

1R - 401

# REPORTS

DATE:

3/16/2004

# Remediakon Incorporated

Geological and Engineering Services  
mstewart@remediakon.com

PO Box 302, Evergreen, Colorado 80437

Telephone: 303.674.4370

Facsimile: 720.528.8132

March 16, 2004

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

Re: Summary of January 2004 Quarterly Groundwater Monitoring Results at the C-Line  
50602 Location in Lea County New Mexico  
(Unit O, Section 31, Township 19 South, Range 37 East)

IR-401

Dear Mr. Weathers:

This report summarizes the groundwater monitoring activities completed at the C-Line 50602 Site for Duke Energy Field Services, LP (DEFS) in January 2004.

The C-Line 50602 site 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. At least five pipelines traverse the study area (Figure 2). DEFS owns two of these pipelines. Rice, Dynegy and SRG own the remaining pipelines.

There is one free product removal well and eight monitoring wells at the site (Figure 2). Well MW-1 is used to remove mobile free-phase hydrocarbons from the water table with an active product-recovery system. Wells MW-2 through MW-9 were installed to characterize the distribution of dissolved-phase hydrocarbons in the groundwater. They now comprise the groundwater monitoring network. Table 1 includes construction information for each well.

Groundwater samples were collected on January 29, 2004. The depth to water in each well was measured prior to the sampling activities. Well MW-1 contained free product so it was not sampled. The remaining eight wells were purged and sampled using the standard protocols for this site.

The calculated groundwater elevations for the January 2004 and the 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 well purging forms are attached. The purge water was disposed of at the DEFS Linam Ranch facility.

The samples were then collected using the disposable bailers. 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. The unfiltered samples were analyzed for benzene, toluene, ethylbenzene and total xylenes (BTEX).

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 3 for the historic and recent sampling episodes. The laboratory report for the January 2004 sampling episode is attached.

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. Approximately 600 gallons of free phase hydrocarbons had been removed as of March 1, 2004.

Figure 3 shows the January 2004 calculated groundwater contours as generated using the Surfer® program with the kriging option. Groundwater flow is toward the southeast at an average gradient of 0.0042 feet per foot. Both the flow direction and gradient correspond to the October 2003 measurements.

Figure 4 includes hydrographs for wells MW-1 to MW-6. The water table remained constant between October 2003 and January 2004.

Figure 5 depicts the January benzene distribution by well. The highest dissolved-phase benzene concentration was measured in well MW-3. The samples from other wells contained substantially less benzene. Well MW-2 is upgradient of the release point but its sample contained the BTEX constituents.

Mr. Stephen Weathers  
March 16, 2004  
Page 3

The change of benzene in the groundwater over time is plotted for wells MW-2, MW-4 and MW-5 on Figure 6 and for MW-3 on Figure 7. The benzene concentration in wells MW-2 and MW-5 have varied within a set range, and the changes may result from temporal influences. The benzene from well MW-4 has decline to the same approximate range as MW-2 and MW-5 after an initial spike. The benzene concentration in well MW-3 appears to be increasing even though it is not directly downgradient from the original release point at MW-1. Wells MW-7 and MW-9 did not contain measurable concentrations of BTEX. The concentrations in MW-8 approach the laboratory detection limit.

All of the data fell within the laboratory quality control standards as shown in the attached report. The BTEX constituents were not detected in the trip blank. There was poor agreement between toluene, ethylbenzene and xylenes in the original and duplicate samples for MW-4. The agreement for benzene between the two samples was better, and it is considered suitable for its intended use.

The next groundwater-monitoring event is scheduled for June 2004 so that it can be completed along with the other DEFS facilities in the area. Sampling will then continue on a quarterly basis until sufficient data is collected to evaluate plume stability.

Active free product removal will continue at the site until the majority of the mobile free phase hydrocarbons have been removed. Soil vapor extraction (SVE) will then be initiated in MW-1. The start of SVE may be accelerated if the groundwater plume appears to be expanding because of the DEFS release.

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.

Sincerely,  
**REMEDIACON INCORPORATED**

*Michael H. Stewart*

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	Nov. 2002	Feb. 2003	Apr. 2003	Oct. 2003	Jan. 2004
MW-1	3,452.01	3,451.60	3,451.73	3,451.35	3,451.34
MW-2	3,452.11	3,451.97	3,451.96	3,451.87	3,451.84
MW-3	3,452.25	3,451.37	3,451.33	3,451.27	3,451.22
MW-4	3,451.56	3,451.32	3,451.21	3,451.25	3,451.19
MW-5	3,451.39	3,451.21	3,451.09	3,451.20	3,451.11
MW-6	3,448.77	3,448.51	3,448.38	3,448.46	3,448.37
MW-7	-----	-----	-----	3,450.76	3,450.72
MW-8	-----	-----	-----	3,450.35	3,450.22
MW-9	-----	-----	-----	3,450.21	3,450.03

Notes: All units in feet.

