

1R - 427-18

**APPROVALS**

**YEAR(S):**

2013

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**Hansen, Edward J., EMNRD**

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**From:** Hansen, Edward J., EMNRD  
**Sent:** Thursday, January 17, 2013 12:44 PM  
**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 (1R427-18) Termination - ROC EME A-8 Boot Site

**RE: Termination Request  
for the Rice Operating Company's  
EME A-8 Boot Site  
Unit Letter A, Section 8, T21S, R36E, NMPM, Lea County, New Mexico  
Remediation Plan (1R427-18) 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 January 11, 2013 (received January 15, 2013). The report is 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 (1R427-18) 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*

122 West Taylor • Hobbs, New Mexico 88240

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

CERTIFIED MAIL

RETURN RECEIPT NO. 7007 2560 0000 4569 8746

**January 11, 2013**

**RECEIVED**

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

**JAN 15 2013**

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

RE: Termination Request  
EME A-8 boot (1R427-18): UL/A Sec. 8, T21S, R36E  
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 2003, ROC initiated work on the former A-8 boot junction box. The site is located in UL/A, Sec. 8, T21S, R36E. NM OSE records indicate that groundwater would likely be encountered at a depth of approximately 200 +/- feet. The site was delineated using a backhoe to collect soil samples at regular intervals, creating a 30x30x11 ft deep excavation. Each sample was field titrated for chlorides and field screened using a PID for hydrocarbons. The excavated soil was blended on site and representative composite samples of the excavation bottom, the excavation walls, and the remediated backfill were sent to a commercial laboratory for analysis of chloride and TPH, resulting in a sidewall chloride concentration of 70.9 mg/kg, a gasoline range organics (GRO) concentration of 26.9 mg/kg and a diesel range organics (DRO) concentration of 495 mg/kg. The bottom composite resulted in chloride concentrations of 585 mg/kg, a GRO concentration of 78.6 mg/kg and a DRO concentration of 767 mg/kg. The remediated backfill resulted in a chloride concentration of 336 mg/kg, a GRO concentration below detectable limits, and a DRO concentration of 144 mg/kg. The remediated backfill sample was also analyzed for BTEX, resulting in a benzene concentration, ethyl benzene concentration and total xylenes concentration below detectable limits and a toluene concentration of 0.007 mg/kg. The remediated backfill was returned to the excavation to ground surface and

contoured to the surrounding area. On 10/15/2003, the site was seeded with a blend of native vegetation and is expected to return to a productive capacity at a normal rate.

The junction box site location map, final report, photo documentation, laboratory analysis and current site photo documentation 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.

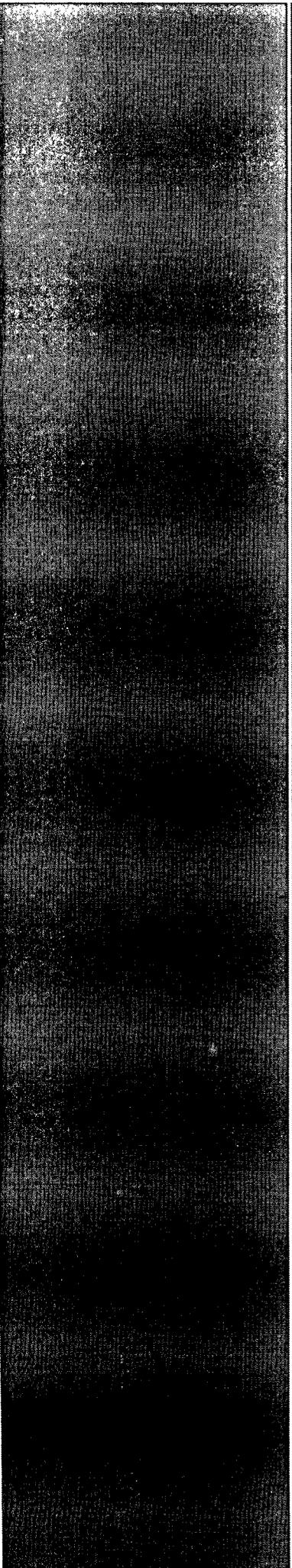
Please contact me at (575) 393-9174 if you have any questions or wish to discuss this site. Thank you for your time and consideration.

