

1R - 427-63

**APPROVALS**

**YEAR(S):**

2013

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**Hansen, Edward J., EMNRD**

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**From:** Hansen, Edward J., EMNRD  
**Sent:** Tuesday, March 26, 2013 10:10 AM  
**To:** Hack Conder (hconder@riceswd.com)  
**Cc:** Leking, Geoffrey R, EMNRD; Laura Pena (lpena@riceswd.com); Katie Jones <kjones@riceswd.com> (kjones@riceswd.com); Scott Curtis (scurtis@riceswd.com)  
**Subject:** Remediation Plan (1R427-63) Termination - ROC EME B-32 Site

**RE: Termination Request  
for the Rice Operating Company's  
EME B-32 Site  
Unit Letter B, Section 32, T19S, R37E, NMPM, Lea County, New Mexico  
Remediation Plan (1R427-63) Termination**

Dear Mr. Conder:

The New Mexico Oil Conservation Division (OCD) has received Rice Operating Company's report and request to close the above-referenced site, dated March 8, 2013 (received March 13, 2013). The reports are acceptable to the OCD.

The above-referenced report, submitted in accordance with 19.15.29 NMAC (Rule 29; formally, Rule 116), indicates that Rice Operating Company has met the requirements of 19.15.29 NMAC; therefore, the OCD approves the report and hereby notifies you that the remediation plan (1R427-63) is terminated in accordance with 19.15.29 NMAC.

Please be advised that OCD approval of this report does not relieve the owner/operator of responsibility should operations pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the owner/operator of responsibility for compliance with any OCD, federal, state, or local laws and/or regulations.

If you have any questions regarding this matter, please contact me at 505-476-3489.

Edward J. Hansen  
Hydrologist  
Environmental Bureau

# RICE *Operating Company*

112 West Taylor • Hobbs, New Mexico 88240

Phone: (575) 393-9174 • Fax: (575) 397-1471

CERTIFIED MAIL

RETURN RECEIPT NO. 7007 2560 0000 4569 9279

March 8, 2013

Mr. Edward Hansen  
New Mexico Energy, Minerals, & Natural Resources  
Oil Conservation Division, Environmental Bureau  
1220 S. St. Francis Drive  
Santa Fe, New Mexico 87505

RECEIVED

MAR 13 2013

Oil Conservation Division  
1220 S. St. Francis Drive  
Santa Fe, NM 87505

RE: Termination Request  
EME B-32 (1R427-63): UL/B, Sec. 32, T19S, R37E  
RICE Operating Company – Eunice Monument Eumont SWD System

Mr. Hansen:

Rice Operating Company (ROC) is the service provider (agent) for the EME Saltwater Disposal (SWD) System and has no ownership of any portion of the pipeline, well, or facility. The System is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis.

## Background

In 2002, ROC initiated work on the former B-32 junction box. The site is located in UL/B, Sec. 32, T19S, R37E. NM OSE records indicate that groundwater would likely be encountered at a depth of approximately <50 +/- feet. The site was delineated using a backhoe to collect soil samples at regular intervals, creating a 20x20x8 ft deep excavation. Each sample was field titrated for chlorides, resulting in slightly elevated chloride concentrations. Representative samples were collected from the excavation walls and excavation bottom and sent to a commercial laboratory for analysis. The sidewall sample resulted in a chloride concentration of 595 mg/kg and concentrations of gasoline range organics (GRO) and diesel range organics (DRO) below detectable limits. The bottom composite sample resulted in a chloride concentration of 698 mg/kg and concentrations of GRO and DRO below detectable limits. Both samples were also analyzed for BTEX, resulting in concentrations below detectable limits throughout.

To further investigate the depth of chloride presence, a soil bore was installed on February 28, 2002 to a total depth of 20 ft below ground surface (bgs). Samples were collected every 5 ft and field titrated for chlorides, resulting in concentrations that decreased with depth. The 20 ft sample was sent to a commercial laboratory for analysis,

resulting in a chloride concentration of 22 mg/kg and GRO, DRO and BTEX concentrations below detectable limits.

