

1R - 427-107

APPROVALS

YEAR(S):

2013

Hansen, Edward J., EMNRD

From: Hansen, Edward J., EMNRD
Sent: Tuesday, May 14, 2013 10:42 AM
To: Hack Conder (hconder@riceswd.com)
Cc: Leking, Geoffrey R, EMNRD; Laura Pena (lpena@riceswd.com); Katie Jones <kjones@riceswd.com> (kjones@riceswd.com); Scott Curtis (scurtis@riceswd.com)
Subject: Remediation Plan (1R427-107) Termination - ROC EME K-1 Site

**RE: Termination Request
for the Rice Operating Company's
EME K-1 Site
Unit Letter K, Section 1, T20S, R36E, NMPM, Lea County, New Mexico
Remediation Plan (1R427-107) Termination**

Dear Mr. Conder:

The New Mexico Oil Conservation Division (OCD) has received Rice Operating Company's report and request to close the above-referenced site, dated April 22, 2013 (received April 24, 2013). The reports are acceptable to the OCD.

The above-referenced report, submitted in accordance with 19.15.29 NMAC (Rule 29; formally, Rule 116), indicates that Rice Operating Company has met the requirements of 19.15.29 NMAC; therefore, the OCD approves the report and hereby notifies you that the remediation plan (1R427-107) is terminated in accordance with 19.15.29 NMAC.

Please be advised that OCD approval of this report does not relieve the owner/operator of responsibility should operations pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the owner/operator of responsibility for compliance with any OCD, federal, state, or local laws and/or regulations.

If you have any questions regarding this matter, please contact me at 505-476-3489.

Edward J. Hansen
Hydrologist
Environmental Bureau

RICE *Operating Company*

122 West Taylor • Hobbs, New Mexico 88240

Phone: (575) 393-9174 • Fax: (575) 397-1471

CERTIFIED MAIL

RETURN RECEIPT NO. 7007 2560 0000 4569 9354

RECEIVED

April 22, 2013

APR 22 2013

Mr. Edward Hansen
New Mexico Energy, Minerals, & Natural Resources
Oil Conservation Division, Environmental Bureau
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505

Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505

RE: Termination Request
EME K-1 (1R427-107): UL/K Sec. 1, T20S, R36E
RICE Operating Company – Eunice Monument Eumont SWD System

Mr. Hansen:

Rice Operating Company (ROC) is the service provider (agent) for the EME Saltwater Disposal (SWD) System and has no ownership of any portion of the pipeline, well, or facility. The System is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis.

Background

In 2001, ROC initiated work on the former K-1 junction box. The site is located in UL/K, Sec. 1, T20S, R36E. NM OSE records indicate that groundwater would likely be encountered at a depth of approximately 26 +/- feet. The site was delineated using a backhoe to collect soil samples at regular intervals, creating a 13x11x11 ft deep excavation. Each sample was field titrated for chlorides, resulting in chloride concentrations that decreased with depth. Representative composite samples of the excavation bottom and the excavation walls were sent to a commercial for analysis of chloride and TPH, resulting in a sidewall chloride concentration of 160 mg/kg and concentrations of gasoline range organics (GRO) and diesel range organics (DRO) below detectable limits. The bottom composite resulted in a chloride concentration of 304 mg/kg and concentrations of GRO and DRO below detectable limits. Both samples were analyzed for BTEX, resulting in a sidewall benzene concentration below detectable limits, 0.005 mg/kg for toluene, 0.006 mg/kg for ethyl benzene and 0.028 mg/kg for total xylenes. The bottom sample resulted in benzene, toluene and ethyl benzene concentrations below detectable limits and 0.019 mg/kg for total xylenes. A compacted clay layer was installed and the excavation was backfilled with clean soil to ground surface and contoured to the surrounding area. The clay layer will provide a barrier that

will inhibit the downward migration of chlorides to groundwater. A new, watertight junction was installed over the site; therefore, seeding is not required

This site is located within the regionally impacted groundwater plume in an area with groundwater chloride concentrations between 5,000 – 10,000 mg/l (see Site Location Map).

