

1R - 427-21

REPORTS

DATE:

3-12-2003

1R 42721

**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	C-12-1	C	12	20 S	36 E	Lea	No Box		

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER Charcie Byrd OTHER _____

Depth to Groundwater 31 feet NMOCD SITE ASSESSMENT RANKING SCORE: 20

Date Started 3/4/2003 Date Completed 3/4/2003 OCD Witness No

Soil Excavated 14 cubic yards Excavation Length 8' Width 8' Depth 6' feet

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

FINAL ANALYTICAL RESULTS: Sample Date 3/4/2003 Sample Depth 6' 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	<0.025	<0.025	<0.025	<10.0	<10.0	70.9
BOTTOM	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	<20.0
REMEDIATED	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	106

General Description of Remedial Action: Chloride and TPH impact were minimal at this box location. Both parameters exhibited a vertical decline. Excavation produced a 8' x 8' x 6' hole that tested clean on the walls and bottom at 6'bgs. The excavated soil was landfarmed on location and then backfilled and contoured to the surrounding area.
These activities are not a threat to groundwater, livestock, or public health.

CHLORIDE FIELD TESTS

LOCATION	DEPTH (ft)	ppm
Vertical	4	300
	6	50
Bottom Comp.	6	75
Wall Comp.	4'	225
Remed. Comp.	n/a	100

cc: lab results, photos

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

DATE 3/12/2003 PRINTED NAME Kristin Farris
SIGNATURE Kristin Farris TITLE Projects Scientist

EME jct. C-12-1



Impact Excavation



Backfilled (no box required)

ANALYTICAL REPORT

Prepared for:

~~DONNIE ANDERSON~~
RICE OPERATING CORP.
122 WEST TAYLOR
HOBBS, NM 88240

Kristin

Project: C-12-1
PO#:
Order#: G0305877
Report Date: 03/10/2003

Certificates

US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

RICE OPERATING CORP.
 122 WEST TAYLOR
 HOBBS, NM 88240

Order#: G0305877
 Project:
 Project Name: C-12-1
 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>Container</u>	<u>Preservative</u>
			<u>Collected</u>	<u>Received</u>		
0305877-01	5pt. Bottom Comp. @ 6'	SOIL	3/4/03 15:00	3/5/03 9:08	4 oz. Glass jar	ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 C		
	8015M					
	8021B/5030 BTEX					
	Chloride					
0305877-02	4pt. Wall Comp. @4'	SOIL	3/4/03 15:00	3/5/03 9:08	4 oz. Glass jar	ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 C		
	8015M					
	8021B/5030 BTEX					
	Chloride					
0305877-03	Remediation Pile Composite	SOIL	3/4/03 16:00	3/5/03 9:08	4 oz. Glass jar	ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.5 C		
	8015M					
	8021B/5030 BTEX					
	Chloride					

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

DONNIE ANDERSON
 RICE OPERATING CORP.
 122 WEST TAYLOR
 HOBBS, NM 88240

Order#: G0305877
 Project:
 Project Name: C-12-1
 Location: EME

Lab ID: 0305877-01
 Sample ID: 5pt. Bottom Comp. @ 6'

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
		3/6/03	1	1		

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	85%	70	130
1-Chlorooctadecane	76%	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
0004865-02		3/6/03	1	25		
		21:21				

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

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	82%	80	120
Bromofluorobenzene	112%	80	120

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

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

DONNIE ANDERSON
 RICE OPERATING CORP.
 122 WEST TAYLOR
 HOBBS, NM 88240

Order#: G0305877
 Project:
 Project Name: C-12-1
 Location: EME

Lab ID: 0305877-02
 Sample ID: 4pt. Wall Comp. @4'

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>		
		3/7/03	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	85%	70	130
1-Chlorooctadecane	76%	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>		
0004865-02		3/6/03 21:41	1	25	CK	8021B

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

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

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

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

DONNIE ANDERSON
 RICE OPERATING CORP.
 122 WEST TAYLOR
 HOBBS, NM 88240

Order#: G0305877
 Project:
 Project Name: C-12-1
 Location: EME

Lab ID: 0305877-03
 Sample ID: Remediation Pile Composite

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
		3/7/03	1	1	CK	

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	88%	70	130
1-Chlorooctadecane	78%	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
0004865-02		3/6/03	1	25	CK	
		22:01				

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

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	102%	80	120
Bromofluorobenzene	120%	80	120

Approval: Raland K Tuttle 3-10-03
 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

