

1R - 426-18

# REPORTS

DATE:

3/26/2003

IR-426-18

**FINAL  
REPORT**

**JUNCTION BOX FINAL REPORT**

**BOX LOCATION**

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
							Length	Width	Depth
B-D	C-16	C	16	22S	37E	Lea	No Box		

LAND TYPE: BLM \_\_\_\_\_ STATE X FEE LANDOWNER \_\_\_\_\_ OTHER \_\_\_\_\_

Depth to Groundwater 85' feet NMOCD SITE ASSESSMENT RANKING SCORE: 10

Date Started 1/28/2003 Date Completed 3/18/2003 OCD Witness No

Soil Excavated 221 cubic yards Excavation Length 26' Width 28.5' Depth 12' feet

Soil Disposed 36 cubic yards Offsite Facility Sundance Services Location Eunice, N.M.

**FINAL ANALYTICAL RESULTS:** Sample Date 2-3-03, 2-23-03 Sample Depth 12' 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 PPM
SIDEWALLS	<0.005	<0.005	<0.005	<0.015	<10	<10	1456
BOTTOM	<0.005	<0.005	<0.005	<0.015	<10	135	752
REMEDIATED	<0.025	<0.025	<0.025	<0.025	10.4	360	213

General Description of Remedial Action: The walls and bottom were excavated laterally and vertically to below the NMOCD TPH guidelines. The junction box was excavated down to 12' bgs. The chlorides declined from 1955 at the surface to 752 ppm chlorides at 12' bgs, therefore it can be assumed that groundwater was not impacted. The depth to groundwater is 85' bgs. A compacted clay liner was installed to slow the migration of any impact left in place. The excavated soil was blended and landfarmed at the location and then backfilled into the excavation and contoured to the surrounding area.

**CHLORIDE FIELD TESTS**

LOCATION	DEPTH	Chlorides
Wall Comp	8' bgs	1560
Bottom Comp	12' bgs	855

cc: lab results, photos

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

DATE March 26, 2003 PRINTED NAME Chris Rodriguez

SIGNATURE *Chris Rodriguez* TITLE Environmental Technician

## BD jct. C-16



Junction Box Location (before excavation)



