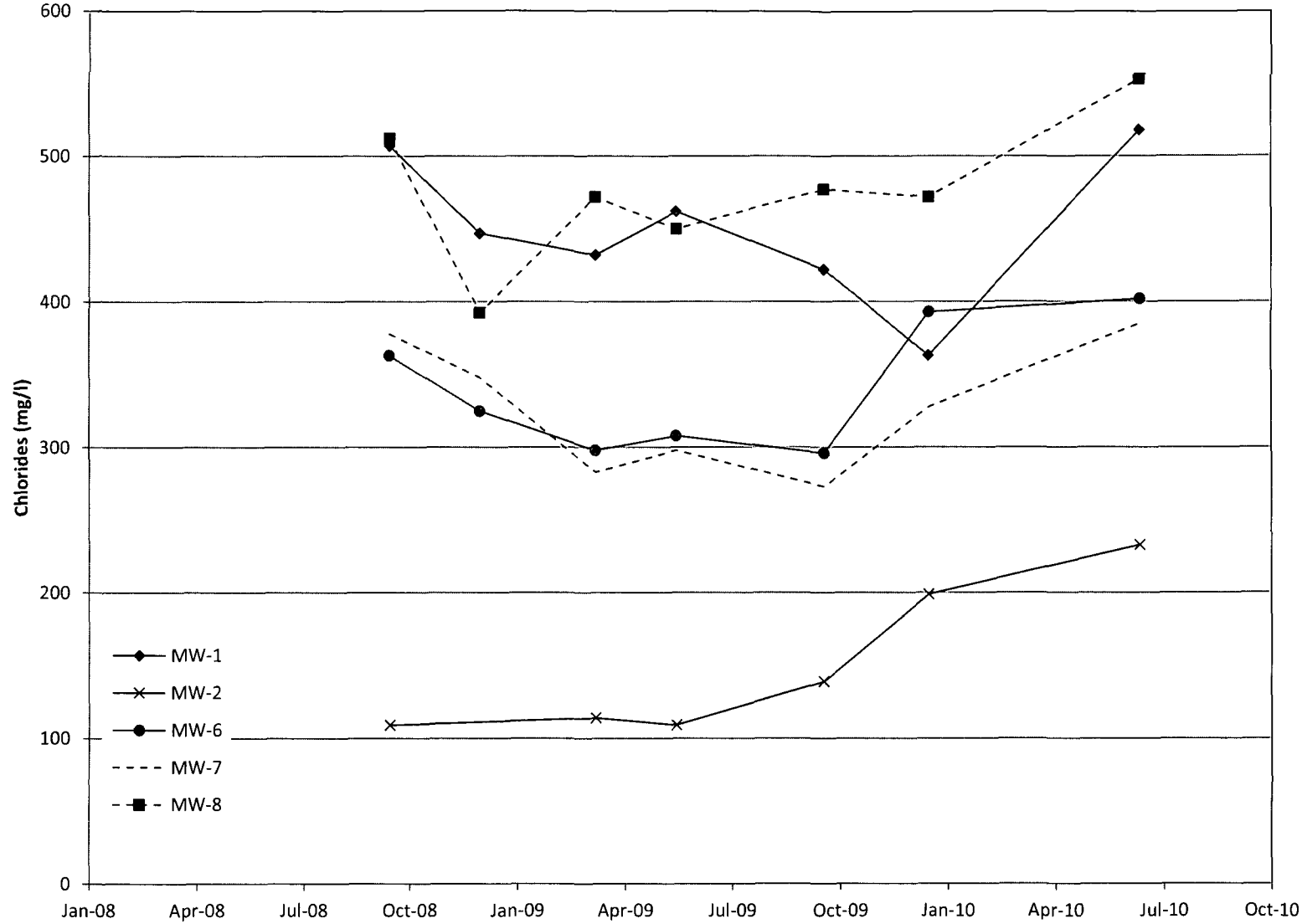


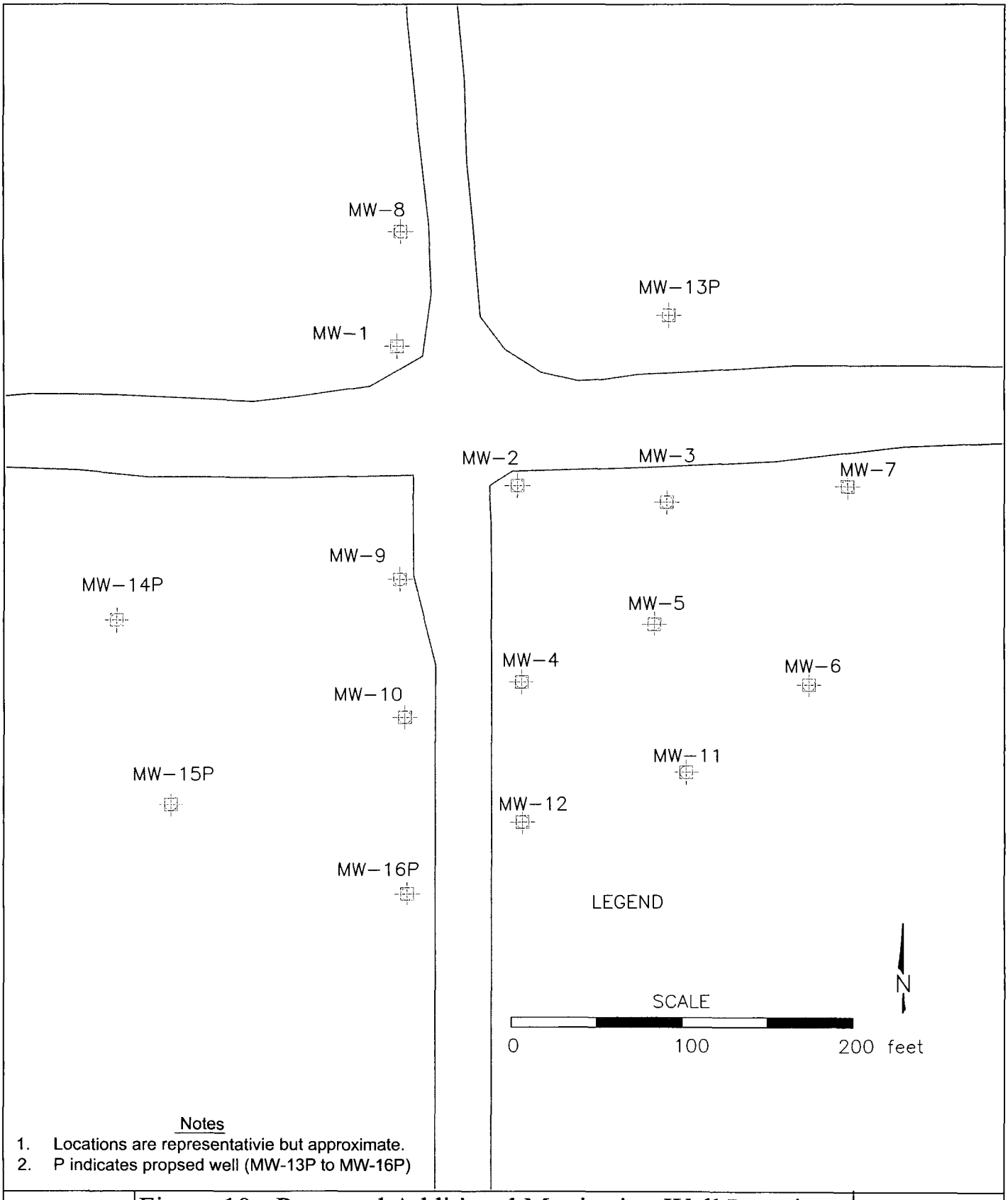
Figure 9 – Chloride Concentrations Verses Time Minus Anomalous Values

