

1R - 427-386

**REPORTS**

**DATE:**

3-21-12

1R427-386  
RECEIVED OGC

2012 MAY -1 P 1:52

EME L-21 EOL  
2011

CLOSURE

# **RICE** *Operating Company*

122 West Taylor • Hobbs, New Mexico 88240

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

May 1, 2012

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

RE: Termination Request  
EME L-21 EOL: UL/L, Sec. 21, T19S, R37E  
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 2011, ROC initiated work on the former L-21 EOL junction box. The site is located in UL/L, Sec. 21, T19S, R37E. NM OSE records indicate that groundwater would likely be encountered at a depth of approximately 35 +/- feet. The site was delineated using a backhoe to collect soil samples at regular intervals, creating a 2x7x7-ft deep excavation. Each sample was field titrated for chlorides and field screened using a PID for hydrocarbons, resulting in low concentrations of each. The 7-ft sample was sent to a commercial laboratory for analysis of chloride and TPH, resulting in a chloride concentration of 16 mg/kg, and concentrations of gasoline range organics (GRO) and diesel range organics (DRO) below detectable limits. The excavated soil was returned to the excavation. The remaining excavation was backfilled with clean imported soil to ground surface and contoured to the surrounding area. On 1/10/2011, the site was seeded with a blend of native vegetation and is expected to return to a productive capacity at a normal rate. The junction box final report, photo documentation, laboratory analysis, PID sheet, chloride graph, and revegetation form 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

A handwritten signature in black ink, appearing to read 'H. Conder', with a stylized, flowing script.

Hack Conder  
Environmental Manager

enclosures

**RICE OPERATING COMPANY  
JUNCTION BOX FINAL REPORT**

**BOX LOCATION**

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
Eunice Monument Eumont (EME)	L-21 EOL	L	21	19S	37E	Lea	Length	Width	Depth
							Eliminated		

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

Depth to Groundwater 35 feet NMOCD SITE ASSESSMENT RANKING SCORE: 20

Date Started 1/20/2011 Date Completed 1/20/2011 OCD Witness No

Soil Excavated 3.6 cubic yards Excavation Length 2 Width 7 Depth 7 feet

Soil Disposed None cubic yards Offsite Facility n/a Location n/a

**FINAL ANALYTICAL RESULTS:** Sample Date 1/20/2011 Sample Depth 7'

TPH and Chloride laboratory test results completed by using an approved lab and testing procedures pursuant to NMOCD guidelines.

Sample Location	PID (field) ppm	GRO mg/kg	DRO mg/kg	Chloride mg/kg
SOURCE 7' GRAB	0.6	<10.0	<10.0	16

CHLORIDE FIELD TESTS		
LOCATION	DEPTH	mg/kg
background	6"	55
vertical delineation trench at the junction (source)	3'	80
	4'	84
	5'	141
	6'	90
	7'	87

**General Description of Remedial Action:** This junction and line were eliminated during the pipeline replacement/upgrade program. After the former junction box was removed, an investigation was conducted using a backhoe to collect soil samples at regular intervals creating a 2X7X7-ft. deep excavation. Chloride field tests performed on each sample yielded concentrations similar to that of the background sample. Organic vapors were measured using a PID, which yielded low concentrations. The deepest sample, 7 ft. BGS, was sent to a commercial laboratory for analysis of chloride and TPH, which confirmed low concentrations of each. The excavation was backfilled with excavated soil. The remaining excavation was backfilled with clean imported soil to ground surface and contoured to the surrounding area. On 1/20/2011, the site was seeded with a blend of native vegetation and is expected to return to a productive capacity at a normal rate.

enclosures: photos, lab results, PID (field) screenings, chloride graph, revegetation form

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

SITE SUPERVISOR Robert Egans SIGNATURE *Robert Egans*

REPORT ASSEMBLED BY Laura Peña SIGNATURE *Laura Peña*

COMPANY RICE OPERATING COMPANY

PROJECT LEADER Larry Bruce Baker, Jr. SIGNATURE *Larry Bruce Baker Jr.*

DATE 3-21-12

# EME L-21 EOL

Unit L, Section 21, T19S, R37E



Collecting sample, facing northeast

1/20/2011



Backfilling site, facing northeast

1/20/2011



Seeding site, facing southwest

1/20/2011



Site complete, facing north

1/20/2011

January 27, 2011

Bruce Baker  
Rice Operating Company  
112 W. Taylor  
Hobbs, NM 88240

RE: EME L-21 EOL (19/37)