The Elevation for MW-1 was corrected using a product density of 0.7

Table 3 - 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	0.18	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
1/29/2004	0.085	6.06	0.32/0.232	0.226	0.00382	<0.001	0.00139	<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
1/29/2004	0.035	0.506	0.169/0.0647	0.064	0.00140	<0.001	0.00109	<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
1/29/2004	0.0029	0.0679	0.0203/0.00391	0.00404	0.00133	<0.001	0.00112	<0.001

Xylenes	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9
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	0.004/0.008	<0.001	<0.001	<0.001	<0.001
1/29/2004	0.0047	0.0849	0.053/0.00693	0.0074	0.00194	<0.001	0.00217	<0.001

All units mg/l

Duplicate samples separated by a slash "/"

FIGURES

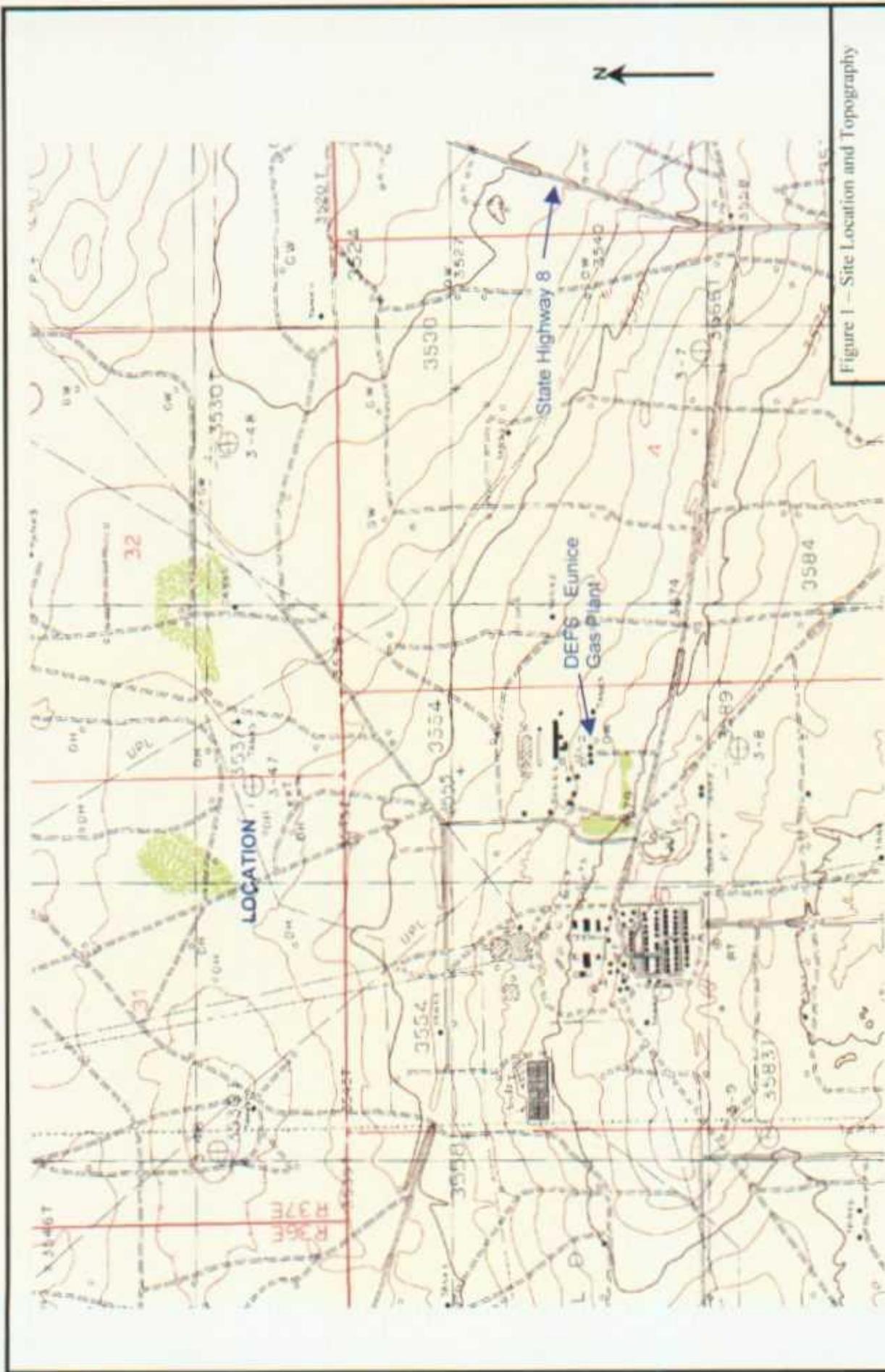


Figure 1 — Site Location and Topography

C-1 Line Groundwater Characterization



DRAWN BY: MJS  
DATE: Dec 2003

5,000 feet

0

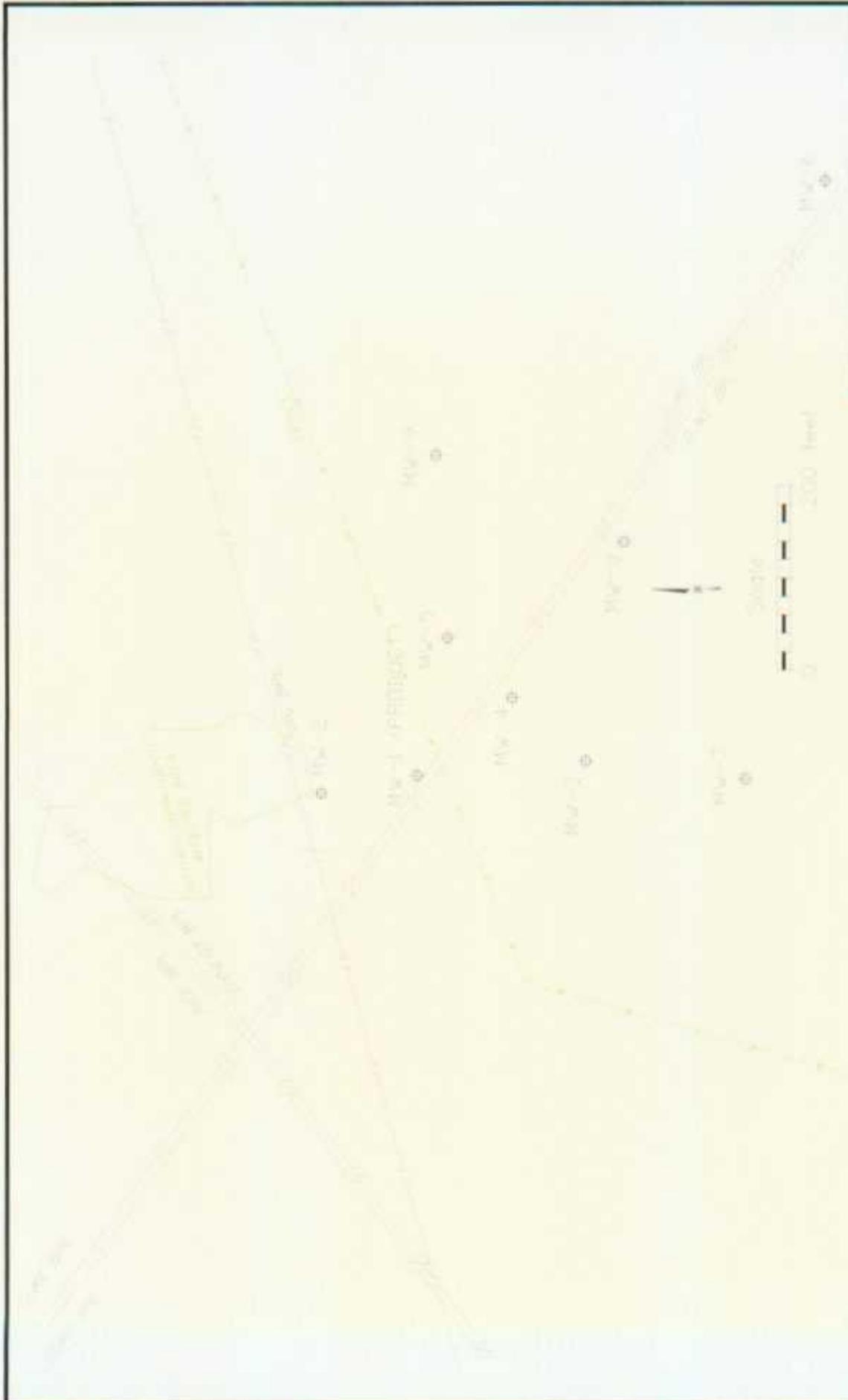


Figure 2 - Monitoring Well and Pipeline Locations

C-1, Inc. Groundwater Characterization  
**Duke Energy Field Services**  
 DRAWN BY: MHIS  
 DATE: Dec 2003

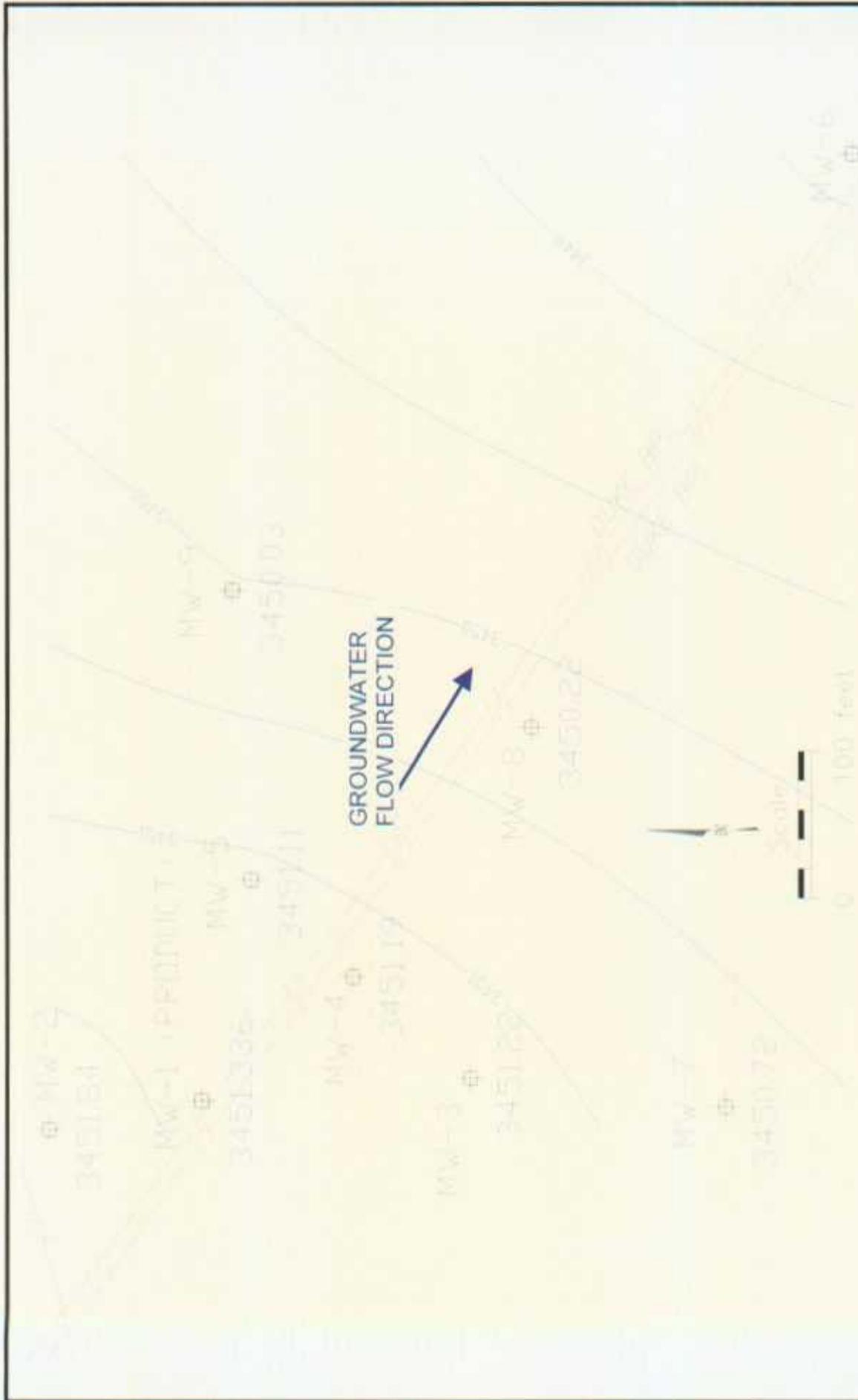
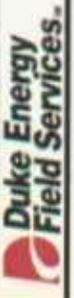