A total of 108 cubic yards of excavated soil was properly disposed of at a NMOCD facility. A compacted clay liner was installed and the excavation was backfilled with clean imported soil to ground surface and contoured to the surrounding area. The liner would provide a barrier that will inhibit the downward migration of chlorides to groundwater. Vegetation has rebounded at the site, so no re-vegetation efforts are needed. Vegetation above the liner will act as an evapo-transpiration barrier that will also inhibit the downward migration of residual chlorides and hydrocarbons. Plants capture water through their roots and so reduce the amount of water infiltrating below the root zone. A junction box was no longer required at this site.

The junction box site location map, final report, soil bore log, laboratory analysis, disposal manifests and current photodocumentation are attached.

**Recommendations**

Site investigation demonstrates that residual chloride and hydrocarbons in the vadose zone will not with reasonable probability contaminate groundwater in excess of NMOCD standards. This site meets the requirements of the NMOCD-approved Revised Junction Box Upgrade Work Plan (July 16, 2003). As such, ROC request termination of the regulatory file, or similar closure status.

Please contact me at (575)393-9174 if you have any questions or wish to discuss this site. Thank you for your time and consideration.

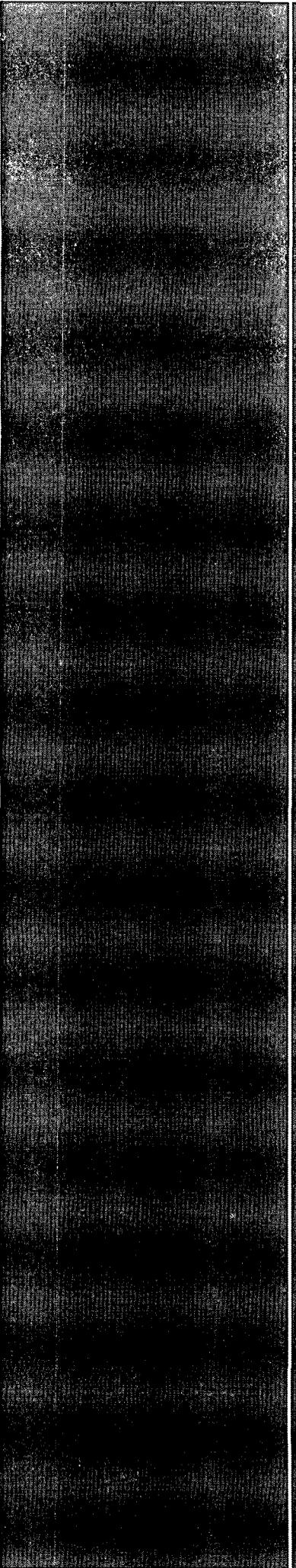
Sincerely,  
RICE Operating Company



Hack Conder  
Environmental Manager

enclosures

RECEIVED OGD  
2003 MAR 13 P 2:21



## Site Location Map

**RICE *Operating Company* (ROC)**  
112 West Taylor Hobbs, NM 88240  
Phone: (575) 393-9174 Fax: (575) 397-1471

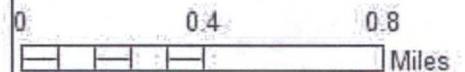
# Site Location Map



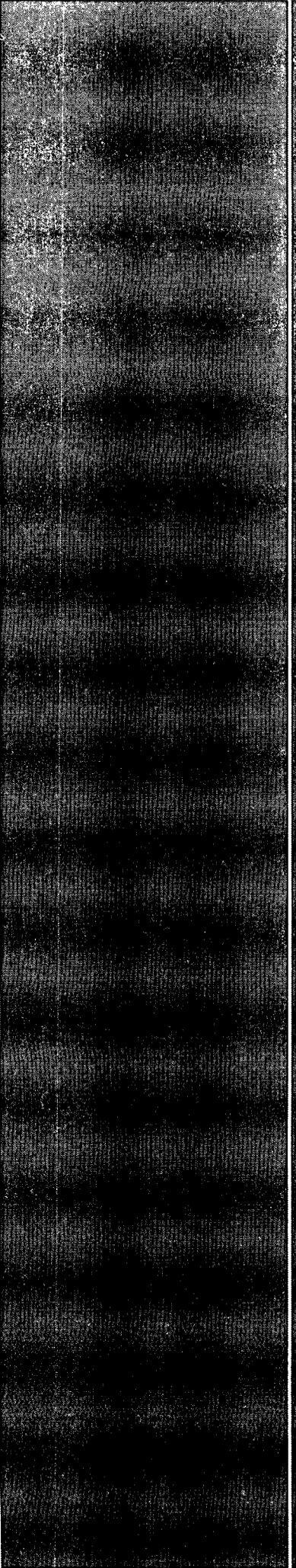
## **EME B-32**

LEGALS: UL/B sec. 32  
T-19-SR-37-E  
LEA COUNTY, NM

NMOCD CASE #: 1R427-63



Drawing date: 3/6/13  
Drafted by: L. Weinheimer



# Junction Box Report

**RICE *Operating Company* (ROC)**  
112 West Taylor Hobbs, NM 88240  
Phone: (575) 393-9174 Fax: (575) 397-1471