ANALYTICAL REPORT

DONNIE ANDERSON
 RICE OPERATING CORP.
 122 WEST TAYLOR
 HOBBS, NM 88240

Order#: G0305877
 Project:
 Project Name: C-12-1
 Location: EME

Lab ID: 0305877-01
 Sample ID: 5pt. Bottom 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	<20.0	mg/kg	1	20	9253	3/6/03	SB

Lab ID: 0305877-02
 Sample ID: 4pt. 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	70.9	mg/kg	1	20	9253	3/6/03	SB

Lab ID: 0305877-03
 Sample ID: Remediation Pile 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	106	mg/kg	1	20	9253	3/6/03	SB

Approval: Raland K Tuttle 3-10-03
 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#: G0305877**

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
		0004875-02			<10.0		
		0004876-02			<10.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
		0305877-01	0	952	823	86.4%	
		0305881-02	0	952	766	80.5%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
		0305877-01	0	952	838	88.8%	1.8%
		0305881-02	0	952	720	75.6%	6.2%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
		0004875-05		1000	777	77.7%	
		0004876-05		1000	864	86.4%	

ENVIRONMENTAL LAB OF TEXAS**QUALITY CONTROL REPORT****8021B/5030 BTEX**

Order#: G0305877

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0004865-02			<0.025		
Toluene-mg/kg		0004865-02			<0.025		
Ethylbenzene-mg/kg		0004865-02			<0.025		
p/m-Xylene-mg/kg		0004865-02			<0.025		
o-Xylene-mg/kg		0004865-02			<0.025		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0305891-01	0.032	2.5	2.17	85.5%	
Toluene-mg/kg		0305891-01	0.1	2.5	2.20	84.0%	
Ethylbenzene-mg/kg		0305891-01	0.093	2.5	2.41	92.7%	
p/m-Xylene-mg/kg		0305891-01	0.292	5	5.05	95.2%	
o-Xylene-mg/kg		0305891-01	0.069	2.5	2.47	96.0%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0305891-01	0.032	2.5	2.23	87.9%	2.7%
Toluene-mg/kg		0305891-01	0.1	2.5	2.25	86.0%	2.2%
Ethylbenzene-mg/kg		0305891-01	0.093	2.5	2.43	93.5%	0.8%
p/m-Xylene-mg/kg		0305891-01	0.292	5	5.07	95.6%	0.4%
o-Xylene-mg/kg		0305891-01	0.069	2.5	2.48	96.4%	0.4%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0004865-05		0.1	0.098	98.0%	
Toluene-mg/kg		0004865-05		0.1	0.102	102.0%	
Ethylbenzene-mg/kg		0004865-05		0.1	0.103	103.0%	
p/m-Xylene-mg/kg		0004865-05		0.2	0.214	107.0%	
o-Xylene-mg/kg		0004865-05		0.1	0.107	107.0%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0305877

<i>BLANK</i>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0004859-01			<20.0		
<i>MS</i>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0305877-01	0	275.75	248	89.9%	
<i>MSD</i>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0305877-01	248	275.75	257	93.2%	3.6%
<i>SRM</i>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0004859-04		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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Logan Anderson
Company Name: Rice Operating
Company Address:
City/State/Zip:
Telephone No:
Sampler Signature: [Signature]
Fax No:

Project Name: C-12-1
Project #:
Project Loc: EME
PO #:

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative							Matrix					Analyze For:																				
					HNO ₃	HCl	NaOH	H ₂ SO ₄	None	Other (Specify)	Water	Sudge	Soil	Other (Specify)	TPH: 418, 8045M, 1005, 1006	Cations (Ca, Mg, Na, K)	Anions (SO ₄ , CO ₃ , HCO ₃)	SAR / ESP / CEC	Metals: As, Ag, Ba, Cd, Cr, Pb, Hg, Se	Volatiles	Sam/Altitas	BTEX 8021B/5030	RCI	N.O.R.M.	Total Gamma	RUSH TAT (Pre-Schedule)	Standard TAT										
01	5 ft. Bottom Comp @ 6'	3-4-03	3:00P	1	✓													✓																			
02	4 ft. Well Comp @ 4'	3-4-03	3:00P	1	✓													✓																			
03	Revised dated pile composite	3-4-03	4:00P	1	✓													✓																			

Special Instructions

Relinquished by: Frank Solis Date: 3/5/03 Time: 0908
 Relinquished by: Jane Manning Date: 3-5-03 Time: 0908

Sample Containers Intact? (Y) N
 Temperature Upon Receipt: 15°C
 Laboratory Comments: 4oz jar

0305877