RR Ext - Groundwater Monitoring

dcp Midstream

DRAWN BY: MHS

DATE: 8/10



Notes

1. Locations are representativie but approximate.
2. P indicates propsed well (MW-13P to MW-16P)

Figure 10 - Proposed Additional Monitoring Well Locations

RR Ext - Groundwater Monitoring

dcp Midstream.

DRAWN BY:	MHS
REVISED:	
DATE:	8/10

ATTACHMENT

WELL SAMPLING DATA AND
ANALYTICAL LABORATORY REPORT

WELL SAMPLING DATA FORM

CLIENT: DCP Midstream WELL ID: MW-1

SITE NAME: RR-EXT DATE: 6/17/2010

PROJECT NO. _____ SAMPLER: A. Taylor

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Dedicated Bailer ☐ Direct from Discharge Hose ☐ Other:

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

TOTAL DEPTH OF WELL: 39.56 Feet
DEPTH TO WATER: 29.84 Feet
HEIGHT OF WATER COLUMN: 9.72 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. *m* S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
	1.6	21.1	1.50	7.16			
	3.2	20.2	1.51	7.28			
	4.8	19.9	1.51	7.30			
	4.8	Volume: (gallons)					

SAMPLE NO.: Collected Sample No.: MW-1

ANALYSES: BTEX (8260)

COMMENTS: _____

Duplicate sample collected

WELL SAMPLING DATA FORM

CLIENT: DCP Midstream WELL ID: MW-2

SITE NAME: RR-EXT DATE: 6/17/2010

PROJECT NO. _____ SAMPLER: A. Taylor

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Dedicated Bailer ☐ Direct from Discharge Hose ☐ Other:

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

TOTAL DEPTH OF WELL: 39.91 Feet

DEPTH TO WATER: 30.65 Feet

HEIGHT OF WATER COLUMN: 9.26 Feet

WELL DIAMETER: 2.0 Inch

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

TIME	VOLUME PURGED	TEMP. °C	COND. *m*S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
							no parameters due to poor
							water quality, bailed 3 casing
							volumes
	0.0	Volume: (gallons)					

SAMPLE NO.: Collected Sample No.: MW-2

ANALYSES: BTEX (8260)

COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: DCP Midstream WELL ID: MW-3

SITE NAME: RR-EXT DATE: 6/17/2010

PROJECT NO. _____ SAMPLER: A. Taylor

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Dedicated Bailer ☐ Direct from Discharge Hose ☐ Other:

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

TOTAL DEPTH OF WELL: 40.03 Feet

DEPTH TO WATER: 32.50 Feet

HEIGHT OF WATER COLUMN: 7.53 Feet

WELL DIAMETER: 2.0 Inch

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

TIME	VOLUME PURGED	TEMP. °C	COND. *m* S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS

0.0 Volume: (gallons)

SAMPLE NO.: Collected Sample No.: No sample because of FPH

ANALYSES: BTEX (8260)

COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: DCP Midstream WELL ID: MW-4

SITE NAME: RR-EXT DATE: 6/17/2010

PROJECT NO. _____ SAMPLER: A. Taylor

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Dedicated Bailer ☐ Direct from Discharge Hose ☐ Other:

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

TOTAL DEPTH OF WELL: 40.66 Feet

DEPTH TO WATER: 30.67 Feet

HEIGHT OF WATER COLUMN: 9.99 Feet

WELL DIAMETER: 2.0 Inch

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

TIME	VOLUME PURGED	TEMP. °C	COND. *m* S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
	0.0	Volume: (gallons)					

SAMPLE NO.: Collected Sample No.: No sample because of FPH

ANALYSES: _____

COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: DCP Midstream WELL ID: MW-5

SITE NAME: RR-EXT DATE: 6/17/2010

PROJECT NO. _____ SAMPLER: A. Taylor

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Dedicated Bailer ☐ Direct from Discharge Hose ☐ Other:

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

TOTAL DEPTH OF WELL: 42.15 Feet

DEPTH TO WATER: 0.00 Feet

HEIGHT OF WATER COLUMN: 42.15 Feet

WELL DIAMETER: 2.0 Inch

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

TIME	VOLUME PURGED	TEMP. °C	COND. *m* S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
0.0	Volume: (gallons)						

SAMPLE NO.: Collected Sample No.: No sample because of FPH

ANALYSES: BTEX (8260)

COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: DCP Midstream WELL ID: MW-6

SITE NAME: RR-EXT DATE: 6/17/2010

PROJECT NO. _____ SAMPLER: A. Taylor

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Dedicated Bailer ☐ Direct from Discharge Hose ☐ Other:

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

TOTAL DEPTH OF WELL: 39.68 Feet

DEPTH TO WATER: 32.03 Feet

HEIGHT OF WATER COLUMN: 7.65 Feet

WELL DIAMETER: 2.0 Inch

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

TIME	VOLUME PURGED	TEMP. °C	COND. *m* S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
	1.3	19.9	1.20	7.63			
	2.6	19.8	1.20	7.51			
	3.9	19.7	1.20	7.47			
	3.9	Volume: (gallons)					

SAMPLE NO.: Collected Sample No.: MW-6

ANALYSES: BTEX (8260)

COMMENTS: Collected samples for MS and MSD analyses

WELL SAMPLING DATA FORM

CLIENT: DCP Midstream WELL ID: MW-7

SITE NAME: RR-EXT DATE: 6/17/2010

PROJECT NO. _____ SAMPLER: A. Taylor

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Dedicated Bailer ☐ Direct from Discharge Hose ☐ Other:

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

TOTAL DEPTH OF WELL: 39.86 Feet

DEPTH TO WATER: 32.67 Feet

HEIGHT OF WATER COLUMN: 7.19 Feet

WELL DIAMETER: 2.0 Inch

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

TIME	VOLUME PURGED	TEMP. °C	COND. *m* S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
	1.3	19.7	1.32	7.58			
	2.6	20.2	1.30	7.55			
	3.9	19.6	1.26	7.52			
3.9	Volume: (gallons)						

SAMPLE NO.: Collected Sample No.: MW-7

ANALYSES: BTEX (8260)

COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: DCP Midstream WELL ID: MW-8

SITE NAME: RR-EXT DATE: 6/17/2010

PROJECT NO. _____ SAMPLER: A. Taylor

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Dedicated Bailer ☐ Direct from Discharge Hose ☐ Other:

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

TOTAL DEPTH OF WELL: 40.26 Feet

DEPTH TO WATER: 31.52 Feet

HEIGHT OF WATER COLUMN: 8.74 Feet

WELL DIAMETER: 2.0 Inch

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

TIME	VOLUME PURGED	TEMP. °C	COND. *m* S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
	1.6	21.5	1.55	7.52			
	3.2	20.8	1.55	7.48			
	4.8	20.6	1.54	7.47			
	4.8	Volume: (gallons)					

SAMPLE NO.: Collected Sample No.: MW-8

ANALYSES: BTEX (8260)

COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: DCP Midstream WELL ID: MW-9

SITE NAME: RR-EXT DATE: 6/17/2010

PROJECT NO. _____ SAMPLER: A. Taylor

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Dedicated Bailer ☐ Direct from Discharge Hose ☐ Other:

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

TOTAL DEPTH OF WELL: 40.00 Feet

DEPTH TO WATER: 29.49 Feet

HEIGHT OF WATER COLUMN: 10.51 Feet

WELL DIAMETER: 2.0 Inch

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

TIME	VOLUME PURGED	TEMP. °C	COND. *m* S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
	2	21.1	1.57	7.30			
	4	20.7	1.56	7.47			
	6	20.2	1.56	7.34			
	6.0	Volume: (gallons)					

SAMPLE NO.: Collected Sample No.: MW-9

ANALYSES: BTEX (8260)

COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: DCP Midstream WELL ID: MW-10

SITE NAME: RR-EXT DATE: 6/17/2010

PROJECT NO. _____ SAMPLER: A. Taylor

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Dedicated Bailer ☐ Direct from Discharge Hose ☐ Other:

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

TOTAL DEPTH OF WELL: 40.00 Feet

DEPTH TO WATER: 29.74 Feet

HEIGHT OF WATER COLUMN: 10.26 Feet

WELL DIAMETER: 2.0 Inch

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

TIME	VOLUME PURGED	TEMP. °C	COND. *m* S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
	2	21.5	1.57	7.52			
	4	21.2	1.57	7.59			
	6	21.1	1.56	7.57			
6.0	Volume: (gallons)						

SAMPLE NO.: Collected Sample No.: MW-10

ANALYSES: BTEX (8260)

COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: DCP Midstream WELL ID: MW-11

SITE NAME: RR-EXT DATE: 6/17/2010

PROJECT NO. _____ SAMPLER: A. Taylor

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Dedicated Bailer ☐ Direct from Discharge Hose ☐ Other:

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

TOTAL DEPTH OF WELL: 40.00 Feet

DEPTH TO WATER: 31.89 Feet

HEIGHT OF WATER COLUMN: 8.11 Feet

WELL DIAMETER: 2.0 Inch

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

TIME	VOLUME PURGED	TEMP. °C	COND. *m* S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
	1.3	21.6	1.3	7.61			
	2.6	20.9	1.29	7.61			
	3.9	20.5	1.29	7.57			
	3.9	Volume: (gallons)					

SAMPLE NO.: Collected Sample No.: MW-11

ANALYSES: BTEX (8260)

COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: DCP Midstream WELL ID: MW-12

SITE NAME: RR-EXT DATE: 6/17/2010

PROJECT NO. _____ SAMPLER: A. Taylor

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Dedicated Bailer ☐ Direct from Discharge Hose ☐ Other:

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☐ Alconox ☐ Distilled Water Rinse ☐ Other: _____

TOTAL DEPTH OF WELL: 40.00 Feet

DEPTH TO WATER: 31.00 Feet

HEIGHT OF WATER COLUMN: 9.00 Feet

WELL DIAMETER: 2.0 Inch

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

TIME	VOLUME PURGED	TEMP. °C	COND. *m* S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
	2	20.9	1.4	7.6			
	3	20.8	1.40	7.59			
	5	20.6	1.40	7.57			
	4.8	Volume: (gallons)					

SAMPLE NO.: Collected Sample No.: MW-12

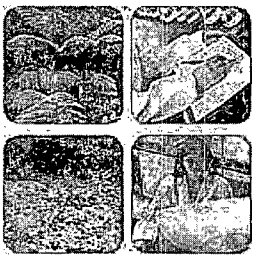
ANALYSES: BTEX (8260)

COMMENTS: _____

Mountain States ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

08/24/10



Technical Report for

DCP Midstream, LP

AECCOL: DCPIRREXT

Accutest Job Number: D14408

Sampling Date: 06/17/10

Report To:

American Environmental Consulting, LLC

mstewart@aecdenver.com

ATTN: Melissa Stewart

Total Number of Pages in Report: 51

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.