**RICE OPERATING COMPANY  
JUNCTION BOX FINAL REPORT**

**BOX LOCATION**

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
							Length	Width	Depth
EME	B-32	B	32	19S	37E	LEA			

LAND TYPE: BLM \_\_\_\_\_ STATE X FEE LANDOWNER \_\_\_\_\_ OTHER \_\_\_\_\_

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

Date Started 2/13/2002 Date Completed 3/12/2002 OCD Witness NO

Soil Excavated 120 cubic yards Excavation Length 20 Width 20 Depth 8 feet

Soil Disposed 108 cubic yards Offsite Facility J & L / Sundance Location MONUMENT/EUNICE, NM

**FINAL ANALYTICAL RESULTS:** Sample Date 3/12/2002 Sample Depth 8'

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	<10	595
BOTTOM	<0.025	<0.025	<0.025	<0.025	<10	<10	698
Boring @20'	<0.025	<0.025	<0.025	<0.025	<10	<10	22

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

At 12' bgs chlorides were 450 ppm. Completed a soil boring on 2/28/02 which demonstrated a drop in chlorides from 770 ppm @ 5' to 100 ppm @ 20' bgs. These results indicate the impact stopped before reaching groundwater. Hauled high impact soil to a permitted disposal facility.

Installed a compacted clay barrier to vertical transmissivity and backfilled with fresh soil. This site is no longer a junction and does not require a box.

**CHLORIDE FIELD TESTS**

LOCATION	DEPTH	mg/kg
SIDEWALLS	7'	600
BOTTOM	8'	650
Soil Boring	5'	770
	10'	340
	15'	90
	20'	100

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

DATE March 22, 2002 PRINTED NAME D. E. Anderson

SIGNATURE *D. E. Anderson* TITLE Project Leader - Environmental

<b>DRILLING LOG</b>		Site Name/Location			Logged by: DEA	
RICE Operating Company 122 West Taylor Hobbs, New Mexico 88240 Phone: (505) 393-9174 Fax (505) 397-1471		Jct. Box B-32 32-T19S-R37E EME SWD System Lea County, NM			Well No: N/A	Date Drilled: 2/26/02
		Well Depth: N/A	Boring Depth: 20'	Driller: Eades	Construction:	
		Casing Length: N/A	Boring Diameter: 4.75"	Well Material: N/A	Plugged boring	
		Screen Length: N/A	Drilling Method: Air Rotary	Casing Size: N/A	w/ 20' bentonite,	
				Slot Size: N/A	water & backfill	

