1R - 33

# REPORTS

DATE:

3/04- GROWD WATER

# **Remediacon Incorporated**

Geological and Engineering Services mstewart@remediacon.com

June 16, 2004

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

PO Box 302, Evergreen, Colorado 80437

Telephone: 303.674.4370 Facsimile: 720.528.8132

RECEIVED

JUN 18 2004

Oil Conservation Division Environmental Bureau

Re:

March 2004 Quarterly Groundwater Monitoring Summary for the NMG-148C Release, Lea County New Mexico (Unit N, Section 16, Township 19 South Range 37 East)

#### Dear Mr. Weathers:

This letter summarizes the results of March 2004 quarterly groundwater monitoring episode that was completed at the NMG-148C release. The site is located approximately 2 miles north and 0.75 miles east of Monument in Lea County (Figure 1). The affected source materials at this location were removed by Environmental Plus Incorporated (EPI) in January and February 2003. The excavation remains open pending New Mexico Oil Conservation Division approval of the site closure plan. The excavation is fenced, and the original pipeline has been removed.

There are three monitoring wells on the site (Figure 2). Well NMG MW-1 was destroyed during the site remediation activities. Well NMG MW-3 is upgradient (north) of the affected area. Well NMG MW-2 is located in the drainage south of the excavation. Well NMG MW-4 is located directly beneath a leak that was located in the NMG-148C pipeline in January 2003.

#### WELL GAUGING, DEVELOPMENT AND SAMPLING

Wells NMG MW-2, NMG MW-3 and NMG MW-4 were purged and sampled on March 22, 2004. Sampling was completed in the following fashion:

- 1. The depth to water in the three wells was measured;
- 2. The saturated water column data was used to calculate each well's casing volume:
- 3. The wells were then purged using disposable bailers for a minimum of three casing volumes and until the field parameters of temperature, pH and conductivity equilibrated;
- 4. Samples were collected upon equilibration using the disposable bailer; and
- 5. The samples were placed in an ice-filled cooler immediately after collection.
- 6. A duplicate sample was collected from well NMG MW-2.
- 7. The samples remained in the cooler until they were delivered directly to Environmental Labs of Texas in Midland Texas for analysis for benzene, toluene, ethylbenzene and xylenes (BTEX). The well development forms and laboratory report are included as Attachment A.

Mr. Stephen Weathers June 16, 2004 Page 2

Two grab samples were also collected from the excavation. The samples were collected from the northeast and southwest corners.

The March 2004 and the historical water-table elevations are summarized in Table 2. The data shows that groundwater has a southerly flow component because the heads decline southward from MW-3 to MW-2 and then to MW-4.

Hydrographs for the three wells are included in Figure 3. The hydrographs indicate a continuing groundwater decline in all three wells since measurements began in February 2003. The declines are consistent for the three wells indicating that an equilibrated system is present.

The BTEX concentrations are summarized in Table 3. The BTEX concentrations from the three monitoring wells were all below the 0.001 mg/l method detection limits. The concentrations of the BTEX constituents detected in the two excavation samples declined substantially between December 2003 and March 2004.

The next quarterly monitoring episode will be completed in June 2004. Thank you for allowing me to complete this work. Do not hesitate to contact me if you have any questions or comments on this work plan.

Respectfully Submitted, REMEDIACON INCORPORATED

Mechael H. Stewart

Michael H. Stewart, P.E.

