

**1R - 427 - 82**

# **REPORTS**

**DATE:**

**1-9-2003**

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1R0427-82

**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-26	A	26	20 S	36 E	Lea	under construction		

LAND TYPE: BLM \_\_\_\_\_ STATE \_\_\_\_\_ FEE LANDOWNER \_\_\_\_\_ Tuffy Cooper \_\_\_\_\_ OTHER \_\_\_\_\_

Depth to Groundwater \_\_\_\_\_ >100 \_\_\_\_\_ feet NMOCD SITE ASSESSMENT RANKING SCORE: \_\_\_\_\_ 0 \_\_\_\_\_

Date Started \_\_\_\_\_ 12/18/2002 \_\_\_\_\_ Date Completed \_\_\_\_\_ 12/26/2002 \_\_\_\_\_ OCD Witness \_\_\_\_\_ No \_\_\_\_\_

Soil Excavated \_\_\_\_\_ 96 \_\_\_\_\_ cubic yards Excavation Length \_\_\_\_\_ 20 \_\_\_\_\_ Width \_\_\_\_\_ 13 \_\_\_\_\_ Depth \_\_\_\_\_ 10 \_\_\_\_\_ feet

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

**FINAL ANALYTICAL RESULTS:** Sample Date \_\_\_\_\_ 12/23/2002 \_\_\_\_\_ Sample Depth \_\_\_\_\_ 10' 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
SIDEWALLS	<0.025	0.031	0.144	<0.470	75.7	809	1450
BOTTOM	<0.025	0.036	0.065	<0.419	86.5	603	496
REMEDIAED	<0.025	0.075	0.125	<0.701	186	977	532

**General Description of Remedial Action:** This junction contained a boot in the past and is located near a production facility. The area between the junction and the facility is overlaid by hardpan. Vertically, TPH virtually ceased at 10' bgs and chlorides exhibited a decline. The impacted soil below the junction box was excavated until visual TPH diminished. A 20' x 13' x 10' excavation was created where TPH was below guideline concentrations. A clay barrier was installed at the bottom of the excavation at 10' bgs to slow vertical migration of the impact in the future. The excavated soil was then land-farmed on location and backfilled into the excavation. The residual TPH in the backfilled soil is expected to naturally attenuate. The junction has been re-plumbed and a water-tight box has been built over the location.

**CHLORIDE FIELD TESTS**

LOCATION	DEPTH	ppm
Vertical	4'	1482
	8'	1095
	14'	673
10' E	10'	1436
10' W	10'	706
8' S	10'	953
5' N	10'	947
Bottom Comp.	10'	769
Wall Comp.	8'	1809
Remed. Comp.	n/a	641

cc: lab results; diagram

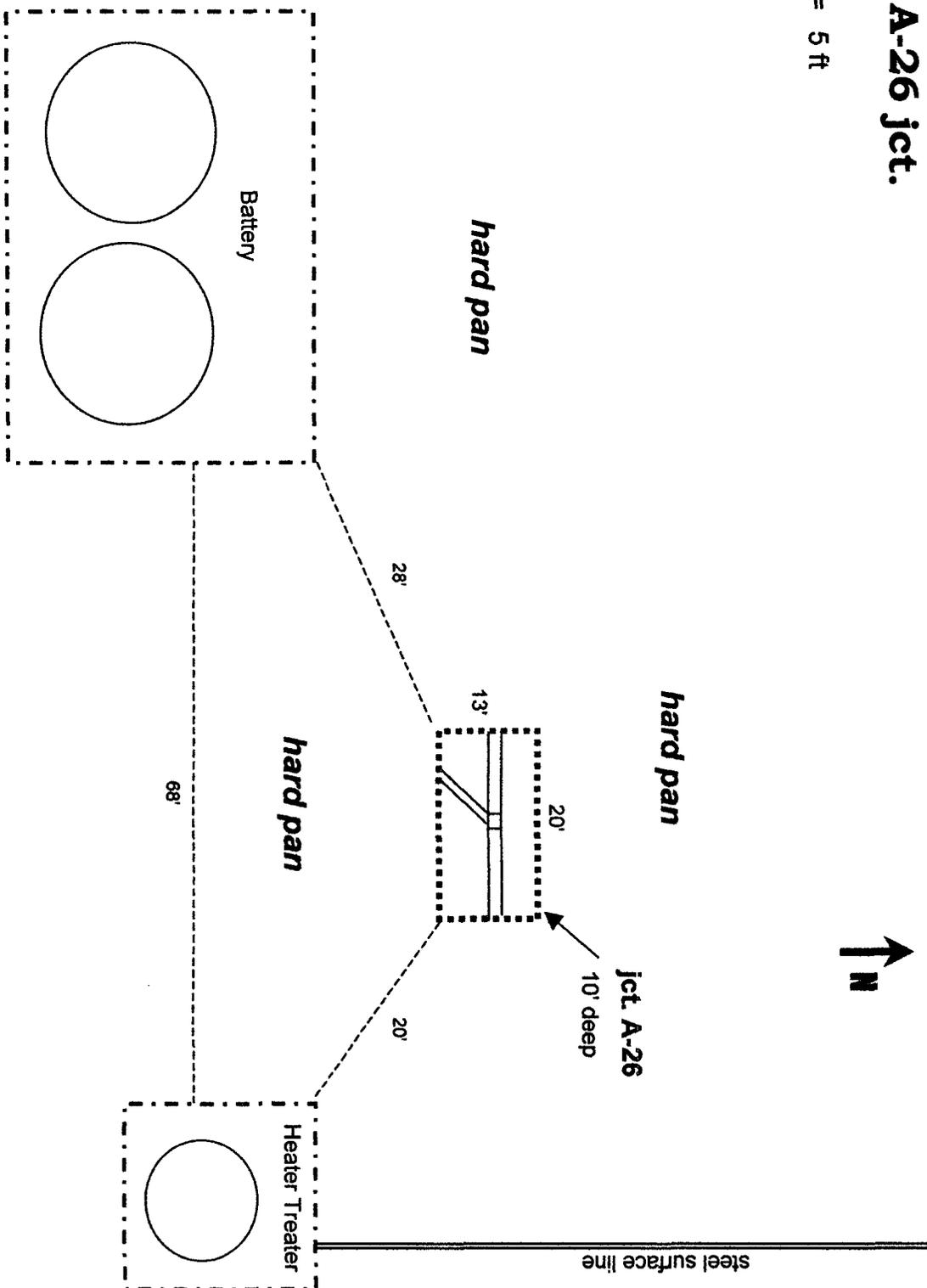
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DATE \_\_\_\_\_ 1/9/2003 \_\_\_\_\_ PRINTED NAME \_\_\_\_\_ Kristin Farris \_\_\_\_\_