Enclosed are the results of analyses for samples received by the laboratory on 01/20/11 16:00.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene  
Lab Director/Quality Manager

COPY

**Analytical Results For:**

Rice Operating Company  
Bruce Baker  
112 W. Taylor  
Hobbs NM, 88240  
Fax To: (575) 397-1471

Received: 01/20/2011  
Reported: 01/27/2011  
Project Name: EME L-21 EOL (19/37)  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 01/20/2011  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: SOURCE @ 7' (H100149-01)**

Chloride, SM4500Cl-B			mg/kg		Analyzed By: LR				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	01/21/2011	ND	432	108	400	0.00	
TPH 8015M			mg/kg		Analyzed By: AB				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	01/25/2011	ND	228	91.4	250	3.38	
DRO >C10-C28	<10.0	10.0	01/25/2011	ND	218	87.2	250	6.71	
Surrogate: 1-Chlorooctane	98.9 %	70-130							
Surrogate: 1-Chlorooctadecane	102 %	70-130							

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Cardinal Laboratories

\* = Accredited Analyte

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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



**Notes and Definitions**

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240

(505) 393-2326 FAX (505) 393-2476

[illegible]

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. 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 claim is based upon any of the above stated reasons or otherwise.

Relinquished By:		Date:	Received By:	Phone Result:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
Robert T Egans		Time:	Jodi Henson	Fax Result:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By:		Date:	Received By:	REMARKS:		
		Time:		bbaker@RiceSwd.COM		
Delivered By: (Circle One)				REgans		
Sampler - UPS - Bus - Other:		Sample Condition		R Harrison		
		Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No		CHECKED BY:		
				(Initials)		

† Cardinal cannot accept verbal changes. Please fax written changes to 505-293-2476

505-293-2476  
#26

# RICE OPERATING COMPANY

122 West Taylor Hobbs, NM 88240

PHONE: (575) 393-9174 FAX: (575) 397-1471

PID METER CALIBRATION & FIELD REPORT FORM

Check Model Number:

✓

Model: PGM 7300 Serial No: 590-000183  
 Model: PGM 7300 Serial No: 590-000508  
 Model: PGM 7320 Serial No: 592-903318


Model: PGM 7600 Serial No: 110-023920  
 Model: PGM 7600 Serial No: 110-013744  
 Model: PGM 7600 Serial No: 110-013676

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO: 930360	EXPIRATION DATE: 5-24-2013
FILL DATE:	METER READING ACCURACY: 100ppm

ACCURACY : +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
EME	L-21 EOL	L	21	19	37

SAMPLE ID	PID	SAMPLE ID	PID
Source 3'	.8	Background	.6
4'	1.1		
5'	1.7		
6'	1.5		
7'	.6		

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I verify that I have calibrated the above instrument in accordance to the manufacture operation manual.

