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

June 21, 2011

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

RE: 1st Quarter 2011 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 1st Quarter 2011 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).

If you have any questions regarding the report, 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

June 3, 2011

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

Re: Summary of Well Installation and First Quarter 2011 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 first quarter 2011 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 following section summarizes the well installation activities. The third section discusses the groundwater monitoring results. The final section provides recommendations.

MONITORING WELL INSTALLATION

The January 2011 field activities included the installation, development and sampling of groundwater monitoring wells MW-13, MW-14, MW-15 and MW-16 (Figure 2). The activities were proposed in the third quarter 2010 quarterly groundwater monitoring report. The work was completed the week of January 24, 2011 after receiving approval from the State Land Office.

The wells were installed 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 41 feet below ground surface (bgs). The locations and elevations for wells MW-8 to MW-16 were surveyed by a professional surveyor licensed in New Mexico.

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 fluid levels in all sixteen wells were measured to calculate the casing volumes. Wells MW-3, MW-4, MW-5, MW-9 and MW-10 contained free phase hydrocarbon (FPH) so they were not purged and sampled.

The remaining 11 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-2 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 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)

All of the adjusted water-table elevation data are attached. Well hydrographs are plotted on Figure 3 for MW-1 to MW-8. Figure 3 indicates that the water table elevations have increased on a near-continuous basis since December 2009. The water table is now at its highest elevation since measurements began in 2008.

The FPH thickness data for MW-3, MW-4, MW-5, MW-9 and MW-10 are summarized in Table 3 and plotted on Figure 4. The FPH thickness decreased in all five wells.

The measured water table elevations from all sixteen wells were used to generate a groundwater contour map using the Surfer program with a kriging option (Figure 5). The additional wells provided better definition of the groundwater flow direction and gradient. The groundwater appears to flow to the southeast.

The groundwater velocity can be estimated by assuming that the hydraulic conductivity falls between $1x10^{-4}$ and $1x10^{-3}$ centimeters per second (cm/sec) and an effective porosity of 0.25 and applying Darcy's equation.

V=k*i/n; where

V: groundwater velocity (feet/year [ft/yr])
k: hydraulic conductivity $1x10^{-4}$ to $1x10^{-3}$ cm/sec (103.5 to 1,035.3 ft/yr) based upon the saturated materials that are described as fine-to-very-fine, well-sorted sands with varying percentages of fines.
i: groundwater gradient (0.0012 ft/ft)
n: effective porosity

The resulting groundwater velocity is estimated at between 0.5 and 5.0 feet per year. This low value primarily results from the shallow groundwater gradient.

The sampling data are summarized in Table 4. The measured field parameters and a copy of the laboratory report are attached. The quality control evaluation data can be summarized as follows:

- The analyses were all completed within the required holding times.
- 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 10.5 percent or they could not be calculated because of non-detect values.

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. The results can be summarized as follows:

1. There is FPH present in MW-3, MW-4, MW-5, MW-9 and MW-10.
2. There were no BTEX detections above the method reporting limits in wells MW-6, MW-7, MW-8, MW-11, MW-12 MW-13, MW-14, MW-15 and MW-16.
3. Wells MW-1 and MW-2 exceeded the benzene standard but not the toluene, ethylbenzene and xylene standards.

Figure 6 posts the benzene concentrations and locations of the wells that contained FPH for the sampling event. Comparison of these values to the groundwater flow pattern shown in Figure 5 demonstrates that the dissolved phase BTEX plume attenuates to below the both the NMWQCC standards and the method reporting limits before encountering the down-gradient boundary wells MW-6, MW-7, MW-11, MW-12, MW-15 and MW-16.

All of the BTEX data collected for this project are attached to this report. Figure 7 graphs the benzene concentration verses time for wells MW-1 and MW-2. The concentration in MW-2 has been constant during the third and fourth quarter 2010 and the first quarter 2011 monitoring events. The concentration in MW-1 appears to have declined between fourth quarter 2010 and the first quarter 2011. This decrease could represent misreporting by the laboratory; however, the toluene, ethylbenzene and xylene concentrations were reported at their historic concentration levels. The source of this decrease should be clarified during the succeeding monitoring events.

The chloride data are summarized in Table 5. The concentrations all lie within a narrow range between 320 and 529 mg/l. Figure 8 shows the chlorides concentrations for this event.

The chloride concentrations verses time are plotted on Figure 9. The graphs indicate that the chloride values appear to be increasing in all of the wells regardless of they are up-gradient, within or down-gradient (MW-6 and MW-7) of the remediated release site.

CONCLUSIONS AND RECOMMENDATIONS

AEC concludes that the dissolved-phase BTEX plume boundaries have been delineated. No additional wells need to be installed.

Also, the data suggests that the FPH thickness is decreasing naturally. The current FPH thickness is now below 1.0 feet making it difficult to artificially removal of substantial volumes of FPH. AEC recommends continued FPH measurement and evalution on a quarterly basis.

The next sampling event will be completed during the second quarter of 2011. 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
MW-13	1/11	40	17.5-40	20-40
MW-14	1/11	41	19-41	21-41
MW-15	1/11	41.3	18-41.3	20.3-40.3
MW-16	1/11	41.4	17.5-41.4	21.4-41.4

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 First Quarter 2011 Fluids Measurement Data

Well	Depth to Water	Depth to Product	FPH Thickness	Water Table Elevation
MW-1	29.01			3505.56
MW-2	29.90			3505.28
MW-3	31.53	31.05	0.48	3505.40
MW-4	30.58	30.03	0.55	3505.03
MW-5	31.20	30.75	0.45	3505.06
MW-6	31.19			3504.97
MW-7	31.89			3505.20
MW-8	30.84			3505.57
MW-9	29.53	28.50	1.03	3505.44
MW-10	29.49	28.59	0.90	3505.40
MW-11	31.05			3505.14
MW-12	29.28			3505.19
MW-13	30.44			3505.64
MW-14	29.48			3505.48
MW-15	29.66			3505.24
MW-16	28.53			3505.15

Units are Feet

Table 3 - Free Phase Hydrocarbon Thickness Summary

Well	MW-3	MW-4	MW-5	MW-9	MW-10
03/19/08	0.00	0.00	0.00		
06/29/08	0.00	0.00	0.00		
09/17/08	0.00	0.00	0.00		
12/03/08	0.00	0.00	0.00		
05/19/09	0.00	0.00	0.00		
09/23/09	0.00	1.00	0.00		
12/20/09	0.00	1.88	0.00		
03/22/10	0.00	1.71	0.27		
06/30/10	0.94	1.56	1.62	1.33	1.10
09/28/10	0.91	0.58	1.28	1.20	1.60
12/09/10	0.77	1.06	1.07	1.10	1.47
03/30/11	0.48	0.55	0.45	1.03	0.90

Units are Feet
Blank cell: Well not installed

Table 4 - RR Ext First Quarter 2011 Groundwater Sampling Results

Well	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Chlorides
NMWQCC Standards	0.010	0.75	0.75	0.62	250
MW-1	**0.0241**	0.0136	<0.01	0.0055 J	457
MW-2	**16.6**	0.403	0.165 J	0.116 J	320
MW-2 DUP	**16.0**	0.363	<0.2	<0.2	320
MW-6	<0.001	<0.002	<0.002	0.00084 J	386
MW-7	<0.001	<0.002	<0.002	<0.002	382
MW-8	<0.001	<0.002	<0.002	<0.002	529
MW-11	<0.001	<0.002	<0.002	<0.002	406
MW-12	<0.001	<0.002	<0.002	<0.002	498
MW-13	<0.001	<0.002	<0.002	<0.002	326
MW-14	<0.001	<0.002	<0.002	<0.002	520
MW-15	<0.001	<0.002	<0.002	<0.002	303
MW-16	<0.001	<0.002	<0.002	<0.002	295
Trip Blank	<0.001	<0.002	<0.002	<0.002	

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
J: Estimated concentration between the method detection limit and the reporting limit
Wells MW-3, MW-4, MW-5, MW-9 and MW-10 contained free phase hydrocarbons and were not sampled

Table 5 - 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	9/10	12/10	3/11
MW-1	510	442	448	457
MW-2	233	263	278	320
MW-3	FPH	FPH	FPH	FPH
MW-4	FPH	FPH	FPH	FPH
MW-5	FPH	FPH	FPH	FPH
MW-6	402	337	359	386
MW-7	385	326	345	382
MW-8	553	486	533	529
MW-9	532*	FPH	FPH	FPH
MW-10	656*	FPH	FPH	FPH
MW-11	407	365	383	406
MW-12	514	464	501	498
MW-13				326
MW-14				520
MW-15				303
MW-16				295

