

1R - 427 - 56

REPORTS

DATE:

3-15-2002

1R0427-56

FINAL REPORT

**RICE OPERATING COMPANY
JUNCTION BOX FINAL REPORT**

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
EME	M-34	M	34	19S	37E	LEA	Length 12	Width 10	Depth 6

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER _____ COY DOYAL _____ OTHER _____

Depth to Groundwater <50 feet NMOCD SITE ASSESSMENT RANKING SCORE: 20

Date Started 3/1/2002 Date Completed 3/5/2002 OCD Witness NO

Soil Excavated 160 cubic yards Excavation Length 25 Width 20 Depth 9' feet

Soil Disposed 132 cubic yards Offsite Facility J&L LANDFARM Location MONUMENT

FINAL ANALYTICAL RESULTS: Sample Date 3/4/2002 Sample Depth 9'

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
SIDEWALLS	<0.025	<0.025	<0.025	<0.025	<10	22.7	414
BOTTOM	<0.025	<0.025	<0.025	<0.025	<10	42.8	606
Boring @ 35'	<0.025	<0.025	<0.025	<0.025	<10	<10	71

General Description of Remedial Action: Delineated vertical and lateral extent.

CHLORIDE FIELD TESTS

Vertical delineation found TPH clean at 9' bgs. A soil boring found chlorides declined from 950 ppm @ 20' to 71 ppm @ 35' bgs. This demonstrates that impact stopped before reaching groundwater. A compacted clay barrier and water tight junction box was installed and backfilled. High impacted soil was hauled to a permitted disposal facility. Natural attenuation will remediate the remaining hydrocarbon.

LOCATION	DEPTH	mg/kg
SIDEWALLS	8'	300
BOTTOM	9'	500
Vertical Trench	15'	2300
Soil Boring	10'	170
	15'	430
	20'	950
	23'	540
	26'	520
	32'	160
	35'	120

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

DATE March 15, 2002 PRINTED NAME D. E. Anderson
SIGNATURE *D. E. Anderson* TITLE Project Leader - Environmental

DRILLING LOG		Site Name/Location		Well No.		Date Drilled:		Driller:		Logged by:			
RICE Operating Company		Jct. Box M-34		N/A		2/28/02		Eades		F. Root			
122 West Taylor		20-T22S-R37E		Well Depth: N/A		Boring Depth: 35'		Well Material: N/A		Construction:			
Hobbs, New Mexico 88240		Eunice Monument Eumont		Casing Length: N/A		Boring Diameter: 4.5"		Casing Size: N/A		Plugged boring			
Phone: (505) 393-9174		SWD System		Screen Length: N/A		Drilling Method: Air Rotary		Slot Size: N/A		w/ 15' bentonite,			
Fax: (505) 397-1471		Lea County, NM										water & backfill	
TEST													
DEPTH	SUBSURFACE LITHOLOGY	SAMPLE TYPE	(ppm)	REMARKS	Boring								
0	Ground surface		CF										
1	Top Soil												
2	Caliche												
3													
4													
5													
6													
7													
8													
9													
10		Grab	170										
11													
12													
13													
14													
15		Grab	430										
16													
17													
18													
19													
20	Sandstone	Grab	950										
21	Sand												
22													
23		Grab	540										
24													
25													
26		Grab	520										
27													
28													
29													
30		Grab	340										
31	Sandstone												
32	Sand and sandstone stringers	Grab	160										
33													
34													
35		Grab	120										

ANALYTICAL REPORT

Prepared for:

DONNIE ANDERSON
RICE OPERATING CORP.
122 WEST TAYLOR
HOBBS, NM 88242

Project: Jct M-34 box Upgrade
Order#: G0202741
Report Date: 03/07/2002

Certificates

US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

RICE OPERATING CORP.
122 WEST TAYLOR

HOBBS, NM 88242

Order#: G0202741
Project: Soil bore @ 35'
bgs
Project Name: Jct M-34 box Upgrade
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.