Principal Engineer

**TABLES** 

Table 1 – NMG-148C Well Completion Information

Well	Date Installed	Total Depth	Screened Interval	Sand Interval	Bentonite Interval
NMG MW-2	12/16/02	35	20-35	18-35	3-18
NMG MW-3	2/5/03	37	17-37	15-37	3-15
NMG MW-4	2/5/03	37	17-37	15-37	3-15

All units are feet

MW-1 destroyed during remediation in Jan/Feb 2003

Table 2 – Measured Groundwater Elevations in The NMG-148C Wells

Well	2/7/03	6/2/03	9/23/03	12/15/03	3/22/2004
NMG MW-2	3,617.05	3,617.00	3,616.93	3,616.89	3,616.84
NMG MW-3	3,620.02	3,619.99	3,619.94	3,619.94	3,619.89
NMG MW-4	3,615.77	3,615.71	3,615.64	3,615.57	3,615.52

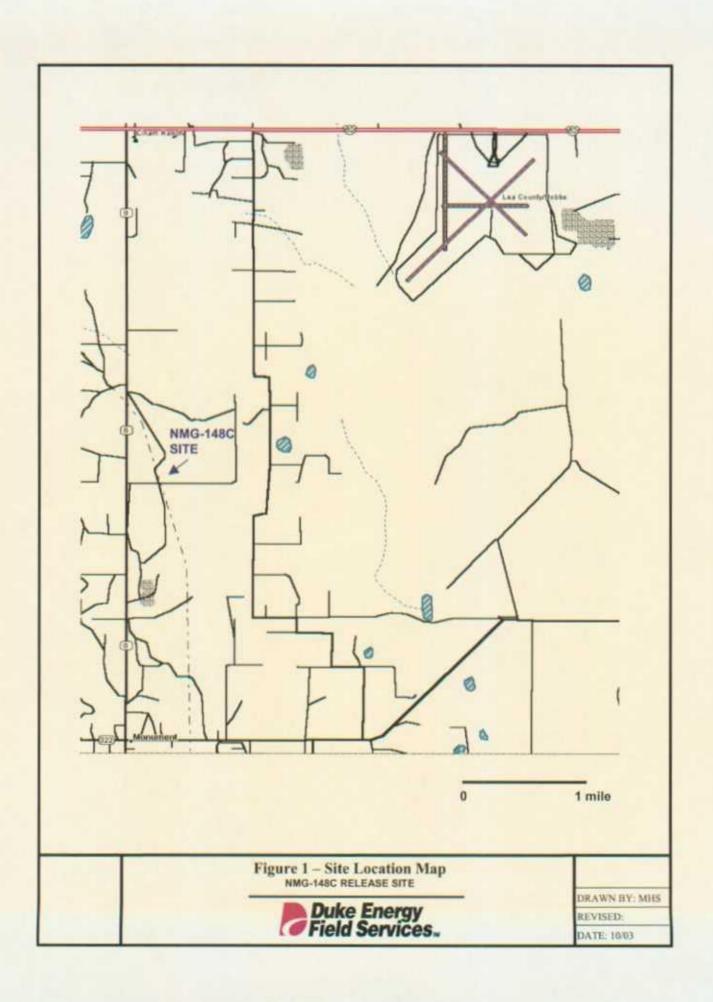
All units are feet

Table 3-Summary of Organic Data from The NMG-148C Study Area Wells

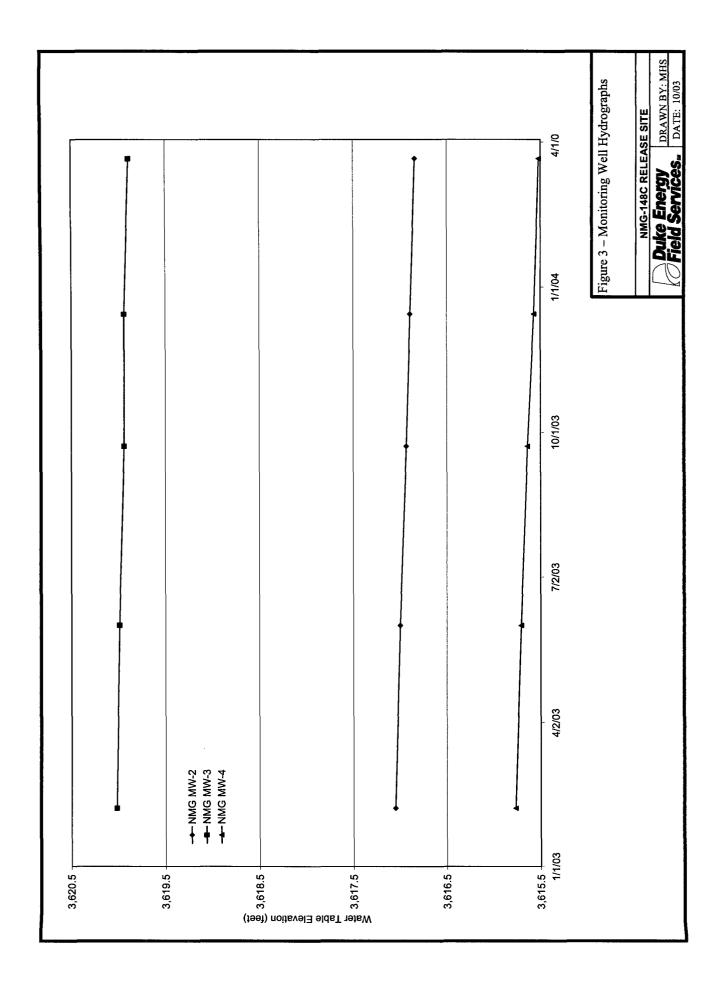
Well	Sampling Date	Benzene	Toluene	Ethylbenzene	Total Xylenes
Excavation	2/14/03	4.25	3.15	1.63	0.463
Excavation (dup)	2/14/03	4.46	3.01	1.54	0.436
Excavation (north)	4/17/03	0.055	0.043	< 0.002	0.003
Excavation (south)	4/17/03	0.048	0.038	<0.002	0.003
Excavation (sw corner)	6/2/03	0.154	0.260	0.039	1.25
Excavation (sw corner)	9/23/03	0.013	0.014	0.001	0.003
Excavation (sw corner)	10/31/03	0.025	0.026	0.002	0.007
Excavation (sw corner)	12/15/03	0.041	0.032	0.002	0.008
Excavation (sw corner)	1/13/04	0.0395	0.0393	0.00146	0.00809