Figure 3 – January 2004 Water Table Elevations (feet)

C-Line Groundwater Characterization



DRAWN BY: MHS  
DATE: Mar 2004

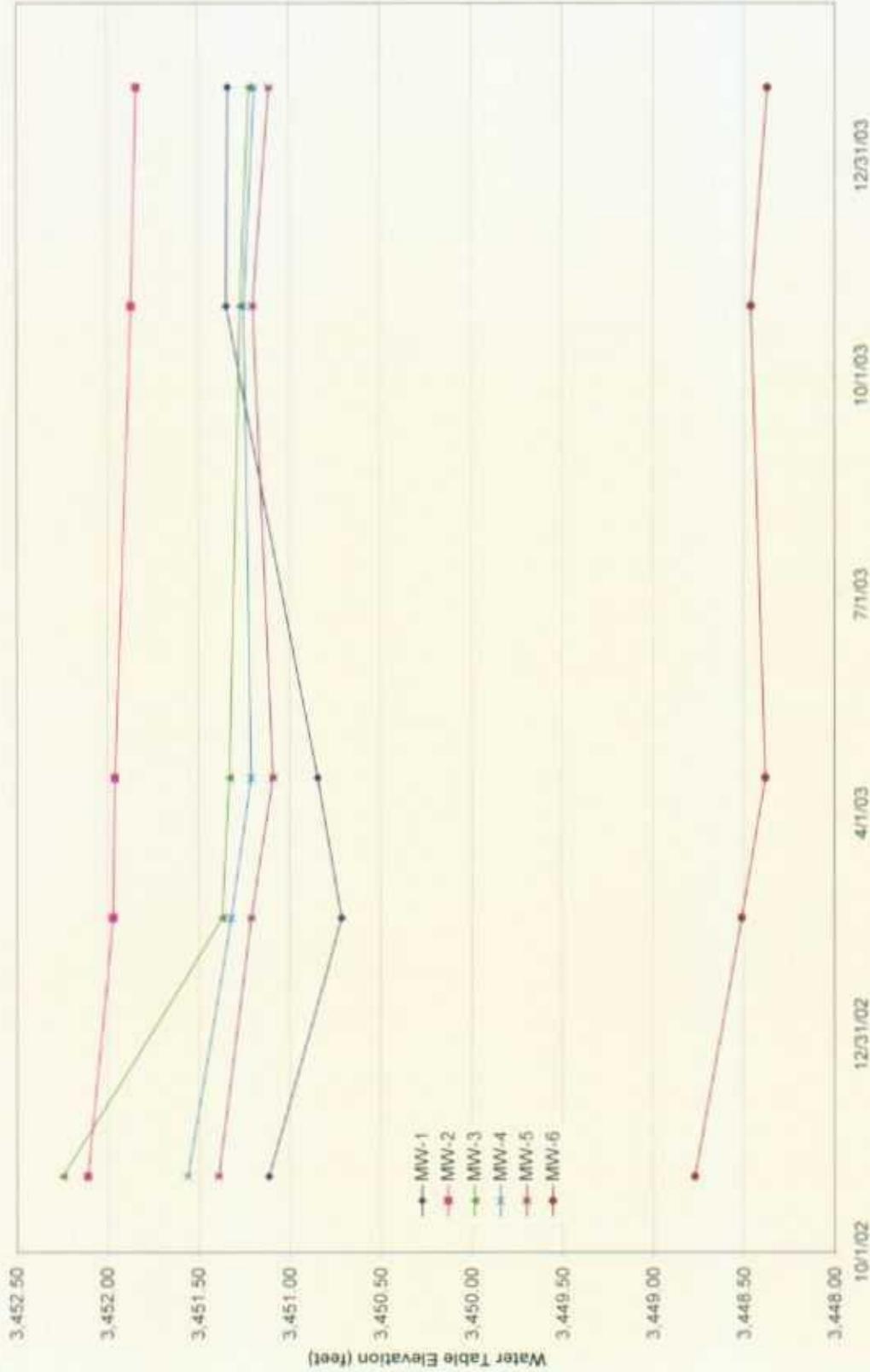


Figure 4 - Hydrograph for Wells MW-1 through MW-6

C-Line Groundwater Characterization

**Duke Energy Field Services**

DRAWN BY: MBHS  
DATE: Mar 2004



Figure 5 - January 2004 Benzene Concentrations

C-1 line Groundwater Characterization



DRAWN BY: MHS  
DATE: Mar 2004

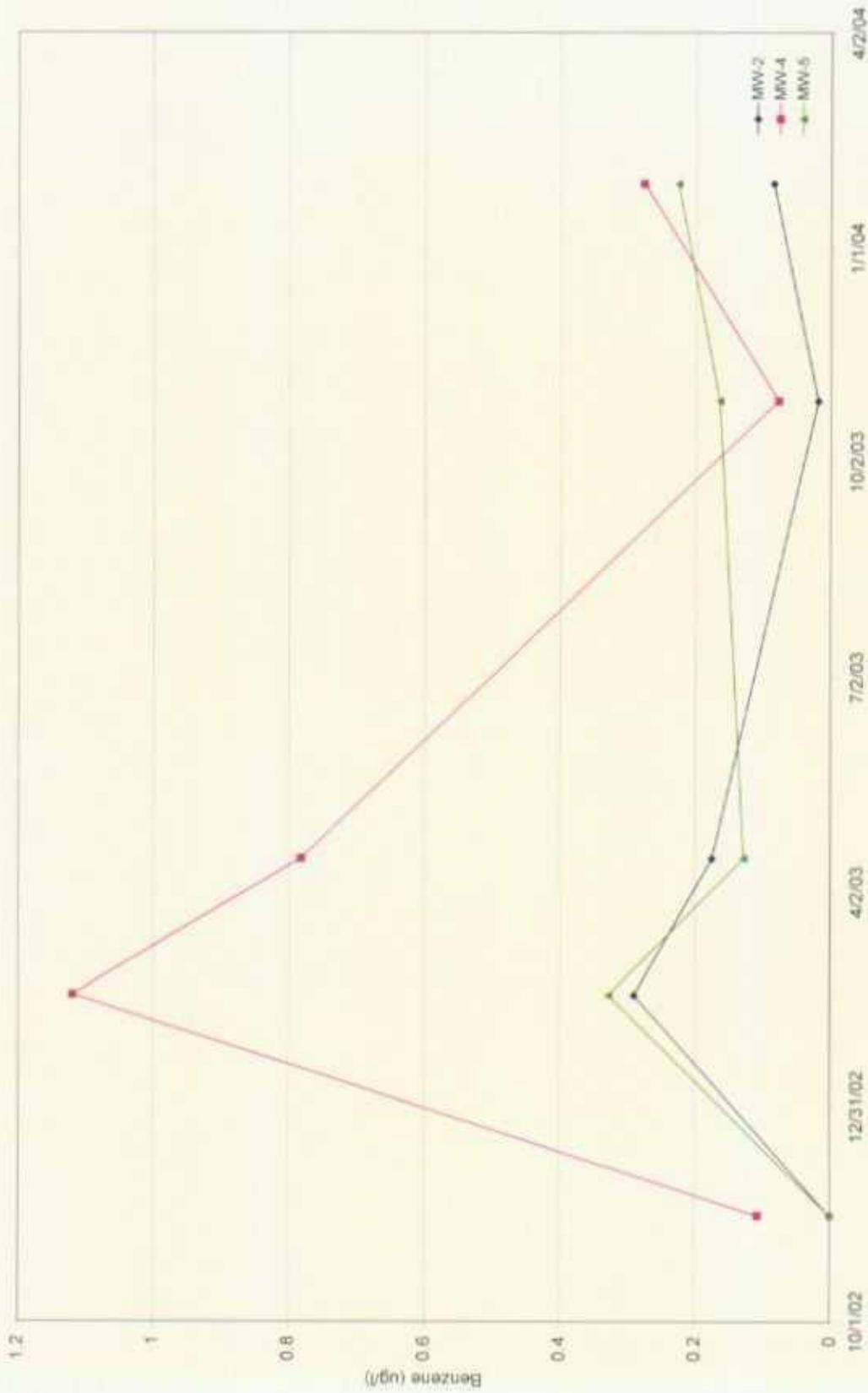


Figure 6 – Benzene Concentrations for Wells MW-2, MW-4 and MW-5

C-Line Groundwater Characterization



DRAWN BY: MHS  
DATE: Mar 2004

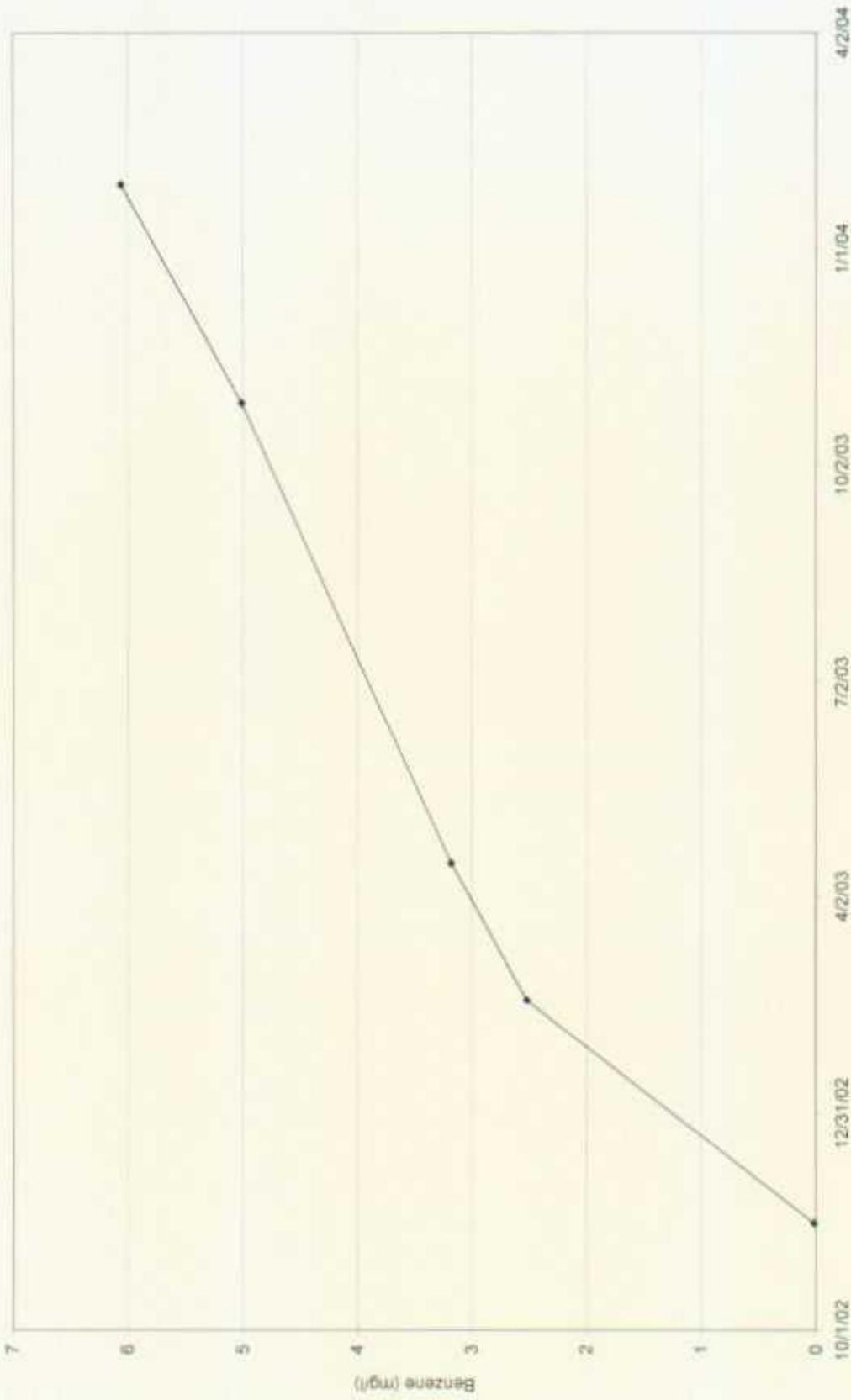


Figure 7 - Benzene Concentrations for Wells MW-3

C-1, Inc. Groundwater Characterization  
**Duke Energy Field Services**  
DRAWN BY: MJS  
DATE: Mar 2004

ANALYTICAL LABORATORY REPORT



12600 West I-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

Michael Stewart  
REMEDIACON  
P.O. Box 302  
Evergreen, CO 80437

Project: DEFS C-Line  
Project Number: None Given  
Location: NW of Oil Center, NM

Lab Order Number: 4B02001

Report Date: 02/09/04

REMEDIACON  
P.O. Box 302  