Excavation

## BD jct. C-16



Compacted Clay Barrier



Backfilled

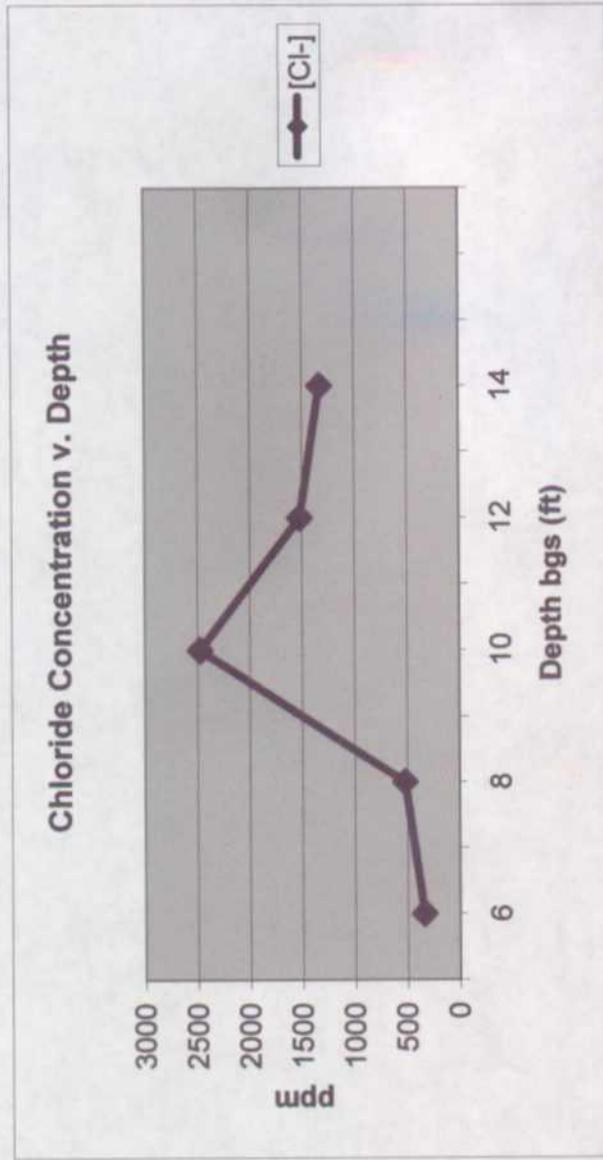
CHLORIDE CONCENTRATION CURVE

RICE Operating Company

BD jct. C-16  
T22S, R37E

Depth bgs (ft)	[Cl <sup>-</sup> ] ppm
6	340
8	520
10	2475
12	1520
14	1330

Groundwater = 87 ft





PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
 RICE OPERATING CO.  
 ATTN: CHRIS RODRIGUEZ  
 122 W. TAYLOR  
 HOBBS, NM 88240  
 FAX TO: (505) 397-1471

Receiving Date: 02/25/03  
 Reporting Date: 02/26/03  
 Project Number: C-16 JCT BOX  
 Project Name: JCT C-16 BOX UPGRADE  
 Project Location: BD

Sampling Date: 02/23/03  
 Sample Type: SOIL  
 Sample Condition: COOL & INTACT  
 Sample Received By: BC  
 Analyzed By: BC

LAB NUMBER	SAMPLE ID	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/Kg)	DRO (>C <sub>10</sub> -C <sub>28</sub> ) (mg/Kg)	CI* (mg/Kg)
ANALYSIS DATE		02/25/03	02/25/03	02/26/03
H7495-1	WALL COMPOSITE 8' BGS	<10.0	<10.0	1456
Quality Control		808	835	1080
True Value QC		800	800	1000
% Recovery		101	104	108
Relative Percent Difference		3.9	2.8	8.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; CI: Std. Methods 4500-C1B

\*Analysis performed on a 1:4 w:v aqueous extract.

Chris Rodriguez  
 Chemist

2/26/03  
 Date  
 RECEIVED  
 FEB 28 2003  
 RICE OPERATING  
 HOBBS, NM

H7495A.XLS

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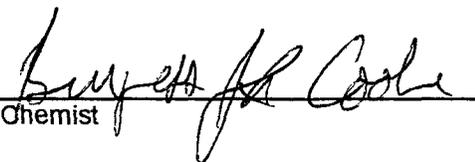
ANALYTICAL RESULTS FOR  
RICE OPERATING CO.  
ATTN: CHRIS RODRIGUEZ  
122 W. TAYLOR  
HOBBS, NM 88240  
FAX TO: (505) 397-1471

Receiving Date: 02/25/03  
Reporting Date: 02/26/03  
Project Number: C-16 JCT BOX  
Project Name: JCT C-16 BOX UPGRADE  
Project Location: BD

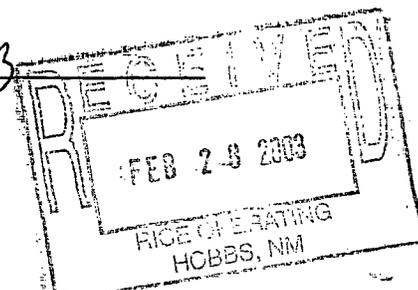
Sampling Date: 02/23/03  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: BC  
Analyzed By: BC

LAB NUMBER	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE		02/25/03	02/25/03	02/25/03	02/25/03
H7495-1	WALL COMPOSITE	<0.005	<0.005	<0.005	<0.015
	8' BGS				
Quality Control		0.099	0.095	0.098	0.284
True Value QC		0.100	0.100	0.100	0.300
% Recovery		99.1	95.3	98.4	94.8
Relative Percent Difference		5.5	1.6	4.9	5.5

METHOD: EPA SW-846 8260

  
Chemist

2/26/03  
Date



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H7495B.XLS



# CARDINAL LABORATORIES, INC.

2111 Beechwood, Abilene, TX 79603 101 East Marland, Hobbs, NM 88240  
(915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page      of     

