1R - 401

REPORTS

DATE:

3/16/2004

Remediacon Incorporated

Geological and Engineering Services mstewart@remediacon.com

March 16, 2004

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

Re: Summary of January 2004 Quarterly Groundwater Monitoring Results at the C-Line

PO Box 302, Evergreen, Colorado 80437

Telephone: 303.674.4370

Facsimile: 720.528.8132

50602 Location in Lea County New Mexico

(Unit O, Section 31, Township 19 South, Range 37 East)

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):

Mr. Stephen Weathers March 16, 2004 Page 2

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

Muhael 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

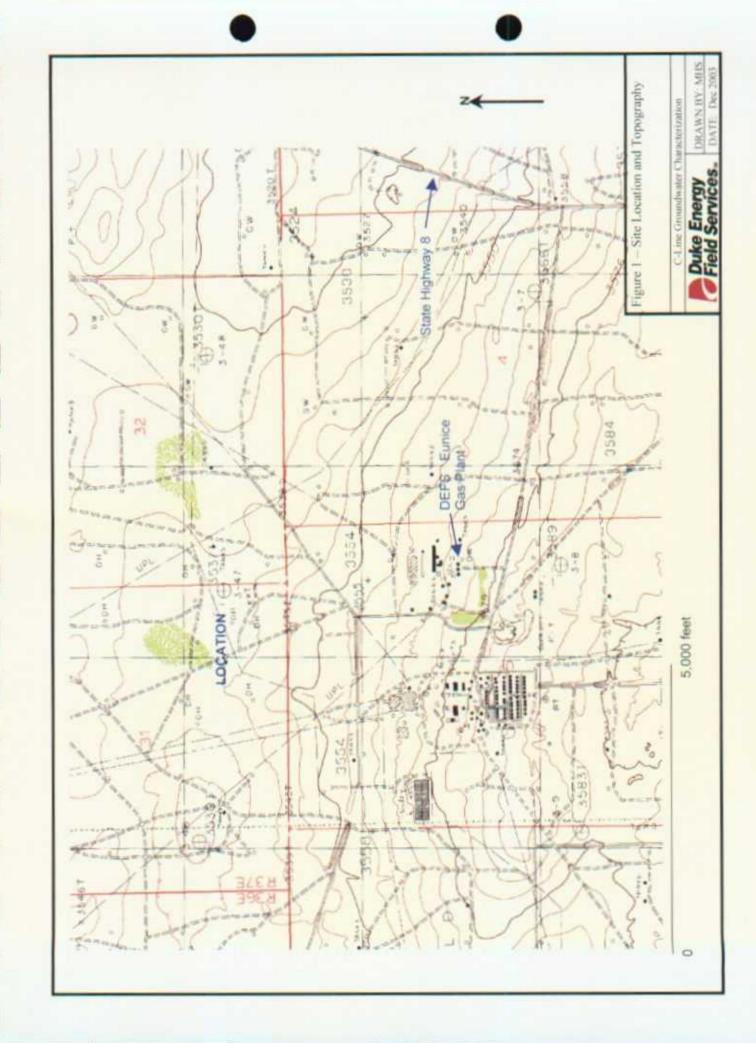
Toluene	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9
11/15/2002	<0.001	0.005	0.039/0.036	<0.001	<0.001			
2/18/2003	0.014	0.634	0.436	0.056	< 0.001			
4/17/2003	0.007	0.513	0.450/0.445	0.007	< 0.001			
10/28/2003	0.001	0.275	0.029	0.048/0.06	< 0.001	< 0.001	< 0.001	< 0.001
1/29/2004	0.035	0.506	0.169/0.0647	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		<u></u>	
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

