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REPORTS

DATE:

12/18/2003

Remediacon Incorporated
Geological and Engineering Services
mstewart@remediacon.com

PO Box 302, Evergreen, Colorado 80437
Telephone: 303.674.4370
Facsimile: 720.528.8132

December 18, 2003

Mr Stephen Weathers
Duke Energy Field Services, LP
370 17th Street, Suite 2500
Denver, CO 80202

Re: Report on Site Activities at the C-Line 50602 Location in Lea County New Mexico (Unit O, Section 31, Township 19 South, Range 37 East)

Dear Mr. Weathers:

This report summarizes the field activities completed at the C-Line 50602 location by Duke Energy Field Services, LP (DEFS) and its subcontractors. A brief background section is included first. The next section describes the field activities completed and summarizes the data. The final section provides conclusions and recommendations.

BACKGROUND INFORMATION

Purpose and Objectives

The purposes of the program included completing characterization activities and initiation of free product removal. The objectives of the program included:

1. Installing additional down-gradient monitoring wells to delineate the extent of the dissolved-phase hydrocarbon migration;
2. Installing a replacement free-product recovery well;
3. Defining the water table gradient;
4. Collecting representative groundwater samples from all of the wells that did not contain free-phase hydrocarbons; and
5. Installing a free-product collection system.

Study Area Location and Configuration

The location is located in the southwestern quarter of the southeastern quarter (Unit O) of Section 31, Township 19 South, Range 37 East. The approximate coordinates are 32 degrees 32.5 minutes north, 103 degrees 15.3 minutes east (Figure 1). The site is approximately 6.25 miles south and 1.25 miles west of the town of Monument in Lea County New Mexico. The area surrounding the release sites is uninhabited and is used for ranching. Two large gas-

processing facilities lie approximately 1 mile south of the site. At least five pipelines traverse the study area (Figure 2). DEFS owns two of these pipelines. Rice, Dynegy and SRG own the remaining pipelines.

Six monitoring wells were present at the site prior to the fall 2003 field activities (MW-1 through MW-6, Figure 2). Well MW-1 was located at or near to the original DEFS pipeline release location. Well MW-2 was installed north (upgradient) of the release location, and it is immediately south of an area covered with historic (non-DEFS) tank bottoms. Wells MW-3 through MW-6 were installed southeast (down-gradient) of the DEFS pipeline release point.

SUMMARY OF FIELD ACTIVITIES

The field activities included well installation, groundwater monitoring and initiation of free product collection. The activities are summarized separately below.

Well Installation

Four wells were installed at the site in October 2003. Wells MW-7, MW-8 and MW-9 are 2-inch monitoring wells that were installed downgradient (southeast) of the site to delineate the extent of hydrocarbon migration. Well MW-1 replaces the original well MW-1. It was installed for product recovery. The locations of the four new wells are shown on Figure 2.

The wells were installed using air rotary drilling techniques. A surface casing had to be set for MW-1 above the 18 foot depth of excavation to facilitate removal of the cuttings. The remaining three wells did not require surface casing because they were installed in undisturbed areas.

The cuttings were inspected and logged for lithology. Samples were collected periodically using a split-spoon sampler to verify the lithologic descriptions. These grab samples were then placed in baggies and the headspace was allowed to equilibrate prior to measurement with a photoionization detector (PID). The lithologic and PID information was compiled into the boring logs that are attached to this report. The well completion information for all of the wells is summarized in Table 1. Completion forms for the new wells are also attached.

The materials encountered had the same relatively uniform composition that was noted in the initial borings. The material is generally described as a well sorted, very-fine-grained silty sand (Unified Soil Classification of SM) with clay percentages varying up to 10 percent. This material is interbedded with a moderate-to-well cemented very-fine-grained sand. This alternating sequence of uncemented and cemented materials is present throughout the entire lithologic interval rather than being confined to the shallower depths where caliche is generally found.

The new wells MW-7, MW-8 and MW-9 were developed on October 27 and 28, 2003 using a submersible pump. Replacement well MW-1 contained free product and was not developed. Well development consisted of extracting a minimum of 10 casing volumes of water using a Grundfos Rediflo pump and continuing development until the field parameters of temperature, pH and conductivity stabilized for three casing volumes. The wells were allowed to stand a minimum of 24 hours prior to purging and sampling.

Groundwater Monitoring

Groundwater samples were collected after the development of wells MW-6, MW-7 and MW-8. The activities consisted of measuring the depth to fluids in each well, purging them to a constant set of field parameters and then collecting the groundwater samples. Each activity is discussed below.

The depth to water in each well was measured prior to the sampling activities. Replacement well MW-1 contained free product so it was not sampled. The remaining eight wells were sampled.

The calculated groundwater elevations for the current and historic monitoring episodes are summarized in Table 2. The groundwater elevation values for well MW-1 were corrected using the following formula (all values in feet):

$GWE_{corr} = MGWE + (PT*PD)$: 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 0.7).

Each well (excepting MW-1) was purged using a disposable bailer until a minimum of three casing volumes of water was removed and the field parameters temperature, pH and conductivity stabilized. The equilibrated field parameters are summarized in Table 3.

The samples were then collected using the disposable bailers. Unfiltered samples from wells MW-2 to MW-9 were analyzed for benzene, toluene, ethylbenzene and total xylenes (BTEX) and chlorides. All samples were placed in an ice-filled chest immediately upon collection and delivered to the analytical laboratory (Environmental Labs of Texas) using standard chain-of-custody protocol.

A field duplicate was collected from MW-4 to evaluate quality control. The field duplicate and a trip blank were both analyzed for BTEX.

The laboratory analyses are summarized in Table 4 for the historic and recent sampling episodes. The laboratory report for the October 2003 sampling is attached.

All development and purge water was disposed of at the DEFS Linan Ranch facility. The cuttings from wells MW-7, MW-8 and MW-9 were thin spread immediately upon completion of drilling because they did not exhibit any indication of hydrocarbon effects. The cuttings from MW-1 were placed on visqueen in a fenced area adjacent to the well. They will aerate until the PID readings decline below the 100 ppm standard. They will then be thin spread after receiving approval from OCD.