Excavation (sw corner)	1/23/04	0.0531	0.0487	0.00184	0.00854
Excavation (sw corner)	3/22/04	0.011	0.00875	< 0.001	0.0015
Excavation (ne corner)	1/13/04	0.0347	0.0361	0.00140	0.00766
Excavation (ne corner)	1/23/04	0.0301	0.0291	0.00121	0.00627
Excavation (ne corner)	3/22/04	0.00781	0.00640	<0.001	0.00111
NMG MW-2	12/17/02	<0.001	<0.001	<0.001	<0.001
NMG MW-2	6/2/03	< 0.001	<0.001	<0.001	<0.001
NMG MW-2	9/23/03	<0.001	<0.001	<0.001	<0.001_
NMG MW-2	12/15/03	0.034	<0.001	<0.001	<0.001
NMG MW-2 (dup)	12/15/03	<0.001	< 0.001	<0.001	<0.001
NMG MW-2	1/23/04	<0.001	< 0.001	<0.001	< 0.001
NMG MW-2	3/22/04	< 0.001	< 0.001	<0.001	< 0.001
NMG MW-2 (dup)	3/22/04	<0.001	<0.001	<0.001	<0.001
DICONOVO	0/7/02	-0.001	-0.001		-0.001
NMG MW-3	2/7/03	<0.001	<0.001	<0.001	<0.001
NMG MW-3	6/2/03	<0.001	<0.001	<0.001	<0.001
NMG MW-3	9/23/03	<0.001	<0.001	<0.001	<0.001
NMG MW-3	12/15/03	0.002	<0.001	<0.001	<0.001
NMG MW-3	1/23/04	<0.001	<0.001	<0.001	<0.001
NMG MW-3	3/22/04	<0.001	<0.001	<0.001	<0.001
NMG MW-4	2/7/03	<0.001	<0.001	<0.001	<0.001
NMG MW-4	6/2/03	<0.001	<0.001	<0.001	0.001
NMG MW-4	9/23/03	<0.001	<0.001	<0.001	<0.001
NMG MW-4	12/15/03	0.038	<0.001	<0.001	<0.001
NMG MW-4	1/23/04	<0.001	<0.001	<0.001	<0.001
NMG MW-4	3/22/04	<0.001	<0.001	<0.001	<0.001
All units mg/l	J, 22, U-T	-0.001	-0.001	-0.001	-0.001