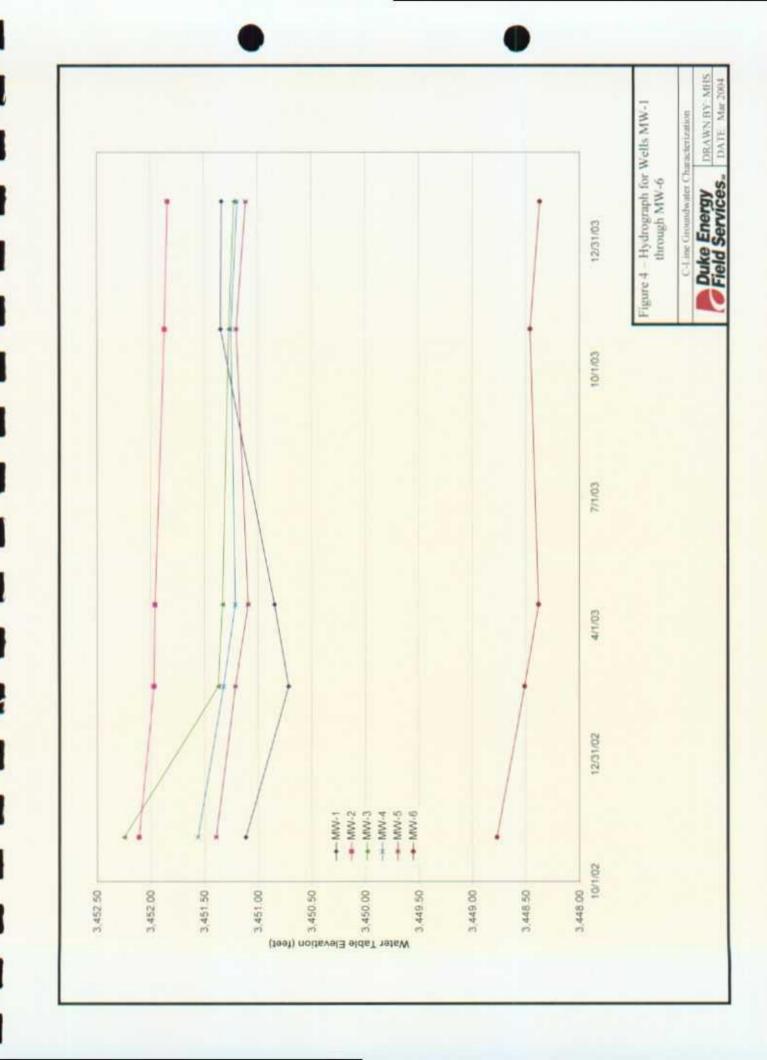
All units mg/l
Duplicate samples separated by a slash "/"

