# 1R-427-322

# **APPROVALS**

YEAR(S):

2013

# Hansen, Edward J., EMNRD

From: Hansen, Edward J., EMNRD

**Sent:** Thursday, September 05, 2013 8:26 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 (1R427-322) Termination - ROC EME J-25 EOL Site

**RE: Termination Request** 

for the Rice Operating Company's

**EME J-25 EOL Site** 

Unit Letter J, Section 25, T20S, R36E, NMPM, Lea County, New Mexico

Remediation Plan (1R427-322) 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 (including further investigation results), dated August 27, 2013 (received August 30, 2013). The report is 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 (1R427-322) 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 RECEIVED OCD

122 West Taylor • Hobbs, New Mexico 88240 703 703 70 30 2: 31 Phone: (575) 393-2967 • Fax: (575) 393-0293

CERTIFIED MAIL
RETURN RECEIPT NO. 7007 2560 0000 4569 8913

# August 27, 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

RE: Termination Request

EME J-25 EOL (1R427-322): UL/J, Sec. 25, 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 2010, ROC initiated work on the former J-25 EOL junction box. The site is located in UL/J, Sec. 25, T20S, R36E. NM OSE records indicate that groundwater would likely be encountered at a depth of approximately 106 +/- feet. The site was delineated using a backhoe to collect soil samples at regular intervals, creating a 30x30x12 ft deep excavation. Each sample was field titrated for chlorides and screened for TPH, resulting in low concentrations of each. The excavated soil was blended on site and representative composite samples of the excavation walls, bottom and blended backfill were sent to a commercial for analysis of chloride and TPH, resulting in a 4-wall chloride concentration of 272 mg/kg, a gasoline range organics (GRO) concentration below detectable limits and a diesel range organics (DRO) concentration of 39.2 mg/kg. The bottom composite resulted in a chloride concentration of 400 mg/kg and concentrations of GRO and DRO below detectable limits. The blended backfill resulted in a chloride concentration of 352 mg/kg, a GRO concentration below detectable limits and a DRO concentration of 38.9 mg/kg. The excavation was backfilled with the excavated soil to ground surface and contoured to the surrounding area. On 5/19/2010, the site was seed with a blend of native vegetation.

On 4/4/2013, the site was seeded with a blend of native vegetation. Vegetation will act as an evapo-transpiration barrier that will also inhibit the downward migration of chlorides and hydrocarbons. Plants capture water through their roots and so reduce the amount of water infiltrating below the root zone. The site revegetation form and photos of these activities are attached.

A Termination Request was submitted to NMOCD on April 26, 2013. On May 16, 2013, NMOCD requested further delineation of the site.

# Further investigation

To further investigate the depth of chloride presence, a soil bore was initiated on June 18, 2013 at 4 ft west of the former junction box site. The boring was advanced to a depth of 25 ft below ground surface (bgs) with soil samples collected every 5 ft. Each sample was field titrated for chlorides and field screened using a PID for hydrocarbons, resulting in concentrations that did relent with depth. The 15 ft and 25 ft samples were sent to a commercial laboratory for analysis. The 15 ft samples resulted in a chloride concentration of 96 mg/kg and concentrations of GRO and DRO below detectable limits. The 25 ft sample resulted in a chloride concentration of 48 mg/kg and concentrations of GRO and DRO below detectable limits. The entire bore hole was plugged with bentonite to ground surface.

The junction box site location map, area map, soil bore plat, logs, laboratory analysis and 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)393-2967 if you have any questions or wish to discuss this site. Thank you for your time and consideration.

Sincerely,

RICE Operating Company

Hack Conder

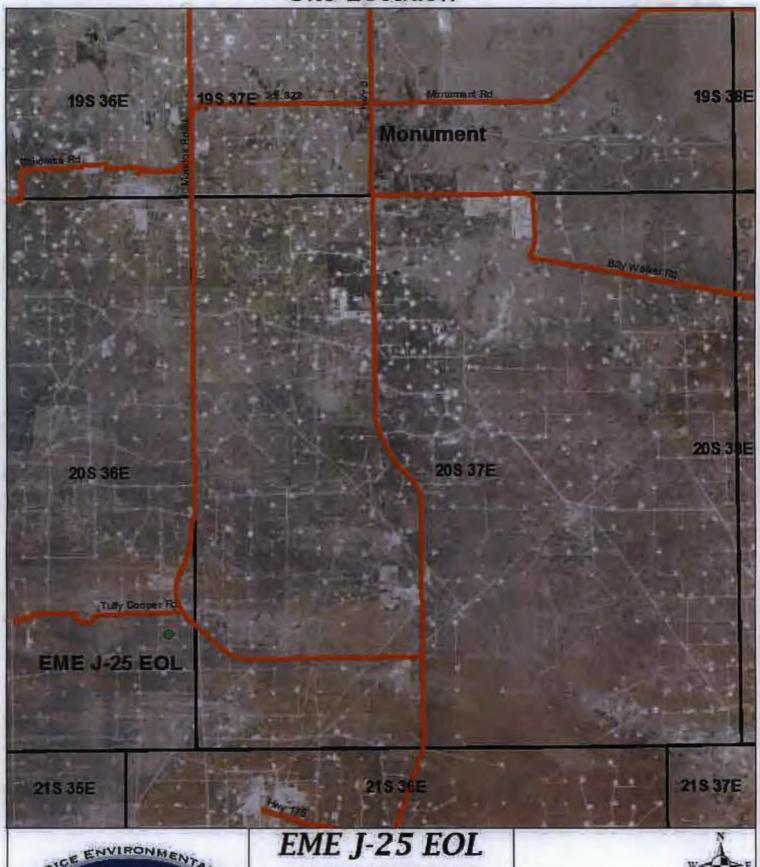
**Environmental Manager** 

enclosures



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

# Site Location





(1R427-322)