The junction box site location map, final report, laboratory analysis, and current photodocumentation are attached.

Recommendations

Site investigation demonstrates that residual chloride and hydrocarbons in the vadose zone will not with reasonable probability contaminate groundwater in excess of NMOCD standards. This site meets the requirements of the NMOCD-approved Revised Junction Box Upgrade Work Plan (July 16, 2003). As such, ROC request termination of the regulatory file, or similar closure status.

Please contact me at (575)393-9174 if you have any questions or wish to discuss this site. Thank you for your time and consideration.

Sincerely,
RICE Operating Company



Hack Conder
Environmental Manager

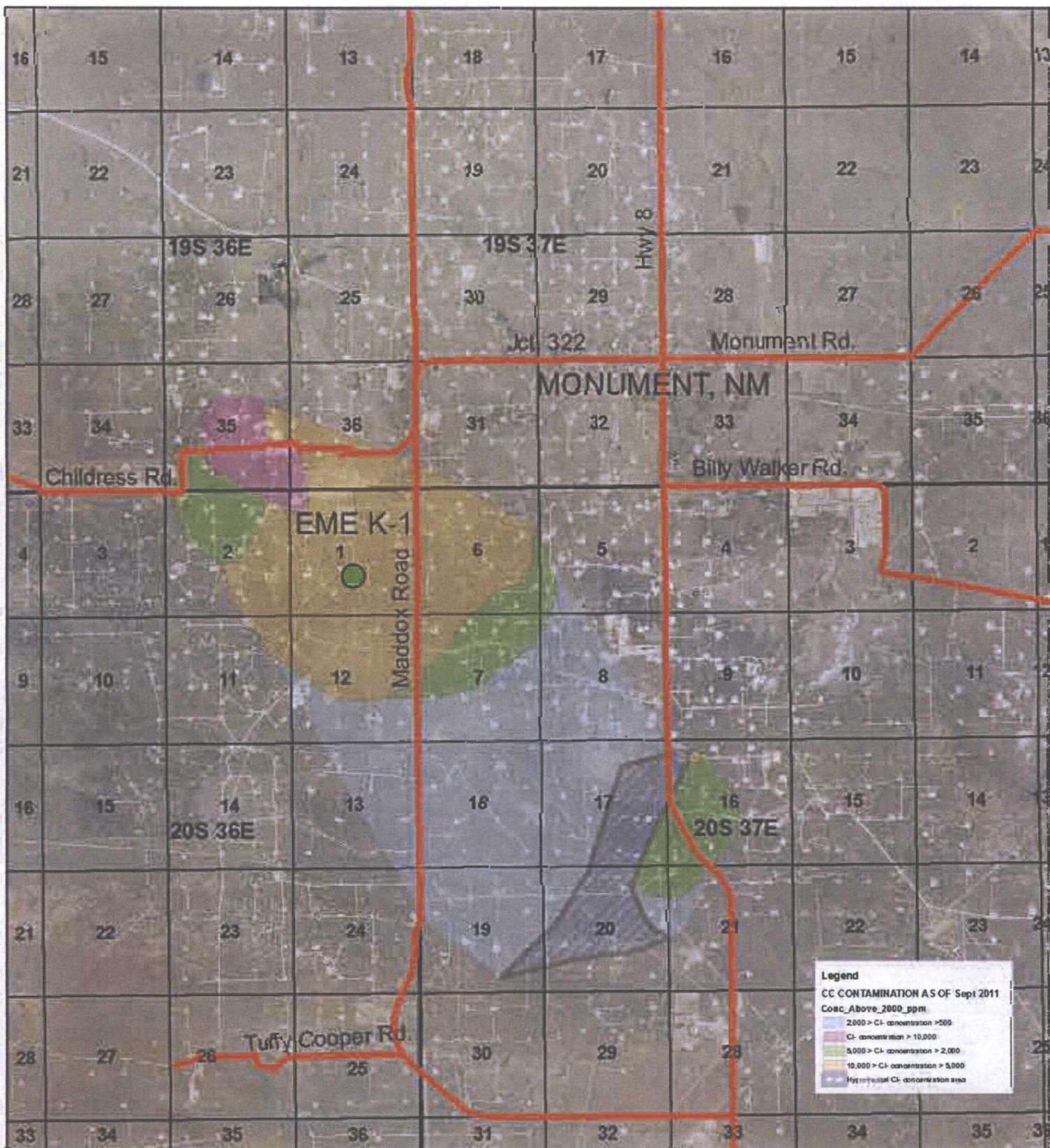
enclosures

RECEIVED OCD
2013 APR 24 P 2:24



Site Location Map

RICE *Operating Company* (ROC)
112 West Taylor Hobbs, NM 88240
Phone: (575) 393-9174 Fax: (575) 397-1471



EME K-1 (1R427-107)

Unit Letter K, Section 1
 T20S, R36E
 Lea County, NM



0 1 2
 Miles

Drawing date: 4/09/13
 Drafted by: LS



Junction Box Report

RICE *Operating Company* (ROC)
112 West Taylor Hobbs, NM 88240
Phone: (575) 393-9174 Fax: (575) 397-1471

**RICE OPERATING COMPANY
JUNCTION BOX FINAL REPORT**

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
E.M.E.	K-1	K	1	20 S	36 E	Lea	Length 13'	Width 11'	Depth 6'

LAND TYPE: BLM _____ STATE X FEE LANDOWNER Climax Chemical CO. OTHER _____

