

1R - 428-23

REPORTS

DATE:

Nov. 14, 2002

IR-428-23

FINAL REPORT

**RICE OPERATING COMPANY
JUNCTION BOX FINAL REPORT**

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
HOBBS	C-33	C	33	18S	38E	LEA	Length	Width	Depth

LAND TYPE: BLM _____ STATE X FEE LANDOWNER _____ OTHER _____

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

Date Started 11/5/2002 Date Completed 11/7/2002 OCD Witness NO

Soil Excavated 350 cubic yards Excavation Length 30' Width 30' Depth 12' feet

Soil Disposed _____ cubic yards Offsite Facility _____ Location _____

FINAL ANALYTICAL RESULTS: Sample Date 11/7/2002 Sample Depth 12'

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 NMOC 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	1170
BOTTOM	<0.025	<0.025	<0.025	<0.025	<10	<10	3230

General Description of Remedial Action: Delineated vertical to 15' bgs. TPH was

field tested at <100 ppm. Chlorides dropped from 3870 at 9' bgs to 1570 at 15.5' bgs. This drop in chlorides indicates that ground water was probably not affected by this site. A compacted clay liner was installed as a barrier to vertical transmissivity. Vegetation around the excavation will also act as a barrier to vertical movement of rain water, keeping the moisture in the root zone. Any salt remaining in the vadose zone will be inhibited from movement without water. The high impacted soil was removed, remediated and used as backfill above the clay barrier. This site is part of the Hobbs SWD System abandonment and a junction box is not required.

CHLORIDE FIELD TESTS

LOCATION	DEPTH	mg/kg
SIDEWALLS	6'	900
BOTTOM	12'	2260
Backfill	-	1230
Vertical Trench	9'	3870
	13'	1665
	15.5'	1570

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

DATE November 14, 2002

PRINTED NAME D. E. Anderson

SIGNATURE 

TITLE Project Leader - Environmental





ANALYTICAL REPORT

Prepared for:

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

Project: Rice

PO#:

Order#: G0204971

Report Date: 11/13/2002

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#: G0204971
Project: None Given
Project Name: Rice
Location: C-33

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>Date / Time</u>	<u>Container</u>	<u>Preservative</u>
			<u>Collected</u>	<u>Received</u>		
0204971-01	4 Pt. Wall Comp. @6'	SOIL	11/7/02 13:00	11/8/02 8:10	4 oz Glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 13.5 C		
	8015M					
	8021B/5030 BTEX					
	Chloride					
0204971-02	4 Pt. Bottom Comp. @12'	SOIL	11/7/02 13:00	11/8/02 8:10	4 oz Glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 13.5 C		
	8015M					
	8021B/5030 BTEX					
	Chloride					

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0204971
Project: None Given
Project Name: Rice
Location: C-33

Lab ID: 0204971-01
Sample ID: 4 Pt. Wall Comp. @6'

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		11/9/02	1	1	CK	8015M

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

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	97%	70	130
1-Chlorooctadecane	100%	70	130

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003696-02		11/8/02 18:46	1	25	CK	8021B

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

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	94%	80	120
Bromofluorobenzene	98%	80	120

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#: G0204971
Project: None Given
Project Name: Rice
Location: C-33

Lab ID: 0204971-02
Sample ID: 4 Pt. Bottom Comp. @12'

8015M

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
		11/9/02	1	1	CK	8015M

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

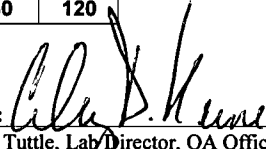
Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	113%	70	130
1-Chlorooctadecane	117%	70	130

8021B/5030 BTEX

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
0003696-02		11/8/02 19:08	1	25	CK	8021B

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

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	93%	80	120
Bromofluorobenzene	97%	80	120

Approval: 
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.

11/13/02
Date

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#: G0204971
Project: None Given
Project Name: Rice
Location: C-33

Lab ID: 0204971-01
Sample ID: 4 Pt. Wall Comp. @6'

Test Parameters

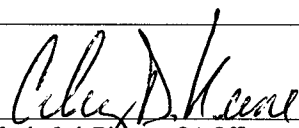
<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	1170	mg/kg	1	20	9253	11/12/02	SB

Lab ID: 0204971-02
Sample ID: 4 Pt. Bottom Comp. @12'

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	3230	mg/kg	1	20	9253	11/12/02	SB

Approval:


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

RL = Reporting Limit N/A = Not Applicable

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ENVIRONMENTAL LAB OF TEXAS I, LTD.

12600 West I-20 East, Odessa, TX 79765 Ph: 915-563-1800

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0204971

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0003699-02			<10.0		
CONTROL	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0003699-03		1904	1730	90.9%	
CONTROL DUP	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0003699-04		1904	1760	92.4%	1.7%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0003699-05		1000	1170	117.0%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0204971

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0003696-02			<0.025		
Ethylbenzene-mg/kg		0003696-02			<0.025		
Toluene-mg/kg		0003696-02			<0.025		
p/m-Xylene-mg/kg		0003696-02			<0.025		
o-Xylene-mg/kg		0003696-02			<0.025		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0204981-01	0	0.1	0.091	91.%	
Ethylbenzene-mg/kg		0204981-01	0	0.1	0.096	96.%	
Toluene-mg/kg		0204981-01	0	0.1	0.094	94.%	
p/m-Xylene-mg/kg		0204981-01	0	0.2	0.203	101.5%	
o-Xylene-mg/kg		0204981-01	0	0.1	0.098	98.%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0204981-01	0	0.1	0.097	97.%	6.4%
Ethylbenzene-mg/kg		0204981-01	0	0.1	0.103	103.%	7.%
Toluene-mg/kg		0204981-01	0	0.1	0.101	101.%	7.2%
p/m-Xylene-mg/kg		0204981-01	0	0.2	0.218	109.%	7.1%
o-Xylene-mg/kg		0204981-01	0	0.1	0.104	104.%	5.9%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0003696-05		0.1	0.100	100.%	
Ethylbenzene-mg/kg		0003696-05		0.1	0.102	102.%	
Toluene-mg/kg		0003696-05		0.1	0.102	102.%	
p/m-Xylene-mg/kg		0003696-05		0.2	0.216	108.%	
o-Xylene-mg/kg		0003696-05		0.1	0.103	103.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0204971

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0003721-01			<20.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0204971-01	1170	1000	2160	99.9%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0204971-01	1170	1000	2180	101.9%	0.9%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0003721-04		5000	4960	99.2%	

Environmental Lab of Texas I, Ltd.

**12600 West I-20 East
Odessa, Texas 79763**

Phone: 915-563-1800
Fax: 915-563-1713

Derrick Robinson

62

Company Address:

City/State/Zip:

Telephone No:

Fax No:

John

Pice

Project #:

3-33

PO #:

Containers 402 8155

[illegible]

Special Instructions

Relinquished by: 

Date	Time
------	------

Received by:

Date	Time
------	------

Relinquished by:

Received by ELO:

Date	Time
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Sample Containers Intact?
Temperature Upon Receipt:
Laboratory Comments:

35