Date / Time Date / Time

0202741-01	Soil bore @ 35' bgs	SOIL	3/5/02	4 oz Glass	ice
			17:00		
	<u>Lab Testing:</u>	Rejected: No	Temp:	2C	
	8015M TPH GRO/DRO				
	8021B/5030 BTEX				
	Chloride				

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

DONNIE ANDERSON
RICE OPERATING CORP.
122 WEST TAYLOR
HOBBS, NM 88242

Order#: G0202741
Project: Soil bore @ 35' bgs
Project Name: Jet M-34 box Upgrade
Location: EME

Lab ID: 0202741-01
Sample ID: Soil bore @ 35' bgs

8015M TPH GRO/DRO

Method	Date	Date	Sample	Dilution		
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>	<u>Analyst</u>	<u>Method</u>
0000785-02		3/6/02 13:46	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	<10	10.0
DRO, >C12-C28	<10	10.0

8021B/5030 BTEX

Method	Date	Date	Sample	Dilution		
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>	<u>Analyst</u>	<u>Method</u>
0000783-02		3/6/02 14:12	1	1	CK	8021B

Parameter	Result µg/kg	RL
Benzene	<25	25.0
Ethylbenzene	<25	25.0
Toluene	<25	25.0
p/m-Xylene	<25	25.0
o-Xylene	<25	25.0

Approval:

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

3-07-02

Date

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

DONNIE ANDERSON
RICE OPERATING CORP.
122 WEST TAYLOR
HOBBS, NM 88242

Order#: G0202741
Project: Soil bore @ 35' bgs
Project Name: Jct M-34 box Upgrade
Location: EME

Lab ID: 0202741-01
Sample ID: Soil bore @ 35' bgs

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution</u> <u>Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date</u> <u>Analyzed</u>	<u>Analyst</u>
Chloride	71.0	mg/kg	1	5.0	9253	3/6/02	SB

Approval: Raland K. Tuttle 3-07-02
Raland K. Tuttle, Lab Director, QA Officer
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Irene Perry, QA Assistant
Sandra Biezugbe, Lab Tech.
Curt Cowdrey, Lab Tech.
Sara Molina, Lab Tech.

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M TPH GRO/DRO

Order#: G0202741

BLANK	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/kg	0000785-02			<10		
DRO, >C12-C28-mg/kg	0000785-02			<10		
MS	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/kg	0202740-01	0	476	447	93.9%	
DRO, >C12-C28-mg/kg	0202740-01	0	476	563	118.3%	
MSD	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/kg	0202740-01	0	476	424	89.1%	5.3%
DRO, >C12-C28-mg/kg	0202740-01	0	476	506	106.3%	10.7%
SRM	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/kg	0000785-05		500	441	88.2%	0.0%
DRO, >C12-C28-mg/kg	0000785-05		500	524	104.8%	0.0%

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0202741

BLANK	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg	0000783-02			<25		
Ethylbenzene-µg/kg	0000783-02			<25		
Toluene-µg/kg	0000783-02			<25		
p/m-Xylene-µg/kg	0000783-02			<25		
o-Xylene-µg/kg	0000783-02			<25		
MS	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg	0202728-02	0	100	112	112.0%	
Ethylbenzene-µg/kg	0202728-02	0	100	111	111.0%	
Toluene-µg/kg	0202728-02	0	100	113	113.0%	
p/m-Xylene-µg/kg	0202728-02	0	200	230	115.0%	
o-Xylene-µg/kg	0202728-02	0	100	112	112.0%	
MSD	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg	0202728-02	112	100	113	113.0%	0.9%
Ethylbenzene-µg/kg	0202728-02	111	100	112	112.0%	0.9%
Toluene-µg/kg	0202728-02	113	100	113	113.0%	0.0%
p/m-Xylene-µg/kg	0202728-02	230	200	228	114.0%	0.9%
o-Xylene-µg/kg	0202728-02	112	100	114	114.0%	1.8%
SRM	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg	0000783-05		100	112	112.0%	0.0%
Ethylbenzene-µg/kg	0000783-05		100	111	111.0%	0.0%
Toluene-µg/kg	0000783-05		100	114	114.0%	0.0%
p/m-Xylene-µg/kg	0000783-05		200	229	114.5%	0.0%
o-Xylene-µg/kg	0000783-05		100	112	112.0%	0.0%