Depth to Groundwater 26' feet NMOCD SITE ASSESSMENT RANKING SCORE: 20

Date Started 04/15/2001 Date Completed 04/18/2001 OCD Witness No -

Soil Excavated 135 cubic yards Excavation Length 13' Width 11' Depth 11' feet

Soil Disposed 0 cubic yards Offsite Facility none Location none

FINAL ANALYTICAL RESULTS: Sample Date April 18, 2001 Sample Depth 11' 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	<0.005	0.005	0.006	0.028	<50	<50	160
BOTTOM	<0.005	<0.005	<0.005	0.019	<50	<50	304

General Description of Remedial Action: Delineated site below the NMOCD guidelines. Impacted area was blended with fresh soil below the NMOCD guidelines and used as backfill. A compacted clay barrier was installed. Then a water tight junction box was installed and then backfilled.

CHLORIDE FIELD TESTS

LOCATION	DEPTH	mg/kg
N wall	2'-5' BGS	50 ppm
E wall	2'-5' BGS	50 ppm
S wall	2'-5' BGS	50 ppm
W wall	2'-5' BGS	50 ppm
Wall Comp.	2'-5' BGS	50 ppm
Bottom Comp.	6' BGS	650 ppm
Bottom Comp.	7 1/2' BGS	1450 ppm
Bottom Comp.	10' BGS	450 ppm
Bottom Comp.	11' BGS	250 ppm

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

DATE April 18, 2001 PRINTED NAME Chris Rodriguez
SIGNATURE Chris Rodriguez TITLE Environmental Technician



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:

Receiving Date: 04/16/01
Reporting Date: 04/17/01
Project Number: K-1
Project Name: BOX UPGRADE
Project Location: E.M.E.