**BILL TO**

**ANALYSIS REQUEST**

Company Name: Rice Operating Co. P.O. #:

Project Manager:      Company:

Address: 122 W. Taylor City: Hobbs State: NM Zip: 88240

City: Hobbs State: NM Zip: 88240

Phone #: 393-9174 Fax #: 397-1471 Address:     

Project #: C-16 Jet box Project Owner:      City:     

Project Name: Jet C-16 box upgrade State:      Zip:     

Project Location: RD. Phone #:     

Sampler Name: Well Composite 8' bgs Fax #:     

FOR LAB USE ONLY	Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	ANALYSIS REQUEST
					GROUNDWATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER :			
	1745-1	Well Composite 8' bgs	C								2-23-03	10:00am	TPH 8015
													STex
													CL

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Signatures or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Sampler Relinquished:      Received By:     

Date: 2-22-03

Time: 5:00pm

Relinquished By: Chris Challenge

Date: 2/15/03

Time: 5:00pm

Received By: (Lab Staff) Burton R. Deane

Delivered By: (Circle One)  UPS  Bus  Other

Sampler - UPS - Bus - Other

Sample Condition  Cool  Intact

Checked By:      (Initials)

Phone Result:  Yes  No  Add'l Phone #:     

Fax Result:  Yes  No  Add'l Fax #:     

REMARKS:     

Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476.







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## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page \_\_\_\_\_ of \_\_\_\_\_

Company Name: <i>Kice Operating Company</i>		P.O. #:		<b>BILL TO</b>		ANALYSIS REQUEST					
Project Manager: <i>Chris Rehrig</i>		Company:									
Address: <i>122 W. Taylor</i>		City:									
City: <i>Hobbs</i>		State: <i>NM</i>		Zip: <i>88240</i>							
Phone #: <i>393-9174</i>		Fax #: <i>397-1471</i>		Address:							
Project #:		Project Owner:		City:							
Project Name: <i>Q-16 box upgrade</i>		State:		Zip:							
Project Location: <i>B-D</i>		Phone #:		Fax #:							
Sampler Name: <i>Bethan Composite @ 10' logs</i>		FOR LAB USE ONLY									
Lab I.D.		Sample I.D.									
<i>47482-1</i>		<i>Bethan Composite</i>									
		(G)RAB OR (C)OMP.									
		# CONTAINERS									
		GROUNDWATER									
		WASTEWATER									
		SOIL									
		CRUDE OIL									
		SLUDGE									
		OTHER :									
		ACID/BASE:									
		ICE / COOL									
		OTHER :									
		DATE		<i>2/15/03</i>							
		TIME									
		X		<i>TPH 8015</i>							

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Sampler Relinquished By: *Chris Rehrig* Date: *Feb 18, 2003* Time: *2:45 pm* Received By: (Lab Staff) *Bethan*

Relinquished By: *Chris Rehrig* Date: *2/15/03* Time: *2:40 pm* Received By: (Lab Staff) *Bethan*

Delivered By: (Circle One)  UPS  Bus  Other:  Sample Condition:  Cool  Ambient  Other:  Checked By: (Initials) *Bethan*

REMARKS:

Phone Result:  Yes  No Add'l Phone #: \_\_\_\_\_  
 Fax Result:  Yes  No Add'l Fax #: \_\_\_\_\_

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122 W. TAYLOR  
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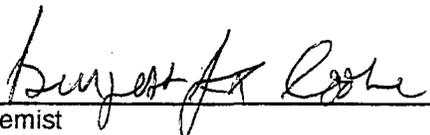
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Project Location: BD

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Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: BC  
Analyzed By: BC

LAB NUMBER	SAMPLE ID	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/Kg)	DRO (>C <sub>10</sub> -C <sub>28</sub> ) (mg/Kg)	CI* (mg/Kg)
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METHODS: TPH GRO & DRO: EPA SW-846 8015 M; CI: Std. Methods 4500-CI'B

\*Analysis performed on a 1:4 w:v aqueous extract.