Initiation of Free Product Collection

An automatic free product collection system was installed in replacement well MW-1 in mid-November 2003. The system became operational on November 26, 2003. A local DEFS subcontractor monitors system operation and product recovery on a weekly basis. Summaries of the volume of product removed will be provided in future monitoring correspondence.

CONCLUSIONS AND RECOMMENDATIONS

Remediacon concludes the following based upon the data collected in October/November 2003 and the historic data:

1. **The groundwater flow is to the southeast.** The additional data provided by MW-7, MW-8 and MW-9 do not change the groundwater flow direction. Figure 3 shows the groundwater contours based upon the water measurements. The contours were generated using the Surfer® program with the kriging option. The water table declines 2 feet over a horizontal distance of approximately 460 feet resulting in a calculated groundwater gradient of 0.0043 feet per foot.

2. **Water table elevations appear relatively constant.** The water table has declined over the past year but not at the rate exhibited in other parts of Lea County. The change in the water table elevation in well MW-1 relative to the other wells is attributed to the replacement of the well.

3. **The dissolved phase hydrocarbon distribution does not match the groundwater flow pattern.** Figure 5 depicts the October 2003 benzene distribution by well location. The highest dissolved-phase benzene concentration of 5.01 mg/l was measured in well MW-3. MW-3 is offset approximately 150 feet southwest of the principal groundwater flow direction yet it had a substantially higher benzene concentration than MW-5: the well that lies directly downgradient from the release point. This anomaly could result from several mechanisms including preferential flow paths or multiple hydrocarbon sources.

4. **The lateral extent of hydrocarbon migration from the DEFS release has been delineated.** Wells MW-7, MW-8 and MW-9 did not contain measurable concentrations of BTEX. This result should be verified by additional sampling.

5. **The elevated chlorides did not originate from the DEFS pipeline release.** The highest chloride concentration was measured in MW-6 that is substantially downgradient from the DEFS pipeline release. The concentrations in the area of the DEFS release are all equivalent (MW-2, MW-3, MW-4, MW-5 and MW-8). This pattern is contrary to the benzene distribution discussed above that is believed to have originated from the DEFS release.

RECOMMENDATIONS

Remediacon recommends completing the following activities based upon the data collected to date:

1. Sampling the groundwater in all of wells that do not contain free product in January, April and July 2003 to provide four independent sets of data over a 1-year period. The samples should be analyzed for BTEX. Data summaries that include water table contour maps should be provided to the OCD after the January and April monitoring episodes. A comprehensive report should be prepared following the July 2003 episode. The primary purpose of the report will be to provide more detailed interpretations and conclusions and to suggest appropriate revisions to the current monitoring scheme.

2. Aggressive free product collection should continue until the mobile phase is removed. Soil vapor extraction should then be initiated and evaluated for effectiveness in removing the less mobile free-phase hydrocarbons.

Thank you for allowing Remediacon to complete this work. Do not hesitate to contact me if you have any questions or comments on the contents of this letter or the proposed activities.

Sincerely,
REMEDIACON INCORPORATED

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

MHS/tbm

TABLES

Table 1 – Summary of Well Construction Information

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

All units in feet except as noted

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

Table 2 – Summary of Corrected Water Table Elevations

Well	November 2002	February 2003	April 2003	October 2003
MW-1	3,452.01	3,451.60	3,451.73	3451.35
MW-2	3,452.11	3,451.97	3,451.96	3451.87
MW-3	3,452.25	3,451.37	3,451.33	3451.27
MW-4	3,451.56	3,451.32	3,451.21	3451.25
MW-5	3,451.39	3,451.21	3,451.09	3451.20
MW-6	3,448.77	3,448.51	3,448.38	3448.46
MW-7	-----	-----	-----	3450.76
MW-8	-----	-----	-----	3450.35
MW-9	-----	-----	-----	3450.21

Notes: All units in feet.
The Elevation for MW-1 was corrected using a product density of 0.7

Table 3 – Summary of October 2003 Equilibrated Field Parameters

10/28/2003	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9
Temperature	20.4	19.8	19.6	19.6	19.3	19.6	19.7	19.6
Conductivity	3.40	3.05	2.74	3.05	4.24	2.14	2.62	2.83
pH	6.64	6.40	7.29	7.10	6.76	7.29	7.25	7.22
Dissolved Oxygen	1.0	1.0	6.61	2.34	4.9	2.20	3.00	4.39

Units: Temperature: °C
Conductivity: mS/cm
pH: pH units
Dissolved Oxygen: mg/l

Table 4 - Summary of Analytical Results

Benzene	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9
11/15/2002	<0.001	0.017	0.114/0.100	<0.001	<0.001			
2/18/2003	0.29	2.52	1.12	0.328	0.001			
4/17/2003	0.175	3.18	0.782/0.773	0.128	0.002			
10/28/2003	0.018	5.01	0.077	0.164/0.198	<0.001	<0.001	<0.001	<0.001

Toluene	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9
11/15/2002	<0.001	0.005	0.039/0.036	<0.001	<0.001			
2/18/2003	0.014	0.634	0.436	0.056	<0.001			
4/17/2003	0.007	0.513	0.450/0.445	0.007	<0.001			
10/28/2003	0.001	0.275	0.029	0.048/0.06	<0.001	<0.001	<0.001	<0.001

Ethylbenzene	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9
11/15/2002	<0.001	<0.001	0.002/0.002	<0.001	<0.001			
2/18/2003	0.001	0.021	0.022	0.004	<0.001			
4/17/2003	<0.001	0.028	0.029/0.029	<0.001	<0.001			
10/28/2003	<0.001	0.031	0.002	0.002/0.003	<0.001	<0.001	<0.001	<0.001

Xylenes								
11/15/2002	<0.001	<0.001	0.003/0.003	<0.001	<0.001			
2/18/2003	0.001	0.064	0.032	0.004	<0.001			
4/17/2003	<0.001	0.1	0.055/0.054	<0.001	<0.001			
10/28/2003	<0.001	0.083	0.008/0.008	0.004	<0.001	<0.001	<0.001	<0.001