Sampling Date: 04/12/01
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: BC/AH

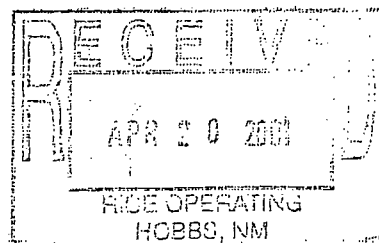
LAB NUMBER	SAMPLE ID	GRO	DRO	Cl*
		(C ₅ -C ₁₀) (mg/Kg)	(>C ₁₀ -C ₂₈) (mg/Kg)	
ANALYSIS DATE		04/16/01	04/16/01	04/17/01
H5790-1	BOTTOM COMPOSITE	<50	<50	1060
H5790-2	SIDES	<50	<50	160
Quality Control		776	726	960
True Value QC		800	800	1000
% Recovery		97.0	90.7	96.0
Relative Percent Difference		1.3	2.7	6.3

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl⁻: Std. Methods 4500-ClB

*Analyses performed on 1:4 w:v aqueous extracts.

Burgett J. Cooke
Chemist

4/17/01
Date



H5790A.XLS

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates 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.



ARDINAL
LABORATORIES

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:

Receiving Date: 04/16/01
Reporting Date: 04/17/01
Project Number: K-1
Project Name: BOX UPGRADE
Project Location: E.M.E.

Sampling Date: 04/12/01
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: BC

LAB NO.	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE		04/16/01	04/16/01	04/16/01	04/16/01
H5790-1	BOTTOM COMPOSITE	<0.005	<0.005	<0.005	<0.015
H5790-2	SIDES	<0.005	0.005	0.006	0.028
Quality Control		0.107	0.100	0.101	0.301
True Value QC		0.100	0.100	0.100	0.300
% Recovery		107	99.9	101	100
Relative Percent Difference		11.0	8.9	10.8	8.5

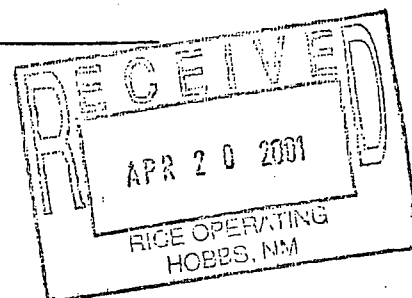
METHOD: EPA SW-846 8260

Chemist

Buyer J. Coche

Date

4/17/01



H5790B.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 ____

Company Name: <u>Rice Operating</u>				BILL TO				ANALYSIS REQUEST																			
Project Manager: <u>Chris Rodriguez</u>				P.O. #:				<div style="writing-mode: vertical-rl; transform: rotate(180deg);"> <u>✓ BTX, GOR, M, C</u> </div>																			
Address: <u>122 W. Taylor</u>				Company: <u>Rice</u>																							
City: <u>Hobbs</u>		State: _____		Zip: <u>88240</u>		Attn: _____																					
Phone #: <u>393-9174</u>		Fax #: _____		Address: <u>122 W. Taylor</u>		City: <u>Hobbs</u>																					
Project #: <u>K-1</u>		Project Owner: _____		State: <u>NM</u>		Zip: <u>88240</u>																					
Project Name: <u>Box upgrade</u>				Phone #: <u>393-9174</u>																							
Project Location: <u>E.M.E.</u>				Fax #: _____																							
Sampler Name: _____																											
FOR LAB USE ONLY																											
Lab I.D.		Sample I.D.		(G/RAB OR C/COMP.)		# CONTAINERS		MATRIX				PRESERV.		SAMPLING													
								GROUNDWATER WASTEWATER SOIL CRUDE OIL SLUDGE OTHER:				ACID/BASE: ICE / COOL OTHER:		DATE TIME													
<u>AS2901</u>		<u>K-1 GOR, M, C</u>		<u>15</u>				<u>X</u>						<u>4/2/01</u>													
		<u>SIDES</u>																									

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses, if claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable services. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates 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.

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 collection, including attorney's fees.