SIGNATURE \_\_\_\_\_ *Kristin Farris* \_\_\_\_\_ TITLE \_\_\_\_\_ Projects Scientist \_\_\_\_\_

# EME A-26 jct.

— = 5 ft



R  
O  
A  
D

EME A-26 jct.



NORM Removal



Impact Excavation

# ANALYTICAL REPORT

## Prepared for:

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

**Project:** A-26 Jct.  
**PO#:** 749  
**Order#:** G0205343  
**Report Date:** 12/30/2002

### 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#: G0205343  
Project: EME  
Project Name: A-26 Jct.  
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>
0205343-01	Bottom Comp @ 10'	SOIL	12/23/02	12/27/02 16:40	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M 8021B/5030 BTEX Chloride	Rejected: No		Temp: 3.0 C		
0205343-02	Wall Comp	SOIL	12/23/02	12/27/02 16:40	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M 8021B/5030 BTEX Chloride	Rejected: No		Temp: 3.0 C		
0205343-03	Remediated Comp	SOIL	12/26/02	12/27/02 16:40	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M 8021B/5030 BTEX Chloride	Rejected: No		Temp: 3.0 C		

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

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

Order#: G0205343  
 Project: EME  
 Project Name: A-26 Jct.  
 Location: EME

Lab ID: 0205343-01  
 Sample ID: Bottom Comp @ 10'

### 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
		12/27/02	1	5		

Parameter	Result mg/kg	RL
GRO, C6-C12	86.5	50.0
DRO, >C12-C35	603	50.0
TOTAL, C6-C35	689	50.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	16%	70	130
1-Chlorooctadecane	11%	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
0004209-02		12/30/02 11:14	1	25		

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Toluene	0.036	0.025
Ethylbenzene	0.065	0.025
p/m-Xylene	0.356	0.025
o-Xylene	0.063	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	85%	80	120
Bromofluorobenzene	92%	80	120

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

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

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

Order#: G0205343  
 Project: EME  
 Project Name: A-26 Jct.  
 Location: EME

Lab ID: 0205343-02  
 Sample ID: Wall Comp

### 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
		12/27/02	1	1		

Parameter	Result mg/kg	RL
GRO, C6-C12	75.7	10.0
DRO, >C12-C35	809	10.0
TOTAL, C6-C35	885	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	88%	70	130
1-Chlorooctadecane	71%	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
0004209-02		12/30/02	1	25		
		11:36				

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Toluene	0.031	0.025
Ethylbenzene	0.144	0.025
p/m-Xylene	0.391	0.025
o-Xylene	0.079	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	82%	80	120
Bromofluorobenzene	93%	80	120

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

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

Order#: G0205343  
 Project: EME  
 Project Name: A-26 Jct.  
 Location: EME

Lab ID: 0205343-03  
 Sample ID: Remediated Comp

### 8015M

<u>Method</u>	<u>Date</u>	<u>Date</u>	<u>Sample</u>	<u>Dilution</u>	<u>Analyst</u>	<u>Method</u>
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
		12/27/02	1	5	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	186	50.0
DRO, >C12-C35	977	50.0
TOTAL, C6-C35	1,160	50.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	18%	70	130
1-Chlorooctadecane	13%	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>
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
0004209-02		12/30/02 11:58	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Toluene	0.075	0.025
Ethylbenzene	0.125	0.025
p/m-Xylene	0.597	0.025
o-Xylene	0.104	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	103%	80	120
Bromofluorobenzene	89%	80	120