All units mg/l

**FIGURES** 







# ATTACHMENT A

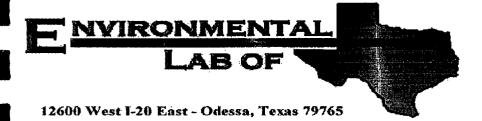
MARCH 2004 SAMPLING FORMS AND ANALYTICAL RESULTS

	CLIENT:	Duke E	nergy Field Se	ervices		WELL ID:	MW-2
SI	TE NAME:	NMC	9 148C			DATE:	3/22/2004
PRO	JECT NO.		F-109			SAMPLER:	D. Littlejohn
PURGING	METHOD:		☑ Hand Bai	led 🗌 Pu	mp If Pui	тр, Туре:	
SAMPLIN	G METHOD	<b>)</b> :	☑ Disposab	le Bailer [	Direct 1	from Discha	arge Hose Other:
DESCRIB	E EQUIPM	ENT DECO	NTAMINATI	ON METHO	OD BEFO	RE PURGI	NG & SAMPLING THE WELL:
☑ Glove:	s 🗌 Alcono	x 🗌 Distill	ed Water Ri	nse 🗌 C	Other:		
DISPOSA	L METHOD	OF PURG	E WATER:	☐ Surface	e Discharç	ge □Drur	ms 🗹 Disposal Facility
DEPTH TO	O WATER:		37.75 30.06	Feet			
		COLUMN: 2.0	7.69	Feet		3.8	Minimum Gallons to purge 3 well volumes
WELL DIA	NVIL I LIX.		IIIOII				(Water Column Height x 0.49)
TIME	VOLUME PURGED		COND. mS/cm	рН	DO ppm	Turb	PHYSICAL APPEARANCE AND REMARKS
17:00	0	_	<u>-</u>	-	_	-	Began Hand Bailing!
17:05	2	65.4	0.500	7.10	6.9	-	
17:12	4	65.7	0.510	7.10	6.7	-	
17:18	6	65.6	0.510	7.10	6.7	-	
		_		-			
_		_					
		_					
_						<u> </u>	
_							
0:18	:Total Time	e (hr:min)	6	:Total Vol	(gal)	0.33	:Flow Rate (gal/min)
SAMP	LE NO.:	Collected S	Sample No.:	040322	1725	_	
ANAL	YSES:	BTEX (802	1-B)				
COM	MENTS:	Collected [	Ouplicate Sa	mple No.:	04032220	000 for BTE	X (8021-B)