Evergreen CO, 80437

Project: DEFS C-Line  
Project Number: None Given  
Project Manager: Michael Stewart

Fax: 720-528-8132  
Reported:  
02/10/04 14:12

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
0401291510 (MW-2)	4B02001-01	Water	01/29/04 15:10	02/01/04 07:10
0401291426 (MW-3)	4B02001-02	Water	01/29/04 14:26	02/01/04 07:10
0401291646 (MW-4)	4B02001-03	Water	01/29/04 14:46	02/01/04 07:10
0401291550 (MW-5)	4B02001-04	Water	01/29/04 15:50	02/01/04 07:10
0401291045 (MW-6)	4B02001-05	Water	01/29/04 10:45	02/01/04 07:10
0401291310 (MW-7)	4B02001-06	Water	01/29/04 13:10	02/01/04 07:10
0401291345 (MW-8)	4B02001-07	Water	01/29/04 13:45	02/01/04 07:10
0401291155 (MW-9)	4B02001-08	Water	01/29/04 11:55	02/01/04 07:10
0401292000 (Duplicate)	4B02001-09	Water	01/29/04 20:00	02/01/04 07:10
Trip Blank	4B02001-10	Water	01/29/04 00:00	02/01/04 07:10

REMEDIACON  
P.O. Box 302  
Evergreen CO, 80437

Project: DEFS C-Line  
Project Number: None Given  
Project Manager: Michael Stewart

Fax: 720-528-8132  
Reported:  
02/10/04 14:12

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>0401291510 (MW-2) (4B02001-01)</b>									
Benzene	0.0848	0.00100	mg/L	1	EB40912	02/08/04	02/08/04	EPA 8021B	
