

1R - 427-18

# REPORTS

DATE:

11-26-2003

EME A-8 boat

IR 977-180

~~18~~  
-18

# FINAL REPORT

**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
REMIEDIATED	<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)

**CHLORIDE CONCENTRATION CURVE**

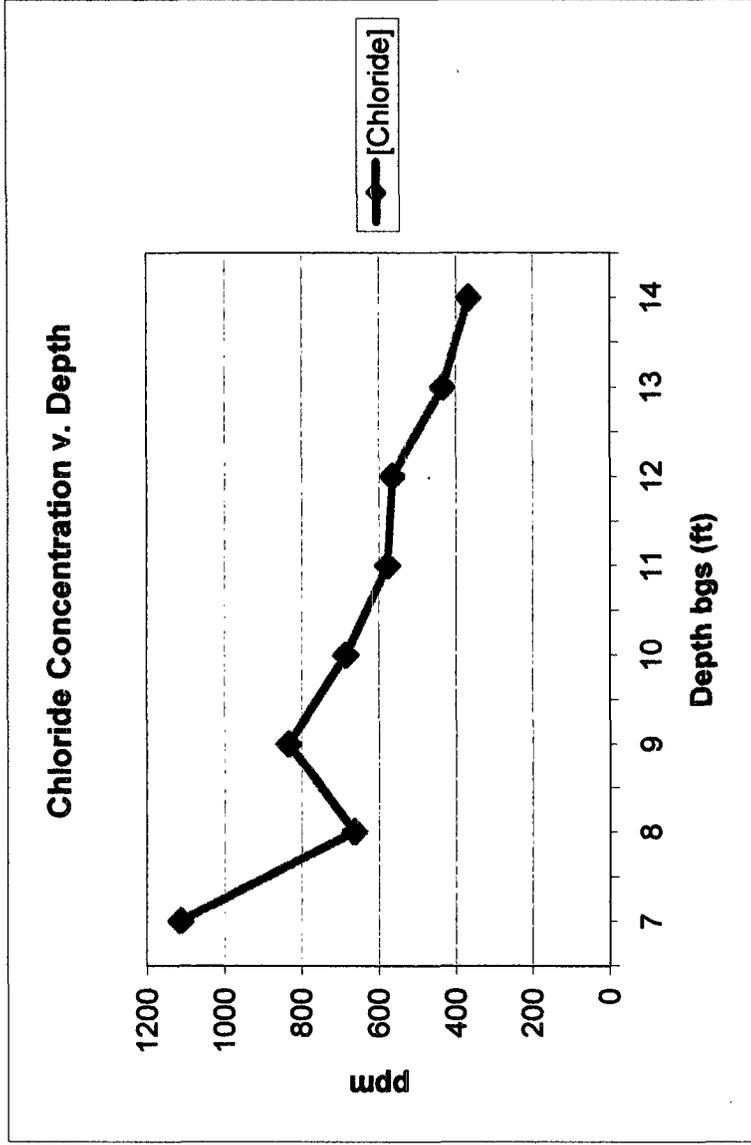
**RICE Operating Company**

**EME A-8 boot**

T21S, R36E

Depth bgs (ft)	[Cl <sup>-</sup> ] ppm
7	1113
8	664
9	834
10	685
11	577
12	565
13	434
14	367

Groundwater = 200 ft



# 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

# 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		

# 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: Raland K Tuttle 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>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0006731-02			<25.0		
<b>CONTROL</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0006731-03		952	1051	110.4%	
<b>CONTROL DUP</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0006731-04		952	1026	107.8%	2.4%
<b>SRM</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
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>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0006732-01			<20.0		
<b>MS</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0307402-01	585	500	1064	95.8%	
<b>MSD</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0307402-01	585	500	1080	99.9%	1.5%
<b>SRM</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0006732-04		5000	4960	99.2%	