TEST						
DEPTH	SUBSURFACE LITHOLOGY	SAMPLE TYPE	(ppm)	REMARKS	Boring	
0	Ground surface		CF			
1	Topsoil				cuttings	
2	Caliche					
3						
4						
5		Grab	770	Field Test		
6						
7						
8						
9						
10		Grab	340	Field Test		
11						
12						
13						
14	Dry clay and sanstone stringers					
15		Grab	90	Field Test		
16						
17	Sandstone					
18	Sandy clay and sandstone stringers					
19						
20		Grab	100	Field Test		

# ANALYTICAL REPORT

## Prepared for:

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

Project: Rice *B-32*  
Order#: G0202810  
Report Date: 03/19/2002

### Certificates

US EPA Laboratory Code TX00158

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# ENVIRONMENTAL LAB OF TEXAS

## SAMPLE WORK LIST

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

Order#: G0202810  
Project:  
Project Name: Rice  
Location: B-32

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 Collected</u>	<u>Date / Time Received</u>	<u>Container</u>	<u>Preservative</u>
0202810-01	4 pt Wall Comp. @7'	SOIL	03/11/2002 13:00	03/12/2002 16:30	4 oz Glass	ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 22C		
	8015M TPH GRO/DRO					
	8021B/5030 BTEX					
	Chloride					
0202810-02	5 pt. Bottom Comp. @8'	SOIL	03/12/2002 9:00	03/12/2002 16:30	4 oz Glass	ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 22C		
	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#: C0202810  
 Project:  
 Project Name: Rice  
 Location: B-32

Lab ID: 0202810-01  
 Sample ID: 4 pt Wall Comp. @7'

### 8015M TPH GRO/DRO

<u>Method</u> <u>Blank</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Sample</u> <u>Amount</u>	<u>Dilution</u> <u>Factor</u>	<u>Analyst</u>	<u>Method</u>
		03/14/2002 15:13	1	1	CK	8015M

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

### 8021B/5030 BTEX

<u>Method</u> <u>Blank</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Sample</u> <u>Amount</u>	<u>Dilution</u> <u>Factor</u>	<u>Analyst</u>	<u>Method</u>
0000901-02		03/14/2002 17:28	1	1	CK	8021B

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

Lab ID: 0202810-02  
 Sample ID: 5 pt. Bottom Comp. @8'

### 8015M TPH GRO/DRO

<u>Method</u> <u>Blank</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Sample</u> <u>Amount</u>	<u>Dilution</u> <u>Factor</u>	<u>Analyst</u>	<u>Method</u>
		03/14/2002 15:23	1	1	CK	8015M

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

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

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

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

Order#: G0202810  
 Project:  
 Project Name: Rice  
 Location: B-32

Lab ID: 0202810-02  
 Sample ID: 5 pt. Bottom Comp. @8'

### 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
0000901-02		03/14/2002 17:50	1	1	CK	8021B

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

Approval: *Coley Keene*  
 Raland K. Tuttle, Lab Director, QA Officer  
 Coley 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.

*3/19/02*  
 Date

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

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

Order#: G0202810  
Project:  
Project Name: Rice  
Location: B-32

Lab ID: 0202810-01  
Sample ID: 4 pt Wall Comp. @7'

### 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	595	mg/kg	1	10	9253	03/18/2002	SB

Lab ID: 0202810-02  
Sample ID: 5 pt. Bottom 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	698	mg/kg	1	10	9253	03/18/2002	SB

Approval: Cele Keene 3/19/02  
 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#: G0202810

<i><b>BLANK</b></i>	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total C6-C28-mg/kg	0000871-02			<10		
<i><b>MS</b></i>	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total C6-C28-mg/kg	0202809-05	0	952	942	98.9%	
<i><b>MSD</b></i>	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total C6-C28-mg/kg	0202809-05	0	952	940	98.7%	0.2%
<i><b>SRM</b></i>	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total C6-C28-mg/kg	0000871-05		1000	1039	103.9%	0.0%