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

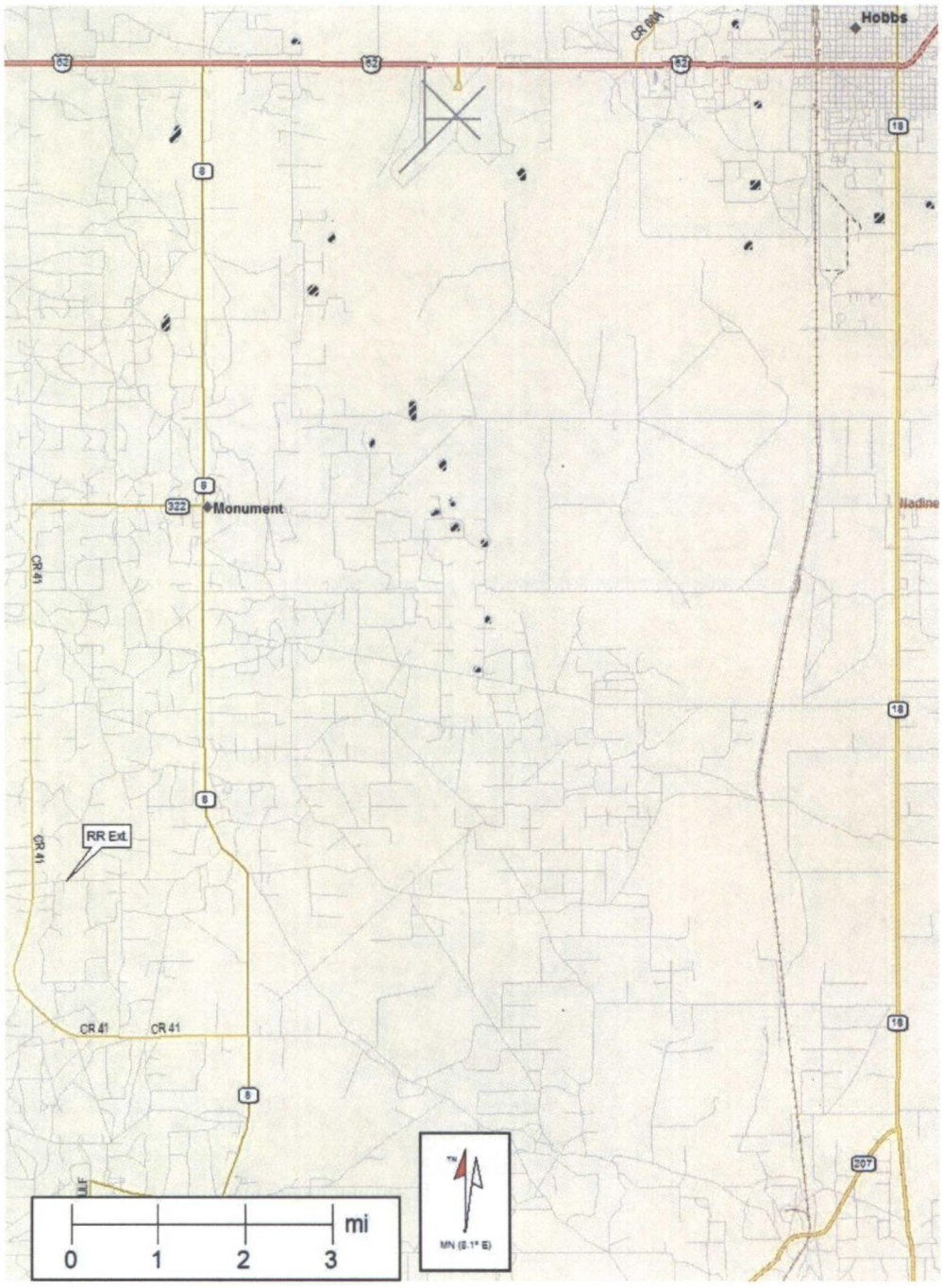

Figure 1 – Site Location
RR Ext - Groundwater Monitoring

dcp Midstream

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REVISED:	
DATE:	5/06

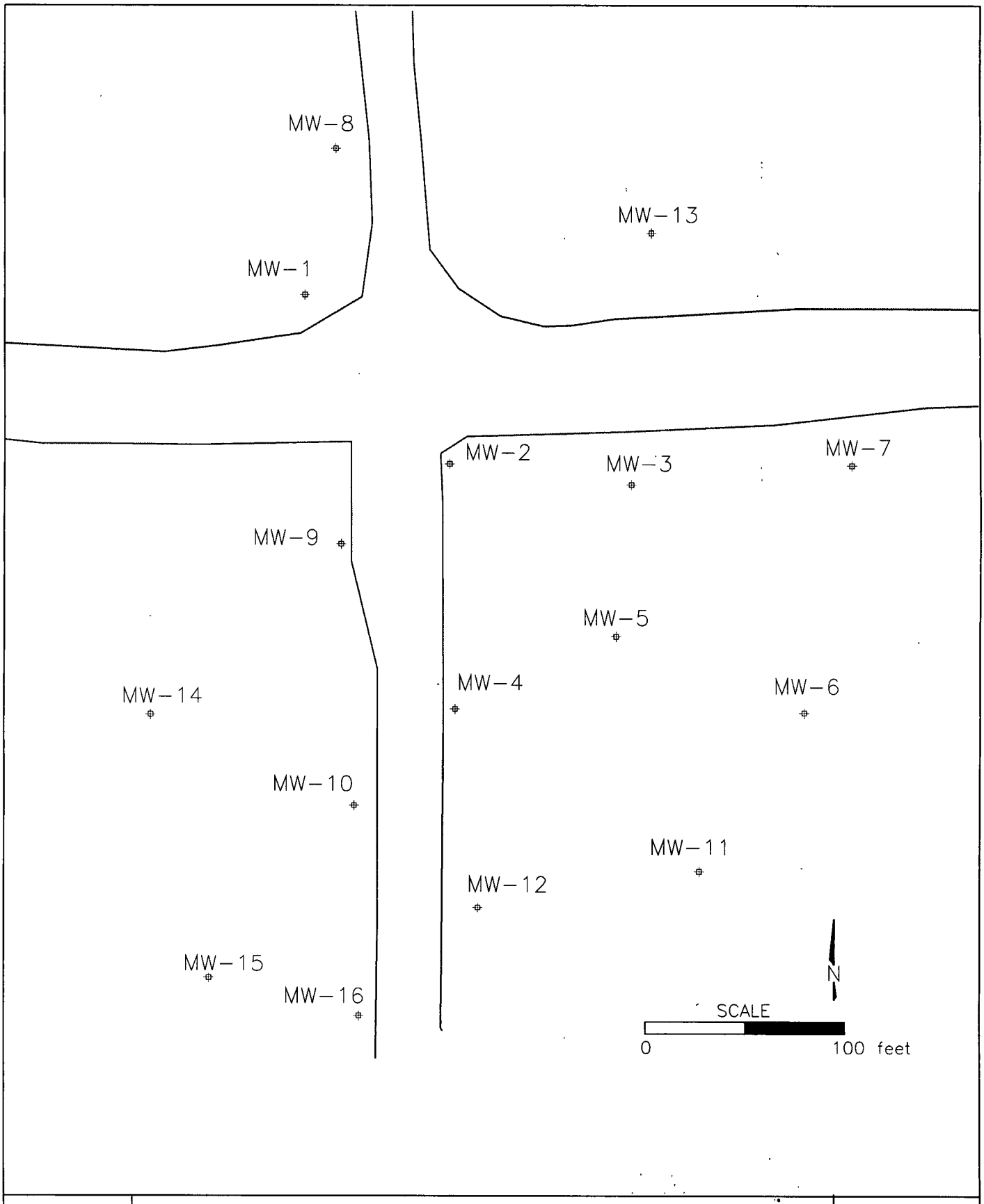

Figure 2 - Monitoring Well Locations

RR Ext - Groundwater Monitoring

dcp Midstream.

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DATE: 5/11

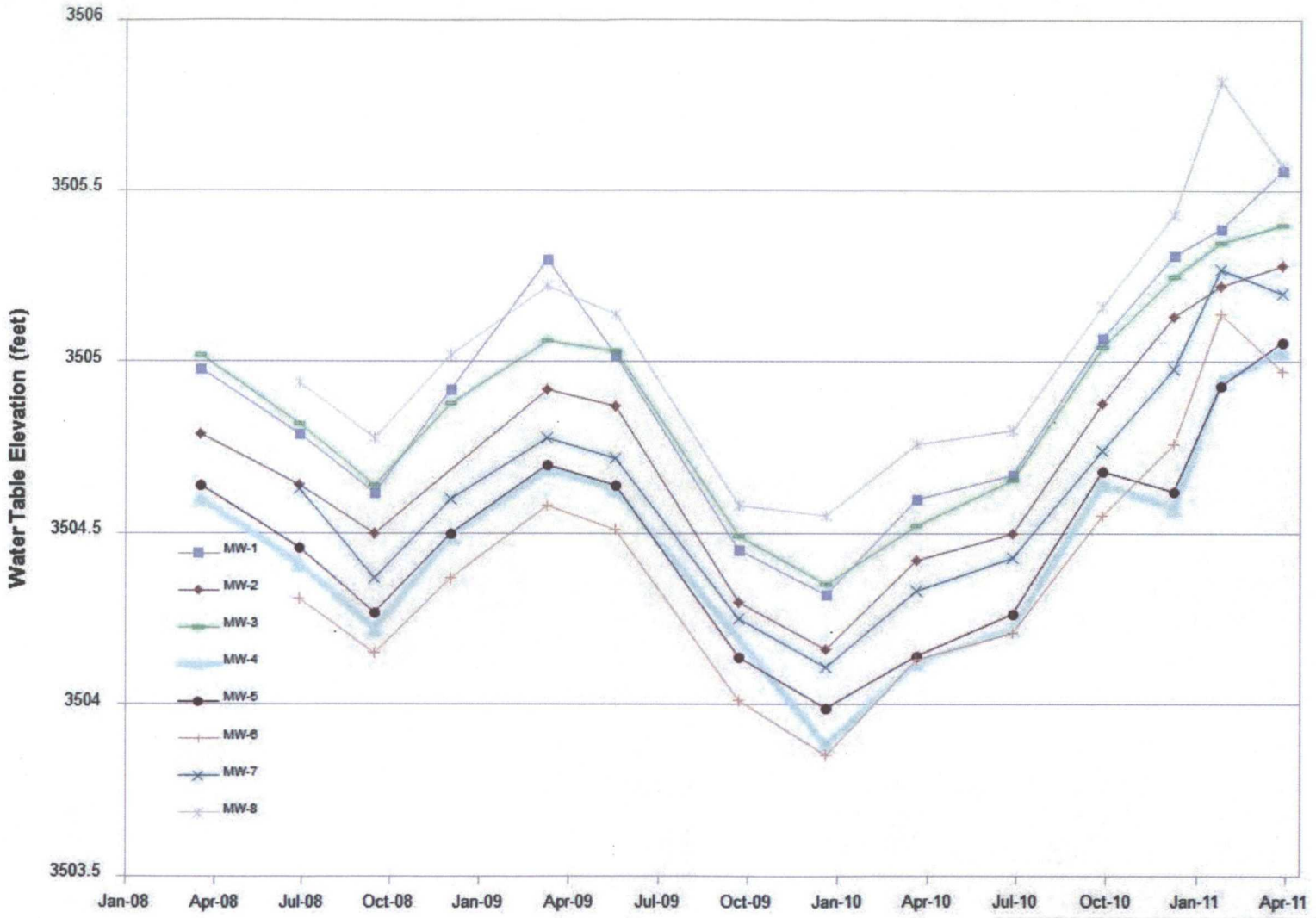

Figure 3 – Monitoring Well Hydrographs

RR Ext - Groundwater Monitoring

Duke Energy Field Services

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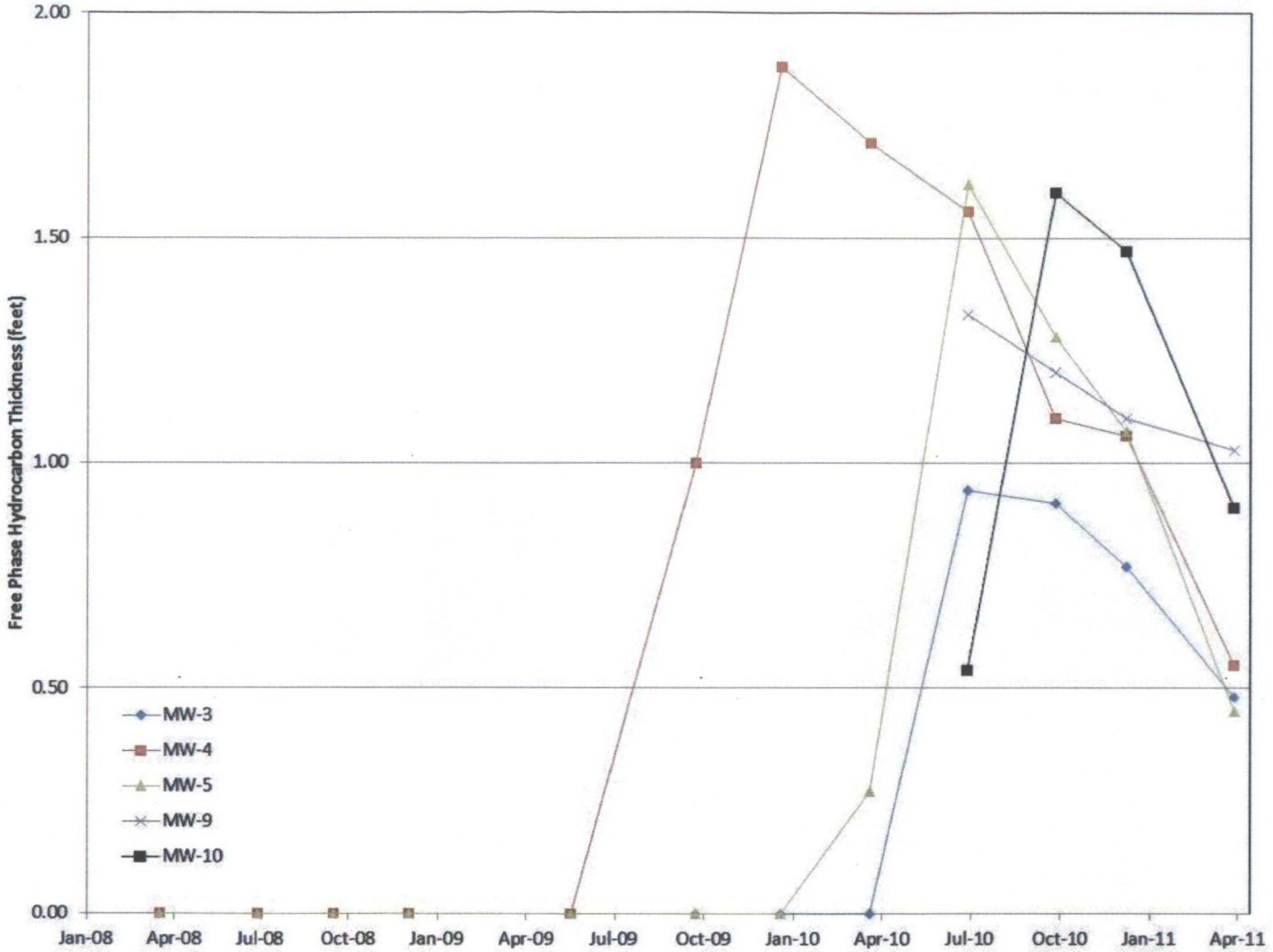