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0202741

BLANK	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0000787-01			<5.00		
MS	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0202739-01	248	667	910	99.3%	
MSD	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0202739-01	248	667	922	101.1%	1.3%
SRM	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0000787-04		5000	5050	101.1%	0.1%

12600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

Project Manager: DONNIE ANDERSON

Company Name RICE OPERATING COMPANY

Company Address: 122 W. TAYLOR

City/State/Zip: HOBBS, NEW MEXICO, 88240

Telephone No: (505) 393-9174-

Sampler Signature:

Fax No: (505) 397-1471

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Name: Lot M-34 box Upgrade

Project #: Sailboat @ 35' bgs

Project Loc: EME

PO #:

[illegible]

ANALYTICAL REPORT

Prepared for:

DEREK ROBINSON
RE ENVIRONMENTAL
P.O. BOX 13418
ODESSA, TX 79768

Project: Rice M-34
Order#: G0202728
Report Date: 03/06/2002

Certificates

US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

RE ENVIRONMENTAL
P.O. BOX 13418
ODESSA, TX 79768
366-0804

Order#: G0202728
Project:
Project Name: Rice
Location: M-34

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.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u>	<u>Date / Time</u>	<u>Container</u>	<u>Preservative</u>
			<u>Collected</u>	<u>Received</u>		
0202728-01	5 pt. Bottom Comp. @ 9'	SOIL	03/04/2002	03/05/2002	4 oz glass	Ice
			15:00	8:20		
				Temp: 14.0 C		
	<u>Lab Testing:</u>	Rejected: No				
	8015M TPH GRO/DRO					
	8021B/5030 BTEX					
	Chloride					
0202728-02	4 pt. Wall Comp. @ 8'	SOIL	03/04/2002	03/05/2002	4 oz glass	Ice
			13:00	8:20		
				Temp: 14.0 C		
	<u>Lab Testing:</u>	Rejected: No				
	8015M TPH GRO/DRO					
	8021B/5030 BTEX					
	Chloride					

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

DEREK ROBINSON
RE ENVIRONMENTAL
P.O. BOX 13418
ODESSA, TX 79768

Order#: G0202728
Project:
Project Name: Rice
Location: M-34

Lab ID: 0202728-01
Sample ID: 5 pt. Bottom Comp. @ 9'

8015M TPH GRO/DRO

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
0000776-02		03/05/2002 21:30	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	<10	10.0
DRO, >C12-C28	42.8	10.0

8021B/5030 BTEX

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
0000783-02		03/05/2002 12:09	1	1	CK	8021B

Parameter	Result µg/kg	RL
Benzene	<25	25.0
Ethylbenzene	<25	25.0
Toluene	<25	25.0
p/m-Xylene	<25	25.0
o-Xylene	<25	25.0

Lab ID: 0202728-02
Sample ID: 4 pt. Wall Comp. @ 8'

8015M TPH GRO/DRO

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
0000776-02		03/05/2002 21:42	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	<10	10.0
DRO, >C12-C28	22.7	10.0

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

Page 1 of 2

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

DEREK ROBINSON
RE ENVIRONMENTAL
P.O. BOX 13418
ODESSA, TX 79768

Order#: G0202728
Project:
Project Name: Rice
Location: M-34

Lab ID: 0202728-02
Sample ID: 4 pt. Wall Comp. @ 8'

8021B/5030 BTEX

Method	Date	Date	Sample	Dilution		
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>	<u>Analyst</u>	<u>Method</u>
0000783-02		03/05/102 20:32	1	1	CK	8021B

Parameter	Result µg/kg	RL
Benzene	<25	25.0
Ethylbenzene	<25	25.0
Toluene	<25	25.0
p/m-Xylene	<25	25.0
o-Xylene	<25	25.0

Approval: *Raland K. Tuttle* 3-06-02
Raland K. Tuttle, Lab Director, QA Officer Date
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Irene Perry, QA Assistant
Sandra Biezugbe, Lab Tech.
Curt Cowdrey, Lab Tech.
Sara Molina, Lab Tech.