**ENVIRONMENTAL LAB OF TEXAS****QUALITY CONTROL REPORT****8021B/5030 BTEX****Order#: G0202810**

<b>BLANK</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene- $\mu\text{g}/\text{kg}$	0000901-02			<25.0		
Ethylbenzene- $\mu\text{g}/\text{kg}$	0000901-02			<25.0		
Toluene- $\mu\text{g}/\text{kg}$	0000901-02			<25.0		
p/m-Xylene- $\mu\text{g}/\text{kg}$	0000901-02			<25.0		
o-Xylene- $\mu\text{g}/\text{kg}$	0000901-02			<25.0		
<b>MS</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene- $\mu\text{g}/\text{kg}$	0202807-07	0	100	97.8	97.8%	
Ethylbenzene- $\mu\text{g}/\text{kg}$	0202807-07	0	100	97.9	97.9%	
Toluene- $\mu\text{g}/\text{kg}$	0202807-07	0	100	98.6	98.6%	
p/m-Xylene- $\mu\text{g}/\text{kg}$	0202807-07	0	200	202	101.0%	
o-Xylene- $\mu\text{g}/\text{kg}$	0202807-07	0	100	97.9	97.9%	
<b>MSD</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene- $\mu\text{g}/\text{kg}$	0202807-07	0	100	94.5	94.5%	3.4%
Ethylbenzene- $\mu\text{g}/\text{kg}$	0202807-07	0	100	95.1	95.1%	2.9%
Toluene- $\mu\text{g}/\text{kg}$	0202807-07	0	100	96.2	96.2%	2.5%
p/m-Xylene- $\mu\text{g}/\text{kg}$	0202807-07	0	200	197	98.5%	2.5%
o-Xylene- $\mu\text{g}/\text{kg}$	0202807-07	0	100	95.3	95.3%	2.7%
<b>SRM</b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Benzene- $\mu\text{g}/\text{kg}$	0000901-05		100	113	113.0%	0.0%
Ethylbenzene- $\mu\text{g}/\text{kg}$	0000901-05		100	111	111.0%	0.0%
Toluene- $\mu\text{g}/\text{kg}$	0000901-05		100	114	114.0%	0.0%
p/m-Xylene- $\mu\text{g}/\text{kg}$	0000901-05		200	230	115.0%	0.0%
o-Xylene- $\mu\text{g}/\text{kg}$	0000901-05		100	113	113.0%	0.0%

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

### Test Parameters

Order#: G0202810

<i>BLANK</i>	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0000902-01			<5.00		
<i>CONTROL</i>	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0000902-02		5000	5050	101.1%	
<i>MS</i>	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0202812-01	886	556	1450	101.4%	
<i>MSD</i>	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0202812-01	886	556	1460	103.2%	0.7%



# ANALYTICAL REPORT

## Prepared for:

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

**Project:** Jct B-32 Soil bore box Upgrade

**Order#:** G0202743

**Report Date:** 03/07/2002

### Certificates

US EPA Laboratory Code TX00158

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# ENVIRONMENTAL LAB OF TEXAS

## SAMPLE WORK LIST

RICE OPERATING CORP.  
122 WEST TAYLOR

HOBBS, NM 88242

Order#: G0202743

Project: Soil bore @ 20'  
bgs

Project Name: Jct B-32 Soil bore 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

0202743-01      Soil bore @ 20' bgs      SOIL      3/5/02      4 oz Glass      ice

17:00

Lab Testing:

Rejected: No

Temp: 7C

8015M TPH GRO/DRO

8021B/5030 BTEX

Chloride

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# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

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

Order#: G0202743  
 Project: Soil bore @ 20' bgs  
 Project Name: Jct B-32 Soil bore box Upgrade  
 Location: EME

Lab ID: 0202743-01  
 Sample ID: Soil bore @ 20' bgs

### 8015M TPH GRO/DRO

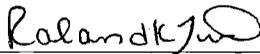
Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
0000785-02		3/6/02 14:21	1	1	CK	8015

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

### 8021B/5030 BTEX

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
0000783-02		3/6/02 16:56	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:  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

## ANALYTICAL REPORT

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

Order#: G0202743  
Project: Soil bore @ 20' bgs  
Project Name: Jct B-32 Soil bore box Upgrade  
Location: EME

Lab ID: 0202743-01  
Sample ID: Soil bore @ 20' 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	22.0	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.