Figure 4 – Free Phase Hydrocarbon Thickness

RR Ext - Groundwater Monitoring

dcp Midstream

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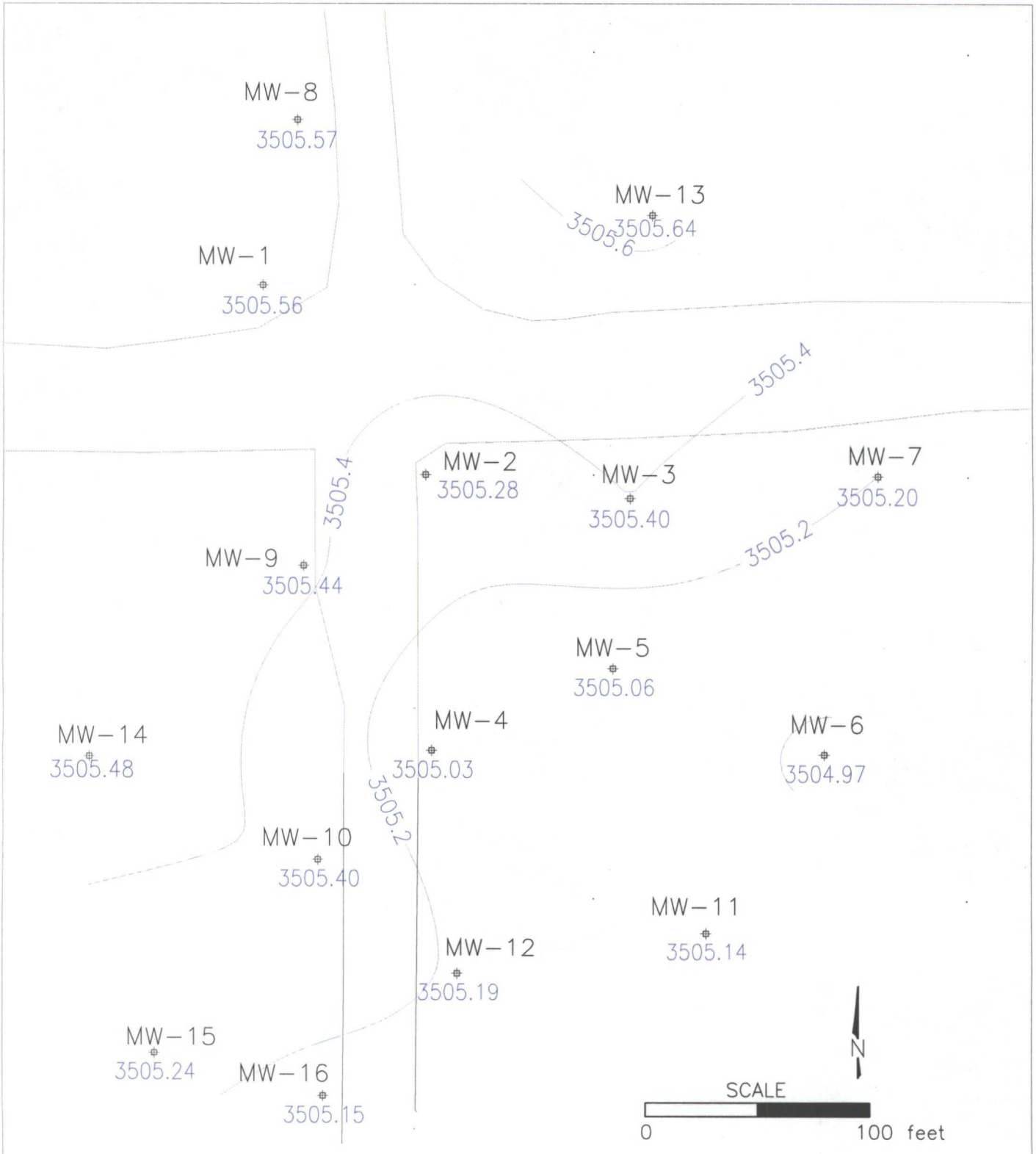

Water Table Contours are 0.20 feet

Figure 5 - March 2011 Water Table Elevations

RR Ext - Groundwater Monitoring

dcp Midstream.