Toluene	0.0350	0.00100	"	"	"	"	"	"	
Ethylbenzene	0.00292	0.00100	"	"	"	"	"	"	
Xylene (p/m)	0.00303	0.00100	"	"	"	"	"	"	
Xylene (o)	0.00171	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		102 %		80-120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		92.7 %		80-120	"	"	"	"	
<b>0401291426 (MW-3) (4B02001-02)</b>									
Benzene	6.06	0.00500	mg/L	5	EB40912	02/08/04	02/08/04	EPA 8021B	
Toluene	0.506	0.00500	"	"	"	"	"	"	
Ethylbenzene	0.0679	0.00500	"	"	"	"	"	"	
Xylene (p/m)	0.0494	0.00500	"	"	"	"	"	"	
Xylene (o)	0.0355	0.00500	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		115 %		80-120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.7 %		80-120	"	"	"	"	
<b>0401291646 (MW-4) (4B02001-03)</b>									
Benzene	0.320	0.00100	mg/L	1	EB40912	02/08/04	02/08/04	EPA 8021B	
Toluene	0.169	0.00100	"	"	"	"	"	"	
Ethylbenzene	0.0203	0.00100	"	"	"	"	"	"	
Xylene (p/m)	0.0372	0.00100	"	"	"	"	"	"	
Xylene (o)	0.0158	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		117 %		80-120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.9 %		80-120	"	"	"	"	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

