

1R - 427 - 54

REPORTS

DATE:

2-3-2004

EME C-33

~~1R0927-12~~
59

DISCLOSURE REPORT

**RICE OPERATING COMPANY
JUNCTION BOX DISCLOSURE* REPORT**

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
							Length	Width	Depth
EME	C-33	C	33	20S	36E	Lea	Eliminated		

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER Dale Cooper Family Trust OTHER _____

Depth to Groundwater 170 feet NMOCD SITE ASSESSMENT RANKING SCORE: 0

Date Started 7/28/2003 Date Completed 8/1/2003 OCD Witness No

Soil Excavated 64 cubic yards Excavation Length 12 Width 12 Depth 12 feet

Soil Disposed 0 cubic yards Offsite Facility n/a Location n/a

FINAL ANALYTICAL RESULTS: Sample Date 7/28/2003 Sample Depth 12 ft bgs

Procure 5-point composite sample of bottom and 4-point composite sample of sidewalls. TPH, BTEX and Chloride laboratory test results completed by using an approved lab and testing procedures pursuant to NMOCD guidelines.

Sample Location	Benzene mg/kg	Toluene mg/kg	Ethyl Benzene mg/kg	Total Xylenes mg/kg	GRO mg/kg	DRO mg/kg	Chlorides mg/kg
Vertical @ 12 ft	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	691
Soil Bore @ 75 ft	XXX	XXX	XXX	XXX	XXX	XXX	1695

General Description of Remedial Action: This junction box site was delineated with a backhoe and samples were tested regularly for chloride and TPH. A 12 x 12 x 12-ft deep excavation yielded no significant trends of decline of chloride concentrations vertically or laterally. There were no indications of TPH or VOC's and lab results confirmed concentrations well below NMOCD guidelines. The excavation was backfilled with the excavated soil. A soil bore was initiated on 1/13/2004 to determine the vertical extent of chloride impact. The bore was advanced to 75 ft BGS and still no conclusive trend of declination was observed (see graph) The bore hole was backfilled with the drill cuttings and an identification plate was secured to the surface for further assessment in the future. This junction will be eliminated with a line replacement in 2004.

CHLORIDE FIELD TESTS

LOCATION	DEPTH (ft)	ppm
Vertical	8	300
	10	300
	12	400
7 ft East	10	1700
5 ft North	10	500
5 ft West	10	700
7 ft South	10	5500
Soil Bore	20	6621
	50	2790
	75	1501

ADDITIONAL EVALUATION IS LOW PRIORITY.

enclosures: lab results, photos, chloride graphs, bore log

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DATE 2/3/2004 PRINTED NAME Kristin Farris