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DATE:	5/11

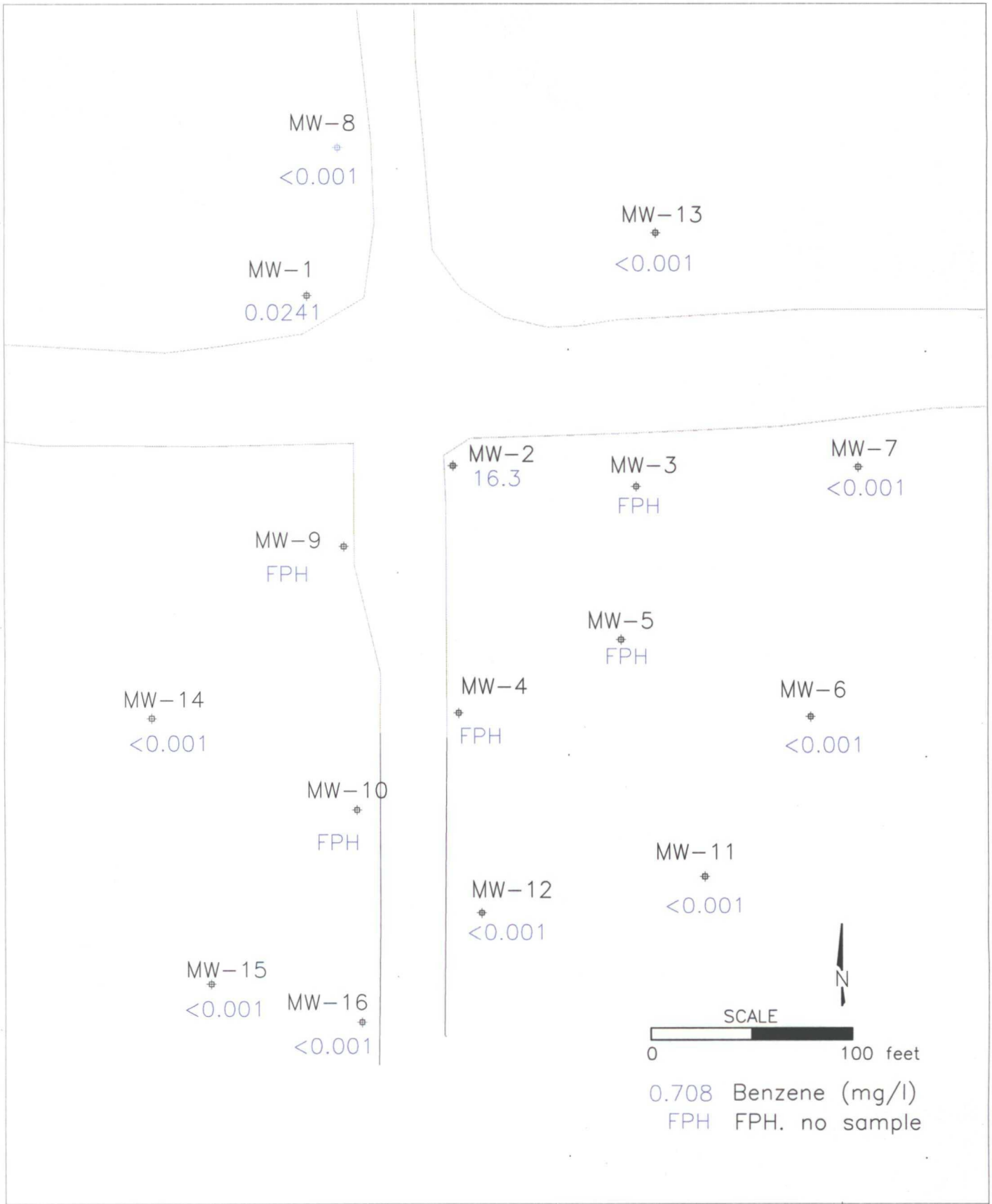

Figure 6 - March 2011 Benzene Concentrations

RR Ext - Groundwater Monitoring

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DATE: 5/11

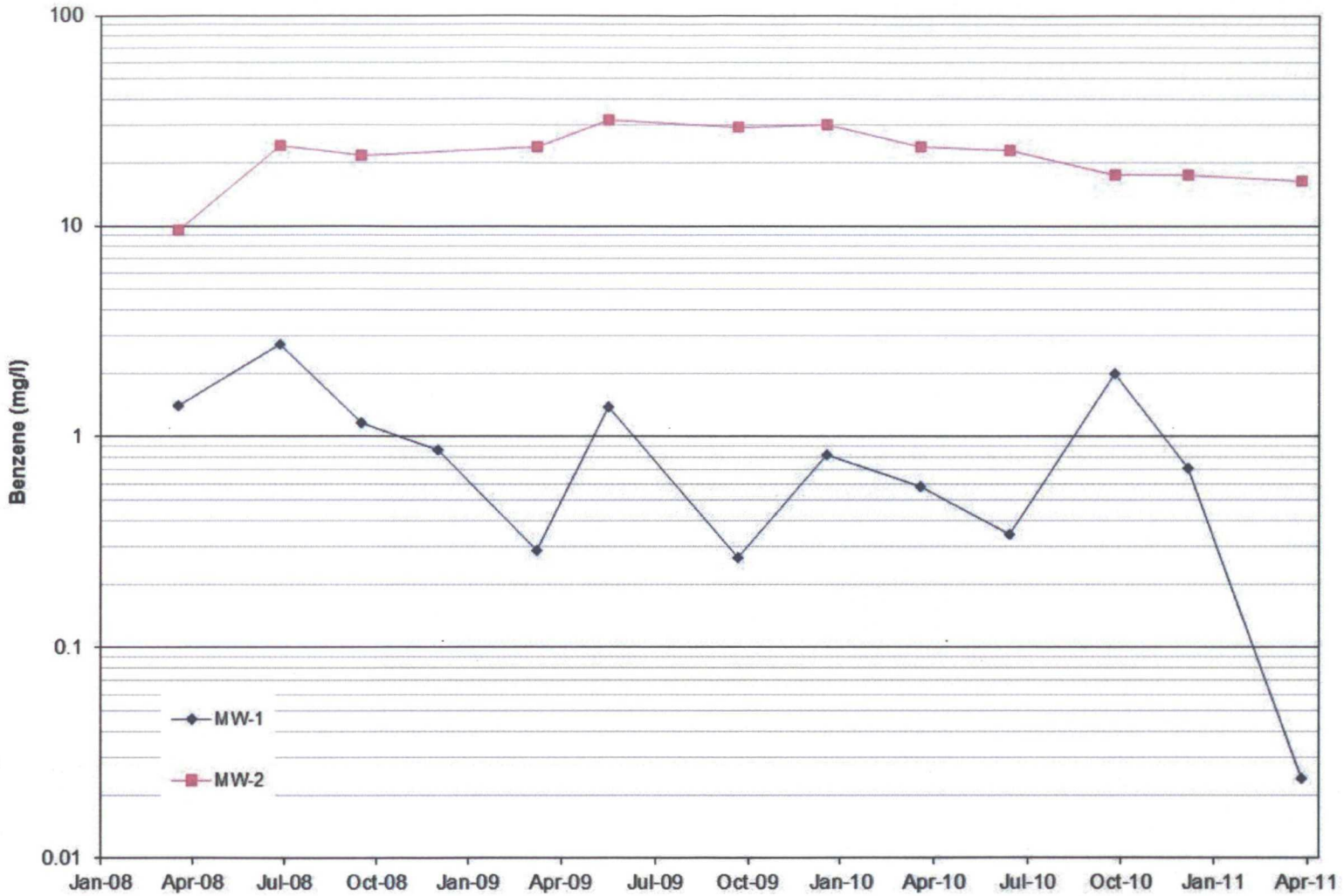

Figure 7 – Benzene Concentrations Verses Time

RR Ext - Groundwater Monitoring

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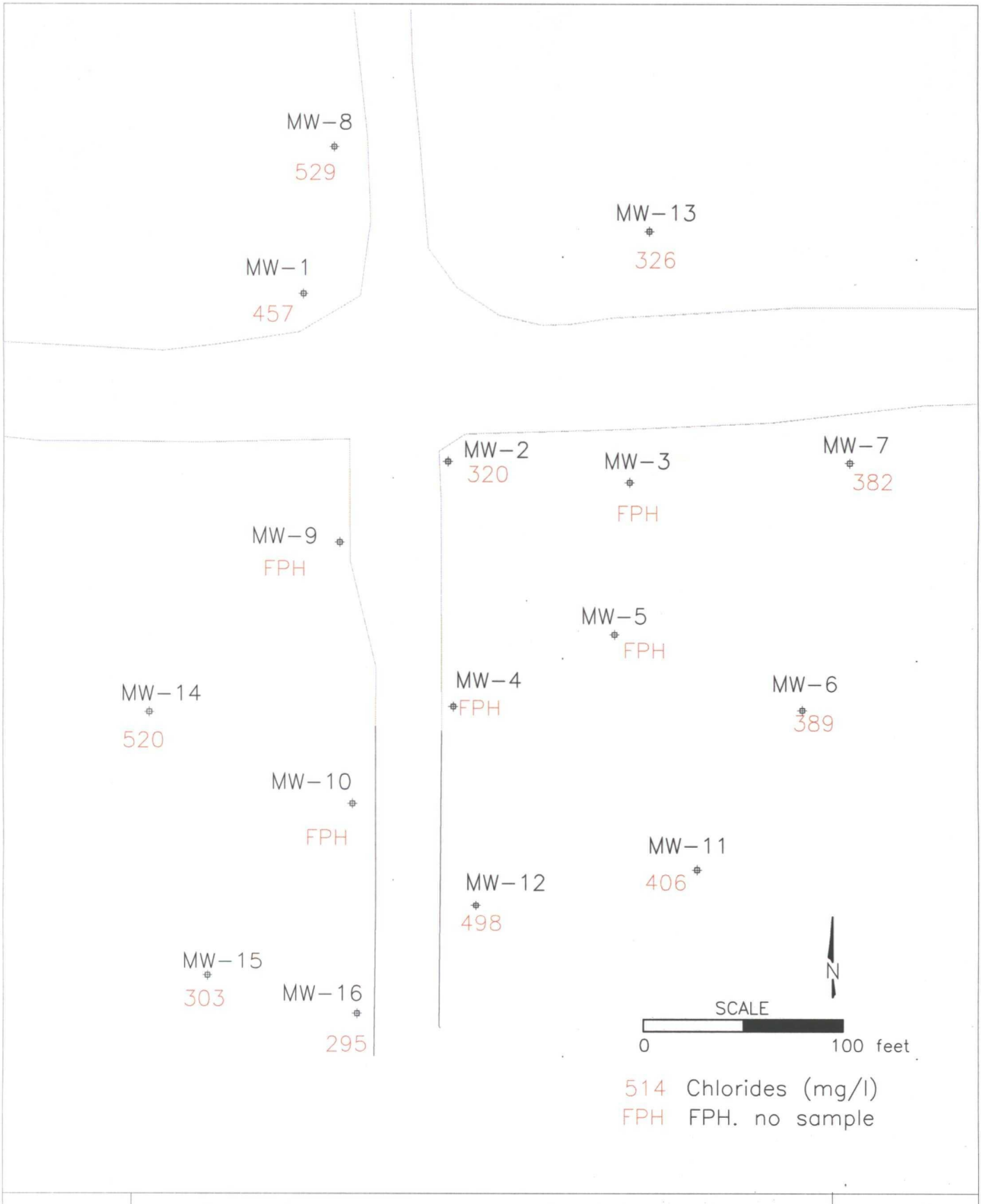

Figure 8 - March 2011 Chloride Concentrations

RR Ext - Groundwater Monitoring

dcp Midstream.

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REVISED:
DATE: 5/11

SUMMARY OF CORRECTED WATER TABLE ELEVATIONS

DCP RREXT - SUMMARY OF CORRECTED WATER TABLE ELEVATIONS

Well	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8
03/19/08	3504.98	3504.79	3505.02	3504.60	3504.64			
06/29/08	3504.79	3504.64	3504.82	3504.41	3504.46	3504.31	3504.63	3504.94
09/17/08	3504.62	3504.50	3504.64	3504.22	3504.27	3504.15	3504.37	3504.78
12/03/08	3504.92		3504.88	3504.49	3504.50	3504.37	3504.60	3505.02
03/11/09	3505.30	3504.92	3505.06	3504.69	3504.70	3504.58	3504.78	3505.22
05/19/09	3505.02	3504.87	3505.03	3504.63	3504.64	3504.51	3504.72	3505.14
09/23/09	3504.45	3504.30	3504.49		3504.14	3504.01	3504.25	3504.58
12/20/09	3504.32	3504.16	3504.35	3503.88	3503.99	3503.85	3504.11	3504.55
03/22/10	3504.60	3504.42	3504.52	3504.12	3504.14	3504.13	3504.33	3504.76
06/29/10	3504.67	3504.50	3504.66	3504.22	3504.27	3504.21	3504.43	3504.80
09/28/10	3505.07	3504.88	3505.04	3504.65	3504.68	3504.55	3504.74	3505.16
12/09/10	3505.31	3505.13	3505.25	3504.58	3504.62	3504.76	3504.98	3505.43
03/30/11	3505.39	3505.22	3505.35	3504.95	3504.93	3505.14	3505.27	3505.82

Well	MW-9	MW-10	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16
03./30/11	3503.83	3505.12	3505.38	3506.84	3505.59	3505.35	3505.12	3504.07

Units are feet
Blank cells wells either not installed or not not measured.

SUMMARY OF GROUNDWATER MONITORING DATA

RR EXT BTEX GROUNDWATER MONITORING DATA 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
	9/10	**1.99**	0.084	0.0951	0.0219J
	12/10	**0.708**	0.0099J	0.0796	0.0047J
	3/11	**0.0241**	0.0136	<0.01	0.0055 J
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
	9/10	**17**	0.257J	0.329J	<0.8
	9/10	**17.7**	0.284J	0.353J	<0.8
	12/10	**16.9**	0.399	0.458	0.0926J
	12/10	**17.5**	0.556	0.452	0.127J
	3/11	16.6	0.403	0.165 J	0.116 J
Duplicate	3/11	16	0.363	<0.2	<0.2

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

RR EXT BTEX GROUNDWATER MONITORING DATA SUMMARY (continued)

Well	Date	Benzene	Toluene	Ethylbenzene	Total Xylenes
NMWQCC Standards		.010	0.75	0.75	0.62
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 Since Second Quarter 2010**			
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
	9/10	<0.001	<0.002	<0.002	<0.004
	12/10	<0.001	<0.002	<0.002	<0.004
	3/11	<0.001	<0.002	<0.002	0.00084 J

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

RR EXT BTEX GROUNDWATER MONITORING DATA 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	<0.006
	9/10	0.00042J	<0.002	<0.002	<0.004
	12/10	<0.002	<0.002	<0.002	<0.006
	3/11	<0.001	<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
	9/10	<0.001	<0.002	<0.002	<0.004
	12/10	<0.001	<0.002	<0.002	<0.004
	3/11	<0.001	<0.002	<0.002	<0.002
MW-9	**Free Phase Hydrocarbons since June 2010 Installation**				
MW-10	**Free Phase Hydrocarbons since June 2010 Installation**				
MW-11	6/10	<0.001	<0.002	<0.002	<0.004
	9/10	<0.001	<0.002	<0.002	<0.004
	12/10	<0.001	<0.002	<0.002	<0.004
	3/11	<0.001	<0.002	<0.002	<0.002
MW-12	6/10	<0.001	<0.002	<0.002	<0.004
	9/10	<0.001	<0.002	<0.002	<0.004
	12/10	<0.001	<0.002	<0.002	<0.004
	3/11	<0.001	<0.002	<0.002	<0.002

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

RR EXT BTEX GROUNDWATER MONITORING DATA SUMMARY (continued)

Well	Date	Benzene	Toluene	Ethylbenzene	Total Xylenes
NMWQCC Standards		.010	0.75	0.75	0.62
MW-13	3/11	<0.001	<0.002	<0.002	<0.002
MW-14	3/11	<0.001	<0.002	<0.002	<0.002
MW-15	3/11	<0.001	<0.002	<0.002	<0.002
MW-16	3/11	<0.001	<0.002	<0.002	<0.002

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

WELL SAMPLING DATA AND
ANALYTICAL LABORATORY REPORT

WELL SAMPLING DATA FORM

CLIENT: DCP Midstream WELL ID: MW-1

SITE NAME: RR-EXT DATE: 3/30/2011

PROJECT NO. _____ SAMPLER: M. Stewart

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: 29.01 Feet
HEIGHT OF WATER COLUMN: 10.55 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
	1.6	18	1.58	7.17			
	3.2	18.2	1.56	7.20			
	4.8	18.3	1.56	7.30			
4.8	Volume: (gallons)						

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

ANALYSES: BTEX (8260)

COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: DCP Midstream WELL ID: MW-2

SITE NAME: RR-EXT DATE: 3/30/2011

PROJECT NO. ☑ SAMPLER: M. Stewart

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: 29.90 Feet
HEIGHT OF WATER COLUMN: 10.01 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
	2						
	3.4						
	5	17.5	7.30	1.15			
	5.1	Volume: (gallons)					

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

ANALYSES: BTEX (8260)

COMMENTS:

Duplicate sample collected

WELL SAMPLING DATA FORM

CLIENT: DCP Midstream WELL ID: MW-3

SITE NAME: RR-EXT DATE: 3/30/2011

PROJECT NO. ☑ SAMPLER: M. Stewart

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

SAMPLING METHOD: Dedicated Bailer Direct from Discharge Hose Other:

☑ SCRIBE ☐ EQUIPME ☐ DECONTAMINATION ☐ METHOD BEFORE SAMPLING THE WELL:

Gloves Alconox Distilled Water Rinse Other:

TOTAL DEPTH OF WELL: 40.03 Feet
DEPTH TO WATER: 31.53 Feet
HEIGHT OF WATER COLUMN: 8.50 Feet
WELL DIAMETER: 2.0 Inch

4.3 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

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: 3/30/2011

PROJECT NO. ☑ ☐ SAMPLER: M. Stewart

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

SAMPLING METHOD: Dedicated Bailer Direct from Discharge Hose Other:

☑ SCRIBE ☐ EQUIPMENT ☐ DECONTAMINATION ☐ METHOD BEFORE SAMPLING THE WELL:

Gloves Alconox Distilled Water Rinse Other:

TOTAL DEPTH OF WELL: 40.66 Feet
DEPTH TO WATER: 30.58 Feet
HEIGHT OF WATER COLUMN: 10.08 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: 3/30/2011

PROJECT NO. SAMPLER: M. Stewart

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

SAMPLING METHOD: Dedicated Bailer Direct from Discharge Hose Other:

☑ SCRIBE ☐ EQUIPME ☐ DECONTAMINATION ☐ METHOD BEFORE SAMPLING THE WELL:

Gloves Alconox Distilled Water Rinse Other:

TOTAL DEPTH OF WELL: 42.15 Feet
DEPTH TO WATER: 30.75 Feet
HEIGHT OF WATER COLUMN: 11.40 Feet
WELL DIAMETER: 2.0 Inch

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

TIME	VOLUME PURGED	TEMP. °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: 3/30/2011

PROJECT NO. ☑ ☐ SAMPLER: M. Stewart

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: 31.19 Feet
HEIGHT OF WATER COLUMN: 8.49 Feet
WELL DIAMETER: 2.0 Inch

4.2 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	18.9	1.23	7.58			
	2.6	18.8	1.22	7.57			
	3.9	18.7	1.23	7.57			
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: 3/30/2011

PROJECT NO. ☑ ☐ SAMPLER: M. Stewart

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

SAMPLING METHOD: Dedicated Bailer Direct from Discharge Hose Other:

☑ SCRIBE ☐ EQUIPME ☐ DECONTAMINATION ☐ METHOD BEFORE SAMPLING THE WELL:

Gloves Alconox Distilled Water Rinse Other:

TOTAL DEPTH OF WELL: 39.86 Feet
DEPTH TO WATER: 31.89 Feet
HEIGHT OF WATER COLUMN: 7.97 Feet
WELL DIAMETER: 2.0 Inch

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

TIME	VOLUME PURGED	TEMP. °C	COND. *m* S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
	1.3	18.0	1.32	7.58			
	2.6	17.9	1.30	7.56			
740	3.9	17.9	1.29	7.58			
	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: 3/30/2011

PROJECT NO. SAMPLER: M. Stewart

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: 30.84 Feet
HEIGHT OF WATER COLUMN: 9.42 Feet
WELL DIAMETER: 2.0 Inch

4.7 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
	2.0	17.5	1.63	7.44			
	4.0	17.6	1.62	7.48			
	6.0	17.7	1.61	7.48			
	6.0	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: 3/30/2011

PROJECT NO. SAMPLER: M. Stewart

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: 29.53 Feet
HEIGHT OF WATER COLUMN: 10.47 Feet
WELL DIAMETER: 2.0 Inch

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

TIME	VOLUME PURGED	TEMP. °C	COND. *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-10

SITE NAME: RR-EXT DATE: 3/30/2011

PROJECT NO. _____ SAMPLER: M. Stewart

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
	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-11

SITE NAME: RR-EXT DATE: 3/30/2011

PROJECT NO. _____ SAMPLER: M. Stewart

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: 31.05 Feet

HEIGHT OF WATER COLUMN: 8.95 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
	1.4	18.0	1.37	7.61			
	2.8	18.4	1.400	7.56			
	4.2	18.6	1.370	7.57			
4.2	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: 3/30/2011

PROJECT NO. ☑ ☐ SAMPLER: M. Stewart

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: 29.28 Feet
HEIGHT OF WATER COLUMN: 10.72 Feet
WELL DIAMETER: 2.0 Inch

5.4 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
	1.7	18.3	1.43	7.54			
	3.4	18.6	1.43	7.60			
	5.1	18.6	1.44	7.54			
	5.1	Volume: (gallons)					

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

ANALYSES: BTEX (8260)

COMMENTS: _____

WELL SAMPLING DATA FORM

CLIENT: DCP Midstream WELL ID: MW-13

SITE NAME: RR-EXT DATE: 3/30/2011

PROJECT NO. SAMPLER: M. Stewart

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

SAMPLING METHOD: Dedicated Bailer Direct from Discharge Hose Other:

☑ SCRIBE ☐ EQUIPME ☐ DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

Gloves Alconox Distilled Water Rinse Other:

TOTAL DEPTH OF WELL: 40.00 Feet
DEPTH TO WATER: 30.44 Feet
HEIGHT OF WATER COLUMN: 9.56 Feet
WELL DIAMETER: 2.0 Inch

4.8 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
	1.6	16.3	1.28	7.61			
	3.2	16.8	1.25	7.59			
	4.8	17.4	1.25	7.56			
	4.8	Volume: (gallons)					

SAMPLE NO.: Collected Sample No.: MW-13

ANALYSES: BTEX (8260)

COMMENTS:

WELL SAMPLING DATA FORM

CLIENT: DCP Midstream WELL ID: MW-14

SITE NAME: RR-EXT DATE: 3/30/2011

PROJECT NO. SAMPLER: M. Stewart

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

SAMPLING METHOD: Dedicated Bailer Direct from Discharge Hose Other:

☑ SCRIBE ☐ EQUIPME ☐ DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

Gloves Alconox Distilled Water Rinse Other:

TOTAL DEPTH OF WELL: 40.00 Feet
DEPTH TO WATER: 29.48 Feet
HEIGHT OF WATER COLUMN: 10.52 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
	2.0	18.7	1.33	7.65			
	4.0	1839.0	1.33	7.62			
	6.0	19.0	1.33	7.59			
	6.0	Volume: (gallons)					

SAMPLE NO.: Collected Sample No.: MW-14

ANALYSES: BTEX (8260)

COMMENTS:

WELL SAMPLING DATA FORM

CLIENT: DCP Midstream WELL ID: MW-15

SITE NAME: RR-EXT DATE: 3/30/2011

PROJECT NO. SAMPLER: M. Stewart

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: 29.66 Feet
HEIGHT OF WATER COLUMN: 10.34 Feet
WELL DIAMETER: 2.0 Inch

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

TIME	VOLUME PURGED	TEMP. °C	COND. *m*S/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
	1.8	18.8	1.11	7.55			
	3.6	18.7	1.10	7.60			
	5.4	18.6	1.10	7.62			
	5.4	Volume: (gallons)					

SAMPLE NO.: Collected Sample No.: MW-15

ANALYSES: BTEX (8260)

COMMENTS:

WELL SAMPLING DATA FORM

CLIENT: DCP Midstream WELL ID: MW-16

SITE NAME: RR-EXT DATE: 3/30/2011

PROJECT NO. SAMPLER: M. Stewart

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: 28.53 Feet
HEIGHT OF WATER COLUMN: 11.47 Feet
WELL DIAMETER: 2.0 Inch

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

TIME	VOLUME PURGED	TEMP. °C	COND. mS/cm	pH	DO mg\L	Turb	PHYSICAL APPEARANCE AND REMARKS
	2.0	18.4	1.11	7.74			
	4.0	18.7	1.11	7.65			
	6.0	18.8	1.11	7.65			
6.0	Volume: (gallons)						

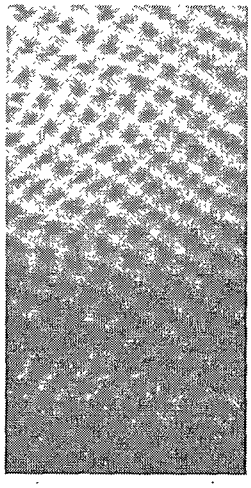
SAMPLE NO.: Collected Sample No.: MW-16

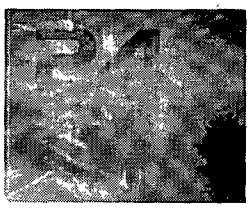
ANALYSES: BTEX (8260)

COMMENTS:

Mountain States ACCUTEST LABORATORIES

05/16/11





Technical Report for

DCP Midstream, LP

AECCOL: DCP RR EXT

RC-GN00 Project-390761103

Accutest Job Number: D22252

Sampling Dates: 03/29/11 - 03/30/11

Report to:

American Environmental Consulting, LLC

mstewart@aecdenver.com

ATTN: Michael Stewart

Total number of pages in report: 43

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

John Hamilton
Laboratory Director

Client Service contact: Shea Greiner 303-425-6021

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

Test results relate only to samples analyzed.

Sections:

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Sample Summary

DCP Midstream, LP

Job No: D22252

AECCOL: DCP RR EXT
Project No: RC-GN00 Project-390761103

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
D22252-1	03/30/11	08:05	MS	03/31/11	AQ	Ground Water	MW-1
D22252-2	03/30/11	08:30	MS	03/31/11	AQ	Ground Water	MW-2
D22252-3	03/29/11	17:40	MS	03/31/11	AQ	Ground Water	MW-6
D22252-3D	03/29/11	17:40	MS	03/31/11	AQ	Water Dup/MSD	MW-6
D22252-3M	03/29/11	17:40	MS	03/31/11	AQ	Water Matrix Spike	MW-6
D22252-4	03/29/11	18:00	MS	03/31/11	AQ	Ground Water	MW-7
D22252-5	03/30/11	07:50	MS	03/31/11	AQ	Ground Water	MW-8
D22252-6	03/29/11	16:55	MS	03/31/11	AQ	Ground Water	MW-11
D22252-7	03/29/11	16:30	MS	03/31/11	AQ	Ground Water	MW-12
D22252-8	03/30/11	00:00	MS	03/31/11	AQ	Water Dup/MSD	DUP
D22252-9	03/30/11	00:00	MS	03/31/11	AQ	Trip Blank Water	TRIP BLANK
D22252-10	03/30/11	07:25	MS	03/31/11	AQ	Ground Water	MW-13
D22252-11	03/29/11	16:05	MS	03/31/11	AQ	Ground Water	MW-14

Sample Summary
(continued)

DCP Midstream, LP

Job No: D22252

AECCOL: DCP RR EXT
Project No: RC-GN00 Project-390761103

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
D22252-12	03/29/11	15:45	MS	03/31/11	AQ	Ground Water	MW-15
D22252-13	03/29/11	17:15	MS	03/31/11	AQ	Ground Water	MW-16

ACCUTEST Laboratories

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CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	DCP Midstream, LP	**Job No**	D22252
Site:	AECCOL: DCP RR EXT	**Report Dat**	4/7/2011 3:50:16 PM

On 03/31/2011, 12 sample(s), 1 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 4.2 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D22252 was assigned to the project. The lab sample IDs, client sample IDs, and dates of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ **Batch ID:** V3V566

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D22252-3MS, D22252-3MSD were used as the QC samples indicated.