LEGALS: UL/J, Sec. 25, T-20-S, R-36-E LEA COUNTY, NM



0.9 1.8 Miles

Drawing date 2/12/13 Drafted by: L. Weinheimer

# **Area** Мар



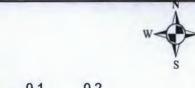


# **EME**

J-25 EOL UL J SECTION 25

T-20-S R-36-E LEA COUNTY, NM

NMOCS Case # 1R427-322



0.1 0.2 Miles

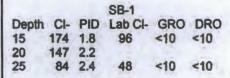
Drawing date: 8/23/13 Drafted by: T. Grieco



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

# Soil Bore Installation

Source



NON-ROC 4 in STEEL LINE

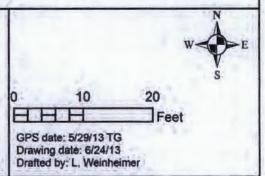
DGW: 106 ft



# EME J-25 EOL

UL J SECTION 25 T-20-S R-36-E LEA COUNTY, NM

NMOCD Case #: 1R427-322



ROC ABANDONED & IN AC LINE

Kyle Norman & Edward Logger: Cesareo Source Driller: Harrison & Cooper, Inc. **Drilling Method: Project Name:** Well ID: Air Rotary EME J-25 EOL Start Date: 6/18/2013 SB-1 End Date: 6/18/2013 Location: UL/J sec. 25 T20S, R36E Comments: SB-1 is located 4' west of the former junction box site. All samples were from cuttings. Lat: 32°32'25.483"N **DRAFTED BY: L. Weinheimer** County: Lea TD = 25 ftGW = 106 ft Long: 103°18'14.919"W State: NM Chloride Depth **Well Construction** LAB PID Description Lithology field tests (feet) SS Regolith 5ft 10 ft bentonite Caliche with Tan Sand seal CI-1.8 15 ft 174 96 GRO <10 DRO <10 20 ft 2.2 147 Tan Sand CI-2.4 25 ft 84 48 GRO

> <10 DRO <10



June 24, 2013

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: EME J-25 EOL

Enclosed are the results of analyses for samples received by the laboratory on 06/18/13 15:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> accred certif.html.

Cardinal Laboratories is accreditated 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 (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celey D. Keene

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



# Analytical Results For:

Rice Operating Company KATIE JONES 112 W. Taylor Hobbs NM, 88240

Fax To:

(575) 397-1471

Received:

06/18/2013

06/24/2013

Reported: Project Name:

EME J-25 EOL NONE GIVEN

Project Number: Project Location:

NOT GIVEN

Sampling Date:

06/18/2013

Sampling Type:

Soil Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

### Sample ID: SB #1 15' (H301405-01)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True <b>V</b> alue QC	RPD	Qualifier
Chloride	96.0	16.0	06/20/2013	ND	432	108	400	3.77	
TPH 8015M	mg,	mg/kg		d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/21/2013	ND	220	110	200	1.01	
DRO >C10-C28	<10.0	10.0	06/21/2013	ND	231	116	200	0.0575	

Surrogate: 1-Chlorooctane

94.4 %

65.2-140

Surrogate: 1-Chlorooctadecane

94.8 %

63.6-154

### Sample ID: SB #1 25' (H301405-02)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	06/20/2013	ND	432	108	400	3.77		
TPH 8015M	mg,	/kg	Analyze	d By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BŞ	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	6-C10 <10.0 10.0		06/21/2013	ND	ND 220		200	1.01		
DRO >C10-C28	<10.0	10.0	06/21/2013	ND	231	116	200	0.0575		
Surrogate: 1-Chlorooctane	90.0	% 65.2-14	0							
Surrogate: 1-Chlorooctadecane	92.0	% 63.6-15	4							

### 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 walved 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.

Celegi Keine



ND

### **Notes and Definitions**

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

Analyte NOT DETECTED at or above the reporting limit

Cardinal Laboratories \*=Accredited Analyte

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Celey & Keine

# ARDINAL LABORATORIES

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603 (505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

Company Name	RICE Operating			<u> </u>	ANALYSIS REQUEST																
Project Manage	anager: Katie Jones P.O. #:																		-		
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Project #:	Project Owner	:			Cit	y:					Σ		s ТРН	Cations/Anions					-		
Project Name:					Sta	ate:		Zip:		es	8015	$\mathbf{x}$							.		
Project Location	: EME J-25 E.O.L				Ph	one	#:			Chlorides		BTEX			TDS		·				
	Edward Cesareo			:	Fax #:					은		B	exas	ပ	F			1	- 1		
FOR LAB USE ONLY				MATRIX PRESERV				SAMPLI	NG	$\ddot{\circ}$	PH		(e)	te							
Lab I.D. H301405	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER WASTEWATER SOIL OIL SLUDGE	OTHER:	ACID/BASE:	ICE / COOL OTHER:	DATE	TIME					Complete					-		
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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 watved 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 consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries,

anisates of successions aliasing 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 of otherwise.												
Rel	inquished By:	Date:	Receiv	red By:		Phone Result:	☐ Yes	☑ No	Add'l Phone #:			
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<sup>†</sup> Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2479

# EME J-25 EOL (1R427-322) Unit Letter J, Section 25, T-20-S, R-36-E



Drilling SB-1, facing northwest 6/18/13



Plugging SB-1 in total with bentonite 6/18/13



Completed SB-1, facing northeast 6/18/13