SIGNATURE *Kristin Farris* TITLE Project Scientist

*** This site is a "DISCLOSURE." It will be placed on a prioritized list of similar sites for further consideration.**

EME jct. C-33



Undisturbed Junction Box 7/25/2003



Excavation July 2003



Delineation Soil Bore 1/13/2004



Backfilled to the pipeline 8/1/2003

CHLORIDE CONCENTRATION CURVE

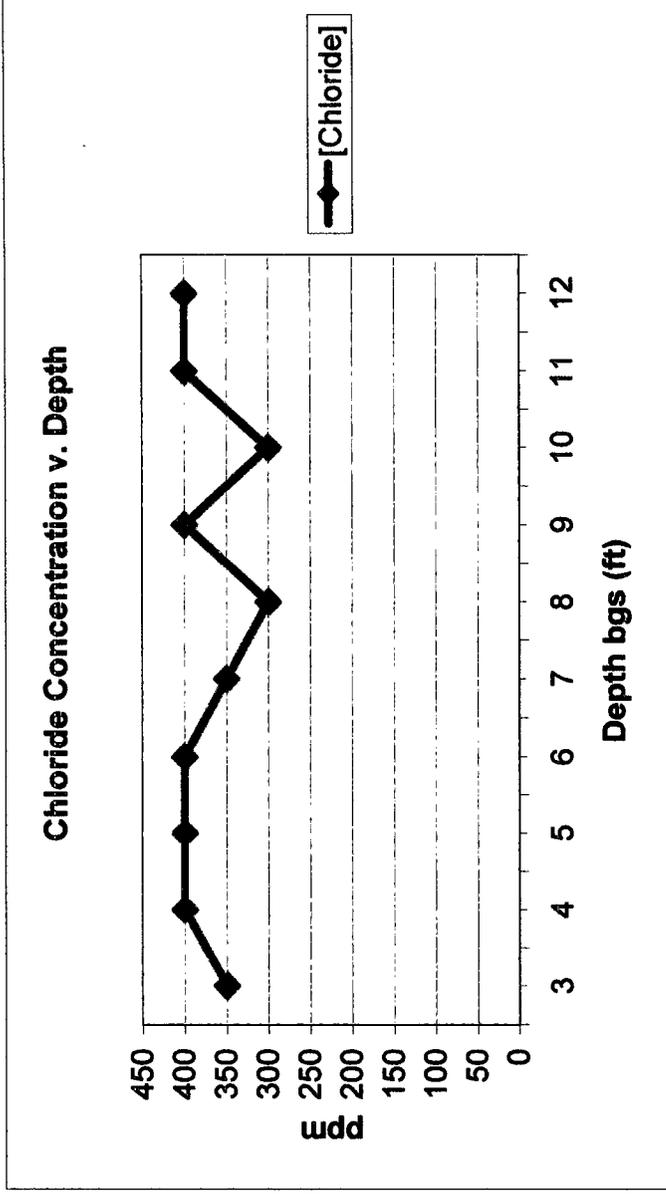
RICE Operating Company

EME jct. C-33

T20S, R36E

Vertical delineation with backhoe at jct.

Depth bgs (ft)	[Cl ⁻] ppm
3	350
4	400
5	400
6	400
7	350
8	300
9	400
10	300
11	400
12	400



Groundwater = 170 ft

SOIL BORE LOG

K. Farris
RICE Operating Company

Logger:	Joe Gatts; Mort Bates	Client:	RICE Operating Company	SB-1
Driller:	Atkins Engineering Associates, Inc.	Project Name:	jct. C-33	
Drilling Method:	Hollow Stem Auger	Location:	EME SWD System	
Start Date:	1/13/2004		Sec. 33, T20S, R36E	
End Date:	1/13/2004		Lea County, NM	
Notes:	Approximately 10 ft South of junction TD = 75 ft Groundwater = 170 ft			

Depth (feet)	Split Spoon		Description	Lithology	Additional Notes
	chloride	PID			
0.0			0-4 ft Silty Sand w/Broken Caliche: loose, reddish brown, dry		bore hole was backfilled with drill cuttings
5.0			4-8 ft Caliche: firm, tan, dry		
10.0			8-40 ft Silty Fine Sand: loose, tan dry		
15.0	5953	no			
		odor			
20.0	6621	no			
		odor			
25.0					
30.0	5707	no	40-45 ft Well-graded Sand: loose, tan, damp		
		odor			
35.0			45-50 ft Silty Broken Sandstone: firm, tan, dry		
40.0	970	no			
		odor			
45.0	712	no	50-75 ft Well-graded Sand: loose, tan, damp		
		odor			
50.0	2790	no			
		odor			
55.0					
60.0	1748	no			
		odor	lab = 1695 ppm Cl ⁻		
65.0	2440	no			
		odor			
70.0					
75.0	1501	no			
		odor			