Wet Chemistry By Method EPA 300/SW846 9056

Matrix AQ **Batch ID:** GP4124

- All samples were prepared and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D22225-8MS, D22225-8MSD were used as the QC samples for the Chloride analysis.

Matrix AQ **Batch ID:** GP4132

- All samples were prepared and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D22149-1MS, D22149-1MSD 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.

Mountain States ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	D22252-1	**Date Sampled:**	03/30/11
Matrix:	AQ - Ground Water	**Date Received:**	03/31/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AECCOL: DCP RR EXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V10250.D	5	04/07/11	DC	n/a	n/a	V3V566
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	0.0241	0.0050	0.0015	mg/l	
108-88-3	Toluene	ND	0.010	0.0050	mg/l	
100-41-4	Ethylbenzene	0.0136	0.010	0.0015	mg/l	
1330-20-7	Xylene (total)	0.0055	0.010	0.0030	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	83%		63-130%
2037-26-5	Toluene-D8	82%		68-130%
460-00-4	4-Bromofluorobenzene	76%		61-130%

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

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	D22252-1	**Date Sampled:**	03/30/11
Matrix:	AQ - Ground Water	**Date Received:**	03/31/11
		Percent Solids:	n/a
Project:	AECCOL: DCP RR EXT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	457	5.0	mg/l	10	04/01/11 14:07	CB	EPA 300/SW846 9056

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-2		
Lab Sample ID:	D22252-2	**Date Sampled:**	03/30/11
Matrix:	AQ - Ground Water	**Date Received:**	03/31/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AECCOL: DCP RR EXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V10251.D	100	04/07/11	DC	n/a	n/a	V3V566
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	16.6	0.10	0.030	mg/l	
108-88-3	Toluene	0.165	0.20	0.10	mg/l	J
100-41-4	Ethylbenzene	0.403	0.20	0.030	mg/l	
1330-20-7	Xylene (total)	0.116	0.20	0.060	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	88%		63-130%
2037-26-5	Toluene-D8	82%		68-130%
460-00-4	4-Bromofluorobenzene	77%		61-130%

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

Report of Analysis

3.2

Client Sample ID:	MW-2		
Lab Sample ID:	D22252-2	**Date Sampled:**	03/30/11
Matrix:	AQ - Ground Water	**Date Received:**	03/31/11
		Percent Solids:	n/a
Project:	AECCOL: DCP RR EXT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	320	5.0	mg/l	10	04/01/11 14:20	CB	EPA 300/SW846 9056

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-6		
Lab Sample ID:	D22252-3	**Date Sampled:**	03/29/11
Matrix:	AQ - Ground Water	**Date Received:**	03/31/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AECCOL: DCP RR EXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V10247.D	1	04/07/11	DC	n/a	n/a	V3V566
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0010	0.00030	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00030	mg/l	
1330-20-7	Xylene (total)	0.00084	0.0020	0.00060	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	89%		63-130%
2037-26-5	Toluene-D8	81%		68-130%
460-00-4	4-Bromofluorobenzene	77%		61-130%

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

Report of Analysis

3.3

Client Sample ID:	MW-6		
Lab Sample ID:	D22252-3	**Date Sampled:**	03/29/11
Matrix:	AQ - Ground Water	**Date Received:**	03/31/11
		Percent Solids:	n/a
Project:	AECCOL: DCP RR EXT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	386	5.0	mg/l	10	04/01/11 14:32	CB	EPA 300/SW846 9056

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-7		
Lab Sample ID:	D22252-4	**Date Sampled:**	03/29/11
Matrix:	AQ - Ground Water	**Date Received:**	03/31/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AECCOL: DCP RR EXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V10252.D	1	04/07/11	DC	n/a	n/a	V3V566
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0010	0.00030	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00030	mg/l	
1330-20-7	Xylene (total)	ND	0.0020	0.00060	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	88%		63-130%
2037-26-5	Toluene-D8	82%		68-130%
460-00-4	4-Bromofluorobenzene	78%		61-130%

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

Report of Analysis

Client Sample ID:	MW-7		
Lab Sample ID:	D22252-4	**Date Sampled:**	03/29/11
Matrix:	AQ - Ground Water	**Date Received:**	03/31/11
		Percent Solids:	n/a
Project:	AECCOL: DCP RR EXT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	382	5.0	mg/l	10	04/01/11 13:29	CB	EPA 300/SW846 9056

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-8		
Lab Sample ID:	D22252-5	**Date Sampled:**	03/30/11
Matrix:	AQ - Ground Water	**Date Received:**	03/31/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AECCOL: DCP RR EXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V10253.D	1	04/07/11	DC	n/a	n/a	V3V566
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0010	0.00030	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00030	mg/l	
1330-20-7	Xylene (total)	ND	0.0020	0.00060	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	90%		63-130%
2037-26-5	Toluene-D8	80%		68-130%
460-00-4	4-Bromofluorobenzene	77%		61-130%

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

Report of Analysis

Client Sample ID:	MW-8		
Lab Sample ID:	D22252-5	**Date Sampled:**	03/30/11
Matrix:	AQ - Ground Water	**Date Received:**	03/31/11
		Percent Solids:	n/a
Project:	AECCOL: DCP RR EXT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	529	5.0	mg/l	10	04/01/11 13:42	CB	EPA 300/SW846 9056

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-11		
Lab Sample ID:	D22252-6	**Date Sampled:**	03/29/11
Matrix:	AQ - Ground Water	**Date Received:**	03/31/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AECCOL: DCP RR EXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V10254.D	1	04/07/11	DC	n/a	n/a	V3V566
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0010	0.00030	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00030	mg/l	
1330-20-7	Xylene (total)	ND	0.0020	0.00060	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	89%		63-130%
2037-26-5	Toluene-D8	82%		68-130%
460-00-4	4-Bromofluorobenzene	79%		61-130%

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

Report of Analysis

3.6

Client Sample ID:	MW-11		
Lab Sample ID:	D22252-6	**Date Sampled:**	03/29/11
Matrix:	AQ - Ground Water	**Date Received:**	03/31/11
		Percent Solids:	n/a
Project:	AECCOL: DCP RR EXT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	406	5.0	mg/l	10	04/01/11 13:54	CB	EPA 300/SW846 9056

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-12		
Lab Sample ID:	D22252-7	**Date Sampled:**	03/29/11
Matrix:	AQ - Ground Water	**Date Received:**	03/31/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AECCOL: DCP RR EXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V10255.D	1	04/07/11	DC	n/a	n/a	V3V566
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0010	0.00030	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00030	mg/l	
1330-20-7	Xylene (total)	ND	0.0020	0.00060	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	90%		63-130%
2037-26-5	Toluene-D8	81%		68-130%
460-00-4	4-Bromofluorobenzene	77%		61-130%

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

Report of Analysis

Client Sample ID:	MW-12		
Lab Sample ID:	D22252-7	**Date Sampled:**	03/29/11
Matrix:	AQ - Ground Water	**Date Received:**	03/31/11
		Percent Solids:	n/a
Project:	AECCOL: DCP RR EXT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	498	5.0	mg/l	10	04/01/11 14:45	CB	EPA 300/SW846 9056

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DUP		
Lab Sample ID:	D22252-8	**Date Sampled:**	03/30/11
Matrix:	AQ - Water Dup/MSD	**Date Received:**	03/31/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AECCOL: DCP RR EXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V10256.D	100	04/07/11	DC	n/a	n/a	V3V566
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	16.0	0.10	0.030	mg/l	
108-88-3	Toluene	ND	0.20	0.10	mg/l	
100-41-4	Ethylbenzene	0.363	0.20	0.030	mg/l	
1330-20-7	Xylene (total)	ND	0.20	0.060	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	92%		63-130%
2037-26-5	Toluene-D8	82%		68-130%
460-00-4	4-Bromofluorobenzene	77%		61-130%

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

Report of Analysis

Client Sample ID:	DUP		
Lab Sample ID:	D22252-8	**Date Sampled:**	03/30/11
Matrix:	AQ - Water Dup/MSD	**Date Received:**	03/31/11
		Percent Solids:	n/a
Project:	AECCOL: DCP RR EXT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	320	5.0	mg/l	10	04/01/11 15:23	CB	EPA 300/SW846 9056

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	D22252-9	**Date Sampled:**	03/30/11
Matrix:	AQ - Trip Blank Water	**Date Received:**	03/31/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AECCOL: DCP RR EXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V10259.D	1	04/07/11	DC	n/a	n/a	V3V566
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0010	0.00030	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00030	mg/l	
1330-20-7	Xylene (total)	ND	0.0020	0.00060	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	86%		63-130%
2037-26-5	Toluene-D8	82%		68-130%
460-00-4	4-Bromofluorobenzene	77%		61-130%

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

Report of Analysis

Client Sample ID:	MW-13		
Lab Sample ID:	D22252-10	**Date Sampled:**	03/30/11
Matrix:	AQ - Ground Water	**Date Received:**	03/31/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AECCOL: DCP RR EXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V10260.D	1	04/07/11	DC	n/a	n/a	V3V566
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0010	0.00030	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00030	mg/l	
1330-20-7	Xylene (total)	ND	0.0020	0.00060	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	87%		63-130%
2037-26-5	Toluene-D8	81%		68-130%
460-00-4	4-Bromofluorobenzene	78%		61-130%

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

Report of Analysis

Client Sample ID:	MW-13		
Lab Sample ID:	D22252-10	**Date Sampled:**	03/30/11
Matrix:	AQ - Ground Water	**Date Received:**	03/31/11
		Percent Solids:	n/a
Project:	AECCOL: DCP RR EXT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	326	5.0	mg/l	10	04/01/11 15:35	CB	EPA 300/SW846 9056

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-14		
Lab Sample ID:	D22252-11	**Date Sampled:**	03/29/11
Matrix:	AQ - Ground Water	**Date Received:**	03/31/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AECCOL: DCP RR EXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V10261.D	1	04/07/11	DC	n/a	n/a	V3V566
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0010	0.00030	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00030	mg/l	
1330-20-7	Xylene (total)	ND	0.0020	0.00060	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	88%		63-130%
2037-26-5	Toluene-D8	80%		68-130%
460-00-4	4-Bromofluorobenzene	76%		61-130%

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

Report of Analysis

Client Sample ID:	MW-14		
Lab Sample ID:	D22252-11	**Date Sampled:**	03/29/11
Matrix:	AQ - Ground Water	**Date Received:**	03/31/11
		Percent Solids:	n/a
Project:	AECCOL: DCP RR EXT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	520	5.0	mg/l	10	04/04/11 10:43	CB	EPA 300/SW846 9056

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-15		
Lab Sample ID:	D22252-12	**Date Sampled:**	03/29/11
Matrix:	AQ - Ground Water	**Date Received:**	03/31/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AECCOL: DCP RR EXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V10262.D	1	04/07/11	DC	n/a	n/a	V3V566
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0010	0.00030	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00030	mg/l	
1330-20-7	Xylene (total)	ND	0.0020	0.00060	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	88%		63-130%
2037-26-5	Toluene-D8	82%		68-130%
460-00-4	4-Bromofluorobenzene	77%		61-130%