Chlorides	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9
10/28/2003	496	461	496	558	674	284	434	496

All units mg/l
Duplicate samples separated by a slash "/"

FIGURES

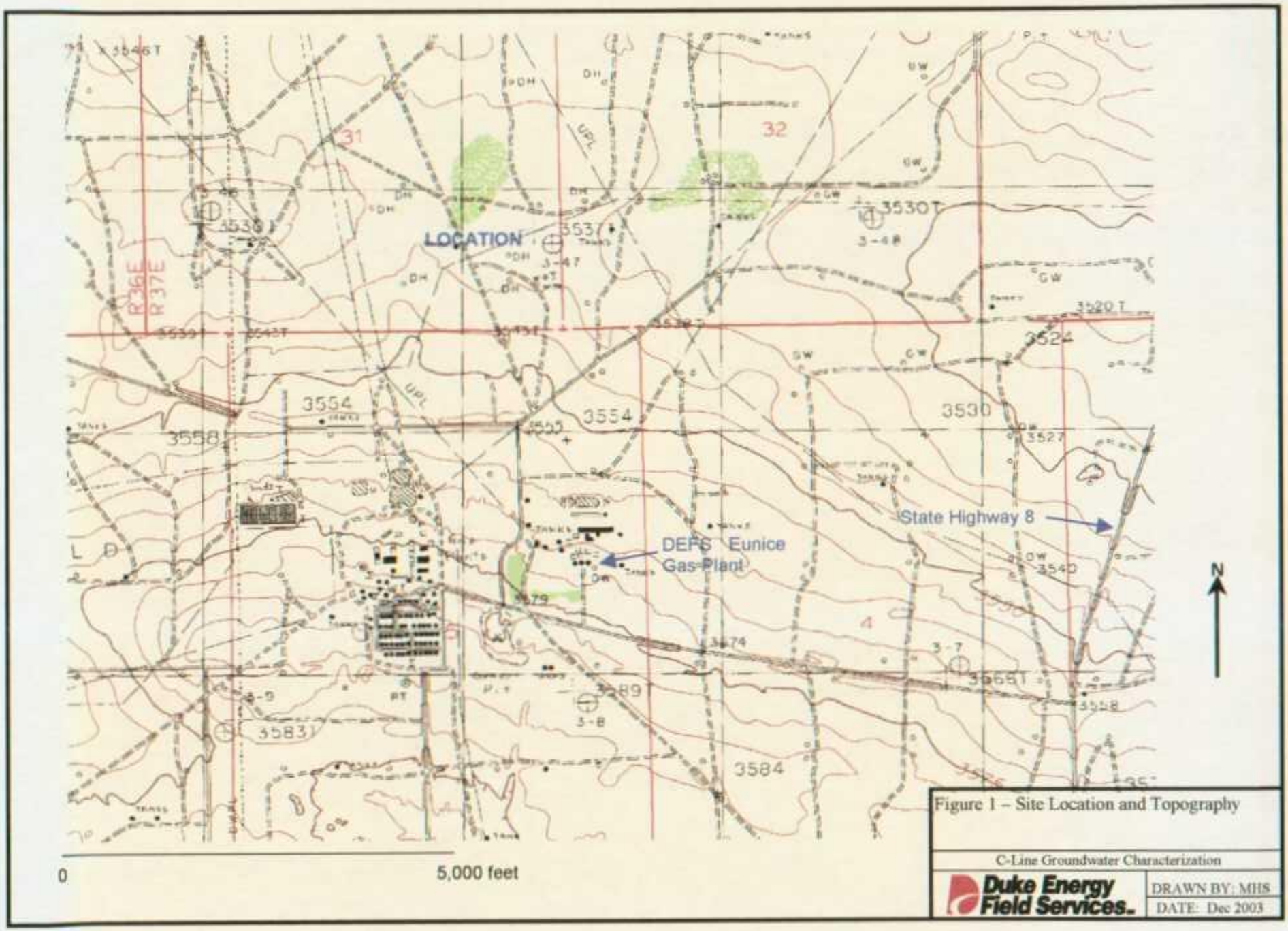

Figure 1 – Site Location and Topography

C-Line Groundwater Characterization

Duke Energy Field Services.