	CLIENT:	Duke E	nergy Field S	ervices	-	WELL ID:	MW-3
SI	TE NAME:	NMC	3 148C	<u> </u>	_	DATE:	3/22/2004
PRO	JECT NO.		F-109		<u>.</u> :	SAMPLER:	D. Littlejohn
PURGING	METHOD:	:	☑ Hand Bai	led 🗌 Pu	mp If Pu	mp, Type:	
SAMPLIN	G METHOD	<b>D</b> :	☑ Disposab	le Bailer [	Direct	from Discha	arge Hose
DESCRIB	E EQUIPM	ENT DECO	NTAMINATI	ON METH	OD BEFC	RE PURGI	NG & SAMPLING THE WELL:
☑ Glove:	s 🗌 Alcono	x Distill	led Water Ri	nse 🗌 (	Other:		
DISPOSA	L METHOD	OF PURG	E WATER:	Surface	e Dischar	ge 🗌 Drur	ms 🗹 Disposal Facility
TOTAL DI	EPTH OF WO	VELL:	39.40 29.91	Feet Feet			
			9.49			4.6	Minimum Gallons to
WELL DIA	METER:	2.0	Inch				purge 3 well volumes (Water Column Height x 0.49)
TIME	VOLUME PURGED		COND. mS/cm	рН	DO mg/L	Turb	PHYSICAL APPEARANCE AND REMARKS
16:15	0	1	-	-	-	-	Begin Hand Bailing
16:24	2	65.5	0.630	6.87	6.9	-	
16:30	4	64.2	0.630	6.95	6.8	-	
16:36	6	64.8	0.590	7.02	7.2	-	
16:41	7	64.8	0.620	7.00	6.8	_	
		<u>.</u>					
0:26	:Total Time	l e (hr:min)	7	:Total Vol	<u>l                                    </u>	0.27	:Flow Rate (gal/min)
SAMP			Sample No.:	040322			
ANAL	YSES:	BTEX (802	1-B)				
COMN	MENTS:		***************************************				

	CLIENT:	Duke E	nergy Field S	ervices	_	WELL ID:	MW-4
Si	TE NAME:	NMC	3 148C		_	DATE:	3/22/2004
PRO	JECT NO.		F-109		_ ;	SAMPLER:	D. Littlejohn
PURGING	METHOD:		☑ Hand Bai	led 🗌 Pu	mp If Pu	mp, Type:	
SAMPLIN	G METHOD	<b>)</b> :	☑ Disposab	le Bailer [	Direct	from Discha	arge Hose
DESCRIB	E EQUIPMI	ENT DECO	NTAMINATI	ON METH	OD BEFO	RE PURGI	NG & SAMPLING THE WELL:
☑ Gloves	s 🗹 Alcono	x Distill	ed Water Ri	nse 🗌 C	Other:		
DISPOSA	L METHOD	OF PURG	E WATER:	☐ Surface	e Discharç	ge 🗌 Drur	ms 🗹 Disposal Facility
DEPTH TO	O WATER:		37.92 30.56	Feet			Michael Calle on the
		2.0	7.36 Inch	reet		3.6	Minimum Gallons to purge 3 well volumes
	VOLUME		COND.		I DO	(Water Column Height x 0.49)  PHYSICAL APPEARANCE AND	
TIME	PURGED		m S/cm	pН	DO mg/L	Turb	REMARKS
17:32	-	-	-				Begin Hand Bailing
17:40	2	65.5	0.590	7.15	6.50	-	
17:45	4	64.5	0.580	7.14	6.4	-	
17:51	6	64.0	0.580	7.14	6.4	-	
	_						
<u></u>							
					<del>                                     </del>		
0:19	:Total Time	(br:min)	6	:Total Vol	(gal)	0.31	:Flow Rate (gal/min)
	LE NO.:		Sample No.:	040322		0.51	.i low itale (gai/min)
		BTEX (802		V 10022			
	MENTS:		· <del>-</del> /				
2 2.3	· · · <del>- ·</del>						