Sincerely,  
RICE Operating Company

A handwritten signature in black ink, appearing to read "H. Conder", written over a horizontal line.

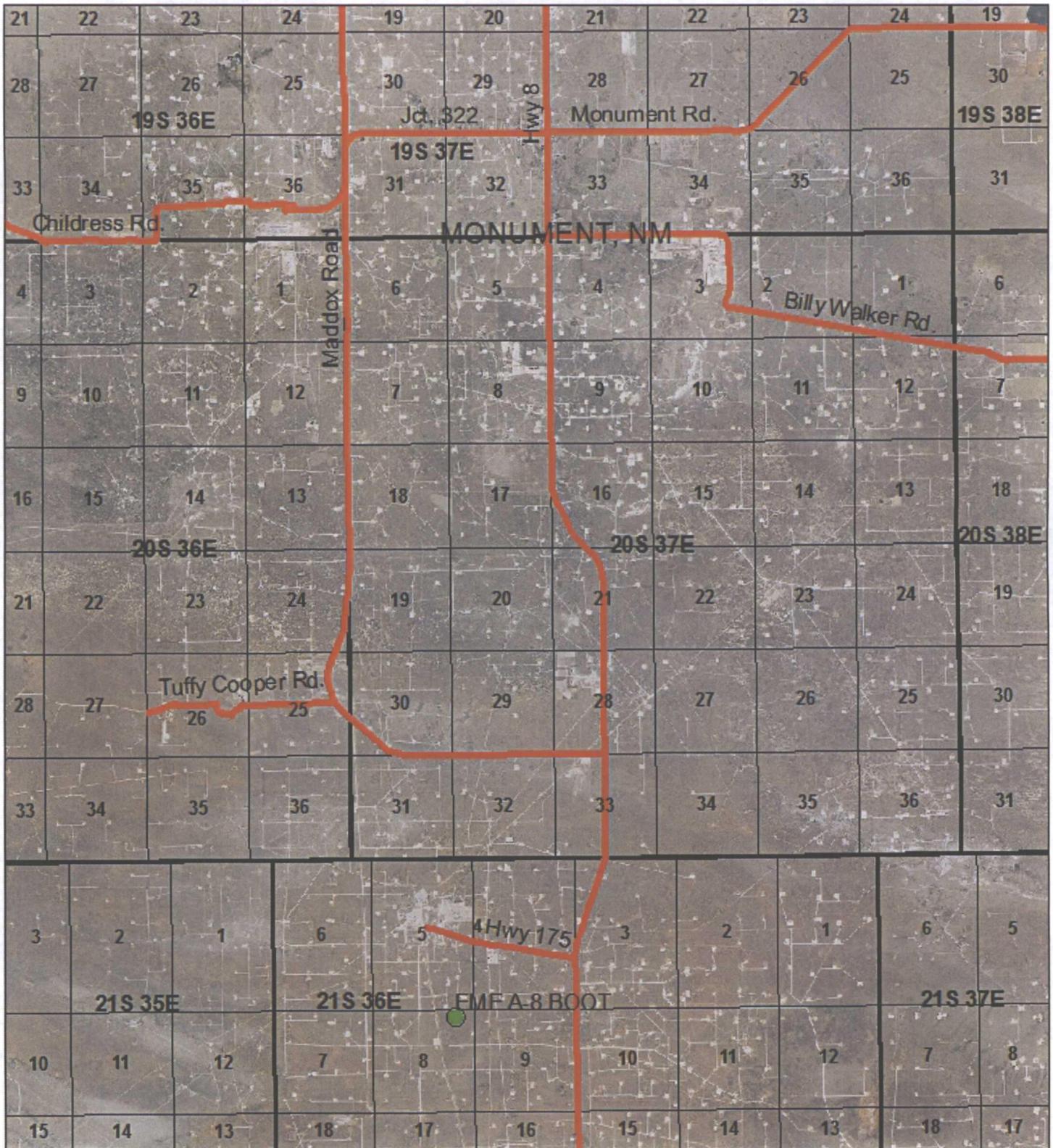
Hack Conder  
Environmental Manager

enclosures



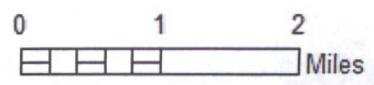
## Site Location Map

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

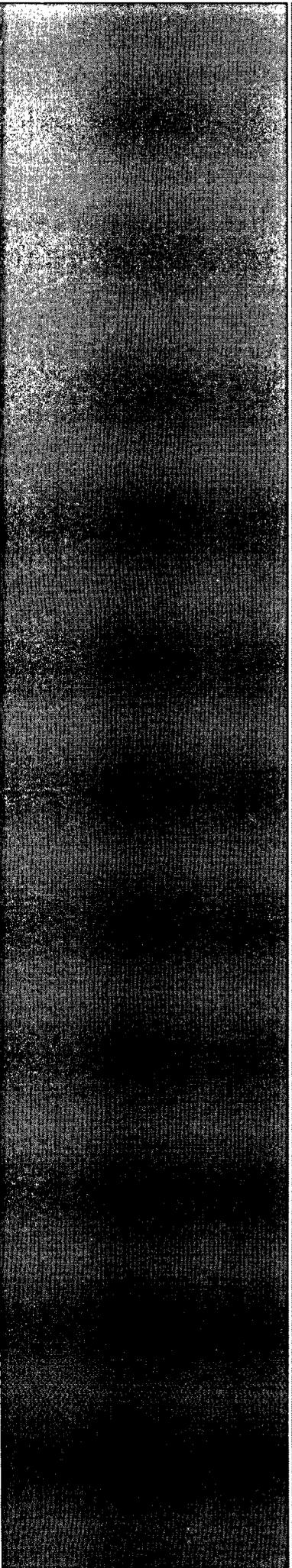


# EME A-8 BOOT

UL A SECTION 8  
 T-21-S R-36-E  
 LEA COUNTY, NM



Drawing date: 12/7/12  
 Drafted by: Tony Grieco



# 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	A-8 boot	A	8	21S	36E	Lea	moved 60 ft west		

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

Depth to Groundwater 200 feet NMOCD SITE ASSESSMENT RANKING SCORE: 0

Date Started 9/2/2003 Date Completed 9/25/2003 OCD Witness No

Soil Excavated 367 cubic yards Excavation Length 30 Width 30 Depth 11 feet

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

**FINAL ANALYTICAL RESULTS:** Sample Date 9/4/2003 Sample Depth 11 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	Chloride mg/kg
REMEDIATED	<0.005	0.007	<0.005	<0.015	<10.0	144	336
SIDEWALLS	PID = 85.3				26.9	495	70.9
BOTTOM	PID = 31.5				78.6	767	585

General Description of Remedial Action: The site was delineated vertically and laterally with a backhoe while chloride tests and PID readings were performed at regular intervals. Chloride concentrations exhibited a vertical and lateral decline. TPH concentrations were well below NMOCD guidelines. Bottom composite and 4-wall composite samples were taken for closure from the final 30 x 30 x 11 ft deep excavation. The excavated soil was blended at the location and then backfilled into the excavation. The disturbed surface area was re-seeded with native vegetation on 10/15/2003 and will be monitored for growth.