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

DEREK ROBINSON
RE ENVIRONMENTAL
P.O. BOX 13418
ODESSA, TX 79768

Order#: G0202728
Project:
Project Name: Rice
Location: M-34

Lab ID: 0202728-01
Sample ID: 5 pt. Bottom Comp. @ 9'

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	606	mg/kg	1	5.0	9253	03/05/2002	CC

Lab ID: 0202728-02
Sample ID: 4 pt. Wall Comp. @ 8'

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	414	mg/kg	1	5.0	9253	03/05/2002	CC

Approval: Ral-ck 3-06-02
Raland K. Tuttle, Lab Director, QA Officer Date
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Irene Perry, QA Assistant
Sandra Biezugbe, Lab Tech.
Curt Cowdrey, Lab Tech.
Sara Molina, Lab Tech.

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M TPH GRO/DRO

Order#: G0202728

BLANK	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/kg	0000776-02			<10		
DRO, >C12-C28-mg/kg	0000776-02			<10		
MS	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/kg	0202728-02	0	476	489	102.7%	
DRO, >C12-C28-mg/kg	0202728-02	22.7	476	564	113.7%	
MSD	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/kg	0202728-02	0	476	480	100.8%	1.9%
DRO, >C12-C28-mg/kg	0202728-02	22.7	476	553	111.4%	2.9%
SRM	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/kg	0000776-05		500	452	90.4%	0.9%
DRO, >C12-C28-mg/kg	0000776-05		500	527	105.4%	0.9%

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0202728

BLANK	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg	0000783-02			<25		
Ethylbenzene-µg/kg	0000783-02			<25		
Toluene-µg/kg	0000783-02			<25		
p/m-Xylene-µg/kg	0000783-02			<25		
o-Xylene-µg/kg	0000783-02			<25		
MS	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg	0202728-02	0	100	112	112.0%	
Ethylbenzene-µg/kg	0202728-02	0	100	111	111.0%	
Toluene-µg/kg	0202728-02	0	100	113	113.0%	
p/m-Xylene-µg/kg	0202728-02	0	200	230	115.0%	
o-Xylene-µg/kg	0202728-02	0	100	112	112.0%	
MSD	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg	0202728-02	0	100	113	113.0%	0.9%
Ethylbenzene-µg/kg	0202728-02	0	100	112	112.0%	0.9%
Toluene-µg/kg	0202728-02	0	100	113	113.0%	0.0%
p/m-Xylene-µg/kg	0202728-02	0	200	228	114.0%	0.9%
o-Xylene-µg/kg	0202728-02	0	100	114	114.0%	1.8%
SRM	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg	0000783-05		100	112	112.0%	0.0%
Ethylbenzene-µg/kg	0000783-05		100	111	111.0%	0.0%
Toluene-µg/kg	0000783-05		100	114	114.0%	0.0%
p/m-Xylene-µg/kg	0000783-05		200	229	114.5%	0.0%
o-Xylene-µg/kg	0000783-05		100	112	112.0%	0.0%

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0202728

BLANK	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0000769-01			< 5.0		
CONTROL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0000769-02		5000	5140	102.8%	
MS	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0202723-01	786	625	1396	97.6%	
MSD	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0202723-01	786	625	1374	94.1%	1.6%

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Derek Robinson

Project Manager:

Company Name RE Environmental

Company Name

Company Address:

City/State/Zip:

Telephone No:

Sampler Signature:

Fax No:

Quint Robertson

[illegible]



J & L LANDFARM, INC.

P.O. BOX 356
HOBBS, NEW MEXICO 88241-0356
PHONE (505) 393-9697 • PERMIT # NME-01-0023

0349

Generator/Company RICE OPERATING

Authorized Representative DOANIE ANDERSON

Originating Site M-34 JUNCTION
Sec. 34 19S 37E

Transporter

REE CONSTRUCTION YARDS

Authorized Representative

Don Palmer

Brief Description of Material Non-HAZ soil

Estimated Volume

132 yards

TPH

SEE TEST

BE-TEX

CERTIFICATE OF CHEMICAL ANALYSIS (if required)

N/A

Don Palmer
FACILITY AUTHORIZED REPRESENTATIVE

DATE

MARCH 5 2008

EME M-34 Junction Box Upgrade



Remediation with New Plumbing