DRAWN BY: MHS

DATE: Dec 2003

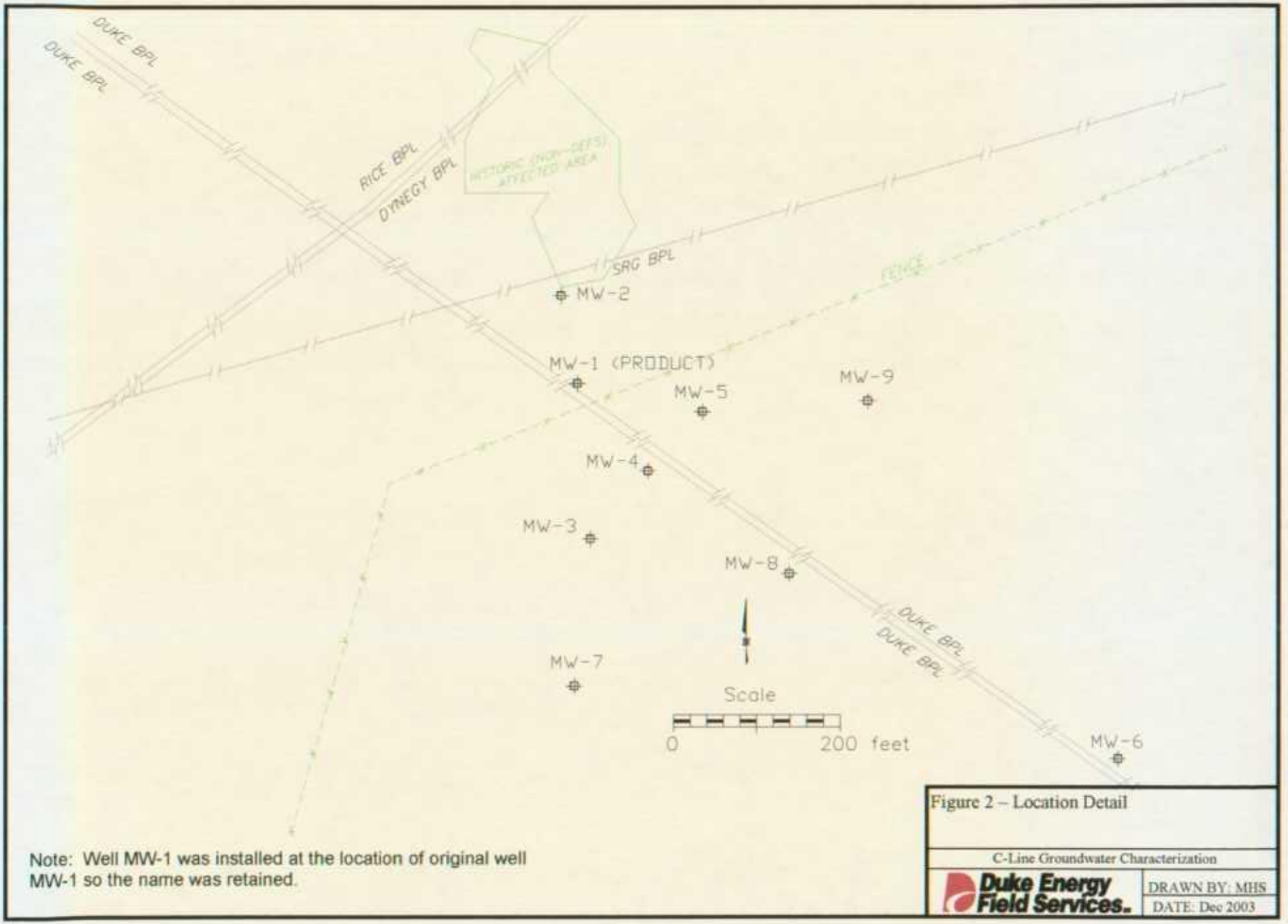

Figure 2 – Location Detail

C-Line Groundwater Characterization

Duke Energy Field Services.

DRAWN BY: MHS

DATE: Dec 2003

Note: Well MW-1 was installed at the location of original well MW-1 so the name was retained.

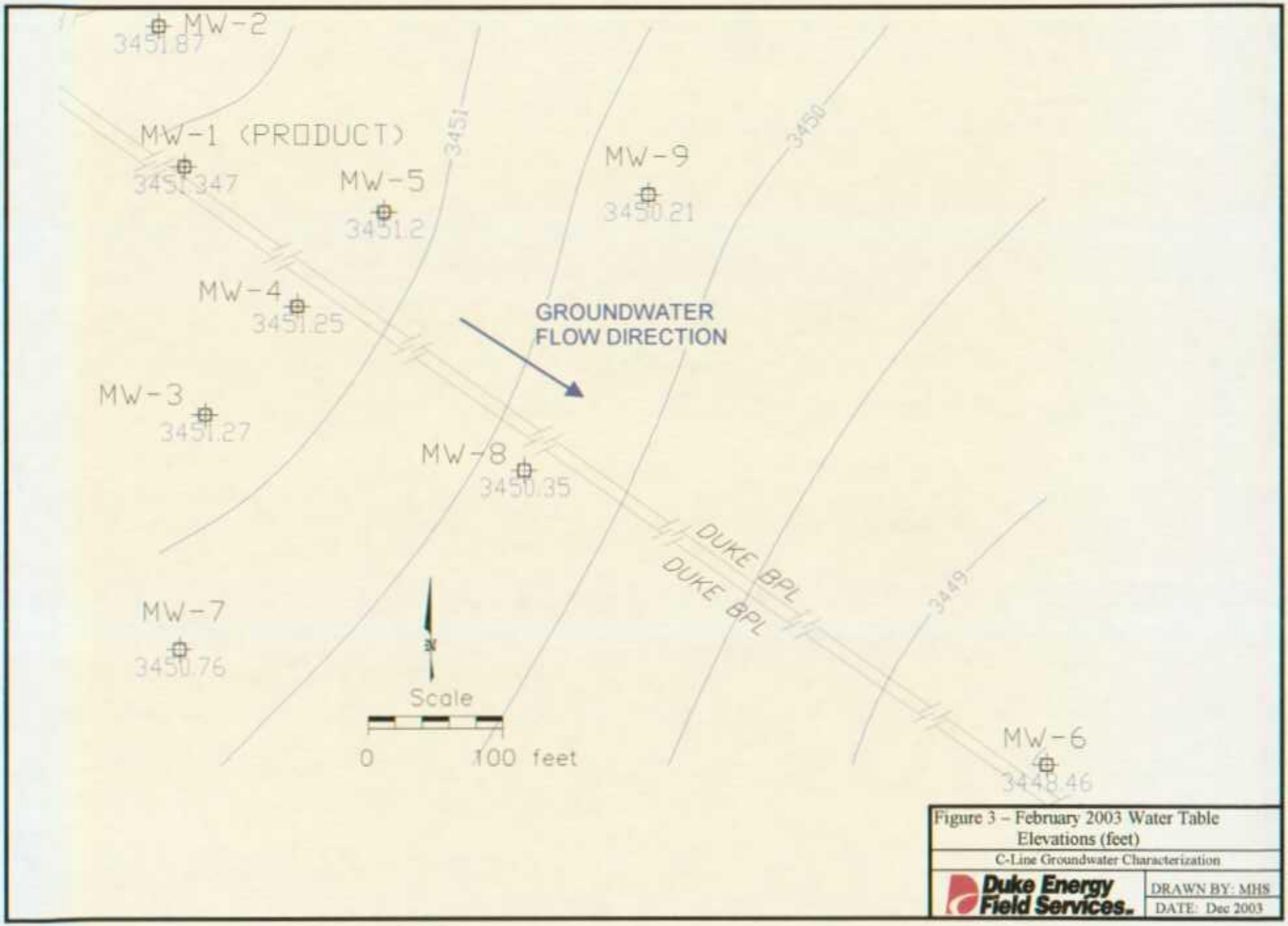

Figure 3 – February 2003 Water Table Elevations (feet)