FIGURES

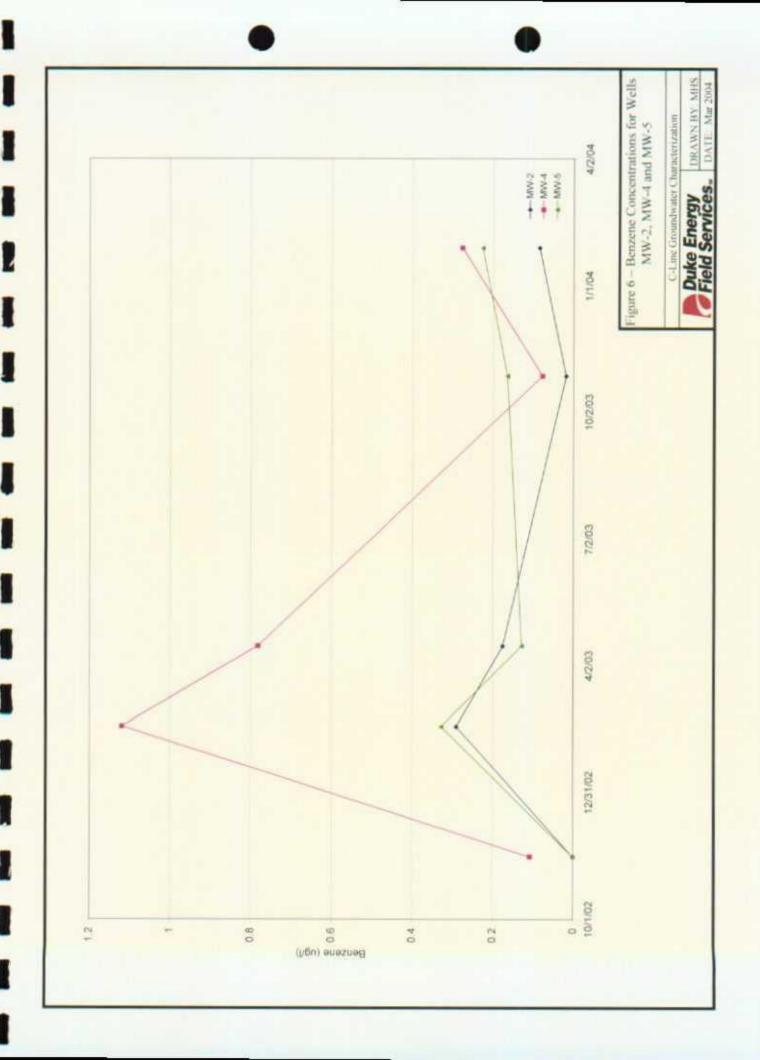


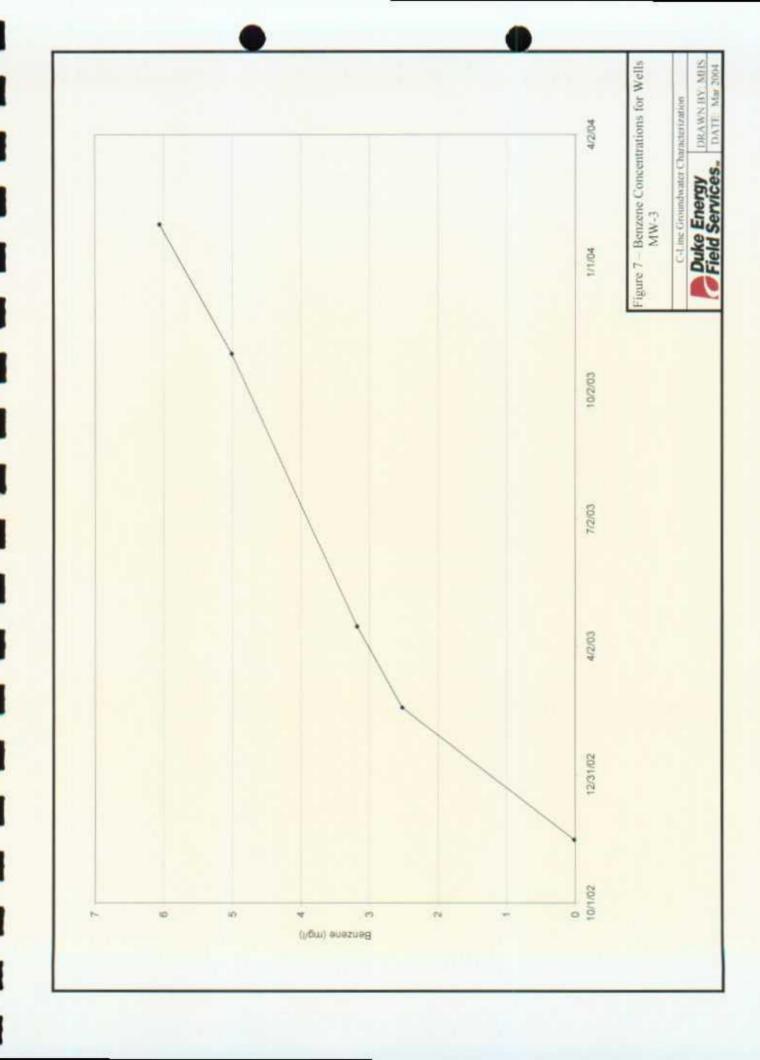
Puke Energy DRAWN BY MBIS Field Services. DATE Dec 2003 Figure 2 - Monitoring Well and Pipeline C-Line Groundwater Characterization Locations

DRAWN BY: MHS DATE: Mar 2004 Calme Groundwater Characterization Figure 3 - January 2004 Water Table Elevations (feet) Duke Energy Field Services. GROUNDWATER FLOW DIRECTION