**CHLORIDE FIELD TESTS**

LOCATION	DEPTH (ft)	ppm	
vertical @ jct.	7	1113	
	8	664	
	9	834	
	10	685	
	11	577	
	12	565	
	13	434	
	14	367	
	4-wall comp.	n/a	381
	remed. comp.	n/a	374

cc: lab results, chloride graph, photos, PID readings

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

DATE 11/26/2003 PRINTED NAME Kristin Farris

SIGNATURE *Kristin Farris* TITLE Project Scientist

## EME A-8 Boot



Undisturbed Box & Boot Before NORM Removal (2/18/2003)



New Junction Box in Foreground, Moved 60 ft West (Aug. 2003)



30 x 30 x 11-ft-deep Excavation (Sept. 2003)



Seeding Disturbed Surface (10/15/2003)

# ANALYTICAL REPORT

## Prepared for:

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

Project: EME A-8  
PO#:  
Order#: G0307402  
Report Date: 09/09/2003

### Certificates

US EPA Laboratory Code TX00158

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# ENVIRONMENTAL LAB OF TEXAS

## SAMPLE WORK LIST

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

Order#: G0307402  
Project:  
Project Name: EME A-8  
Location: None Given

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>
0307402-01	Bottom Composite	SOIL	9/4/03 14:45	9/8/03 8:00	4 oz glass	ice
	<u>Lab Testing:</u> 8015M Chloride	Rejected: No		Temp: 9.0 C		
0307402-02	4 Wall Composite	SOIL	9/4/03 15:35	9/8/03 8:00	4 oz glass	ice
	<u>Lab Testing:</u> 8015M Chloride	Rejected: No		Temp: 9.0 C		

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# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

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

Order#: G0307402  
Project:  
Project Name: EME A-8  
Location: None Given

Lab ID: 0307402-01  
Sample ID: Bottom Composite

### 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	585	mg/kg	1	20	9253	9/9/03	SB

Lab ID: 0307402-02  
Sample ID: 4 Wall Composite

### 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	70.9	mg/kg	1	20	9253	9/9/03	SB

Approval: Raland K Tuttle 9-09-03  
Raland K. Tuttle, Lab Director, QA Officer Date  
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#: G0307402  
 Project:  
 Project Name: EME A-8  
 Location: None Given

Lab ID: 0307402-01  
 Sample ID: Bottom Composite

**8015M**

<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>
		9/8/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	26.9	10.0
DRO, >C12-C35	495	10.0
TOTAL, C6-C35	522	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	104%	70	130
1-Chlorooctadecane	127%	70	130

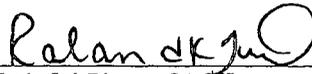
Lab ID: 0307402-02  
 Sample ID: 4 Wall Composite

**8015M**

<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>
		9/8/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	78.6	10.0
DRO, >C12-C35	767	10.0
TOTAL, C6-C35	846	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	117%	70	130
1-Chlorooctadecane	129%	70	130

Approval:  9-10-03  
 Raland K. Tuttle, Lab Director, QA Officer      Date  
 Celey 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#: G0307402

<b>BLANK</b>		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	SOIL						
TOTAL, C6-C35-mg/kg		0006731-02			<25.0		
<b>CONTROL</b>		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	SOIL						
TOTAL, C6-C35-mg/kg		0006731-03		952	1051	110.4%	
<b>CONTROL DUP</b>		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	SOIL						
TOTAL, C6-C35-mg/kg		0006731-04		952	1026	107.8%	2.4%
<b>SRM</b>		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	SOIL						
TOTAL, C6-C35-mg/kg		0006731-05		1000	1032	103.2%	

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

### Test Parameters

Order#: G0307402

<b>BLANK</b>		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	SOIL	0006732-01			<20.0		
<b>MS</b>		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	SOIL	0307402-01	585	500	1064	95.8%	
<b>MSD</b>		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	SOIL	0307402-01	585	500	1080	99.9%	1.5%
<b>SRM</b>		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	SOIL	0006732-04		5000	4960	99.2%	