C-Line Groundwater Characterization

Duke Energy Field Services

DRAWN BY: MHS

DATE: Dec 2003

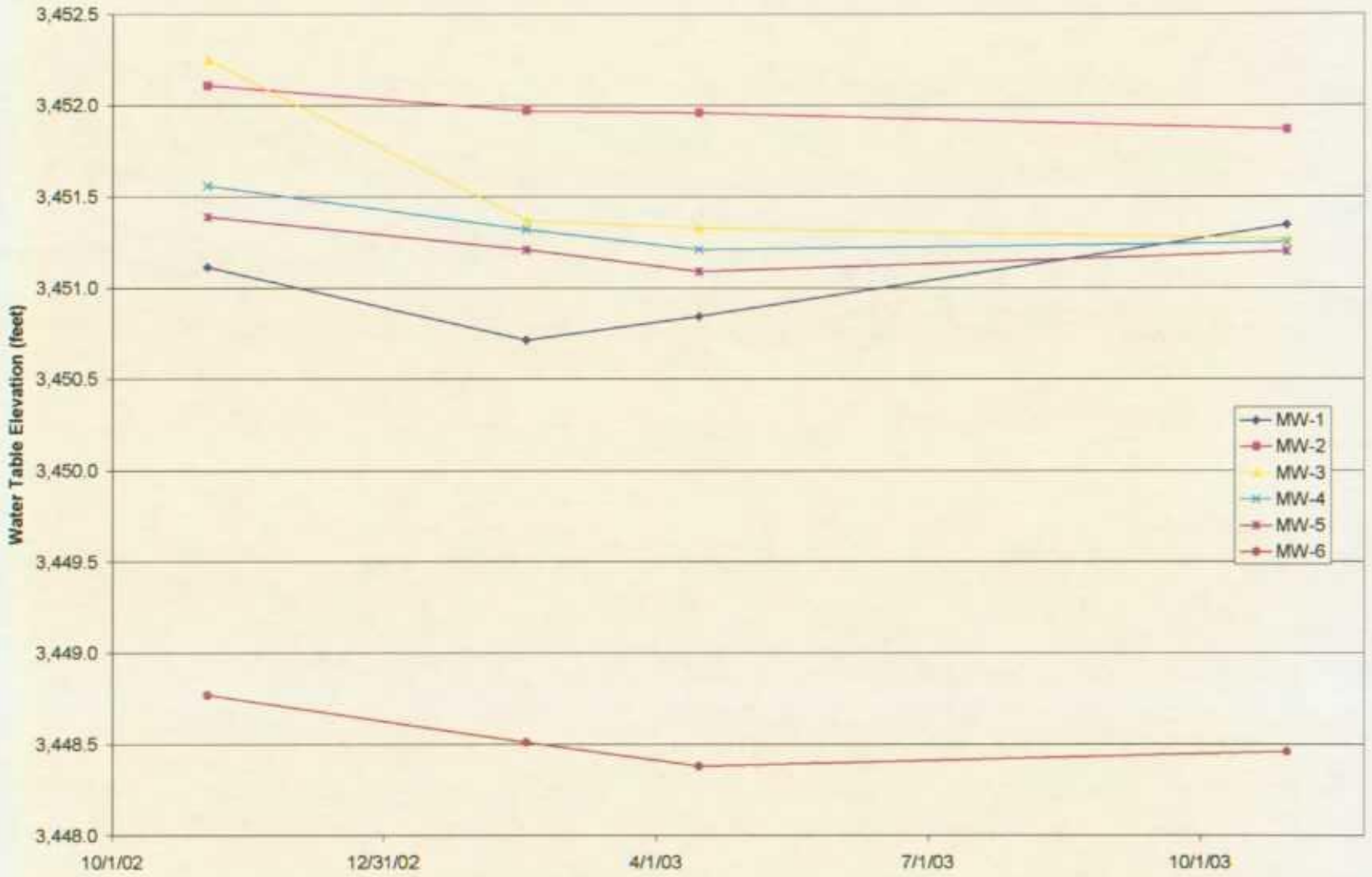

Figure 4 – Hydrograph for Wells MW-1 through MW-6

C-Line Groundwater Characterization

Duke Energy Field Services

DRAWN BY: MHS

DATE: Dec 2003

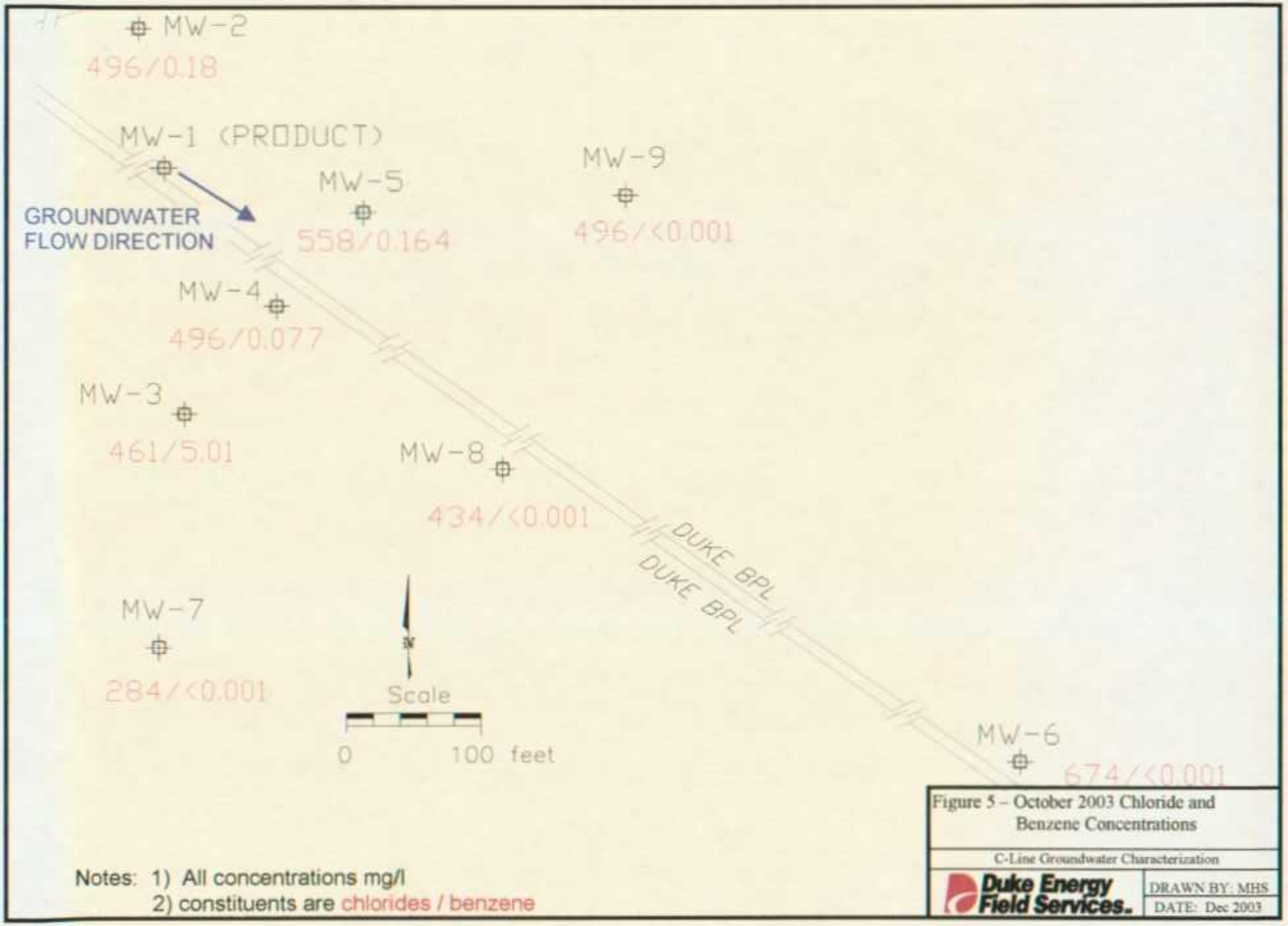

Figure 5 – October 2003 Chloride and Benzene Concentrations

C-Line Groundwater Characterization

Duke Energy Field Services

DRAWN BY: MHS

DATE: Dec 2003

Notes: 1) All concentrations mg/l
2) constituents are chlorides / benzene

OCTOBER 2003 LABORATORY REPORT

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

REMEDIACON
P.O. BOX 302
EVERGREEN, CO 80437
720-528-8132

Order#: G0307830
Project:
Project Name: Duke Energy Field Services
Location: C-Line

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0307830-01	MW-6 (0310280915)	WATER	10/28/03 9:15	10/31/03 16:00	See COC	HCl and ice
	Lab Testing: 8021B/5030 BTEX, Chloride	Rejected: No		Temp: -2.5 C		
0307830-02	MW-2 (0310281020)	WATER	10/28/03 10:20	10/31/03 16:00	See COC	HCl and ice
	Lab Testing: 8021B/5030 BTEX, Chloride	Rejected: No		Temp: -2.5 C		
0307830-03	MW-3 (0310281130)	WATER	10/28/03 11:30	10/31/03 16:00	See COC	HCl and ice
	Lab Testing: 8021B/5030 BTEX, Chloride	Rejected: No		Temp: -2.5 C		
0307830-04	MW-4 (0310281215)	WATER	10/28/03 12:15	10/31/03 16:00	See COC	HCl and ice
	Lab Testing: 8021B/5030 BTEX, Chloride	Rejected: No		Temp: -2.5 C		
0307830-05	MW-5 (0310281450)	WATER	10/28/03 14:50	10/31/03 16:00	See COC	HCl and ice
	Lab Testing: 8021B/5030 BTEX, Chloride	Rejected: No		Temp: -2.5 C		
0307830-06	MW-9 (0310281615)	WATER	10/28/03 16:15	10/31/03 16:00	See COC	HCl and ice
	Lab Testing: 8021B/5030 BTEX, Chloride	Rejected: No		Temp: -2.5 C		
0307830-07	MW-7 (0310300820)	WATER	10/30/03 8:20	10/31/03 16:00	See COC	HCl and ice