*Palanck*  
Quality Assurance Review

REMEDIACON  
P.O. Box 302  
Evergreen CO, 80437

Project: DEFS C-Line  
Project Number: None Given  
Project Manager: Michael Stewart

Fax: 720-528-8132  
Reported:  
02/09/04 14:15

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

0401291550 (MW-5) (4B02001-04) Water Sampled: 01/29/04 15:50 Received: 02/01/04 07:10

Benzene	0.226	0.00100	mg/L	1	EB40912	02/08/04	02/09/04	EPA 8021B	
Toluene	0.0640	0.00100	"	"	"	"	"	"	
Ethylbenzene	0.00404	0.00100	"	"	"	"	"	"	
Xylene (p/m)	0.00514	0.00100	"	"	"	"	"	"	
Xylene (o)	0.00226	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		104 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.3 %	80-120		"	"	"	"	

0401291045 (MW-6) (4B02001-05) Water Sampled: 01/29/04 10:45 Received: 02/01/04 07:10

Benzene	0.00382	0.00100	mg/L	1	EB40912	02/08/04	02/09/04	EPA 8021B	
Toluene	0.00140	0.00100	"	"	"	"	"	"	
Ethylbenzene	0.00133	0.00100	"	"	"	"	"	"	
Xylene (p/m)	0.00194	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		85.3 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		91.7 %	80-120		"	"	"	"	

0401291310 (MW-7) (4B02001-06) Water Sampled: 01/29/04 13:10 Received: 02/01/04 07:10

Benzene	ND	0.00100	mg/L	1	EB40912	02/08/04	02/08/04	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		89.4 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89.8 %	80-120		"	"	"	"	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

*Ralank*  
Quality Assurance Review

REMEDIACON P.O. Box 302 Evergreen CO, 80437	Project: DEFS C-Line Project Number: None Given Project Manager: Michael Stewart	Fax: 720-528-8132 Reported: 02/09/04 14:15
---	--	--

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

<b>0401291345 (MW-8) (4B02001-07)</b>									
Water Sampled: 01/29/04 13:45 Received: 02/01/04 07:10									
Benzene	0.00139	0.00100	mg/L	1	EB40912	02/08/04	02/09/04	EPA 8021B	
Toluene	0.00109	0.00100	"	"	"	"	"	"	
Ethylbenzene	0.00112	0.00100	"	"	"	"	"	"	
Xylene (p/m)	0.00217	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		87.7 %		80-120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.3 %		80-120	"	"	"	"	

<b>0401291155 (MW-9) (4B02001-08)</b>									
Water Sampled: 01/29/04 11:55 Received: 02/01/04 07:10									
Benzene	ND	0.00100	mg/L	1	EB40912	02/08/04	02/08/04	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		91.0 %		80-120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.5 %		80-120	"	"	"	"	

<b>0401292000 (Duplicate) (4B02001-09)</b>									
Water Sampled: 01/29/04 20:00 Received: 02/01/04 07:10									
Benzene	0.232	0.00100	mg/L	1	EB40912	02/08/04	02/08/04	EPA 8021B	
Toluene	0.0647	0.00100	"	"	"	"	"	"	
Ethylbenzene	0.00391	0.00100	"	"	"	"	"	"	
Xylene (p/m)	0.00483	0.00100	"	"	"	"	"	"	
Xylene (o)	0.00210	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		104 %		80-120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		92.3 %		80-120	"	"	"	"	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

*Roland K. Paul*  
Quality Assurance Review

REMEDIACON  
 P.O. Box 302  
 Evergreen CO, 80437

Project: DEFS C-Line  
 Project Number: None Given  
 Project Manager: Michael Stewart

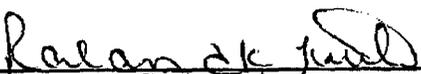
Fax: 720-528-8132  
 Reported:  
 02/09/04 14:15

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Trip Blank (4B02001-10) Water Sampled: 01/29/04 00:00 Received: 02/01/04 07:10									
Benzene	ND	0.00100	mg/L	1	EB40912	02/08/04	02/08/04	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		87.7 %		80-120	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		91.5 %		80-120	"	"	"	"	

Environmental Lab of Texas

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

  
 Quality Assurance Review

REMEDIACON  
P.O. Box 302  
Evergreen CO, 80437

Project: DEFS C-Line  
Project Number: None Given  
Project Manager: Michael Stewart

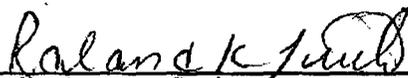
Fax: 720-528-8132  
Reported:  
02/10/04 14:12

**General Chemistry Parameters by EPA / Standard Methods**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>0401291510 (MW-2) (4B02001-01)</b>									
Chloride	461	5.00	mg/L	1	EB40304	02/03/04	02/03/04	EPA 325.3	
<b>0401291426 (MW-3) (4B02001-02)</b>									
Chloride	443	5.00	mg/L	1	EB40304	02/03/04	02/03/04	EPA 325.3	
<b>0401291646 (MW-4) (4B02001-03)</b>									
Chloride	470	5.00	mg/L	1	EB40304	02/03/04	02/03/04	EPA 325.3	
<b>0401291550 (MW-5) (4B02001-04)</b>									
Chloride	514	5.00	mg/L	1	EB40304	02/03/04	02/03/04	EPA 325.3	
<b>0401291045 (MW-6) (4B02001-05)</b>									
Chloride	620	5.00	mg/L	1	EB40304	02/03/04	02/03/04	EPA 325.3	
<b>0401291310 (MW-7) (4B02001-06)</b>									
Chloride	292	5.00	mg/L	1	EB40304	02/03/04	02/03/04	EPA 325.3	
<b>0401291345 (MW-8) (4B02001-07)</b>									
Chloride	354	5.00	mg/L	1	EB40304	02/03/04	02/03/04	EPA 325.3	
<b>0401291155 (MW-9) (4B02001-08)</b>									
Chloride	443	5.00	mg/L	1	EB40304	02/03/04	02/03/04	EPA 325.3	