Date

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

8015M TPH GRO/DRO

Order#: G0202743

<b>BLANK</b>	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		
<b>MS</b>	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%	
<b>MSD</b>	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%
<b>SRM</b>	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/kg	0000785-05		500	441	88.2%	0%
DRO, >C12-C28-mg/kg	0000785-05		500	524	104.8%	0%

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0202743

<b>BLANK</b>	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		
<b>MS</b>	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%	
<b>MSD</b>	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%
<b>SRM</b>	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#: G0202743

<b><i>BLANK</i></b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Chloride-mg/kg	0000787-01			<5.00		
<b><i>MS</i></b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Chloride-mg/kg	0202739-01	248	667	910	99.3%	
<b><i>MSD</i></b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Chloride-mg/kg	0202739-01	248	667	922	101.1%	1.3%
<b><i>SRM</i></b>	<b>LAB-ID #</b>	<b>Sample Concentr.</b>	<b>Spike Concentr.</b>	<b>QC Test Result</b>	<b>Pct (%) Recovery</b>	<b>RPD</b>
Chloride-mg/kg	0000787-04		5000	5050	101.1%	0.0%





**J & L LANDFARM, INC.**

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

0201

Generator/Company RICE OPERATING CO.

Authorized Representative DONNIE ANDERSON

Originating Site B-32  
S-32 T 19 S R 37 E

Transporter R/E CONSTRUCTION

Authorized Representative Donnie Anderson

Brief Description of Material NON-HAZ SOIL

Estimated Volume 96 yards

TPH SEE TEST

BE-TEX " "

CERTIFICATE OF CHEMICAL ANALYSIS (if required) N/A

Lee M. Roberts  
FACILITY AUTHORIZED REPRESENTATIVE

March 12 2002  
DATE

**Sundance Services, Inc.**

P.O. Box 1737 ★ Eunice, NM 88231  
(505) 394-2511

№ 48799

LEASE OPERATOR/SHIPPER/COMPANY: Rice

LEASE NAME: E.M.E. SWD

TRANSPORTER COMPANY: DIRT WORK

TIME: \_\_\_\_\_ AM/PM

DATE: 1/3/12

VEHICLE NO.: 101

DRIVER NO.:

CHARGE TO: Rice

TYPE OF MATERIAL S32 T20S R37E

- Production Water
- Tank Bottoms
- Other Material:

- Drilling Fluids
- Contaminated soil
- BS&W Content: \_\_\_\_\_

- Completion Fluids
- C-117 No.: \_\_\_\_\_

Description: CD

SYSTEM EME SWD  
JOB B 32 WELL A5E H716

VOLUME OF MATERIAL [ ] BBLs. \_\_\_\_\_ : [ ] YARD 1/2 : [ ] \_\_\_\_\_

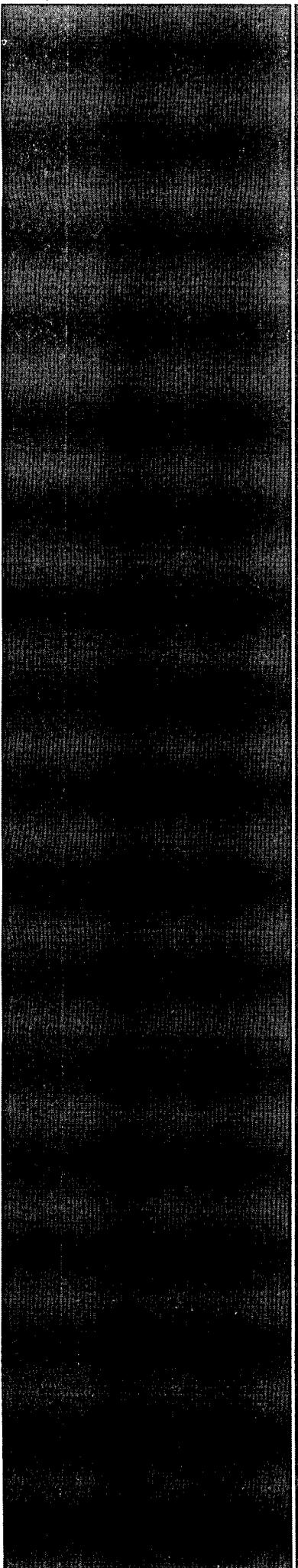
AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, et seq., THE NM HEALTH AND SAF. CODE § 361.001, et seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.

ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL.

*THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident.*

DRIVER: [Signature]  
(SIGNATURE)

FACILITY REPRESENTATIVE: [Signature]  
(SIGNATURE)

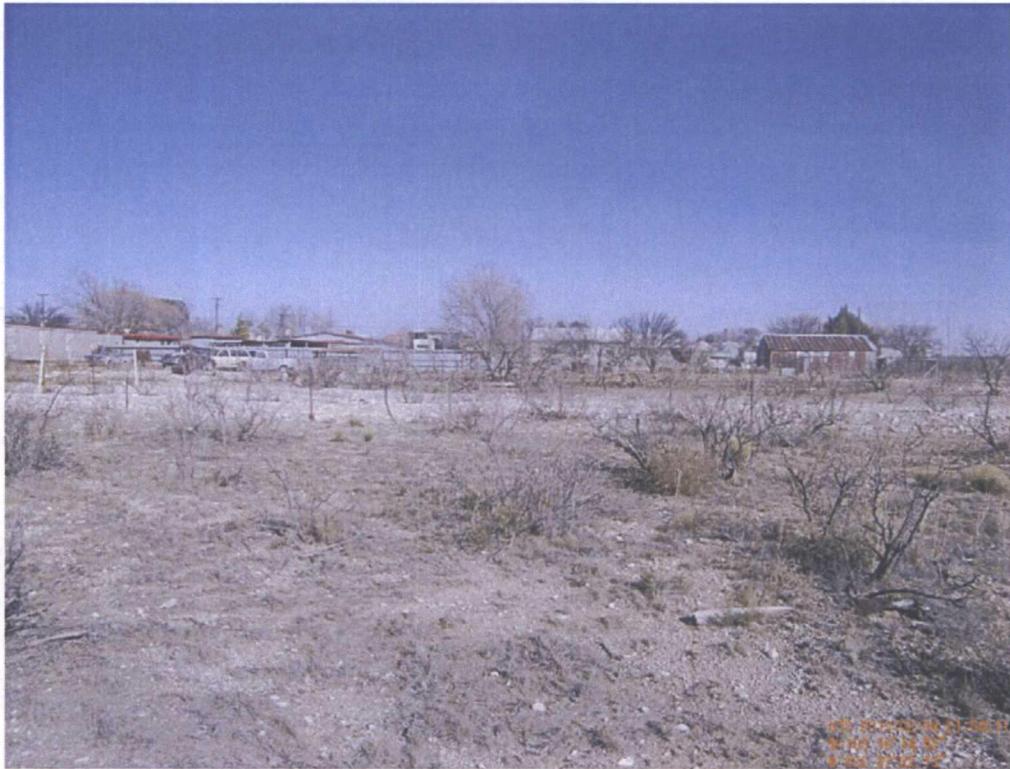


# Current Photodocumentation

**RICE *Operating Company* (ROC)**  
112 West Taylor Hobbs, NM 88240  
Phone: (575) 393-9174 Fax: (575) 397-1471

# EME B-32

UL/B, Section 32, T19S, R37E



Facing east

2/18/2013



Facing west

2/18/2013