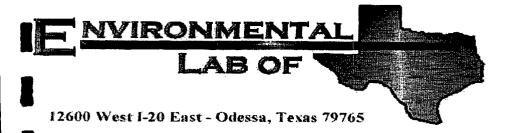


Puke Energy DRAWN BY MES Field Services. DATE Mar 2004 C.Line Groundwater Characterization Figure 5 January 2004 Benzene Concentrations GROUNDWATER FLOW DIRECTION Notes: 1) All concentrations mg/l





ANALYTICAL LABORATORY REPORT



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

Project: DEFS C-Line

Fax: 720-528-8132

P.O. Box 302

Project Number: None Given

Reported: 02/10/04 14:12

Evergreen CO, 80437

Project Manager: Michael Stewart

Organics by GC Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
0401291510 (MW-2) (4B02001-01)		·							
Benzene	0.0848	0.00100	mg/L	1	EB40912	02/08/04	02/08/04	EPA 8021B	
Toluene	0.0350	0.00100	n	n	U	**	IT	r	
Ethylbenzene	0.00292	0.00100	Ħ	ď	n	u	u	n	
Xylene (p/m)	0.00303	0.00100	u	U	n	lf .	H	. 11	
Xylene (o)	0.00171	0.00100	U	N	b	**	u	я	
Surrogate: a,a,a-Trifluorotoluene		102 %	80-12	0					
Surrogate: 4-Bromosluorobenzene		92.7 %	80-12	0	"	#	"	"	
0401291426 (MW-3) (4B02001-02)									
Benzene	6.06	0.00500	mg/L	5	EB40912	02/08/04	02/08/04	EPA 8021B	
Toluene	0.506	0.00500	n	Ħ	11	n	•	"	
Ethylbenzene	0.0679	0.00500	*	U	ч	n	· ·	u	
Xylene (p/m)	0.0494	0.00500	11	U	Ħ	D	H	II .	
Xylene (0)	0.0355	0.00500	n	11	u	17	#	tt.	
Surrogate: a,a,a-Trifluorotoluene	•	115 %	80-12	0	· ·	11	n .	"	
Surrogate: 4-Bromofluorobenzene		98.7 %	80-12	0	"	"	**	"	
0401291646 (MW-4) (4B02001-03)									
Benzene	0.320	0.00100	mg/L	1	EB40912	02/08/04	02/08/04	EPA 8021B	
Toluene	0.169	0.00100	11		Ħ	tl .	ıı	п	
_Ethylbenzene	0.0203	0.00100	n	n	u	Ħ	n	v	
Xylene (p/m)	0.0372	0.00100	tr.	n	n	11	tı	H	
Kylene (o)	0.0158	0.00100	M	ti .	b	11	u	u	
Surrogate: a,a,a-Trifluorotoluene		117%	80-12	0	····		"		
Surrogate: 4-Bromofluorobenzene		99.9 %	80-12	0	"	"	"	"	

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

Project: DEFS C-Line

Fax: 720-528-8132

P.O. Box 302

Project Number: None Given

Reported:

Evergreen CO, 80437

Project Manager: Michael Stewart

02/09/04 14:15

Organics by GC

Environmental Lab of Texas

Алајуте	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
0401291550 (MW-5) (4B02001-04)	1	Water Sam	oled: 01/2	29/04 15:	50 Recei	ved: 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	·	н	n	17	**	11	
Ethylbenzene	0.00404	0.00100	**	į t	If	0	n	•	
Xylene (p/m)	0.00514	0.00100	U	11	п	Ħ	II .	В	
Xylene (o)	0.00226	0.00100	Ħ	u	'n	н	"	•	
Surrogate: a,a,a-Trifluorotoluene		104 %	80	120		н	"		
Surrogate: 4-Bromofluorobenzene		99.3 %	80-2	120	n	n	"	**	
0401291045 (MW-6) (4B02001-05)	1	Water Samp	oled: 01/2	29/04 10:4	45 Recei	ved: 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	br	**	II .	71	ч	*	
Ethylbenzene	0.00133	0.00100	Ħ	U	н	0	n	11	
Xylene (p/m)	0.00194	0.00100	**			Ħ	H	er e	
Xylene (o)	ND	0.00100	Ħ	u	U	71	u	16	
Surrogate: a,a,a-Trifluorotoluene		85.3 %	80-	120			" ——	n	
Surrogate: 4-Bromofluorobenzene		91.7 %	80-1	120	**	"	**	μ	
0401291310 (MW-7) (4B02001-06)	•	Water Samp	oled: 01/2	29/04 13:	10 Recei	ved: 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	11	•	q	н	Ħ	u	
Ethylbenzene	ND	0.00100	*	N	н	n	и	π	
Kylene (p/m)	ND	0.00100	н	и	r	0	n	н	
Xylene (o)	ND	0.00100	u	u	п	u	er	u	
Surrogate: a,a,a-Trifluorotoluene		89.4 %	80-	120		ii		"	
Surrogate: 4-Bromofluorobenzene		89.8 %	80-	120	n	H	rr .	"	

invironmental 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

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	Note
0401291345 (MW-8) (4B02001-07)	·	Water Sam	pled: 01/	29/04 13:4	45 Recei	ived: 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	n	7	n	Ħ	#		
Ethylbenzene	0.00112	0.00100	a	11	#	ti	н	"	
Xylene (p/m)	0.00217	0.00100	н	Ħ	U	Ħ	*	11	
Xylene (o)	ND	0.00100	11	11	n	11	n	19	
Surrogate: a,a,a-Trifluorotoluene		87.7 %	80-	120		ii-		, , , , , , , , , , , , , , , , , , , 	
Surrogate: 4-Bromofluorobenzene		97.3 %	80-	120	"	"	n	"	
0401291155 (MW-9) (4B02001-08)		Water Samp	oled: 01/2	29/04 11:5	55 Recei	ved: 02/01	/04 07:10		
Benzene	ND	0.00100	mg/L	i	EB40912	02/08/04	02/08/04	EPA 8021B	
Toluene	ND	0.00100	и	n	n	n	n	11	
Ethylbenzene	ND	0.00100	**	"	π	ø	n	11	
Xylene (p/m)	ND	0.00100	D	•	II.	#	n	p	
Xylene (o)	ND	0.00100	4	ii	H	u	ìı	H .	
Surrogate: a,a,a-Trifluorotoluene		91.0 %	80-	120	- re				
Surrogate: 4-Bromofluorobenzene		93.5 %	80-	120	"	"	"	n	
0401292000 (Duplicate) (4B02001-09)		Water Samj	oled: 01/2	29/04 20:0	00 Recei	vcd: 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	ŧr	IJ	н	11	D	11	
Ethylbenzene	0.00391	0.00100	n	r	n	n	N	**	
Xylene (p/m)	0.00483	0.00100	Ħ	U		u	u	n	
Xylene (o)	0.00210	0.00100	"	. "	11	н	n	bt	
Surrogate: a,a,a-Trifluorotoluene		104%	80-	120					
Surrogate: 4-Bromofluorobenzene		92.3 %	80-	120	n	"	*	"	

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 4 of 10

Project: DEFS C-Line

Fax: 720-528-8132

P.O. Box 302

Project Number: None Given
Project Manager: Michael Stewart

Reported: 02/09/04 14:15

Evergreen CO, 80437

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	n 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	ti .	17	tı	11	19	n	
Ethylbenzene	ND	0.00100	11	u	. 11	U	lı .	ti	
Xylene (p/m)	ND	0.00100	H	н	n	a	41	n	
Xylene (o)	ND	0.00100	n	Ħ	u	11	*	v	
Surrogate: a,a,a-Trifluorotoluene		87.7 %	80-12	20					
Surrogate: 4-Bromofluorobenzene		91.5 %	80-12	20	"	n	**	W	

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.

