

1R - 426-53

REPORTS

DATE:

9/04/2002

IR-426-53

FINAL REPORT

**RICE OPERATING COMPANY
JUNCTION BOX FINAL REPORT**

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
BD	E-3	E	3	22S	37E	LEA	Length 12	Width 10	Depth 6

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER Bill Stevens OTHER _____

Depth to Groundwater 93 feet NMOCD SITE ASSESSMENT RANKING SCORE: 10

Date Started 5/13/2002 Date Completed 5/15/2002 OCD Witness NO

Soil Excavated 70 cubic yards Excavation Length 15 Width 15 Depth 9 feet

Soil Disposed 0 cubic yards Offsite Facility _____ Location _____

FINAL ANALYTICAL RESULTS: Sample Date 5/15/2002 Sample Depth 9'

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	25	1050
BOTTOM	<0.025	<0.025	<0.025	<0.025	<10	64	1260

General Description of Remedial Action: Delineated vertical and lateral extent. Re-
moved TPH impacted soil to below 100 ppm. Soil was land farmed on-site to 857 ppm TPH and 300 ppm chlorides. A soil boring found chloride impact diminished @ 65' bgs, before reaching ground water. The samples from 55' & 60' bgs were moist, but from 65' was dry, indicating a probable perch zone located at this depth. The site was excavated to 9'bgs and a compacted clay liner and water proof junction box was installed. The site was backfilled with remediated soil. The clay liner will act as a barrier to vertical transmissivity. Natural attenuation will remediate the remaining hydrocarbon.

CHLORIDE FIELD TESTS

LOCATION	Depth	TPH	mg/kg
SIDEWALLS	8'	52	800
BOTTOM	9'	245	1200
Vertical Trench	8'	511	500
	10'	84	1200
	12'		1100
	14'		1900
	16'	45	2000

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

DATE September 4, 2002 PRINTED NAME D. E. Anderson
SIGNATURE *D. E. Anderson* TITLE Project Leader - Environmental

DRILLING LOG	Site Name/Location	BORING/WELL INFORMATION			Logged by: Eades
RICE Operating Company 122 West Taylor Hobbs, New Mexico 88240 (505) 393-9174	Jct. E-3 3-T22S-R37E BD SWD System Lea County, NM	Well No. SB-1	Date Drilled: 9/10/02	Driller: Eades	Completion: Plugged with bentonite & cuttings.
		Well Depth:	Boring Depth: 65'	Well Material:	
		Casing Length	Boring Diameter: 4.75"	Casing Size:	
		Screen Length:	Drilling Method: Air Rotary	Slot Size:	

Test Results (ppm)						
DEPTH	SUBSURFACE LITHOLOGY	SAMPLE TYPE	CI	TPH	REMARKS	Boring
0	Ground surface		Titrate	EPA 418.1		
	Topsoil					
5	Damp red sand	Grab	1439			
10	Dry Caliche	Grab	1470		cuttings →	
15	Dry Caliche	Grab	2143			
20	Dry Caliche					
25	Caliche and Sand Dry Caliche	Grab	1082			
30	Dry Caliche	Grab	1214			
35	Pink Sand	Grab	757			
40	Pink Sand	Grab	576			
45	Pink Sand	Grab	717			
50	Pink Sand	Grab	854			
55	Damp Sand	Grab	1245		bentonite	
60	Moist Sand	Grab	253			
65	Sand and Sandstone Stringers (dry)	Grab	210			



ANALYTICAL REPORT

Prepared for:

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

Project: Rice
Order#: G0203364
Report Date: 05/20/2002

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#: G0203364

Project:

Project Name: Rice

Location: E-3

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>
0203364-01	5 pt. Bottom Comp. @ 9'	SOIL	5/15/02 11:10	5/15/02 17:00	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 2.0 C		
	8015M					
	8021B/5030 BTEX					
	Chloride					
0203364-02	4 pt. Wall Comp. @ 8'	SOIL	5/15/02 10:19	5/15/02 17:00	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 2.0 C		
	8015M					
	8021B/5030 BTEX					
	Chloride					

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0203364
Project:
Project Name: Rice
Location: E-3

Lab ID: 0203364-01
Sample ID: 5 pt. Bottom Comp. @ 9'

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>		
		5/16/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
DRO, >C12-C35	63.9	10.0
GRO, C6-C12	<10.0	10.0
TOTAL, C6-C35	63.9	10.0

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>		
0001736-02		5/16/02 19:41	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: 0203364-02
Sample ID: 4 pt. Wall Comp. @ 8'

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>		
		5/16/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
DRO, >C12-C35	25.2	10.0
GRO, C6-C12	<10.0	10.0
TOTAL, C6-C35	25.2	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#: G0203364
Project:
Project Name: Rice
Location: E-3

Lab ID: 0203364-02
Sample ID: 4 pt. Wall Comp. @ 8'

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>		
0001736-02		5/16/02 20:03	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 5-21-02
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

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

Order#: G0203364
Project:
Project Name: Rice
Location: E-3

Lab ID: 0203364-01
Sample ID: 5 pt. Bottom Comp. @ 9'

Test Parameters

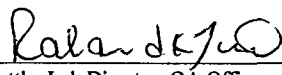
<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Chloride	1260	mg/kg	1	5.00	9253	5/16/02	SB

Lab ID: 0203364-02
Sample ID: 4 pt. Wall Comp. @ 8'

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	1050	mg/kg	1	5.00	9253	5/16/02	SB

Approval:

 5-21-02
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

QUALITY CONTROL REPORT

8015M

Order#: G0203364

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0001735-02			<10.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0203364-02	25.2	952	831	84.6%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0203364-02	25.2	952	823	83.8%	1.0%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0001735-05		1000	809	80.9%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0203364

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg		0001736-02			<25.0		
Ethylbenzene-µg/kg		0001736-02			<25.0		
Toluene-µg/kg		0001736-02			<25.0		
p/m-Xylene-µg/kg		0001736-02			<25.0		
o-Xylene-µg/kg		0001736-02			<25.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg		0203370-02	0	100	120	120.0%	
Ethylbenzene-µg/kg		0203370-02	28.1	100	116	115.0%	
Toluene-µg/kg		0203370-02	39.9	100	118	116.0%	
p/m-Xylene-µg/kg		0203370-02	66.4	200	240	119.0%	
o-Xylene-µg/kg		0203370-02	0	100	117	117.0%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg		0203370-02	0	100	114	114.0%	5.1%
Ethylbenzene-µg/kg		0203370-02	28.1	100	113	112.0%	2.6%
Toluene-µg/kg		0203370-02	39.9	100	111	109.0%	6.1%
p/m-Xylene-µg/kg		0203370-02	66.4	200	230	114.0%	4.3%
o-Xylene-µg/kg		0203370-02	0	100	112	112.0%	4.4%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg		0001736-05		100	115	115.0%	
Ethylbenzene-µg/kg		0001736-05		100	112	112.0%	
Toluene-µg/kg		0001736-05		100	109	109.0%	
p/m-Xylene-µg/kg		0001736-05		200	226	113.0%	
o-Xylene-µg/kg		0001736-05		100	111	111.0%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0203364

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0001732-01			<5.00		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0203352-01	278	556	837	100.5%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0203352-01	278	556	847	102.3%	1.2%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0001732-04		5000	5050	101.%	

**12600 West I-20 East
Odessa, Texas 79763**
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Fax: 915-563-1713

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

D. Robinson

RICE

Re: Encomintas

Project #:

Company Address:

Project Loc:

City/State/Zip:

4-3

PO #:

Telephone No:

Fax No:

Sampler Signature:[illegible]