	Lab Testing:	Rejected: No		Temp: -2.5 C		

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

REMEDIACON
P.O. BOX 302
EVERGREEN, CO 80437
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Order#: G0307830
Project:
Project Name: Duke Energy Field Services
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The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
	8021B/5030 BTEX Chloride					
0307830-08	MW-8 (0310300915)	WATER	10/30/03 9:15	10/31/03 16:00	See COC	HCl and ice
	Lab Testing:	**Rejected:** No		**Temp:** -2.5 C		
	8021B/5030 BTEX *Chloride*					
0307830-09	Duplicate "A"	WATER	10/28/03 20:00	10/31/03 16:00	See COC	HCl and ice
	Lab Testing:	**Rejected:** No		**Temp:** -2.5 C		
	8021B/5030 BTEX					
0307830-10	Trip Blank	WATER		10/31/03 16:00	See COC	HCl and ice
	Lab Testing:	**Rejected:** No		**Temp:** -2.5 C		
	8021B/5030 BTEX					

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

MICHAEL STEWART
REMEDIACON
P.O. BOX 302
EVERGREEN, CO 80437

Order#: G0307830
Project:
Project Name: Duke Energy Field Services
Location: C-Line

Lab ID: 0307830-01
Sample ID: MW-6 (0310280915)

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0007337-02		11/5/03	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	<0.001	0.001
Toluene	<0.001	0.001
Ethylbenzene	<0.001	0.001
p/m-Xylene	<0.001	0.001
o-Xylene	<0.001	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	108%	80	120
Bromofluorobenzene	120%	80	120

Lab ID: 0307830-02
Sample ID: MW-2 (0310281020)

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0007337-02		11/5/03	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	0.018	0.001
Toluene	0.001	0.001
Ethylbenzene	<0.001	0.001
p/m-Xylene	<0.001	0.001
o-Xylene	<0.001	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	102%	80	120
Bromofluorobenzene	110%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