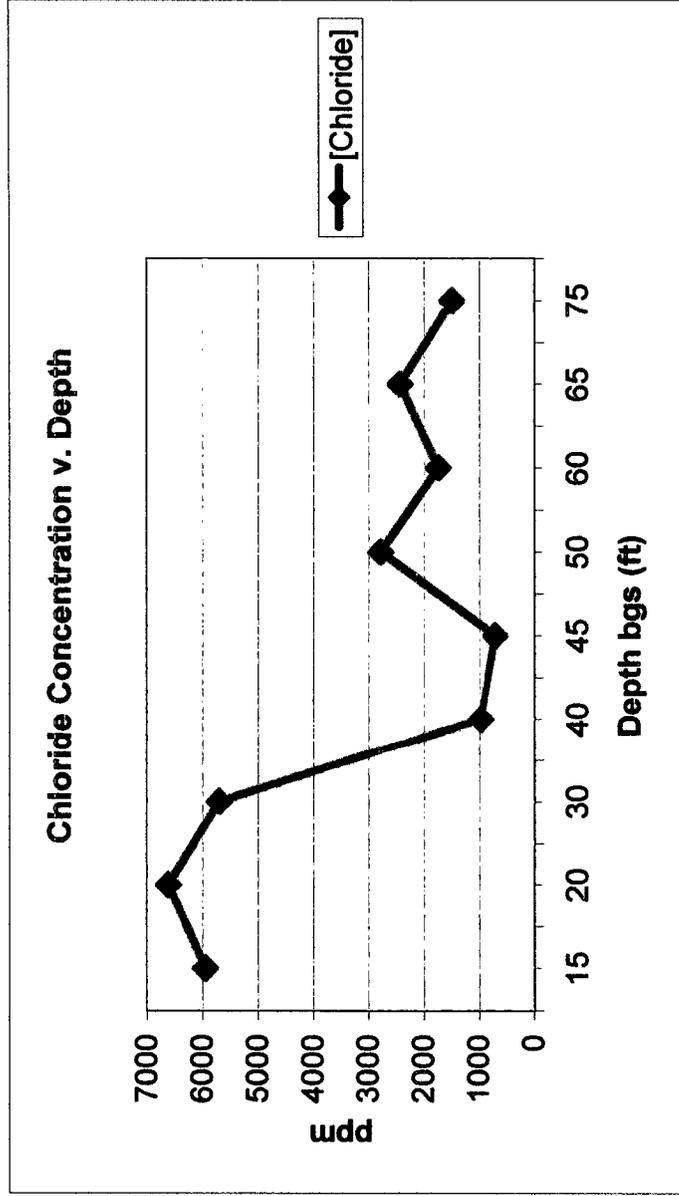
EME jct. C-33

T20S, R36E

SOIL BORE 10 ft SOUTH OF JCT.

Depth bgs (ft)	[Cl-] ppm
15	5933
20	6621
30	5707
40	970
45	712
50	2790
60	1748
65	2440
75	1501

Groundwater = 170 ft





ARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
RICE OPERATING CO.
ATTN: KRISTIN FARRIS
122 W. TAYLOR
HOBBS, NM 88240
FAX TO: (505) 397-1471

Receiving Date: 01/14/04
Reporting Date: 01/15/04
Project Number: NOT GIVEN
Project Name: C-33
Project Location: EME

Analysis Date: 01/15/04
Sampling Date: 01/13/04
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: AH

LAB NUMBER	SAMPLE ID	Cl ⁻ (mg/Kg)
H8363-1	SOIL BORE 75' BGS	1695
Quality Control		980
True Value QC		1000
% Recovery		98.0
Relative Percent Difference		3.0

METHOD: Standard Methods	4500-Cl ⁻ B
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Note: Analysis performed on a 1:4 w:v aqueous extract.

Amy Hill
Chemist

1/15/04
Date

PLEASE NOTE: **Liability and Damages.** Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

H8363

ANALYTICAL REPORT

Prepared for:

**Kristin Farris
Rice Operating
122 W. Taylor
Hobbs, NM 88240**

Project: C-33

PO#:

Order#: G0307125

Report Date: 08/04/2003

Certificates

US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

Rice Operating
 122 W. Taylor
 Hobbs, NM 88240
 505-397-1471

Order#: G0307125
 Project:
 Project Name: C-33
 Location: EME

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.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u> <u>Collected</u>	<u>Date / Time</u> <u>Received</u>	<u>Container</u>	<u>Preservative</u>
0307125-01	Vertical 1 @ 12' (Bottom)	SOIL	7/28/03 15:00	8/1/03 8:00	4 oz glass	icc
<u>Lab Testing:</u>		Rejected: No	Temp:	3.0 C		
8015M						
8021B/5030 BTEX						
Chloride						