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

Report of Analysis

Client Sample ID:	MW-15		
Lab Sample ID:	D22252-12	**Date Sampled:**	03/29/11
Matrix:	AQ - Ground Water	**Date Received:**	03/31/11
		Percent Solids:	n/a
Project:	AECCOL: DCP RR EXT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	303	5.0	mg/l	10	04/04/11 10:56	CB	EPA 300/SW846 9056

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-16		
Lab Sample ID:	D22252-13	**Date Sampled:**	03/29/11
Matrix:	AQ - Ground Water	**Date Received:**	03/31/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	AECCOL: DCP RR EXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V10263.D	1	04/07/11	DC	n/a	n/a	V3V566
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0010	0.00030	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00030	mg/l	
1330-20-7	Xylene (total)	ND	0.0020	0.00060	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	89%		63-130%
2037-26-5	Toluene-D8	79%		68-130%
460-00-4	4-Bromofluorobenzene	76%		61-130%

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

Report of Analysis

Client Sample ID:	MW-16		
Lab Sample ID:	D22252-13	**Date Sampled:**	03/29/11
Matrix:	AQ - Ground Water	**Date Received:**	03/31/11
		Percent Solids:	n/a
Project:	AECCOL: DCP RR EXT		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	295	5.0	mg/l	10	04/04/11 11:09	CB	EPA 300/SW846 9056

RL = Reporting Limit

Mountain States ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- **Chain of Custody**

CHAIN OF CUSTODY

PAGE 1 OF 2

ACCUTEST LABORATORIES

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 #: D22252

Client / Reporting Information

Company Name: American Environmental Consulting
Street Address: 6885 S. Marshall Street Suite 3
City: Littleton CO 80128
Project Contact: Michael Stewart mstewart@aecdenver.com
Phone #: 303-605-1718
Sampler(s) Name(s):

Project Information

Project Name: DCP RR EXT
Street:
City: State:
Project #: RC - GN00 Project - 390761103
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

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

Requested Analysis (see TEST CODE sheet)

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

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	MeOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	V8260BTX	CHL	MS/MSD for V8260BTX	LAB USE ONLY
	MW-1		3-30	0805	MS	GW	4	3				1				X	X		01
	MW-2		3-30 *	0830		GW	4	3				1				X	X		02
	MW-6		3-29	1740		GW	4	3				1				X	X		03
	MW-7		3-29	1800		GW	4	3				1				X	X		04
	MW-8		3-30 *	0750		GW	4	3				1				X	X		05
	MW-11		3-29	1655		GW	4	3				1				X	X		06
	MW-12		3-29	1636		GW	4	3				1				X	X		07
	DUP		3-30 *	—		GW	4	3				1				X	X		08
	MW-6 MS/MSD		3-29	1740		GW	6	6										X	03
	Trip Blank		—	—			1									X			09
	MW-13		3-30 *	0725		GW	4	3				1				X	X		10
	MW-14		3-29	1605	MS	GW	4	3				1				X	X		11

Turnaround Time (Business days)

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

Approved By (Accutest PM) / Date:

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

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

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

Comments / Special Instructions

Email results to Steve Weathers

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		3-30 1210		2 1210pm		2
3	Relinquished by Sampler:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by	Date Time:	Received By: 5	Custody Seal #	[X] Intact [ ] Not Intact	Preserved where applicable: On Ice: Cooler Temp: 4.2

4.1 4

D22252: Chain of Custody
Page 1 of 3

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

PAGE 2 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 # D22252

Client / Reporting Information	Project Information	Billing Information (If different from Report to)
Company Name: American Environmental Consulting	Project Name: DCP RR EXT	
Street Address: 6885 S. Marshall Street Suite 3	Street	
City: Littleton CO 80128	City / State	Company Name: DCP Midstream
Project Contact: Michael Stewart mstewart@aecdenver.com	Project #: RC - GN00 Project - 380761103	Street Address: PO Box 4870
Phone #: 303-605-1718	Client Purchase Order #	City: Portland OR 97208-4870
Sampler(s) Name(s)	Project Manager	Attention: Steve Weathers SWWeathers@dcpmidstream.com

Requested Analysis (see TEST CODE sheet): V8260BTX; CHL; MS/MSD for V8260BTX

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

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	V8260BTX	CHL	MS/MSD for V8260BTX	LAB USE ONLY
	MW-15		3-29	1545	MS	GW	4	3				1				X	X		12
	MW-16		3-29	1715	MS	GW	4	3				1				X	X		13
	~~Trip Blank~~																		
																			20

Turnaround Time (Business days)

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

Emergency & Rush T/A data available VIA Labilink

Approved By (Accutest PM) / Date:

Data Deliverable Information

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

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

Comments / Special Instructions

Email results to Steve Weathers

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	3-31 1716	1	2		2
Relinquished by Sampler	Date Time:	Received By:	Relinquished By	Date Time:	Received By:
3		3	4		4
Relinquished by:	Date Time	Received By	Custody Seal #	Intact / Not Intact	Preserved where applicable	On Ice	Cooler Temp.
5		5					4.2

4.1.4

ACCUTEST LABORATORIES

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D22252 **Client:** AMERICAN ENV. CONSULTING **Immediate Client Services Action Required:** No

Date / Time Received: 3/31/2011 12:10:00 PM **No. Coolers:** 1 **Client Service Action Required at Login:** No

Project: DCP RR EXT **Airbill #'s:** HD

Cooler Security

Y	or	N
☑		☐
☑		☐

Y	or	N
☑		☐
☑		☐

Cooler Temperature

Y	or	N
☑		☐

Quality Control Preservation

Y	or	N	N/A
☐		☐	
☐		☐	
☑		☐	
☑		☐	☐

Sample Integrity - Documentation

Y	or	N
☑		☐
☑		☐
☑		☐

Sample Integrity - Condition

Y	or	N
☑		☐
☑		☐

Sample Integrity - Instructions

Y	or	N	N/A
☑		☐	
☐		☑	
☑		☐	
☐		☐	☑
☐		☐	☑

4.1

4

D22252: Chain of Custody
Page 3 of 3

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: D22252
Account: DCPMCODN DCP Midstream, LP
Project: AECCOL: DCP RR EXT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3V566-MB1	3V10245.D	1	04/06/11	DC	n/a	n/a	V3V566

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

D22252-1, D22252-2, D22252-3, D22252-4, D22252-5, D22252-6, D22252-7, D22252-8, D22252-9, D22252-10, D22252-11, D22252-12, D22252-13

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	
1330-20-7	Xylene (total)	ND	2.0	0.60	ug/l	

CAS No.	Surrogate Recoveries		Limits
17060-07-0	1,2-Dichloroethane-D4	85%	63-130%
2037-26-5	Toluene-D8	82%	68-130%
460-00-4	4-Bromofluorobenzene	76%	61-130%

Blank Spike Summary

Job Number: D22252
Account: DCPMCODN DCP Midstream, LP
Project: AECCOL: DCP RR EXT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3V566-BS1	3V10246.D	1	04/06/11	DC	n/a	n/a	V3V566

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

D22252-1, D22252-2, D22252-3, D22252-4, D22252-5, D22252-6, D22252-7, D22252-8, D22252-9, D22252-10, D22252-11, D22252-12, D22252-13

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	49.9	100	70-130
100-41-4	Ethylbenzene	50	51.2	102	70-130
108-88-3	Toluene	50	49.7	99	70-140
1330-20-7	Xylene (total)	100	91.2	91	55-134

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	83%	63-130%
2037-26-5	Toluene-D8	82%	68-130%
460-00-4	4-Bromofluorobenzene	78%	61-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D22252
Account: DCPMCODN DCP Midstream, LP
Project: AECCOL: DCP RR EXT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D22252-3MS	3V10248.D	1	04/07/11	DC	n/a	n/a	V3V566
D22252-3MSD	3V10249.D	1	04/07/11	DC	n/a	n/a	V3V566
D22252-3	3V10247.D	1	04/07/11	DC	n/a	n/a	V3V566

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

D22252-1, D22252-2, D22252-3, D22252-4, D22252-5, D22252-6, D22252-7, D22252-8, D22252-9, D22252-10, D22252-11, D22252-12, D22252-13

CAS No.	Compound	D22252-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		50	52.3	105	53.3	107	2	59-132/30
100-41-4	Ethylbenzene	ND		50	53.0	106	54.2	108	2	68-130/30
108-88-3	Toluene	ND		50	50.8	102	52.0	104	2	56-142/30
1330-20-7	Xylene (total)	0.84	J	100	94.7	94	97.4	97	3	36-146/30

CAS No.	Surrogate Recoveries	MS	MSD	D22252-3	Limits
17060-07-0	1,2-Dichloroethane-D4	84%	84%	89%	63-130%
2037-26-5	Toluene-D8	83%	82%	81%	68-130%
460-00-4	4-Bromofluorobenzene	80%	79%	77%	61-130%

Mountain States ACCUTEST LABORATORIES

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: D22252
Account: DCPMCODN - DCP Midstream, LP
Project: AECCOL: DCP RR EXT

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP4124/GN8945	0.50	0.0	mg/l	20	18.5	92.5	90-110%
Chloride	GP4132/GN8963	0.50	0.0	mg/l	20	18.6	93.0	90-110%
Fluoride	GP4132/GN8963	0.20	0.0	mg/l	10	9.59	95.9	90-110%
Sulfate	GP4124/GN8945	0.50	0.0	mg/l	30	29.2	97.3	90-110%

Associated Samples:
Batch GP4124: D22252-1, D22252-10, D22252-2, D22252-3, D22252-4, D22252-5, D22252-6, D22252-7, D22252-8
Batch GP4132: D22252-11, D22252-12, D22252-13
(*) Outside of QC limits

6.1
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MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D22252
Account: DCPMCODN - DCP Midstream, LP
Project: AECCOL: DCP RR EXT

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP4124/GN8945	D22225-8	mg/l	107	50	162	110.0	80-120%
Chloride	GP4132/GN8963	D22149-1	mg/l	1.8	10	11.9	101.0	80-120%
Fluoride	GP4132/GN8963	D22149-1	mg/l	0.36	2.5	2.7	93.6	80-120%
Sulfate	GP4124/GN8945	D22225-8	mg/l	109	50	164	110.0	80-120%

Associated Samples:
Batch GP4124: D22252-1, D22252-10, D22252-2, D22252-3, D22252-4, D22252-5, D22252-6, D22252-7, D22252-8
Batch GP4132: D22252-11, D22252-12, D22252-13
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

6.2

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D22252
Account: DCPMCODN - DCP Midstream, LP
Project: AECCOL: DCP RR EXT

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chloride	GP4124/GN8945	D22225-8	mg/l	107	50	163	0.6	20%
Chloride	GP4132/GN8963	D22149-1	mg/l	1.8	10	11.8	0.8	20%
Fluoride	GP4132/GN8963	D22149-1	mg/l	0.36	2.5	2.7	0.0	20%
Sulfate	GP4124/GN8945	D22225-8	mg/l	109	50	164	0.0	20%

Associated Samples:
Batch GP4124: D22252-1, D22252-10, D22252-2, D22252-3, D22252-4, D22252-5, D22252-6, D22252-7, D22252-8
Batch GP4132: D22252-11, D22252-12, D22252-13
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

6.3
6

BORING LOGS FOR MW-9 TO MW-16

AEC

AMERICAN ENVIRONMENTAL CONSULTING, LLC
6885 S. MARSHALL ST., SUITE 3
LITTLETON, COLORADO 80128
Phone: 303-948-7733 Fax: 303-948-7739