MICHAEL STEWART
REMEDIACON
P.O. BOX 302
EVERGREEN, CO 80437

Order#: G0307830
Project:
Project Name: Duke Energy Field Services
Location: C-Line

Lab ID: 0307830-03
Sample ID: *MW-3 (0310281130)*

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0007337-02		11/5/03	1	10	CK	8021B

Parameter	Result mg/L	RL
Benzene	**5.01**	0.010
Toluene	**0.275**	0.010
Ethylbenzene	**0.031**	0.010
p/m-Xylene	**0.055**	0.010
o-Xylene	**0.028**	0.010

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	125%	80	120
Bromofluorobenzene	123%	80	120

Lab ID: 0307830-04
Sample ID: MW-4 (0310281215)

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0007337-02		11/5/03	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	**0.077**	0.001
Toluene	**0.029**	0.001
Ethylbenzene	**0.002**	0.001
p/m-Xylene	**0.006**	0.001
o-Xylene	**0.002**	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	122%	80	120
Bromofluorobenzene	99%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ANALYTICAL REPORT

Prepared for:

MICHAEL STEWART
REMEDIACON
P.O. BOX 302
EVERGREEN, CO 80437

Project: Duke Energy Field Services

PO#:

Order#: G0307830

Report Date: 11/06/2003

Certificates
US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

MICHAEL STEWART
REMEDIACON
P.O. BOX 302
EVERGREEN, CO 80437

Order#: G0307830
Project:
Project Name: Duke Energy Field Services
Location: C-Line

Lab ID: 0307830-05
Sample ID: MW-5 (0310281450)

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0007337-02		11/5/03	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	**0.164**	0.001
Toluene	**0.048**	0.001
Ethylbenzene	**0.002**	0.001
p/m-Xylene	**0.003**	0.001
o-Xylene	**0.001**	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	111%	80	120
Bromofluorobenzene	103%	80	120

Lab ID: 0307830-06
Sample ID: MW-9 (0310281615)

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0007337-02		11/5/03	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	**<0.001**	0.001
Toluene	**<0.001**	0.001
Ethylbenzene	**<0.001**	0.001
p/m-Xylene	**<0.001**	0.001
o-Xylene	**<0.001**	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	107%	80	120
Bromofluorobenzene	120%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

MICHAEL STEWART
REMEDIACON
P.O. BOX 302
EVERGREEN, CO 80437

Order#: G0307830
Project:
Project Name: Duke Energy Field Services
Location: C-Line

Lab ID: 0307830-07
Sample ID: MW-7 (0310300820)

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0007337-02		11/5/03	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	<0.001	0.001
Toluene	<0.001	0.001
Ethylbenzene	<0.001	0.001
p/m-Xylene	<0.001	0.001
o-Xylene	<0.001	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	106%	80	120
Bromofluorobenzene	107%	80	120

Lab ID: 0307830-08
Sample ID: MW-8 (0310300915)

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0007337-02		11/5/03	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	<0.001	0.001
Toluene	<0.001	0.001
Ethylbenzene	<0.001	0.001
p/m-Xylene	<0.001	0.001
o-Xylene	<0.001	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	108%	80	120
Bromofluorobenzene	99%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

MICHAEL STEWART
REMEDIACON
P.O. BOX 302
EVERGREEN, CO 80437

Order#: G0307830
Project:
Project Name: Duke Energy Field Services
Location: C-Line

Lab ID: 0307830-09
Sample ID: Duplicate "A"

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0007337-02		11/5/03	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	0.198	0.001
Toluene	0.060	0.001
Ethylbenzene	0.003	0.001
p/m-Xylene	0.006	0.001
o-Xylene	0.002	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	127%	80	120
Bromofluorobenzene	101%	80	120

Lab ID: 0307830-10
Sample ID: Trip Blank

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0007337-02		11/5/03	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	<0.001	0.001
Toluene	<0.001	0.001
Ethylbenzene	<0.001	0.001
p/m-Xylene	<0.001	0.001
o-Xylene	<0.001	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	106%	80	120
Bromofluorobenzene	95%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

MICHAEL STEWART
REMEDIACON
P.O. BOX 302
EVERGREEN, CO 80437

Order#: G0307830
Project:
Project Name: Duke Energy Field Services
Location: C-Line

Approval: Celey D. Keene 11/7/03
Raland K. Tuttle, Lab Director, QA Officer — Date
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biczugbe, Lab Tech.
Sara Molina, Lab Tech.

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

MICHAEL STEWART
REMEDIACON
P.O. BOX 302
EVERGREEN, CO 80437

Order#: G0307830
Project:
Project Name: Duke Energy Field Services
Location: C-Line

Lab ID: 0307830-01
Sample ID: MW-6 (0310280915)

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	674	mg/L	1	5.00	9253	11/3/03	CK

Lab ID: 0307830-02
Sample ID: MW-2 (0310281020)

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	496	mg/L	1	5.00	9253	11/3/03	CK

Lab ID: 0307830-03
Sample ID: MW-3 (0310281130)

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	461	mg/L	1	5.00	9253	11/3/03	CK

Lab ID: 0307830-04
Sample ID: MW-4 (0310281215)

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	496	mg/L	1	5.00	9253	11/3/03	CK

Lab ID: 0307830-05
Sample ID: MW-5 (0310281450)

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	558	mg/L	1	5.00	9253	11/3/03	CK

Lab ID: 0307830-06
Sample ID: MW-9 (0310281615)

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	496	mg/L	1	5.00	9253	11/3/03	CK

RL = Reporting Limit N/A = Not Applicable

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

MICHAEL STEWART		Order#:	G0307830
REMEDIACON		Project:	
P.O. BOX 302		Project Name:	Duke Energy Field Services
EVERGREEN, CO 80437		Location:	C-Line

Lab ID: 0307830-07
Sample ID: MW-7 (0310300820)

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	284	mg/L	1	5.00	9253	11/3/03	CK

Lab ID: 0307830-08
Sample ID: MW-8 (0310300915)