	CLIENT:	Duke E	nergy Field S	ervices		WELL ID:	Excavation
SI	TE NAME:	NMC	3 148C			DATE:	3/22/2004
PRO	JECT NO.		F-109			SAMPLER:	D. Littlejohn
PURGING	METHOD:		☐ Hand Bai	led 🗌 Pu	mp If Pu	mp, Type:	
SAMPLIN	G METHO	<b>)</b> :	☑ Disposab	le Bailer	Direct 1	from Discha	arge Hose
DESCRIB	E EQUIPM	ENT DECO	NTAMINATI	ON METH	OD BEFO	RE PURGI	NG & SAMPLING THE WELL:
☑ Glove:	s 🗌 Alcono	x 🗌 Distill	led Water Ri	nse 🗌 C	Other:		
DISPOSA	L METHOD	OF PURG	E WATER:	Surface	e Discharç	ge 🗌 Drui	ms Disposal Facility
	EPTH OF V O WATER:			Feet Feet			
HEIGHT (	OF WATER	COLUMN:	0.00			0.0	Minimum Gallons to
WELL DIA	AMETER:	2.0	Inch				purge 3 well volumes (Water Column Height x 0.49)
TIME	VOLUME PURGED		COND. mS/cm	рН	DO mg/L	Turb	PHYSICAL APPEARANCE AND REMARKS
18:10	0	61.8	0.610	8.12	9.2	-	Southwest Corner (SWC)
			_	-	_		Northwest Corner (NWC)
18:25	0_	61.8	0.61	8.27	9.3	-	Northeast Corner (NEC)
		_	-	-	-	-	Southeast Corner (SEC)
	_						
					<u></u>		
	<del>  -</del> -						
				- -			
	_						
0:15	:Total Time	l e (hr:min)	0	:Total Vol	(gal)	0.00	:Flow Rate (gal/min)
SAMP	LE NO.:	Collected S	Sample No.:	040322	1810 (S\	NC) & 040	3221824 (NEC)
ANAL	YSES:	BTEX (802	:1-B)				
COM	MENTS:						



# **Analytical Report**

#### **Prepared for:**

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

Project: Duke Energy Field Services
Project Number: NMG-148C (4 Line)
Location: None Given

Lab Order Number: 4C24003

Report Date: 03/25/04

REMEDIACON Project: Duke Energy Field Services Fax: 720-528-3132
P.O. Box 302 Project Number: NMG-148C (4 Line) Reported:
Evergreen CO, 80437 Project Manager: Michael Stewart 03/25/04 13:56

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
(MW-3) 0403221645	4C24003-01	Water	03/22/04 16:45	03/24/04 08:05
(MW-2) 0403221725	4C24003-02	Water	03/22/04 17:25	03/24/04 08:05
(MW-4) 0403221755	4C24003-03	Water	03/22/04 17:55	03/24/04 08:05
(Pit SWC) 0403221810	4C24003-04	Water	03/22/04 18:10	03/24/04 08:05
(Pit NEC) 0403221825	4C24003-05	Water	03/22/04 18:25	03/24/04 08:05
(Duplicate) 0403222000	4C24003-06	Water	03/22/04 20:00	03/24/04 08:05
Trip Blank	4C24003-07	Water	03/22/04 00:00	03/24/04 08:05

REMEDIACON Project: Duke Energy Field Services Fax: 720-528-8132
P.O. Box 302 Project Number: NMG-148C (4 Line) Reported:
Evergreen CO, 80437 Project Manager: Michael Stewart 03/25/04 13:56