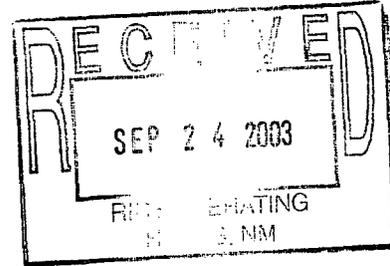




**ARDINAL  
LABORATORIES**

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

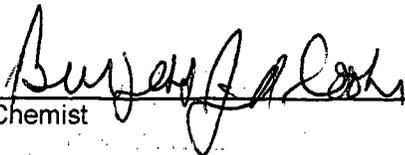
Receiving Date: 09/19/03  
Reporting Date: 09/22/03  
Project Number: NOT GIVEN  
\*Project Name: EME A-8  
Project Location: LEA CO., NM

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	DRO	Cl*
		(C <sub>6</sub> -C <sub>10</sub> ) (mg/Kg)	(>C <sub>10</sub> -C <sub>28</sub> ) (mg/Kg)	(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-ClB

\*Analysis performed on a 1:4 w:v aqueous extract.

  
\_\_\_\_\_  
Chemist

9/22/03  
\_\_\_\_\_  
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.



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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

Bryant A. Cohen  
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.



**ARDINAL LABORATORIES, INC.**  
 2111 Beechwood, Abilene, TX 79603 101 East Marland, Hobbs, NM 88240  
 (915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

Page \_\_\_\_\_ of \_\_\_\_\_

**ANALYSIS REQUEST**

**WILL TO**

Company Name: **RICE Operating Company**  
 Project Manager: **Kristin Farris**

Address: **122 W. Taylor**

City: **Hobbs,**

Phone #: **393-9174**

Project #:

Project Name: **570-KOITE**

Project Location: **See Map**

Sampler Name: **See Map**

P.O. #:

Company: **RICE**

Address:

City:

State: Zip:

Phone #: Fax #:

Fax #:

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV		DATE	TIME	ANALYSIS REQUEST
				GROUNDWATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL			
H8019-1	570-KOITE Composite	<input checked="" type="checkbox"/>	5			<input checked="" type="checkbox"/>						5-18-03	9:15	X BTEX
														X Chl/ide
														X TPAH 8015

**PLEASE NOTE:** Liability and Damages. Cardholder's liability and claims are hereby released to the extent that the sample is analyzed by the analyst for the analysis requested. All claims including those for negligence and any other cause whatsoever shall be deemed waived to the extent that the sample is analyzed by the analyst for the analysis requested. In no event shall Cardholder be liable for incidental or consequential damages, including without limitation, business interruption, loss of time, or loss of profits, however caused, in whole or in part, by the use of this laboratory's services.

Terms and Conditions: Interval will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collection, including attorney's fees.

Sampler Relinquished: Date: Time:

Received By: (Lab Staff) Date: Time:

Relinquished By:

Date: Time:

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

Received By: (Lab Staff) Date: Time:

Sample Condition Cool Intact Yes No

CHECKED BY: (Initials)

Phone Result:  Yes  No

Address: Add'l Phone #: Add'l Fax #:

REMARKS: Fax & copy to Rice

EME A-B

ETGIE RE-Environmental Final Report Jet Box

9-4-03 stock pile blend w/clean some dirt  
420 ppm 5020 TPH 513.2 pid

9-8-03 stock pile blend w/clean some dirt

9-9-03 stock pile blend w/clean some dirt  
420 ppm 4290 TPH 285.7 pid

9-17-03 stock pile blend w/clean some dirt

9-18-03 stock pile blend w/clean some dirt  
374 ppm 2780 TPH 190.9 pid

LAB 336

144

started backfilling 9-24-03

complete backfilling 9-25-03

Landscaping area 9-25-03

Yang Shun

ET6Z  
Gary Stark

Final report Bottom/Four Well composite

SITE EXCAVATION INFORMATION

EME A-8

DATE	DEPTH	CL <sup>585</sup> LAB <del>603</del>	PID	TPH <sup>Tony RE</sup> LAB	SOIL COMPOSITION
9-4-03	Bottom II	630	31.5	416	582 mix
10' N	N. Wall	259	28.5	218	mix
15' S	S. Wall	591	92.3	2090	mix
15'	W. Wall	418	52.8	540	mix
15'	E. Wall	430	39.3	890	mix
4	Wall comp	381 <sup>90.9</sup>	<del>1250</del> <sup>853</sup>	1250	846 mix
9-8-03	stockpile	420	513.2	5020	mix
9-9-03	stockpile	420	285.7	4290	mix

*Gary Stark*