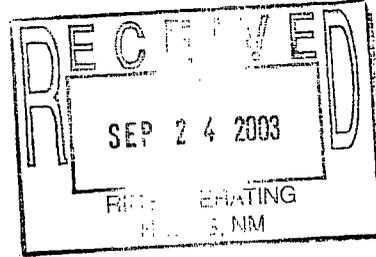


**ARDINAL  
LABORATORIES**

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

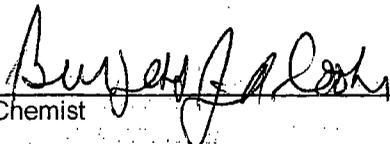


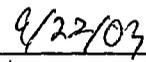
Receiving Date: 09/19/03  
Reporting Date: 09/22/03  
Project Number: NOT GIVEN  
Project Name: EME A-8  
Project Location: LEA CO., NM

Sampling Date: 09/18/03  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: AH  
Analyzed By: BC/AH

LAB NUMBER	SAMPLE ID	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/Kg)	DRO (>C <sub>10</sub> -C <sub>28</sub> ) (mg/Kg)	Cl* (mg/Kg)
ANALYSIS DATE		09/19/03	09/19/03	09/22/03
H8019-1	STOCKPILE COMPOSITE	<10.0	144	336
Quality Control		734	838	980
True Value QC		800	800	1000
% Recovery		91.8	105	98.0
Relative Percent Difference		0.6	7.5	2.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl: Std. Methods 4500-Cl B  
\*Analysis performed on a 1:4 w:v aqueous extract.

  
Chemist

  
Date

H8019A.XLS

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.



**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: 09/19/03  
Reporting Date: 09/22/03  
Project Number: NOT GIVEN  
Project Name: EME A-8  
Project Location: LEA CO., NM

Sampling Date: 09/18/03  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: AH  
Analyzed By: BC/AH

LAB NO.	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
	ANALYSIS DATE	09/19/03	09/19/03	09/19/03	09/19/03
H8019-1	STOCKPILE COMPOSITE	<0.005	0.007	<0.005	<0.015
	Quality Control	0.097	0.096	0.094	0.279
	True Value QC	0.100	0.100	0.100	0.300
	% Recovery	96.6	96.1	93.6	92.9
	Relative Percent Difference	0.8	5.8	6.0	5.7

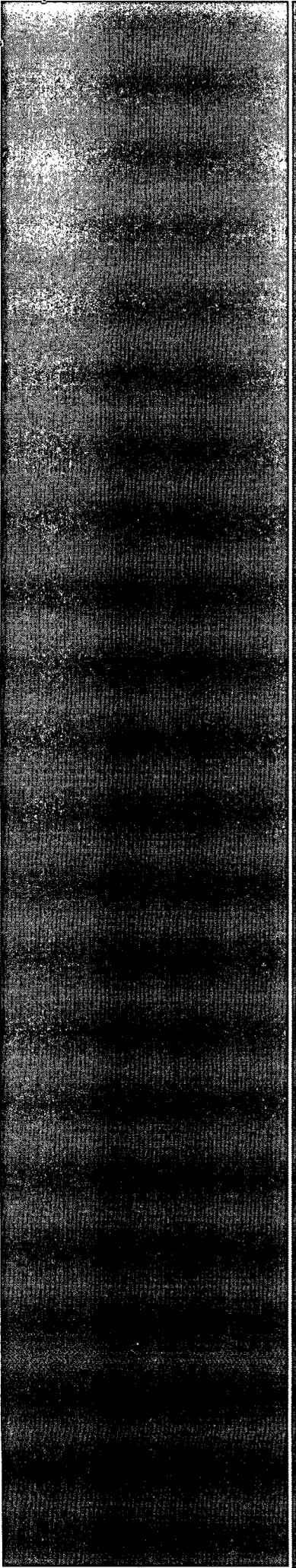
METHOD: EPA SW-846 8260

*Burgess A. Cochrane*  
Chemist

*9/22/03*  
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.





# Current Photodocumentation

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

EME A-8 Boot (1R427-18)  
Unit Letter A, Section 8, T21S, R36E



Facing South

1/8/2013



Facing North

1/8/2013