Jesse L. Smith
Jesse L. Smith
Laboratory Director

Client Service Contact: Amanda Kissell 303-425-6021

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

Test Results relate only to Samples Analyzed.

ACCUTEST LABORATORIES 50 YEARS 1956-2006

Sections:

Table of Contents

Sample Summary

DCP Midstream, LP

Job No: D14408

AECCOL: DCP RR EXT

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
D14408-1	06/17/10	11:50	AT	06/18/10	AQ	Ground Water	MW-1
D14408-2	06/17/10	11:05	AT	06/18/10	AQ	Ground Water	MW-2
D14408-3	06/17/10	09:40	AT	06/18/10	AQ	Ground Water	MW-6
D14408-3D	06/17/10	09:40	AT	06/18/10	AQ	Water Dup/MSD	MW-6
D14408-3M	06/17/10	09:40	AT	06/18/10	AQ	Water Matrix Spike	MW-6
D14408-4	06/17/10	08:30	AT	06/18/10	AQ	Ground Water	MW-7
D14408-5	06/17/10	11:30	AT	06/18/10	AQ	Ground Water	MW-8
D14408-6	06/17/10	00:00	AT	06/18/10	AQ	Water Dup/MSD	MW DUP
D14408-7	06/17/10	00:00	AT	06/18/10	AQ	Trip Blank Water	TRIP BLANK
D14408-8	06/17/10	12:20	AT	06/18/10	AQ	Ground Water	PW 1
D14408-9	06/17/10	12:40	AT	06/18/10	AQ	Ground Water	PW 2
D14408-10	06/17/10	13:00	AT	06/18/10	AQ	Ground Water	PW 0
D14408-11	06/17/10	13:30	AT	06/18/10	AQ	Ground Water	PW

ACCUTEST Laboratories

CASE NARRATIVE/QC CONFORMANCE SUMMARY

Client: DCP Midstream, LP **Job No** D14408

Site: AECCOL: DCP RR EXT **Report Dat** 6/23/2010 3:59:15 PM

On 06/18/2010, 10 samples, 1 Trip Blanks, and 0 Field Blanks were received at Accutest Mountain States (AMS) at a temperature of 2.5°C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D14408 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 GC MS By Method SW846 8260B

Matrix AQ	Batch ID: V5V457

- All Samples Were Analyzed Within The Recommended Method Holding Time.
- All Method Blanks For This Batch Meet Method Specific Criteria.
- Samples D14408-3MS And D14408-3MSD Were Used As The QC Samples Indicated.

Matrix AQ	Batch ID: V5V458

- All Samples Were Analyzed Within The Recommended Method Holding Time.
- All Method Blanks For This Batch Meet Method Specific Criteria.
- Samples D14411-2MS And D14411-2MSD Were Used As The QC Samples Indicated.

Wet Chemistry By Method EPA 300/SW846 9056

Matrix AQ	Batch ID: GP2188

- All Samples Were Prepared Within The Recommended Method Holding Time.
- All Samples Were Analyzed Within The Recommended Method Holding Time.
- All Method Blanks For This Batch Meet Method Specific Criteria.
- Samples D14074-3MS And D14074-3MSD 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 Or 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 Results

Reports of Analysis

Report of Analysis

Client Sample ID:	MW-1C		
Lab Sample ID:	D14408-1	**Date Sampled:**	06/17/10C
Matrix:	AQ - Ground Water	**Date Received:**	06/18/10C
Method:	SW846 8260B	**Percent Solids:**	n/aC
Project:	AECCOL:DCPCRRCEXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V08484.D	1	06/20/10	DC	n/a	n/a	V5V457
Run #2	5V08513.D	5	06/21/10	DC	n/a	n/a	V5V458

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

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	339	5.0	1.5	ug/l	
108-88-3	Toluene	32.9	2.0	1.0	ug/l	
100-41-4	Ethylbenzene	53.9	2.0	0.30	ug/l	
	m,p-Xylene	5.3	4.0	0.60	ug/l	
95-47-6	o-Xylene	2.6	2.0	0.60	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	94%	89%	70-130%
2037-26-5	Toluene-D8	93%	90%	70-130%
460-00-4	4-Bromofluorobenzene	85%	81%	70-130%

(a) Result is from Run# 2

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

Report of Analysis

Client Sample ID:	MW-1C		
Lab Sample ID:	D14408-1	**Date Sampled:**	06/17/10
Matrix:	AQ - Ground Water	**Date Received:**	06/18/10
		Percent Solids:	n/a
Project:	AECCOL:DCPRREXT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	518	5.0	mg/l	10	06/21/10 15:21	GH	EPA 300/SW846 9056

RL = Reporting Limit

ACCUTEST

Report of Analysis

Client Sample ID:	MW-2C		
Lab Sample ID:	D14408-2	**Date Sampled:**	06/17/10
Matrix:	AQ - Ground Water	**Date Received:**	06/18/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AECOM: CPG RREXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V08485.D	200	06/20/10	DC	n/a	n/a	V5V457
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	22900	200	60	ug/l	
108-88-3	Toluene	390	400	200	ug/l	J
100-41-4	Ethylbenzene	485	400	60	ug/l	
	m,p-Xylene	128	800	120	ug/l	J
95-47-6	o-Xylene	ND	400	120	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	95%		70-130%
2037-26-5	Toluene-D8	91%		70-130%
460-00-4	4-Bromofluorobenzene	82%		70-130%