#### Organics by GC Environmental Lab of Texas

		PHALL OUTIL	WHITE A	an or I	C)E40				
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
(MW-3) 0403221645 (4C24003-01)									
Benzene	ND	0.00100	mg/L	1	EC42515	03/24/04	03/24/04	EPA 8021B	
Toluene	ND	0.00100	#	u	U.	π	•		
Ethylbenzene	ND	0.00100	10	H	Ħ	Ħ	"	*	
Xylene (p/m)	ND	0.00100	я	n	et	n	#	u	
Xylene (o)	ND	0.00100	n	*	н	9	U	и	
Surrogate: a,a,a-Trifluorotoluene		82.0 %	80	120					<b></b> -
Surrogate: 4-Bromofluorobenzene		82.5 %	80-	120	~	"	u	"	
(MW-2) 0403221725 (4C24003-02)									
Benzene	ND	0.00100	mg/L	1	EC42515	03/24/04	03/24/04	EPA 8021B	
Toluene	ND	0.00100	n	я	ţi	(f	11	н	
Ethylbenzene	ND	0.00100	**		п	П	*	ŧI	
Xylene (p/m)	ND	0.00100	n	,	п	U	U	ħ	
Xylene (o)	ND	0.00100	IF	þ	•	**	,	u	
Surrogate: a,a,a-Trifluorotoluene		116%	80-	120				n -	
Surrogate: 4-Bromofluorobenzene		93.0 %	80-	120	n	"	н	#	
(MW-4) 0403221755 (4C24003-03)									
Benzene	ND	0.00100	mg/L	1	EC42515	03/24/04	03/24/04	EPA 8021B	
Toluene	ND	0.00100	u	**		41	#	ч	
Ethylbenzene	ND	0.00100	•	#	u	n	"	n	
Xylene (p/m)	ND	0.00100	a	"	*	H	n	11	
Xylene (o)	ND	0.00100	н	ħ	ч	Ħ	U	н	
Surrogate: a,a,a-Trifluorotoluene		96.0 %	80-	120	-11	,,	<del>"</del>		
Surrogate: 4-Bromofluorobenzene		85.0 %	<b>80</b>		"	*	*	"	
(Pit SWC) 0403221810 (4C24003-04)									
Benzene	0.0110	0.00100	mg/L	1	EC42515	03/24/04	03/24/04	EPA 8021B	<del></del> -
Toluene	0.00875	0.00100	u	*	π	p	n	Ħ	
Ethylbenzene	ND	0.00100	Ħ	и	u	#	π	n	
Xylene (p/m)	0.00150	0.00100	u		11	**	и	π	
Xylene (o)	ND	0.00100	п	u	H	#	•	u	
Surrogate: a.a.a-Trifluorotoluene		178 %	80-	120	<del></del>	h		<del></del>	S-C
Surrogate: 4-Bromofluorobenzene		114%	80-		"	<i>n</i>	"	n	_ •

**Environmental Lab of Texas** 

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory.. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Quality Assurance Review

REMEDIACON P.O. Box 302 Evergreen CO, 80437

Project: Duke Energy Field Services Project Number: NMG-148C (4 Line) Project Manager: Michael Stewart

Fax: 720-528-8132 Reported: 03/25/04 13:56

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
(Pit NEC) 0403221825 (4C24003-05)		····				·			
Benzene	0.00781	0.00100	mg/L	1	EC42515	03/24/04	03/24/04	EPA 8021B	
Toluene	0.00640	0.00100	4	Ħ	•			ŧ	
Ethylbenzene	МĎ	0.00100	ø	0	#	u	Ħ	17	
Xylene (p/m)	0.00111	0.00100	n	я	u	#		ţu .	
Xylene (o)	ND	0.00100	,,,	n	*	u	и	n	
Surrogate: a,a,a-Trifluorotoluene		138 %	80-120		н —		<del>n</del>	"	S-04
Surrogate: 4-Bromofluorobenzene		83.0 %	80-1	20	rr	n	"	n.	
(Duplicate) 0403222000 (4C24003-06)									
Benzene	ND	0.00100	mg/L	1	EC42515	03/24/04	03/24/04	EPA 8021B	
Toluene	ND	0.00100	ø	я	н	#	r	**	
Ethylbenzene	ND	0.00100	a	II .	#	u	п	n	
Xylene (p/m)	ND	0.00100	•	п	đ	et	ĸ	er e	
Xylene (o)	ND	0.00100	ti	u	Ħ	ч		•	
Surrogate: a,a,a-Trifluorotoluene		114%	80-1	20	<del></del> ,	<del>''</del>	"		
Surrogate: 4-Bromofluorobenzene		86.5 %	80-1	20	n	n	77	"	
Trip Blank (4C24003-07)									
Benzene	ND	0,00100	mg/L	1	EC42515	03/24/04	03/24/04	EPA 8021B	