Ouality 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
0401291510 (MW-2) (4B02001-01)									
Chloride	461	5.00	mg/L	1	EB40304	02/03/04	02/03/04	EPA 325.3	_ _
0401291426 (MW-3) (4B02001-02)								•	
Chloride	443	5.00	mg/L	1	EB40304	02/03/04	02/03/04	EPA 325.3	
0401291646 (MW-4) (4B02001-03)									
Chloride	470	5.00	mg/L	1	EB40304	02/03/04	02/03/04	EPA 325.3	
0401291550 (MW-5) (4B02001-04)									
Chloride	514	5.00	mg/L	1	EB40304	02/03/04	02/03/04	EPA 325.3	
0401291045 (MW-6) (4B02001-05)									
Chloride	620	5.00	mg/L	1	EB40304	02/03/04	02/03/04	EPA 325.3	
0401291310 (MW-7) (4B02001-06)									
Chloride	292	5.00	mg/L	1	EB40304	02/03/04	02/03/04	EPA 325.3	
0401291345 (MW-8) (4B02001-07)									
Chloride	354	5.00	mg/L	1	EB40304	02/03/04	02/03/04	EPA 325.3	
0401291155 (MW-9) (4B02001-08)									
Chloride	443	5.00	mg/L	Ī	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

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	h t_4				
	Kesuit	Limit	Onus	Level	Result	70REC	Limits	KFD	Limit	Notes				
Batch EB40912 - EPA 5030C (GC)														
Blank (EB40912-BLK1)	Prepared & Analyzed: 02/08/04													
Benzene	ND	0.00100	mg/L											
l'olu e ne	ND	0.00100	Ħ											
Ethylbenzene	מא	0.00100	N											
Xylene (p/m)	ND	0.00100	P											
Xylene (o)	ND	0.00100	u											
Surrogate: a,a,a-Trifluorotoluene	90.7		ug/l	100		90.1	80-120							
Surrogate: 4-Bromofluorobenzene	84.6		**	100		84.6	80-120							
LCS (EB40912-BS1)				Prepared	& Analyz	ed: 02/08/0)4							
Benzene	94.6		ug/l	100		94.6	80-120							
Toluene	94.0		и	100		94.0	80-120							
Ethylbenzene	105		o	100		105	80-120							
Xylene (p/m)	208		u	200		104	80-120							
Xylene (o)	105		n	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	 						
Foluene	91.9		н	100		91.9	80-120							
Ethylbenzene	105		11	100		105	80-120							
Xylene (p/m)	211		u	200		106	80-120							
Xylene (a)	109		Ħ	100		109	80-120							
Surrogate: a,a,a-Trifluorotoluene	89.3			100		89.3	80-120							
Surrogate: 4-Bromofluorobenzene	103		n	100		103	80-120	,						
Matrix Spike (EB40912-MS1)	So	urce: 4B020(1-10	Prepared	& Analyz	ed: 02/08/0)4							
Benzene	93.9		ug/l	100	ND	93.9	80-120							
l'oluene	92.5			100	ND	92.5	80-120							
Ethylbenzene	103		"	100	ND	103	80-120							
Xylene (p/m)	204		Ħ	200	ND	102	80-120							
(ylene (o)	104		n	100	ND	104	80-120							
Surrogate: a,a,a-Trifluorotoluene	93.0		п	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.

Ouality Assurance Review

Page 7 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)										
Matrix Spike Dup (EB40912-MSDI)	So	urce: 4B0200	1-10	Prepared	& Analyzo	d: 02/08/0	04			
Benzene	88.2		ug/l	100	ND	88.2	80-120	6.26	20	
Tolucne	87.9		10	100	ND	87.9	80-120	5.10	20	
Ethylbenzene	98.6		Ħ	100	ND	98.6	80-120	4.37	20	
Xylene (p/m)	196		II	200	ND	98.0	80-120	4.00	20	
Xylene (o)	99.8		tī	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		v	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.