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

Report of Analysis

Client Sample ID:	MW-2C		
Lab Sample ID:	B11188-2	Date Sampled:	06/17/10C
Matrix:	AQC Ground Water	Date Received:	06/18/10C
		Percent Solids:	n/aC
Project:	AECCOL:CPRRCEXT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	233	2.5	mg/l	5	06/21/10C 15:34	GH	EPAC00/SW846C056

RLC ReportingCLimitCCCCCCC

ACCUTEST

Report of Analysis

Client Sample ID:	MW-6C		
Lab Sample ID:	D14408-3	**Date Sampled:**	06/17/10
Matrix:	AQ - Ground Water	**Date Received:**	06/18/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AECOL:OCPRREXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V08481.D	1	06/20/10	DC	n/a	n/a	V5V457
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	1.0	0.30	ug/l	
108-88-3	Toluene	ND	2.0	1.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.30	ug/l	
	m,p-Xylene	ND	4.0	0.60	ug/l	
95-47-6	o-Xylene	ND	2.0	0.60	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	95%		70-130%
2037-26-5	Toluene-D8	91%		70-130%
460-00-4	4-Bromofluorobenzene	82%		70-130%

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

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

Report of Analysis

Client Sample ID:	MW-6C		
Lab Sample ID:	D14408-3	Date Sampled:	06/17/10
Matrix:	AQ - Ground Water	Date Received:	06/18/10
		Percent Solids:	n/a
Project:	AECCOL:DCPORTEXT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	402	5.0	mg/l	10	06/21/10 15:48	CH	EPA 300/SW846 9056

RL = Reporting Limit

ACCUTEST

Report of Analysis

Client Sample ID:	MW-7C		
Lab Sample ID:	D14408-4	**Date Sampled:**	06/17/10
Matrix:	AQ - Ground Water	**Date Received:**	06/18/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AECCOL:DCPCRREXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V08486.D	1	06/20/10	DC	n/a	n/a	V5V457
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.50	1.0	0.30	ug/l	J
108-88-3	Toluene	ND	2.0	1.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.30	ug/l	
	m,p-Xylene	ND	4.0	0.60	ug/l	
95-47-6	o-Xylene	ND	2.0	0.60	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	93%		70-130%
2037-26-5	Toluene-D8	91%		70-130%
460-00-4	4-Bromofluorobenzene	82%		70-130%

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

Report of Analysis

Client Sample ID:	MW-7C		
Lab Sample ID:	D14408-4	**Date Sampled:**	06/17/10
Matrix:	AQ - Ground Water	**Date Received:**	06/18/10
		Percent Solids:	n/a
Project:	AECOM: DCPRRCEXT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	385	5.0	mg/l	10	06/21/10 10:49	GH	EPA 300/SW846 9056

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-8C		
Lab Sample ID:	D14408-5	**Date Sampled:**	06/17/10
Matrix:	AQ - Ground Water	**Date Received:**	06/18/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AECOM: DCP RRC EXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V08487.D	1	06/20/10	DC	n/a	n/a	V5V457
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	1.0	0.30	ug/l	
108-88-3	Toluene	ND	2.0	1.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.30	ug/l	
	m,p-Xylene	ND	4.0	0.60	ug/l	
95-47-6	o-Xylene	ND	2.0	0.60	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	93%		70-130%
2037-26-5	Toluene-D8	91%		70-130%
460-00-4	4-Bromofluorobenzene	83%		70-130%

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

Report of Analysis

Client Sample ID:	MW-8C		
Lab Sample ID:	D14408-5	**Date Sampled:**	06/17/10
Matrix:	AQ - Ground Water	**Date Received:**	06/18/10
		Percent Solids:	n/a
Project:	AECCOL:DCPRRDEXT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	553	5.0	mg/l	10	06/21/10 11:02	GH	EPA 300/SW846 9056

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-UPC		
Lab Sample ID:	D14408-6	**Date Sampled:**	06/17/10
Matrix:	AQ - Water Dup/MSD	**Date Received:**	06/18/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AECOM: DCP RRC EXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V08488.D	2	06/20/10	DC	n/a	n/a	V5V457
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	353	2.0	0.60	ug/l	
108-88-3	Toluene	39.5	4.0	2.0	ug/l	
100-41-4	Ethylbenzene	63.2	4.0	0.60	ug/l	
	m,p-Xylene	6.1	8.0	1.2	ug/l	J
95-47-6	o-Xylene	2.7	4.0	1.2	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	93%		70-130%
2037-26-5	Toluene-D8	91%		70-130%
460-00-4	4-Bromofluorobenzene	85%		70-130%

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

Report of Analysis

Client Sample ID:	MW-DUP		
Lab Sample ID:	D14408-6	**Date Sampled:**	06/17/10
Matrix:	AQ - Water Dup/MSD	**Date Received:**	06/18/10
		Percent Solids:	n/a
Project:	AECOM: DCP RREXT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	501	5.0	mg/l	10	06/21/10 11:16	GH	EPA 300/SW846 9056

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	D14408-7	**Date Sampled:**	06/17/10
Matrix:	AQ - Trip Blank Water	**Date Received:**	06/18/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AECOL:DCPRREXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V08489.D	1	06/20/10	DC	n/a	n/a	V5V457
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	1.0	0.30	ug/l	
108-88-3	Toluene	ND	2.0	1.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.30	ug/l	
	m,p-Xylene	ND	4.0	0.60	ug/l	
95-47-6	o-Xylene	ND	2.0	0.60	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	100%		70-130%
2037-26-5	Toluene-D8	91%		70-130%
460-00-4	4-Bromofluorobenzene	85%		70-130%

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

Report of Analysis

Client Sample ID:	PW-1C		
Lab Sample ID:	D14408-8	**Date Sampled:**	06/17/10
Matrix:	AQ - Ground Water	**Date Received:**	06/18/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AECCOL:DCPRREXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V08512.D	1	06/21/10	DC	n/a	n/a	V5V458
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	1.0	0.30	ug/l	
108-88-3	Toluene	ND	2.0	1.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.30	ug/l	
	m,p-Xylene	ND	4.0	0.60	ug/l	
95-47-6	o-Xylene	ND	2.0	0.60	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	97%		70-130%
2037-26-5	Toluene-D8	91%		70-130%
460-00-4	4-Bromofluorobenzene	83%		70-130%