LOG OF BORING NUMBER: MW-9
SHEET NUMBER: 1 of 1

LOCATION DIAGRAM

CLIENT:DCP Midstream	DRILLING METHOD: HSA
PROJECT NAME: RREXT	
PROJECT NUMBER.	BOREHOLE SIZE. 7 inch.
PROJECT LOCATION:	
	SAMPLING METHODS: SPT
BORING LOCATION. MW-11	
	GRD.SURFACE ELEV:
	TOP OF CSG ELEV:
START DATE: 6/16/10 FINISH DATE: 6/16/10	SURVEYED or ESTIMATED (circle one)
START TIME· 0945 FINISH TIME:~1300	

	SOIL DESCRIPTION AND DRILLING CONDITIONS
0	0-5: Light brown to white, very-fine silty SAND (SM), dry
	5-15. Light brown fine SAND, slightly moist
10	Slightly more fines
	Minor pebbles present Hydrocarbon odor slight increasing mild by 20'
20	Grades to moist with slight to moderate hydrocarbon odor
	Moderate to strong hydrocarbon odor
30	
	Total Depth is 38 feet below ground surface
40	Screen 18-38, Sand 16-38, Bentonite Chips to ~1 foot, surface protector w/2'x2' apron

COMPLETED BY· ART CHECKED BY: MHS

DRILLING CONTRACTOR. Atkins Engineering

NOTES·

WATER LEVELS: DATE TIME DEPTH TO WATER · DATUM

AEC

AMERICAN ENVIRONMENTAL CONSULTING, LLC
6885 S. MARSHALL ST., SUITE 3
LITTLETON, COLORADO 80128
Phone: 303-948-7733 Fax: 303-948-7739

LOG OF BORING NUMBER: MW-10
SHEET NUMBER: 1 of 1

LOCATION DIAGRAM

CLIENT:DCP Midstream	DRILLING METHOD: HSA
PROJECT NAME. RREXT	
PROJECT NUMBER:	BOREHOLE SIZE: 7 inch.
PROJECT LOCATION·	
	SAMPLING METHODS. SPT
BORING LOCATION: MW-11	
	GRD.SURFACE ELEV.
	TOP OF CSG ELEV:
START DATE: 6/16/10 FINISH DATE. 6/16/10	SURVEYED or ESTIMATED (circle one)
START TIME: 0730 FINISH TIME:0930	

	SOIL DESCRIPTION AND DRILLING CONDITIONS
	0-5:White very-fine silty SAND (SM), dry
	5-15: Light brown fine SAND, slightly moist
10	
	15-: Brown fine SAND, slightly moist
20	Hydrocarbon odor slight increasing mild by 20'
	Mild hydrocarbon odor below 25 feet
30	
	Total Depth is 38 feet below ground surface
40	Screen 18-38, Sand 16-38, Bentonite Chips to ~1 foot, surface protector w/2'x2' apron

COMPLETED BY· ART CHECKED BY: MHS

DRILLING CONTRACTOR: Atkins Engineering

NOTES:

WATER LEVELS: DATE TIME DEPTH TO WATER DATUM

AEC

AMERICAN ENVIRONMENTAL CONSULTING, LLC
6885 S. MARSHALL ST., SUITE 3
LITTLETON, COLORADO 80128
Phone: 303-948-7733 Fax: 303-948-7739

LOG OF BORING NUMBER: MW-11
SHEET NUMBER: 1 of 1

LOCATION DIAGRAM

CLIENT:DCP Midstream	DRILLING METHOD. HSA
PROJECT NAME: RREXT	
PROJECT NUMBER:	BOREHOLE SIZE: 7 inch.
PROJECT LOCATION:	
	SAMPLING METHODS: SPT
BORING LOCATION: MW-11	
	GRD SURFACE ELEV:
	TOP OF CSG ELEV:
START DATE: 6/15/10 FINISH DATE 6/15/10	SURVEYED or ESTIMATED (circle one)
START TIME: 945 FINISH TIME:1100	

	SOIL DESCRIPTION AND DRILLING CONDITIONS
	0-2: Brown fine SAND (SP), slightly moist,
	5-30: White very-fine SAND (SP) dry
10	
	White grading to Light brown 15-20 feet
20	Grading to moist by 20 feet.
	Very moist (wet) by 32 feet
30	
	Total Depth is 38 feet below ground surface
40	Screen 18-38, Sand 16-38, Bentonite Chips to ~1 foot, surface protector w/2'x2' apron

COMPLETED BY: ART CHECKED BY: MHS

DRILLING CONTRACTOR: Atkins Engineering

NOTES.

WATER LEVELS: DATE TIME DEPTH TO WATER DATUM

AEC

AMERICAN ENVIRONMENTAL CONSULTING, LLC
6885 S. MARSHALL ST., SUITE 3
LITTLETON, COLORADO 80128
Phone: 303-948-7733 Fax: 303-948-7739

LOG OF BORING NUMBER: MW-12
SHEET NUMBER: 1 of 1

LOCATION DIAGRAM

CLIENT:DCP Midstream	DRILLING METHOD: HSA
PROJECT NAME· RREXT	
PROJECT NUMBER:	BOREHOLE SIZE: 7 inch.
PROJECT LOCATION·	
	SAMPLING METHODS: SPT
BORING LOCATION: MW-11	
	GRD.SURFACE ELEV:
	TOP OF CSG ELEV·
START DATE: 6/15/10 FINISH DATE: 6/15/10	SURVEYED or ESTIMATED (circle one)
START TIME: 1445 FINISH TIME:1645	

	SOIL DESCRIPTION AND DRILLING CONDITIONS
10	0-5: Light brown (white) very-fine silty SAND (SM), dry
	5-30 Light brown fine SAND, dry grading to slightly moist
	Dry
20	Slightly moist
	Moist
30	Saturated, mild hydrocarbon odor.
40	Total Depth is 38 feet below ground surface
	Screen 18-38, Sand 16-38, Bentonite Chips to ~1 foot, surface protector w/2'x2' apron

COMPLETED BY ART CHECKED BY: MHS	WATER LEVELS: DATE TIME DEPTH TO WATER DATUM
DRILLING CONTRACTOR. Atkins Engineering	
NOTES:	

AEC

AMERICAN ENVIRONMENTAL CONSULTING, LLC
6885 S. MARSHALL ST., SUITE 3
LITTLETON, COLORADO 80128
Phone: 303-948-7733 Fax: 303-948-7739

LOG OF BORING NUMBER: MW-13
SHEET NUMBER· of
LOCATION DIAGRAM

CLIENT.DCP Midstream	DRILLING METHOD. SSA
PROJECT NAME· RREXT	
PROJECT NUMBER·	BOREHOLE SIZE: 7 inch.
PROJECT LOCATION.	
	SAMPLING METHODS: SPT
BORING LOCATION: MW-13	
	GRD.SURFACE ELEV:
	TOP OF CSG ELEV:
START DATE: 1/26/11 FINISH DATE 1/26/11	SURVEYED or ESTIMATED (circle one)
START TIME: 1000 FINISH TIME:1200	

SOIL DESCRIPTION AND DRILLING CONDITIONS
0-5 Loose, medium reddish brown, very fine to medium, silty SAND (SP), slightly moist, Alluvial Deposit.
5-27 Loose to dense (mainly compact), pale yellowish gray, very fine to fine, SAND (SW), moist, ALLUVIAL Deposit
27-40 Dense, reddish medium brown, very fine to fine, some clay, clayey SAND (SW), moist to wet, Alluvial deposit.

COMPLETED BY: CHECKED BY:	WATER LEVELS. DATE TIME DEPTH TO WATER DATUM
DRILLING CONTRACTOR.	
NOTES·	

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LOG OF BORING NUMBER: MW-14
SHEET NUMBER of
LOCATION DIAGRAM

CLIENT:DCP Midstream	DRILLING METHOD: SSA
PROJECT NAME. RREXT	
PROJECT NUMBER:	BOREHOLE SIZE: 7 inch
PROJECT LOCATION:	
	SAMPLING METHODS: SPT
BORING LOCATION: MW-14	
	GRD.SURFACE ELEV:
	TOP OF CSG ELEV:
START DATE 1/26/11 FINISH DATE:1/26/11	SURVEYED or ESTIMATED (circle one)
START TIME 840 FINISH TIME:940	

SOIL DESCRIPTION AND DRILLING CONDITIONS
0-6 5 Loose, medium reddish brown, very fine to medium, silty SAND (SP), slightly moist, Alluvial Deposit
6.5-28 Loose to dense (mainly compact), pale yellowish gray, very fine to fine, SAND (SW), moist, ALLUVIAL Deposit
28-41 Dense, reddish medium brown, very fine to fine, some clay, clayey SAND (SW) , moist to wet, Alluvial deposit mixed with weathered caliche.

COMPLETED BY: CHECKED BY:	WATER LEVELS: DATE TIME DEPTH TO WATER DATUM
DRILLING CONTRACTOR.	
NOTES:	

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LOG OF BORING NUMBER: MW-15
SHEET NUMBER: of
LOCATION DIAGRAM

CLIENT:DCP Midstream	DRILLING METHOD: SSA
PROJECT NAME: RREXT	
PROJECT NUMBER·	BOREHOLE SIZE: 7 inch.
PROJECT LOCATION:	
	SAMPLING METHODS: SPT
BORING LOCATION: MW-15	
	GRD SURFACE ELEV:
	TOP OF CSG ELEV:
START DATE: 1/25/11 FINISH DATE:1/25/11	SURVEYED or ESTIMATED (circle one)
START TIME:930 FINISH TIME.1310	

SOIL DESCRIPTION AND DRILLING CONDITIONS

0-7 5 Loose, medium reddish brown, very fine to medium, silty SAND (SP), slightly moist, Alluvial Deposit.

7.5-25 Loose to dense (mainly compact), pale yellowish gray, very fine to medium, SAND (SW), moist, ALLUVIAL Deposit

25-31 Compact, pale yellowish gray, very fine to medium, clayey SAND (SW), moist to wet, Weathered CALICHE

31-42 Weathered, pale yellowish gray, sand to clay size grains homogeneous, weak rock R-1, CALICHE, very moist to dry

COMPLETED BY. CHECKED BY.	WATER LEVELS. DATE TIME DEPTH TO WATER DATUM
DRILLING CONTRACTOR.	
NOTES.	

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LOG OF BORING NUMBER: MW-16
SHEET NUMBER: of
LOCATION DIAGRAM

CLIENT·DCP Midstream	DRILLING METHOD: SSA
PROJECT NAME RREXT	
PROJECT NUMBER·	BOREHOLE SIZE: 7 inch.
PROJECT LOCATION:	
	SAMPLING METHODS: SPT
BORING LOCATION: MW-16	
	GRD.SURFACE ELEV:
	TOP OF CSG ELEV:
START DATE: 1/26/11 FINISH DATE.1/26/11	SURVEYED or ESTIMATED (circle one)
START TIME: 1400 FINISH TIME:1550	

SOIL DESCRIPTION AND DRILLING CONDITIONS
0-5 Loose, medium reddish brown, very fine to medium, silty SAND (SP), slightly moist, Alluvial Deposit.
5-27 Loose to dense (mainly compact), pale yellowish gray, very fine to fine, little weathered caliche, SAND (SW), moist, ALLUVIAL Deposit
27-42 Dense, reddish medium brown, very fine to fine, some clay, clayey SAND (SW), moist to wet, Alluvial deposit.

COMPLETED BY: CHECKED BY:	WATER LEVELS: DATE TIME DEPTH TO WATER DATUM
DRILLING CONTRACTOR.	
NOTES:	