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	434	mg/L	1	5.00	9253	11/3/03	CK

Approval: Celey D. Keene 11/7/03
Date

Raland K. Tuttle, Lab Director, QA Officer
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

RL = Reporting Limit N/A = Not Applicable

ENVIRONMENTAL LAB OF TEXAS I, LTD. 12600 West I-20 East, Odessa, TX 79765 Ph: 915-563-1800

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0307830

BLANK WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L	0007337-02			<0.001		
Toluene-mg/L	0007337-02			<0.001		
Ethylbenzene-mg/L	0007337-02			<0.001		
p/m-Xylene-mg/L	0007337-02			<0.001		
o-Xylene-mg/L	0007337-02			<0.001		
MS WATER	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Benzene-mg/L	0307830-10	0	0.1	0.100	100.%	
Toluene-mg/L	0307830-10	0	0.1	0.099	99.%	
Ethylbenzene-mg/L	0307830-10	0	0.1	0.096	96.%	
p/m-Xylene-mg/L	0307830-10	0	0.2	0.190	95.%	
o-Xylene-mg/L	0307830-10	0	0.1	0.096	96.%	
MSD WATER	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Benzene-mg/L	0307830-10	0	0.1	0.099	99.%	1.%
Toluene-mg/L	0307830-10	0	0.1	0.099	99.%	0.%
Ethylbenzene-mg/L	0307830-10	0	0.1	0.096	96.%	0.%
p/m-Xylene-mg/L	0307830-10	0	0.2	0.195	97.5%	2.6%
o-Xylene-mg/L	0307830-10	0	0.1	0.097	97.%	1.%
SRM WATER	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Benzene-mg/L	0007337-05		0.1	0.104	104.%	
Toluene-mg/L	0007337-05		0.1	0.105	105.%	
Ethylbenzene-mg/L	0007337-05		0.1	0.100	100.%	
p/m-Xylene-mg/L	0007337-05		0.2	0.204	102.%	
o-Xylene-mg/L	0007337-05		0.1	0.099	99.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0307830

BLANK WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/L	0007311-01			<5.00		
MS WATER	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Chloride-mg/L	0307833-02	239	500	718	95.8%	
MSD WATER	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Chloride-mg/L	0307833-02	239	500	718	95.8%	0.%
SRM WATER	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Chloride-mg/L	0007311-04		5000	4960	99.2%	

CASE NARRATIVE

ENVIRONMENTAL LAB OF TEXAS

Prepared for:

REMEDIACON
P.O. BOX 302
EVERGREEN, CO 80437

Order#: **G0307830**

Project: **Duke Energy Field Services**

The following samples were received as indicated below and on the attached Chain of Custody record. All analyses were performed within the holding time and with acceptable quality control results unless otherwise noted.

SAMPLE ID	LAB ID	MATRIX	Date Collected	Date Received
MW-6 (0310280915)	0307830-01	WATER	10/28/2003	10/31/2003
MW-2 (0310281020)	0307830-02	WATER	10/28/2003	10/31/2003
MW-3 (0310281130)	0307830-03	WATER	10/28/2003	10/31/2003
MW-4 (0310281215)	0307830-04	WATER	10/28/2003	10/31/2003
MW-5 (0310281450)	0307830-05	WATER	10/28/2003	10/31/2003
MW-9 (0310281615)	0307830-06	WATER	10/28/2003	10/31/2003
MW-7 (0310300820)	0307830-07	WATER	10/30/2003	10/31/2003
MW-8 (0310300915)	0307830-08	WATER	10/30/2003	10/31/2003
Duplicate "A"	0307830-09	WATER	10/28/2003	10/31/2003
Trip Blank	0307830-10	WATER		10/31/2003

Surrogate recoveries on the 8021B BTEX are outside control limits due to matrix interference. (0307830-03,04,09)

The enclosed results of analyses are representative of the samples as received by the laboratory. Environmental Lab of Texas makes no representations or certifications as to the methods of sample collection, sample identification, or transportation handling procedures used prior to our receipt of samples. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved By: _____ Date: 11/7/03

Environmental Lab of Texas I, Ltd.

Environmental Lab of Texas

12600 West I-20 East
Odessa, Texas 79765
Phone: 432-563-1800
Fax: 432-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Mike Stewart
Company Name: Remediacon, Inc.
Company Address: P.O. Box 302
City/State/Zip: Evergreen, CO 80437
Telephone No: 303-674-4370 Fax No: 720-528-8132
Sampler Signature: Dale T Littlejohn

Project Name: Duke Energy Field Services
Project #:
Project Loc: C-Line
PO #:

0307830

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	HNO_3	HCl	NaOH	H_2SO_4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify):	Analyze For: TPH: 418.1 8015M 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chloride				RUSH TAT (Pre-Schedule)
01	MW-6 (0310280915)	10/28/03	0915	3	✓		✓					✓											✓			✓				
02	MW-2 (0310281020)	10/28/03	1020	3	✓		✓					✓											✓			✓				
03	MW-3 (0310281130)	10/28/03	1130	3	✓		✓					✓											✓			✓				
04	MW-4 (0310281215)	10/28/03	1215	3	✓		✓					✓											✓			✓				
05	MW-5 (0310281450)	10/28/03	1450	3	✓		✓					✓											✓			✓				
06	MW-9 (0310281615)	10/28/03	1615	3	✓		✓					✓											✓			✓				
07	MW-7 (0310300820)	10/30/03	0820	3	✓		✓					✓											✓			✓				
08	MW-8 (0310300915)	10/30/03	0915	3	✓		✓					✓											✓			✓				
09	Duplicate "A"	10/28/03	2000	3	✓		✓					✓											✓							
10	Trip Blank			2	✓		✓					✓											✓							

Special Instructions:

Sample Containers Intact? (Y) N
Temperature Upon Receipt: -2.5°C
Laboratory Comments: 40 mL VOA, 250 mL HDPE

Relinquished by:	Date	Time	Received by:	Date	Time
Dale T Littlejohn	10/31/03	1600			
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Kim Anderson	10/31/03	1600

Nov 07 03 01:37p

P.15