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

Report of Analysis

Client Sample ID:	PW-1C		
Lab Sample ID:	D14408-8	**Date Sampled:**	06/17/10
Matrix:	AQ - Ground Water	**Date Received:**	06/18/10
		Percent Solids:	n/a
Project:	AECOM: DCP RREXT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	407	5.0	mg/l	10	06/21/10 11:30	GH	EPA 300/SW846 9056

RL - Reporting Limit

Report of Analysis

Client Sample ID:	PW-2C		
Lab Sample ID:	D14408-9	**Date Sampled:**	06/17/10
Matrix:	AQ - Ground Water	**Date Received:**	06/18/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AECCOL:DCPRRCEXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V08498.D	1	06/21/10	DC	n/a	n/a	V5V458
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	1.0	0.30	ug/l	
108-88-3	Toluene	ND	2.0	1.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.30	ug/l	
	m,p-Xylene	ND	4.0	0.60	ug/l	
95-47-6	o-Xylene	ND	2.0	0.60	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	93%		70-130%
2037-26-5	Toluene-D8	92%		70-130%
460-00-4	4-Bromofluorobenzene	85%		70-130%

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

Report of Analysis

Client Sample ID:	PW-2C		
Lab Sample ID:	D14408-9	**Date Sampled:**	06/17/10
Matrix:	AQ - Ground Water	**Date Received:**	06/18/10
		Percent Solids:	n/a
Project:	AECOM: DCP RREXT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	514	5.0	mg/l	10	06/21/10 11:43	GH	EPA 300/SW846 9056

RL - Reporting Limit

Report of Analysis

Client Sample ID:	PW10C		
Lab Sample ID:	D14408-10	**Date Sampled:**	06/17/10
Matrix:	AQ - Ground Water	**Date Received:**	06/18/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AECOL:DCPRRXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V08499.D	100	06/21/10	DC	n/a	n/a	V5V458
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	9320	100	30	ug/l	
108-88-3	Toluene	15200	200	100	ug/l	
100-41-4	Ethylbenzene	2570	200	30	ug/l	
	m,p-Xylene	4780	400	60	ug/l	
95-47-6	o-Xylene	1360	200	60	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	92%		70-130%
2037-26-5	Toluene-D8	93%		70-130%
460-00-4	4-Bromofluorobenzene	86%		70-130%

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

Report of Analysis

Client Sample ID:	PW10C		
Lab Sample ID:	D14408-10	**Date Sampled:**	06/17/10
Matrix:	AQ - Ground Water	**Date Received:**	06/18/10
		Percent Solids:	n/a
Project:	AECOM: DCPRRA EXT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	656	10	mg/l	20	06/21/10 16:02	GH	EPA 300/SW846 9056

RL - Reporting Limit

Report of Analysis

Client Sample ID:	PW-C		
Lab Sample ID:	D14408-11	**Date Sampled:**	06/17/10
Matrix:	AQ - Ground Water	**Date Received:**	06/18/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AECOL:DCPRREXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V08500.D	500	06/21/10	DC	n/a	n/a	V5V458
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	17000	500	150	ug/l	
108-88-3	Toluene	29800	1000	500	ug/l	
100-41-4	Ethylbenzene	2430	1000	150	ug/l	
	m,p-Xylene	4560	2000	300	ug/l	
95-47-6	o-Xylene	1140	1000	300	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	92%		70-130%
2037-26-5	Toluene-D8	91%		70-130%
460-00-4	4-Bromofluorobenzene	84%		70-130%

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

Report of Analysis

Client Sample ID:	PW-C		
Lab Sample ID:	D14408-11	**Date Sampled:**	06/17/10
Matrix:	AQ - Ground Water	**Date Received:**	06/18/10
		Percent Solids:	n/a
Project:	AECOM: CPR EXT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	532	5.0	mg/l	10	06/21/10 12:38	GH	EPA 300/SW846 9056

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

ACCUTEST Laboratories

CHAIN OF CUSTODY

D14408

PAGE 1 OF 2

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

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

Client / Reporting Information

Company Name: AECOM
Street Address: 6885 South Marshall, Suite 3
City: Littleton CO 80128
Project Contact: Michael Steward
Phone #: 303-605-1718
Sampler(s) Name(s): A. Taylor

Project Information

Project Name: DCP RR EXT
Street:
City: State:
Project #: DCP RR EXT
Client Purchase Order #:
Project Manager:

Billing Information (If different from Report to)

Company Name: DCP Midstream
Street Address: 370 Seventeenth Street Suite 2500
City: Denver, CO 80202
Attention: Stephen Weathers

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date (2016)	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	BTEX 8260B	CHLORIDE	LAB USE ONLY
	MW-1		6/17	~~1105~~ 1150	AT	GW	4	X								X	X	01
	MW-2		6/17	~~1150~~ 1105		GW		X								X	X	02
	MW-3		X	X		GW		X								X	X	
	MW-4		X	X		GW		X								X	X	
	MW-5		X	X		GW		X								X	X	
	MW-6		6/17	940		GW		X								X	X	03
	MW-6 MS		6/17	940		GW		X								X		03MS
	MW-6 MSD		6/17	940		GW		X								X		03SD
	MW-7		6/17	830		GW		X								X	X	04
	MW-8		6/17	1130		GW		X				A				X	X	05
	MW DUP MW2 Dup		6/17	000		GW		X								X	X	06
	TRIP BLANK		Lab	Lab	Lab	GW		X								X		07

Turnaround Time (Business days)

- [ ] Std. 15 Business Days
- [ ] Std. 10 Business Days
- [X] 5 Day RUSH
- [ ] 3 Day Emergency
- [ ] 2 Day Emergency
- [ ] 1 Day Emergency
- [ ] Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information