Quality Assurance Review

Page 8 of 10

Project: DEFS C-Line

Fax: 720-528-8132

P.O. Box 302

Project Number: None Given

Reported:

Evergreen CO, 80437

Project Manager: Michael Stewart

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
Batch EB40304 - General Preparatio	n (WetChen	n)		······································						
Blank (EB40304-BLK1)				Prepared	& Analyzi	ed: 02/03/	04			
Chloride	ND	5.00	mg/L							
Calibration Check (EB40304-CCV1)				Prepared	& Analyza	ed: 02/03/	04			
Chloride	4870		mg/L	5000		97.4	80-120			
Matrix Spike (EB40304-MS1)	So	urce: 4B020()1-01	Prepared	& Analyzo	ed: 02/03/	04			
Chloride	975		mg/L	500	461	103	80-120			
Matrix Spike Dup (EB40304-MSD1)	So	urce: 4B0200)1-01	Prepared	& Analyze	ed: 02/03/	04			
Chloride	966	76	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.

Quality Accurance Povices

Page 9 of 10

Project: DEFS C-Line

Fax: 720-528-8132

P.O. Box 302

Project Number: None Given

Reported:

Evergreen CO, 80437

Project Manager: Michael Stewart

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.

Ouality Assurance Review

Page 10 of 10

Feb 10	04	06	: 35	P			_														P. 12
	1		15	{	{				TAT brabnes	2/2	1	<u></u>	7			7		_	<u></u>		
			-		1	•	"		elubeno2-erq) TAT H2US		+-	 `	-			\rightarrow	+	4	-		
			20			Γ		_		+-	†	 	 		-	-+	-		_		
EST	2		3			1				1	┼─	-			\dashv	-	+	-	²		
เอก	-)				1					1	\vdash		-		-	+	+	+	-		
S RE				}					د لااعد الماء	$\overline{}$	1	1	7		S	5	5	_	7		
CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST	Ú	1	0		}				1.O.R.M.	1					7		1	7	7	ام	
VAŁ	1				ĺ	Ö.	 	-	(CI	4					1	\top	\top	7	7		
. O			5		{			1	828 X3T8 30 0000 815X 826			1	7	1	7	7	1	5	Containers Intact?	Temperature Upon Receipt: Laboratory Comments:	
AN	اٽ					Analyze	-	↓_	salitelovimeS										ers [noc mir	
JRD	الا		3					-	Volatiles										igi i	± 8 √	
ĒČ	\Box		7.						Metals: As Ag Ba Cd Cr Pb Hg S	├						\bot		I	Ö	f gat	
	ä;) ¥≚	ا	4			TCLP. TOTAL	<u> </u>	2AR / ESP / CEC	<u> </u>	-				\bot				Sample	nper 2	
707	E B	Project #:	Project Loc:	# Od	\$ 3.		1-	-	Anions (Cl. SO4, CO3, HCO3)	 	-				_	\perp		\perp	Sar		
รกร	act 1	Proj	ojec.		\$ #			-	Cations (Ca, Mg, Na, K)	 		}	}		_	_ _	_	4	ᆀ.	\$ Z = 8	
0F(Project Name:		ď		Mike Stewart) Stevelylanthers			30	Other (specify): Other (specify):	-	-			-+	-	+		4	<u></u> ;	12 2 12 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Time .
N/K	-				ie s			.≥	Soil Olber (enecifit):	-		-	-}	\dashv	-	+		4	100		- (
CH)					Mike			Matrix	agbulā	-		-		-+	-	+		-}-		1	