Environmental Lab of Texas

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

  
Quality Assurance Review

Page 6 of 10

REMEDIACON  
P.O. Box 302  
Evergreen CO, 80437

Project: DEFS C-Line  
Project Number: None Given  
Project Manager: Michael Stewart

Fax: 720-528-8132  
Reported:  
02/09/04 14:15

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch EB40912 - EPA 5030C (GC)**

**Blank (EB40912-BLK1)**

Prepared & Analyzed: 02/08/04

Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	90.1		ug/l	100		90.1	80-120			
Surrogate: 4-Bromofluorobenzene	84.6		"	100		84.6	80-120			

**LCS (EB40912-BS1)**

Prepared & Analyzed: 02/08/04

Benzene	94.6		ug/l	100		94.6	80-120			
Toluene	94.0		"	100		94.0	80-120			
Ethylbenzene	105		"	100		105	80-120			
Xylene (p/m)	208		"	200		104	80-120			
Xylene (o)	105		"	100		105	80-120			
Surrogate: a,a,a-Trifluorotoluene	91.6		"	100		91.6	80-120			
Surrogate: 4-Bromofluorobenzene	95.4		"	100		95.4	80-120			

**Calibration Check (EB40912-CCV1)**

Prepared: 02/08/04 Analyzed: 02/09/04

Benzene	91.3		ug/l	100		91.3	80-120			
Toluene	91.9		"	100		91.9	80-120			
Ethylbenzene	105		"	100		105	80-120			
Xylene (p/m)	211		"	200		106	80-120			
Xylene (o)	109		"	100		109	80-120			
Surrogate: a,a,a-Trifluorotoluene	89.3		"	100		89.3	80-120			
Surrogate: 4-Bromofluorobenzene	103		"	100		103	80-120			

**Matrix Spike (EB40912-MS1)**

Source: 4B02001-10

Prepared & Analyzed: 02/08/04

Benzene	93.9		ug/l	100	ND	93.9	80-120			
Toluene	92.5		"	100	ND	92.5	80-120			
Ethylbenzene	103		"	100	ND	103	80-120			
Xylene (p/m)	204		"	200	ND	102	80-120			
Xylene (o)	104		"	100	ND	104	80-120			
Surrogate: a,a,a-Trifluorotoluene	93.0		"	100		93.0	80-120			
Surrogate: 4-Bromofluorobenzene	101		"	100		101	80-120			

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

*Rolan C. Paul*  
Quality Assurance Review

REMEDIACON  
 P.O. Box 302  
 Evergreen CO, 80437

Project: DEFS C-Line  
 Project Number: None Given  
 Project Manager: Michael Stewart

Fax: 720-528-8132  
 Reported:  
 02/09/04 14:15

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch EB40912 - EPA 5030C (GC)**

**Matrix Spike Dup (EB40912-MSD1)**

Source: 4B02001-10

Prepared & Analyzed: 02/08/04

Benzene	88.2		ug/l	100	ND	88.2	80-120	6.26	20	
Toluene	87.9		"	100	ND	87.9	80-120	5.10	20	
Ethylbenzene	98.6		"	100	ND	98.6	80-120	4.37	20	
Xylene (p/m)	196		"	200	ND	98.0	80-120	4.00	20	
Xylene (o)	99.8		"	100	ND	99.8	80-120	4.12	20	
Surrogate: a,a,a-Trifluorotoluene	88.1		"	100		88.1	80-120			
Surrogate: 4-Bromofluorobenzene	95.3		"	100		95.3	80-120			

Environmental Lab of Texas

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

*Ralanda Paul*  
 Quality Assurance Review

REMEDIACON  
 P.O. Box 302  
 Evergreen CO, 80437

Project: DEFS C-Line  
 Project Number: None Given  
 Project Manager: Michael Stewart

Fax: 720-528-8132  
 Reported:  
 02/09/04 14:15

**General Chemistry Parameters by EPA / Standard Methods - Quality Control  
 Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch EB40304 - General Preparation (WetChem)</b>										
<b>Blank (EB40304-BLK1)</b> Prepared & Analyzed: 02/03/04										
Chloride	ND	5.00	mg/L							
<b>Calibration Check (EB40304-CCV1)</b> Prepared & Analyzed: 02/03/04										
Chloride	4870		mg/L	5000		97.4	80-120			
<b>Matrix Spike (EB40304-MS1)</b> Source: 4B02001-01 Prepared & Analyzed: 02/03/04										
Chloride	975		mg/L	500	461	103	80-120			
<b>Matrix Spike Dup (EB40304-MSD1)</b> Source: 4B02001-01 Prepared & Analyzed: 02/03/04										
Chloride	966		mg/L	500	461	101	80-120	0.927	20	

Environmental Lab of Texas

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Ralan d k [Signature]  
 Quality Assurance Review

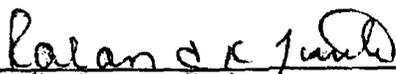
REMEDIACON P.O. Box 302 Evergreen CO, 80437	Project: DEFS C-Line Project Number: None Given Project Manager: Michael Stewart	Fax: 720-528-8132 Reported: 02/09/04 14:15
---	--	--

**Notes and Definitions**

- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

Environmental Lab of Texas

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

  
 \_\_\_\_\_  
 Quality Assurance Review