Toluene	

11.p 2 (102 1000 01)									
Benzene	ND	0.00100	mg/L	1	EC42515	03/24/04	03/24/04	EPA 8021B	
Toluene	ND	0.00100	ч	"	Ħ	4	*	n	
Ethylbenzene	ND	0.00100	U		**	u	te .	11	
Xylene (p/m)	ND	0.00100	4	18	ıt	11	Ħ	11	
Xylene (o)	ND	0.00100	n	H	*	u	ч	M	
Surrogate: a,a,a-Trifluorotoluene		87.5 %	80-1	20	<del>"</del>	N	<del></del>		
Surrogate: 4-Bromofluorobenzene		91.0 %	80-1.	20	"	,,	Ħ	n	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory.. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

REMEDIACON P.O. Box 302 Evergreen CO, 80437 Project: Duke Energy Field Services

Project Number: NMG-148C (4 Line)
Project Manager: Michael Stewart

Fax: 720-528-8132

Reported: 03/25/04 13:56

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC	RPD	RPD Limit	Notes
	1CSun		- Onto		Testit	701000	, , , , , , , , , , , , , , , , , , ,			. 10003
Batch EC42515 - EPA 5030C (GC)				<del></del>						
Blank (EC42515-BLK1)	Prepared & Analyzed: 03/24/04									
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	ŋ							
Ethylbenzene	ND	0.00100	ļi.							
Xylene (p/m)	ND	0.00100	Ħ							
Xylene (o)	ND	0.00100	u							
Surrogate: a,a,a-Trifluorotoluene	22.3		ug/l	20.0		112	80-120			
Surrogate: 4-Bromofluorobenzene	16.8		n	20.0		84.0	80-120			
LCS (EC42515-BS1)	Prepared & Analyzed: 03/24/04									
Benzene	80.1		ug/l	100		80.1	80-120			
Toluene	82.3		U	100		82.3	80-120			
Ethylbenzene	82.1		0	100		82.1	80-120			
Xylene (p/m)	172		н	200		86.0	80-120			
Xylene (o)	86.6		n	100		86.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	17.1	<del></del>	"	20.0	++v-	85.5	80-120			
Surrogate: 4-Bromofluorobenzene	16.5		"	20.0		<i>82.5</i>	80-120			
Calibration Check (EC42515-CCV1)	Prepared & Analyzed: 03/24/04									
Benzene	80.7	· · · · · · · · · · · · · · · · · · ·	ug/l	100		80.7	80-120			
Toluene	82.0		0	100		82.0	80-120			
Ethylbenzene	83.2		9	100		83.2	80-120			
Xylene (p/m)	169		ti	200		84.5	80-120			
Xylene (o)	86.6			100		86.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	17.0			20.0	<del></del>	85.0	80-120			—
Surrogate: 4-Bromofluorobenzene	18.4		"	20.0		92.0	80-120			
Duplicate (EC42515-DUP1)	So	urce: 4 <b>C24</b> 00	03-04	Prepared	& Analyze	ed: 03/24/	04			
Benzene	0.0100	0.00100	mg/L		0.0110			9.52	20	
Toluene	0.00791	0.00100	u		0.00875			10.1	20	
Ethylbenzene	ND	0.00100	•		ND				20	
Xylene (p/m)	0.00170	0.00100			0.00150			12.5	20	
Xylene (o)	ND	0.00100	*		ND				20	
Surrogate: a,a,a-Trifluorotoluene	29.4		ug/l	20.0	<del></del>	147	80-120			
Surrogate: 4-Bromofluorobenzene	17.4		"	20.0		<i>87.0</i>	80-120			

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory.. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Quality Assurance Review

REMEDIACON	Project:	Duke Energy Field Services	Fax: 720-528-8132
P.O. Box 302	Project Number:	NMG-148C (4 Line)	Reported:
Evergreen CO, 80437	Project Manager:	Michael Stewart	03/25/04 13:56

#### **Notes and Definitions**

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

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** 

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Quality Assurance Review

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