SIGNATURE: *Robert Jones*

DATE: 1-20-2011

## CHLORIDE CONCENTRATION CURVE

RICE Operating Company

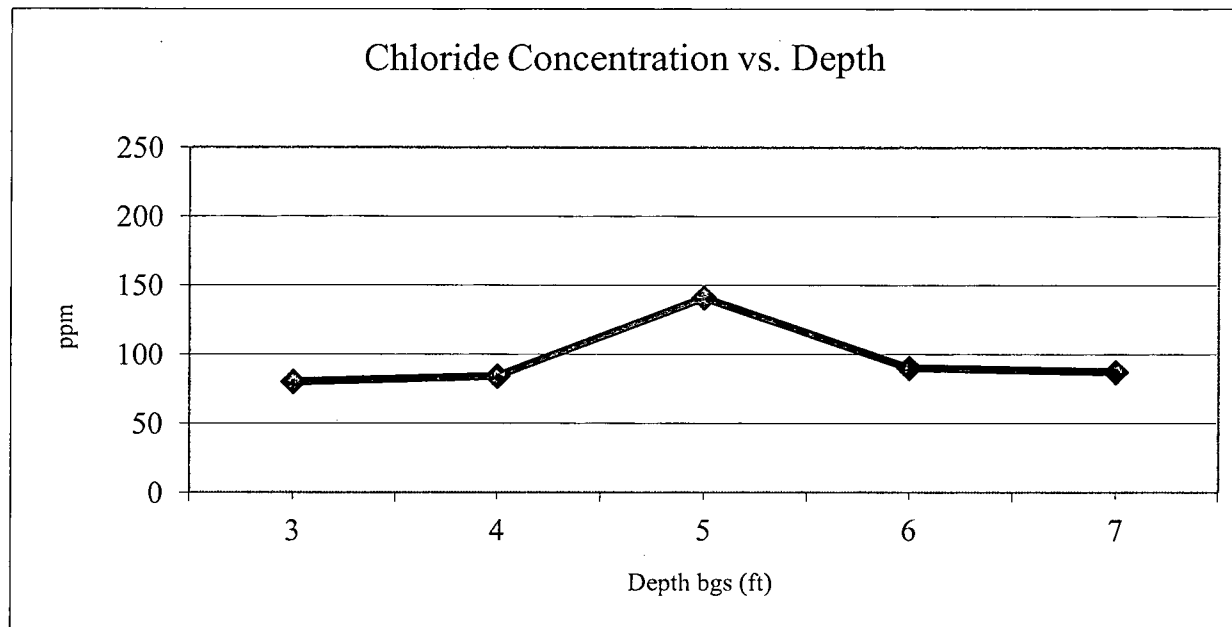
### EME L-21 EOL

Unit 'L', Sec. 21, T19S, R37E

*Backhoe samples at junction (source)*

Depth bgs (ft)	[Cl <sup>-</sup> ] ppm
3	80
4	84
5	141
6	90
7	87

Groundwater = 35 ft





PO Box 5630  
Hobbs, NM 88241  
Phone: (575) 393-4411  
Fax: (575) 393-0293

## REVEGETATION FORM

### 1. General Information

Site name: EME L-21 EOL						
U/L L	Section 21	Township T19S	Range R37E	County Lea	Latitude 32° 38.706'	Longitude 103° 15.800'
Contact Name: Bruce Baker						
Email: bbaker@rice-ecs.com						
Site size: 30 x 37		square feet: 1110		Map detail of site attached <input checked="" type="checkbox"/>		
Additional information:						

### 2. Soils

*\*Do not rip caliche subsoils; caliche rocks brought to the surface by ripping shall be removed.*

Salvaged from site <input checked="" type="checkbox"/>	Bioremediated <input type="checkbox"/>	Imported <input checked="" type="checkbox"/>	Blended <input type="checkbox"/>	Depth (in):	
Texture:		Describe soil & subsoil:			
Soil prep methods:	Rip <input type="checkbox"/>	Depth(in):	Disc <input type="checkbox"/>	Depth (in):	Rollerpack <input type="checkbox"/>
Date completed: 1/20/2011					

### 3. Bioremediation

Fertilizer <input type="checkbox"/>	Hay <input type="checkbox"/>	Other <input type="checkbox"/>
Type:		Describe:
Lbs/acre:		

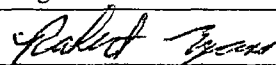
### 4. Seeding

*\*Attach seed bag tags to this form. Seed bag tags shall contain the site name and S-T-R.*

Custom seed mix <input checked="" type="checkbox"/>	Prescribed mix <input type="checkbox"/>	Seed mix name: 1 lb. Blue Grama	Seeding date: 1/20/2011
Broadcast <input checked="" type="checkbox"/>			
Method: hand broadcast			
Soil conditions during seeding: Dry <input checked="" type="checkbox"/> Damp <input type="checkbox"/> Wet <input type="checkbox"/>			
Photos attached <input checked="" type="checkbox"/>	Observations:		
Number of photos: 3			

### 5. Certification

I hereby certify that the information in this form and attachments is true and complete to the best of my knowledge and belief.

Name: Robert Egans	Title: Environmental Tech	Date: 1/20/2011
Signature: 		

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