Approval: *Jeanne McMurrey* 12-30-02  
 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#: G0205343  
Project: EME  
Project Name: A-26 Jct.  
Location: EME

Lab ID: 0205343-01  
Sample ID: Bottom Comp @ 10'

### 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	496	mg/kg	1	20	9253	12/30/02	SB

Lab ID: 0205343-02  
Sample ID: Wall Comp

### 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	1450	mg/kg	1	20	9253	12/30/02	SB

Lab ID: 0205343-03  
Sample ID: Remediated Comp

### 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	532	mg/kg	1	20	9253	12/30/02	SB

Approval: Jeanne McMurrey 12-30-02  
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#: G0205343

<b>BLANK</b>		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	SOIL						
TOTAL, C6-C35-mg/kg		0004207-02			<10.0		
<b>CONTROL</b>		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	SOIL						
TOTAL, C6-C35-mg/kg		0004207-03		952	1220	128.2%	
<b>CONTROL DUP</b>		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	SOIL						
TOTAL, C6-C35-mg/kg		0004207-04		952	1110	116.6%	9.4%
<b>SRM</b>		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	SOIL						
TOTAL, C6-C35-mg/kg		0004207-05		1000	1116	111.6%	

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

**8021B/5030 BTEX**

Order#: G0205343

<b>BLANK</b>		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
SOIL							
Benzene-mg/kg		0004209-02			<0.025		
Toluene-mg/kg		0004209-02			<0.025		
Ethylbenzene-mg/kg		0004209-02			<0.025		
p/m-Xylene-mg/kg		0004209-02			<0.025		
o-Xylene-mg/kg		0004209-02			<0.025		
<b>MS</b>		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
SOIL							
Benzene-mg/kg		0205342-05	0	0.1	0.100	100.0%	
Toluene-mg/kg		0205342-05	0	0.1	0.102	102.0%	
Ethylbenzene-mg/kg		0205342-05	0	0.1	0.104	104.0%	
p/m-Xylene-mg/kg		0205342-05	0	0.2	0.208	104.0%	
o-Xylene-mg/kg		0205342-05	0	0.1	0.097	97.0%	
<b>MSD</b>		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
SOIL							
Benzene-mg/kg		0205342-05	0	0.1	0.106	106.0%	5.8%
Toluene-mg/kg		0205342-05	0	0.1	0.108	108.0%	5.7%
Ethylbenzene-mg/kg		0205342-05	0	0.1	0.112	112.0%	7.4%
p/m-Xylene-mg/kg		0205342-05	0	0.2	0.227	113.5%	8.7%
o-Xylene-mg/kg		0205342-05	0	0.1	0.111	111.0%	13.5%
<b>SRM</b>		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
SOIL							
Benzene-mg/kg		0004209-05		0.1	0.110	110.0%	
Toluene-mg/kg		0004209-05		0.1	0.111	111.0%	
Ethylbenzene-mg/kg		0004209-05		0.1	0.110	110.0%	
p/m-Xylene-mg/kg		0004209-05		0.2	0.219	109.5%	
o-Xylene-mg/kg		0004209-05		0.1	0.104	104.0%	

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

### Test Parameters

Order#: G0205343

<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	SOIL	0004201-01			<20.0		
<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	SOIL	0205342-02	5140	1000	6130	99%	
<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	SOIL	0205342-02	5140	1000	6150	101%	0.3%
<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	SOIL	0004201-04		4960	4960	100%	

# CASE NARRATIVE

## ENVIRONMENTAL LAB OF TEXAS

**Prepared for:**

Rice Operating  
122 W. Taylor  
Hobbs, NM 88240

**Order#:** G0205343

**Project:** A-26 Jct.

The following samples were received as indicated below and on the attached Chain of Custody record. All analyses were performed within the holding time and with acceptable quality control results unless otherwise noted.

SAMPLE ID	LAB ID	MATRIX	Date Collected	Date Received
Bottom Comp @ 10'	0205343-01	SOIL	12/23/2002	12/27/2002
Wall Comp	0205343-02	SOIL	12/23/2002	12/27/2002
Remediated Comp	0205343-03	SOIL	12/26/2002	12/27/2002

**Surrogate recoveries on the 8015M are outside the control limits because they were diluted out.  
(0205343-01,03)**

The enclosed results of analyses are representative of the samples as received by the laboratory. Environmental Lab of Texas makes no representations or certifications as to the methods of sample collection, sample identification, or transportation handling procedures used prior to our receipt of samples. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved By:

*Jeanne McMurry*  
Environmental Lab of Texas I, Ltd.

Date:

12-30-02