	1	j	į		SIS	1	İ		Water	1		-	$\overline{}$		+	,	-	+	- 1) \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Date
	}		j]	25				Other (Specify)			-4	7	-}	4	4	4-	7	2 1		i •
	}	}	1	}	2/2	}			anoN			-+	-		+	+	+	+	┦``		
		}	}	1	100-			tive	'OS²H			-	-	-	+	+	+-	+		8	1
		}	1	}	00 0			reservativ	HOBN			_	$\neg \dagger$	_	_	+	+	+	40		
		}	1		200			res	Ha (BYEX ONLY)			7	2	4	4	7	5	7	<u> </u>	5	
l	}	}	}	Ì					HNO			7	1	十	1	1	1	+	نِ ا	7	
	1	}	- {	}	303				90)	>	2	21	コ	7	7	1	7/	木	- - - - - - - -	5	
	1		İ	Ì	30	7'	kala		No. of Containers 1-2 So.	3	3	3	2	~ F	7 (م آر	J C	۱,	र्ग है	x	
•	1	.	- {	- 1	<u>.</u> '	'	130/2	,	,, ,						-+	+	+	+		20 X	1 7
			1	1	Fax No:			- {	manufusa assus					الما	ے ار	2/2	2	}	3	1	1
	1	1		1	۳ ع			}	Time Sampled	Š	477	E	2	195	5	5 4		5.	Ste	0	
			1	4				}			-		7	-=	-	-	- [(7	1	0-1	15
		l	- {	80437		}		1	18	4	7	X	7	ヹ゙	E 3		F 3	-	70		ELOTE TO TE
	1	ĺ	ł	き		{			baldma2 etsO	2	0	2	2	9	2 6	2 4	0 3	2	1	by by	ya b
	1	{	1	$\bar{\omega}$	b	{				01-29-04	01.29-04	01-29-0H	01-29-0	01-10-04	10-67-10	10176-10	10-67-11		0.5	Received by	Received by
			1			1		}		Ō	ই	9	0	0		0 3	<u>5 5</u>	1	report	- <u>x</u>	δ.
k 2	7	}	4	D	~ n	1		- [- {	1		1		1	7	- 1	(a)	4
6 8 5	8	5	O	0								_ }	7	<u></u>	×	96	7	< 	14	Time	Time of
9 8 8	٥	0	302	[2/4	1		- {		7	4	1-	7平	91	7 2	0/3/2	3	3	1.3	5	
Dof Texa Phone: 432-563-1800 Fax: 432-663-1713	Stewart	RC05	,	Evergreen	43			1		MW-2	E-MW-3	NW 1	NW-S	36-6	3 3	E 2	∑ َ	アンローにあが	المدينة م		77
7 4 4	N		Ó	8	1				DE			-0	ハヒン	3	_1		1 ~	-1		Date	9 late
rom Fax		Kemed	Box	9	E CE	1			FIELD CODE	1510 (14761	1626	1550	1045	5000	3/2	1137	2	2 2	12	704 Date
CO Z	2	Š		3	JO 100			İ	<u>פ</u> רנ	7	42	3	5	10	5 3	2 2	45	3	یا یا		
ِ لَي		V	20	3	WAm				ti.	16		5	·!.	. –1	- 1	- 0	15	⊸ l	Jack Joice	1	2
	Mike	=		1	200]				29	29	70	7	21	75	16	7/5	16	Z S	17	16
₹.	1				,	1		1		01,		0	101	2	0	0/0	2/5	3	9/2	-1	*5
<u>.</u>	iger:	ame	.622.	/Zip:	No: ure:	1	\	- {	,		40	┰ ┟		y 1.	5		r C	Y.	Send invoice		3
st 65	Aana	N V	\ddr	tate	none ynat			ļ		94	O	<u>"</u>	\supset		_			प्रा			اد
Enveronmentar Lab of Texas 12600 West I-20 East Phone: 432-563-1800 Odessa, Texas 79765 Fax: 432-563-1713	Project Manager:	Company Name	Company Address:	City/State/Zip:	Telephone No: _ Sampler Signature:				(<u>Ş</u> ı	7	20-	-03	20	8	3 1	2	8 3	5	Special Instructions:	1	2
Xas E	roje	Son	edu	່ວັ	Te nple				4602-001	10-	8	7	7	1	1	1	1		וֹ בַּיִּ	The S	\$
Vest.			ő		Sar			1	<i>9</i> ĕ		[1	1				}	nstr	Relinquished tay	Relinquished by:
00 V				•				}	*						}				cial	事ツ	Z Ising
								l	<u> </u>	1 '	1 1	- 1	- 1	1	- 1	1	- 1	- {	١ĕ	∤ 등	∕ 1.≣