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Kristin Farris
 Rice Operating
 122 W. Taylor
 Hobbs, NM 88240

Order#: G0307125
 Project:
 Project Name: C-33
 Location: EME

Lab ID: 0307125-01
 Sample ID: Vertical 1 @ 12' (Bottom)

8015M

<u>Method</u>	<u>Date</u>	<u>Date</u>	<u>Sample</u>	<u>Dilution</u>	<u>Analyst</u>	<u>Method</u>
Blank	Prepared	Analyzed	Amount	Factor	CK	8015M
		8/1/03	1	1	CK	

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	120%	70	130
1-Chlorooctadecane	89%	70	130

8021B/5030 BTEX

<u>Method</u>	<u>Date</u>	<u>Date</u>	<u>Sample</u>	<u>Dilution</u>	<u>Analyst</u>	<u>Method</u>
Blank	Prepared	Analyzed	Amount	Factor	CK	8021B
0006402-02		8/4/03	1	25	CK	
		11:03				

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Toluene	<0.025	0.025
Ethylbenzene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	88%	80	120
Bromofluorobenzene	84%	80	120

Approval: 
 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.

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Kristin Farris
 Rice Operating
 122 W. Taylor
 Hobbs, NM 88240

Order#: G0307125
 Project:
 Project Name: C-33
 Location: EME

Lab ID: 0307125-01
 Sample ID: Vertical 1 @ 12' (Bottom)

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	691	mg/kg	1	20	9253	8/4/03	CK

Approval: Coley D. Keene 08/05/03
 Raland K. Tuttle, Lab Director, QA Officer
 Coley D. Keene, Org. Tech. Director
 Jeanne McMurrey, Inorg. Tech. Director
 Sandra Biezugbe, Lab Tech.
 Sara Molina, Lab Tech.

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0307125

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0006407-02			<10.0		
CONTROL	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0006407-03		952	853	89.6%	
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0307124-02	0	952	1171	123.3%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0307124-02	0	952	1186	124.6%	1.3%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0006407-05		1000	1003	100.3%	

ENVIRONMENTAL LAB OF TEXAS**QUALITY CONTROL REPORT****8021B/5030 BTEX**

Order#: G0307125

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0006402-02			<0.025		
Toluene-mg/kg		0006402-02			<0.025		
Ethylbenzene-mg/kg		0006402-02			<0.025		
p/m-Xylene-mg/kg		0006402-02			<0.025		
o-Xylene-mg/kg		0006402-02			<0.025		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0307124-02	0	0.1	0.084	84.%	
Toluene-mg/kg		0307124-02	0	0.1	0.084	84.%	
Ethylbenzene-mg/kg		0307124-02	0	0.1	0.086	86.%	
p/m-Xylene-mg/kg		0307124-02	0	0.2	0.174	87.%	
o-Xylene-mg/kg		0307124-02	0	0.1	0.087	87.%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0307124-02	0	0.1	0.089	89.%	5.8%
Toluene-mg/kg		0307124-02	0	0.1	0.089	89.%	5.8%
Ethylbenzene-mg/kg		0307124-02	0	0.1	0.090	90.%	4.5%
p/m-Xylene-mg/kg		0307124-02	0	0.2	0.201	100.5%	14.4%
o-Xylene-mg/kg		0307124-02	0	0.1	0.100	100.%	13.9%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0006402-05		0.1	0.091	91.%	
Toluene-mg/kg		0006402-05		0.1	0.091	91.%	
Ethylbenzene-mg/kg		0006402-05		0.1	0.092	92.%	
p/m-Xylene-mg/kg		0006402-05		0.2	0.186	93.%	
o-Xylene-mg/kg		0006402-05		0.1	0.090	90.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0307125

<i>BLANK</i>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0006411-01			<20.0		
<i>CONTROL</i>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0006411-02		5000	4960	99.2%	
<i>CONTROL DUP</i>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0006411-03		5000	4960	99.2%	0.0%
<i>SRM</i>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0006411-04		5000	4870	97.4%	