  
Chemist

2/26/03  
Date  
**RECEIVED**  
FEB 26 2003  
RICE OPERATING  
HOBBS, NM

H7495A.XLS

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# ANALYTICAL REPORT

## Prepared for:

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

**Project: C-16  
PO#: 755  
Order#: G0306013  
Report Date: 03/24/2003**

### 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#: G0306013  
 Project:  
 Project Name: C-16  
 Location: BD

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>
0306013-01	Remed. Comp.	SOIL	3/17/03	3/18/03 19:40	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 2 C		
	8015M					
	8021B/5030 BTEX					
	Chloride					

---

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

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

Order#: G0306013  
 Project:  
 Project Name: C-16  
 Location: BD

Lab ID: 0306013-01  
 Sample ID: Remed. 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>		
		3/20/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	10.4	10.0
DRO, >C12-C35	360	10.0
TOTAL, C6-C35	370	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	88%	70	130
1-Chlorooctadecane	91%	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>		
0005022-02		3/21/03 16:35	1	25	RKT	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	98%	80	120
Bromofluorobenzene	108%	80	120

Approval: *Raland K Tuttle* 3-25-03  
 Raland K. Tuttle, Lab Director, QA Officer      Date  
 Celey D. Keene, Org. Tech. Director  
 Jeanne McMurrey, Inorg. Tech. Director  
 Sandra Blezugbe, Lab Tech.  
 Sara Molina, Lab Tech.

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

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

Order#: G0306013  
Project:  
Project Name: C-16  
Location: BD

Lab ID: 0306013-01  
Sample ID: Remed. 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	213	mg/kg	1	20	9253	3/20/03	SB

Approval: Raland K Tuttle 3-25-03  
 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#: G0306013

<b>BLANK</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0004990-02			<10.0		
<b>CONTROL</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0004990-03		952	885	93.0%	
<b>CONTROL DUP</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0004990-04		952	945	99.3%	6.6%
<b>SRM</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0004990-05		1000	846	84.6%	

**ENVIRONMENTAL LAB OF TEXAS****QUALITY CONTROL REPORT****8021B/5030 BTEX****Order#: G0306013**

<b>BLANK</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0005022-02			<0.025		
Toluene-mg/kg		0005022-02			<0.025		
Ethylbenzene-mg/kg		0005022-02			<0.025		
p/m-Xylene-mg/kg		0005022-02			<0.025		
o-Xylene-mg/kg		0005022-02			<0.025		
<b>MS</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0306012-01	0	2.5	2.53	101.2%	
Toluene-mg/kg		0306012-01	0	2.5	2.68	107.2%	
Ethylbenzene-mg/kg		0306012-01	0	2.5	2.76	110.4%	
p/m-Xylene-mg/kg		0306012-01	0	5	5.70	114%	
o-Xylene-mg/kg		0306012-01	0	2.5	2.83	113.2%	
<b>MSD</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0306012-01	0	2.5	2.47	98.8%	2.4%
Toluene-mg/kg		0306012-01	0	2.5	2.60	104%	3%
Ethylbenzene-mg/kg		0306012-01	0	2.5	2.61	104.4%	5.6%
p/m-Xylene-mg/kg		0306012-01	0	5	5.42	108.4%	5%
o-Xylene-mg/kg		0306012-01	0	2.5	2.64	105.6%	6.9%
<b>SRM</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0005022-05		0.1	0.107	107%	
Toluene-mg/kg		0005022-05		0.1	0.112	112%	
Ethylbenzene-mg/kg		0005022-05		0.1	0.109	109%	
p/m-Xylene-mg/kg		0005022-05		0.2	0.224	112%	
o-Xylene-mg/kg		0005022-05		0.1	0.104	104%	

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

### Test Parameters

Order#: G0306013

<b>BLANK</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0004978-01			<20.0		
<b>MS</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0305982-01	478	500	939	92.2%	
<b>MSD</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0305982-01	478	500	957	95.8%	1.9%
<b>SRM</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0004978-04		5000	4960	99.2%	