Sampler Relinquished: <u>Chris Rodriguez</u>		Date: _____		Received By: _____		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Phone #:	
		Time: _____				Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Fax #:	
Relinquished By: _____		Date: <u>4/2/01</u>		Received By: (Lab Staff) <u>[Signature]</u>		REMARKS:			
		Time: <u>4:00 PM</u>							
Delivered By: (Circle One)									
Sampler - UPS - Bus - Other:		Sample Condition		CHECKED BY:					
		Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		(Initials)					



ARDINAL LABORATORIES

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:

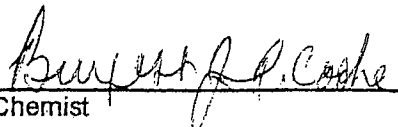
Receiving Date: 04/17/01
Reporting Date: 04/18/01
Project Number: K-1
Project Name: BOX UPGRADE
Project Location: E.M.E.

Sampling Date: 04/16/01
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: GP
Analyzed By: BC/GP

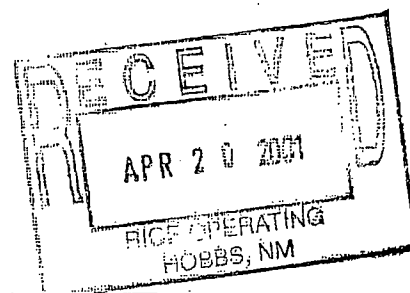
LAB NO.	SAMPLE ID	GRO	DRO	CI*
		(C ₆ -C ₁₀) (mg/Kg)	(>C ₁₀ -C ₂₈) (mg/Kg)	(mg/Kg)
ANALYSIS DATE		04/17/01	04/17/01	04/17/01
H5793-1	K-1 BOX UPGRADE // 865	<50	<50	304
Quality Control		776	726	960
True Value QC		800	800	1000
% Recovery		97.0	90.7	96.0
Relative Percent Difference		1.3	2.7	6.3

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

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


Chemist

4/18/01
Date



H5793A.XLS

PLEASE NOTE: **Liability and Damages.** Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates 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.



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

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

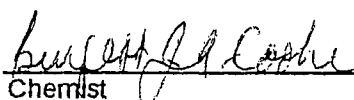
ANALYTICAL RESULTS FOR
RICE OPERATING CO.
ATTN: CHRIS RODRIGUEZ
122 W. TAYLOR
HOBBS, NM 88240
FAX TO:

Receiving Date: 04/17/01
Reporting Date: 04/18/01
Project Number: K-1
Project Name: BOX UPGRADE
Project Location: E.M.E.

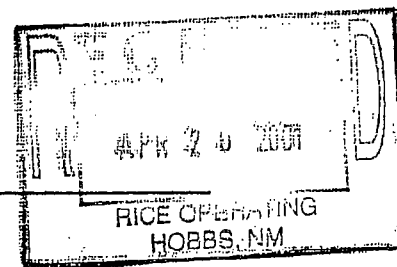
Sampling Date: 04/16/01
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: GP
Analyzed By: BC

LAB NO.	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE		04/17/01	04/17/01	04/17/01	04/17/01
H5793-1	K-1 BOX UPGRADE 11' BG5	<0.005	<0.005	<0.005	0.019
Quality Control		0.101	0.097	0.100	0.290
True Value QC		0.100	0.100	0.100	0.300
% Recovery		101	96.7	100	96.6
Relative Percent Difference		5.8	3.3	1.2	3.7

METHOD: EPA SW-846 8260


Chemist

4/18/01
Date



H5793B.XLS

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates 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.



(915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

Page 1 of 1

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claims arising whether based in contract or tort, shall be limited to the amount paid by the client for the services. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client. Its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claims is based upon any of the above stated reasons or otherwise.

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 collection, including attorney's fees.

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



Current Photodocumentation

RICE *Operating Company* (ROC)
112 West Taylor Hobbs, NM 88240
Phone: (575) 393-9174 Fax: (575) 397-1471

EME K-1 (1R427-107)

UL/K, Section 1, T20S, R36E



Facing north

3/20/2013



Facing west

3/20/2013