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

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

Comments / Special Instructions

PLEASE SEND AN EHARDCOPY TO SWWEATHERS@DCPMIDSTREAM.COM

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

Relinquished by Sampler	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	6/17/16 500	1	2		2 6-18-16 930
3	Date Time:	3	4	Date Time:	4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	Intact / Not Intact	Preserved where applicable / On Ice / Cooler Temp. 2.5

4.1

D14408: Chain of Custody
Page 1 of 3

CHAIN OF CUSTODY

ACCUTEST Laboratories
4036 Youngfield Street, Wheat Ridge, Colorado 80033
TEL: 303-425-6021; 877-737-4521 FAX: 303-425-6854
www.accutest.com

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: D14408

Client / Reporting Information

Company Name: DCP/AEC
Street Address: 6885 S. Marshall St #5
City: Littleton State: CO Zip: 80128
Project Contact: Mike Stewart E-mail:
Phone #: 303 638 0001 Fax #:
Sampler(s) Name(s): Art Taylor Phone #:

Project Information

Project Name: DCP RREXT
Street:
City: State:
Project #: DCP RREXT
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name: DCP Midstream
Street Address: 370 17th St. STE 2500
City: Denver State: CO Zip: 80202
Attention: Stephen Weathers

Requested Analysis (see TEST CODE sheet)

BTEX 8260
CHL

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	LAB USE ONLY
	PW 11		6/17/2010	1220	AT	GW	4	3				1				08
	PW 12			1240				3				1				09
	PW 10			100				3				1				10
	PW 9			130				3				1				11

Turnaround Time (Business days)

- [ ] Std. 10 Business Days
- [ ] UST Analysis 3-5 Days
- [ ] 6 - 9 Day *RUSH*
- [ ] 3 - 5 Day *RUSH*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Approved By (Accutest PM): / Date:

Emergency & Rush T/A data available VIA Labiink

Data Deliverable Information

- [ ] Level 1
- [ ] Level 2
- [ ] Level 3
- [ ] Level 4
- [ ] PDF
- [ ] EDD Format
- [ ] Other

Level 1 = Results Only
Level 2 = Results + QC Summary + Case Narrative
Level 3 = Results + QC Summary + Partial Raw data
Level 4 = Full Deliverable

Comments / Special Instructions

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

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		6/17/10 500	1	2		2 6-18-10 830
3	Relinquished by Sampler:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished By:	Date Time:	Received By: 5	Custody Seal #	[✓] Intact [ ] Not Intact	Preserved where applicable [✓] On Ice [✓] Cooler Temp. 2.5

FAX

D14408: Chain of Custody
Page 2 of 3

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D14408 **Client:** AECOM **Immediate Client Services Action Required:** No

Date/Time Received: 6/18/2010 9:30:00 AM **No. Coolers:** 1 **Client Service Action Required at Login:** No

Project: DCP RRE EXT **Airbill #'s:** fedex

Cooler Security	Y or N		Y or N
1. Custody Seals Present:	☑ ☐	3. COC Present:	☑ ☐
2. Custody Seals Intact:	☑ ☐	4. Smpl Dates/Time OK	☑ ☐

Cooler Temperature	Y or N
1. Temp Criteria Achieved:	☑ ☐
2. Cooler Temp Verification:	Infared Gun
3. Cooler Media:	Ice (bag)

Quality Control Preservation	Y or N	N/A
1. Trip Blank Present / Cooler:	☐ ☐	
2. Trip Blank Listed on COC:	☐ ☐	
3. Samples Preserved Properly:	☑ ☐	
4. VOCs Headspace Free:	☑ ☐	☐

Sample Integrity / Documentation	Y or N	
1. Sample Labels Present on Bottles:	☑	☐
2. Container Labeling Complete:	☑	☐
3. Sample Container Label / COC Agree:	☑	☐

Sample Integrity / Condition	Y or N	
1. Sample Recvd within HT:	☑	☐
2. All Containers Accounted for:	☑	☐
3. Condition of Sample:	Intact	

Sample Integrity / Instructions	Y or N		N/A
1. Analysis Requested is Clear:	☑	☐	
2. Bottles Received for Unspecified Tests	☐	☑	
3. Sufficient Volume Rec'd for Analysis:	☑	☐	
4. Compositing Instructions Clear:	☐	☐	☑
5. Filtering Instructions Clear:	☐	☐	☑

Comments

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D14408: Chain of Custody

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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: D14408
Account: DCPMCODN DCP Midstream, LP
Project: AECCOL: DCP RR EXT

Sample	FileID	DF	Analyzed	By	PrepDate	PrepBatch	AnalyticalBatch
V5V457-MB1	5V08469A.D	1	06/20/10	DC	n/a	n/a	V5V457

5.1.1

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

D14408-1, D14408-2, D14408-3, D14408-4, D14408-5, D14408-6, D14408-7

CAS No.	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	

CAS No.	Surrogate Recoveries		Limits
17060-07-0	1,2-Dichloroethane-D4	93%	70-130%
2037-26-5	Toluene-D8	90%	70-130%
460-00-4	4-Bromofluorobenzene	82%	70-130%

Method Blank Summary

Job Number: D14408
Account: DCPMCODN DCP Midstream, LP
Project: AECCOL: DCP RR EXT

Sample	FileID	DF	Analyzed	By	PrepDate	PrepBatch	AnalyticalBatch
V5V458-MB2	5V08493.D	1	06/21/10	DC	n/a	n/a	V5V458

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

D14408-1, D14408-8, D14408-9, D14408-10, D14408-11

CAS No.	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	

CAS No.	Surrogate Recoveries		Limits
17060-07-0	1,2-Dichloroethane-D4	91%	70-130%
2037-26-5	Toluene-D8	91%	70-130%
460-00-4	4-Bromofluorobenzene	81%	70-130%

Blank Spike Summary

Job Number: D14408
Account: DCPMCODN DCP Midstream, LP
Project: AECCOL: DCP RR EXT

Sample	FileID	DF	Analyzed	By	PrepDate	PrepBatch	AnalyticalBatch
V5V457-BS1	5V08470A.D	1	06/20/10	DC	n/a	n/a	V5V457

