

1R - 427 - 84

REPORTS

DATE:

5-16-2002

1R0 927-84

FINAL REPORT

**RICE OPERATING COMPANY
JUNCTION BOX FINAL REPORT**

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
EME	C-25-A	C	25	20S	36E	LEA	Length 12	Width 10	Depth 4

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER _____ TUFFY COOPER _____ OTHER _____

Depth to Groundwater 68' feet NMOCD SITE ASSESSMENT RANKING SCORE: 10

Date Started 4/30/2002 Date Completed 5/1/2002 OCD Witness NO

Soil Excavated 35 cubic yards Excavation Length 15 Width 15 Depth 5 feet

Soil Disposed 0 cubic yards Offsite Facility _____ Location _____

FINAL ANALYTICAL RESULTS: Sample Date 4/30/2002 Sample Depth 5'

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	46.6	591
BOTTOM	<0.025	<0.025	<0.025	<0.025	<10	45.6	573

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

Found impact below NMOCD TPH guidelines. Installed a compact clay barrier and water proof

junction box. Backfilled with blended soil. Natural attenuation will remediate the remaining

hydrocarbon.

CHLORIDE FIELD TESTS

LOCATION	DEPTH	mg/kg
SIDEWALLS	4'	500
BOTTOM	5'	600
Vertical	5'	550

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

DATE May 16, 2002 PRINTED NAME D. E. Anderson

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

ANALYTICAL REPORT

Prepared for:

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

Project: Rice Operating
Order#: G0203250
Report Date: 05/04/2002

C-25-18

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#: G0203250
Project:
Project Name: Rice Operating
Location: C-25-A

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>Collected</u>	<u>Date / Time</u> <u>Received</u>	<u>Container</u>	<u>Preservative</u>
0203250-01	4 pt Wall Comp. @ 4'	SOIL	4/30/02 16:00	5/1/02 14:51	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 12.0 C		
	8015M					
	8021B/5030 BTEX					
	Chloride					
0203250-02	5 pt Bottom Comp. @ 5'	SOIL	5/1/02 9:00	5/1/02 14:51	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 12.0 C		
	8015M					
	8021B/5030 BTEX					
	Chloride					

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0203250
Project:
Project Name: Rice Operating
Location: C-25-A

Lab ID: 0203250-01
Sample ID: 4 pt Wall Comp. @ 4'

8015M

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>
		5/2/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
DRO, >C12-C35	46.6	10.0
GRO, C6-C12	<10.0	10.0
TOTAL, C6-C35	46.6	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>
0001549-02		5/2/02 17:32	1	25	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: 0203250-02
Sample ID: 5 pt Bottom Comp. @ 5'

8015M

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>
		5/2/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
DRO, >C12-C35	45.6	10.0
GRO, C6-C12	<10.0	10.0
TOTAL, C6-C35	45.6	10.0

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

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ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0203250
Project:
Project Name: Rice Operating
Location: C-25-A

Lab ID: 0203250-02
Sample ID: 5 pt Bottom Comp. @ 5'

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>
0001549-02		5/2/02 14:14	1	25	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:

Raland K. Tuttle 5-6-02
Raland K. Tuttle, Lab Director, QA Officer
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

Date

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0203250
Project:
Project Name: Rice Operating
Location: C-25-A

Lab ID: 0203250-01
Sample ID: 4 pt Wall Comp. @ 4'

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	591	mg/kg	1	10	9253	5/3/02	SB

Lab ID: 0203250-02
Sample ID: 5 pt Bottom Comp. @ 5'

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	573	mg/kg	1	10	9253	5/3/02	SB

Approval: Raland K Tuttle 5-6-02
Raland K. Tuttle, Lab Director, QA Officer
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#: G0203250

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0001581-02			<10.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0203250-01	46.6	952	1117	112.4%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0203250-01	46.6	952	1117	112.4%	0.0%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0001581-05		1000	899	89.9%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0203250

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg		0001549-02			<25.0		
Ethylbenzene-µg/kg		0001549-02			<25.0		
Toluene-µg/kg		0001549-02			<25.0		
p/m-Xylene-µg/kg		0001549-02			<25.0		
o-Xylene-µg/kg		0001549-02			<25.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg		0203185-08	0	100	108	108.0%	
Ethylbenzene-µg/kg		0203185-08	0	100	110	110.0%	
Toluene-µg/kg		0203185-08	0	100	108	108.0%	
p/m-Xylene-µg/kg		0203185-08	0	200	230	115.0%	
o-Xylene-µg/kg		0203185-08	0	100	110	110.0%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg		0203185-08	0	100	105	105.0%	2.8%
Ethylbenzene-µg/kg		0203185-08	0	100	107	107.0%	2.8%
Toluene-µg/kg		0203185-08	0	100	106	106.0%	1.9%
p/m-Xylene-µg/kg		0203185-08	0	200	225	112.5%	2.2%
o-Xylene-µg/kg		0203185-08	0	100	108	108.0%	1.8%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg		0001549-05		100	104	104.0%	
Ethylbenzene-µg/kg		0001549-05		100	112	112.0%	
Toluene-µg/kg		0001549-05		100	105	105.0%	
p/m-Xylene-µg/kg		0001549-05		200	224	112.0%	
o-Xylene-µg/kg		0001549-05		100	112	112.0%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0203250

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0001561-01			<5.00		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0203241-14	35	500	541	101.2%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0203241-14	35	500	541	101.2%	0.0%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0001561-04		5000	5050	101.1%	

EME C-25A Jet. Box Upgrade



Old Junction Box



NORM Removal

EME C-25A Jet. Box Upgrade



Remediation (with new plumbing)



Completed New Junction Box