5.2.1

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

D14408-1, D14408-2, D14408-3, D14408-4, D14408-5, D14408-6, D14408-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	51.3	103	70-130
100-41-4	Ethylbenzene	50	55.2	110	70-130
108-88-3	Toluene	50	52.9	106	70-140
	m,p-Xylene	50	48.6	97	55-134
95-47-6	o-Xylene	50	48.5	97	55-134

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	85%	70-130%
2037-26-5	Toluene-D8	90%	70-130%
460-00-4	4-Bromofluorobenzene	97%	70-130%

Blank Spike Summary

Job Number: D14408
Account: DCPMCODN DCP Midstream, LP
Project: AECCOL: DCP RR EXT

Sample	FileID	DF	Analyzed	By	PrepDate	PrepBatch	AnalyticalBatch
V5V458-BS2	5V08494.D	1	06/21/10	DC	n/a	n/a	V5V458

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

D14408-1, D14408-8, D14408-9, D14408-10, D14408-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	53.5	107	70-130
100-41-4	Ethylbenzene	50	58.3	117	70-130
108-88-3	Toluene	50	56.2	112	70-140
	m,p-Xylene	50	51.3	103	55-134
95-47-6	o-Xylene	50	52.5	105	55-134

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	88%	70-130%
2037-26-5	Toluene-D8	91%	70-130%
460-00-4	4-Bromofluorobenzene	99%	70-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D14408
Account: DCPMCODN DCP Midstream, LP
Project: AECCOL: DCP RR EXT

Sample	FileID	DF	Analyzed	By	PrepDate	PrepBatch	AnalyticalBatch
D14408-3MS	5V08482.D	1	06/20/10	DC	n/a	n/a	V5V457
D14408-3MSD	5V08483.D	1	06/20/10	DC	n/a	n/a	V5V457
D14408-3	5V08481.D	1	06/20/10	DC	n/a	n/a	V5V457

5.3.1

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

D14408-1, D14408-2, D14408-3, D14408-4, D14408-5, D14408-6, D14408-7

CAS No.	Compound	D14408-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		50	52.9	106	53.4	107	1	59-132/30
100-41-4	Ethylbenzene	ND		50	57.0	114	58.0	116	2	68-130/30
108-88-3	Toluene	ND		50	54.8	110	56.3	113	3	56-142/30
	m,p-Xylene	ND		50	50.8	102	51.3	103	1	36-146/30
95-47-6	o-Xylene	ND		50	51.3	103	51.2	102	0	36-146/30

CAS No.	Surrogate Recoveries	MS	MSD	D14408-3	Limits
17060-07-0	1,2-Dichloroethane-D4	93%	82%	95%	70-130%
2037-26-5	Toluene-D8	94%	93%	91%	70-130%
460-00-4	4-Bromofluorobenzene	100%	100%	82%	70-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D14408
Account: DCPMCODN DCP Midstream, LP
Project: AECCOL: DCP RR EXT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D14411-2MS	5V08496.D	1	06/21/10	DC	n/a	n/a	V5V458
D14411-2MSD	5V08497.D	1	06/21/10	DC	n/a	n/a	V5V458
D14411-2	5V08495.D	1	06/21/10	DC	n/a	n/a	V5V458

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

D14408-1, D14408-8, D14408-9, D14408-10, D14408-11

CAS No.	Compound	D14411-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		50	52.1	104	54.8	110	5	59-132/30
100-41-4	Ethylbenzene	ND		50	54.9	110	57.6	115	5	68-130/30
108-88-3	Toluene	ND		50	52.0	104	55.3	111	6	56-142/30
	m,p-Xylene	ND		50	47.9	96	50.9	102	6	36-146/30
95-47-6	o-Xylene	ND		50	49.8	100	52.1	104	5	36-146/30

CAS No.	Surrogate Recoveries	MS	MSD	D14411-2	Limits
17060-07-0	1,2-Dichloroethane-D4	85%	85%	95%	70-130%
2037-26-5	Toluene-D8	90%	91%	90%	70-130%
460-00-4	4-Bromofluorobenzene	101%	99%	88%	70-130%

General Chemistry

QC Data Summaries

Includes the following where applicable:

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

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D14408
Account: DCPMCODN - DCP Midstream, LP
Project: AECCOL: DCP RR EXT

Analyte	BatchID	RL	MB Result	MB Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP2188/GN4964	0.50	0.20	mg/l	20	19.1	95.5	90-110
Fluoride	GP2188/GN4964	0.20	0.0	mg/l	10	9.65	96.5	90-110

Associated Samples:
Batch GP2188: D14408-1, D14408-10, D14408-11, D14408-2, D14408-3, D14408-4, D14408-5, D14408-6, D14408-8, D14408-9
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D14408
Account: DCPMCODN - DCP Midstream, LP
Project: AECCOL: DCP RR EXT

Analyte	QC Original	Spike	MS	Result	Amount	Result	%Rec	Limits	
Chloride	GP2188/GN4964	D14074-3	mg/l	1.4	10	10.9	95.0	80-120	%
Fluoride	GP2188/GN4964	D14074-3	mg/l	0.29	2.5	2.6	92.4	80-120	%

Associated Samples:
Batch GP2188: D14408-1, D14408-10, D14408-11, D14408-2, D14408-3, D14408-4, D14408-5, D14408-6, D14408-8, D14408-9
(*) Outside of QC limits
(N) Matrix Spike Rec. Outside of QC limits

6.2

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D14408
Account: DCPMCODN - DCP Midstream, LP
Project: AECCOL: DCP RR EXT

Analyte	Batch ID	Sample	Units	QC Original Result	Amount	QC Result	RPD	Limit	QC
Chloride	GP2188/GN4964	D14074-3	mg/l	1.4	10	10.9	0.0	20%	
Fluoride	GP2188/GN4964	D14074-3	mg/l	0.29	2.5	2.6	0.0	20%	

AssociatedSamples:
Batch GP2188: D14408-1, D14408-10, D14408-11, D14408-2, D14408-3, D14408-4, D14408-5, D14408-6, D14408-8, D14408-9
(*) Outside of QC limits
(N) Matrix Spike Rec. Outside of QC limits