

1R - 425-71

**APPROVALS**

**YEAR(S):**

2012

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**Hansen, Edward J., EMNRD**

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**From:** Hansen, Edward J., EMNRD  
**Sent:** Wednesday, July 11, 2012 2:44 PM  
**To:** Hack Conder (hconder@riceswd.com)  
**Cc:** Leking, Geoffrey R, EMNRD; Laura Pena (lpena@riceswd.com); Lara Weinheimer (lweinheimer@rice-ecs.com); Scott Curtis (scurtis@riceswd.com)  
**Subject:** Remediation Plan (1R425-71) Termination - ROC Vacuum Marathon McAlister EOL Site

**RE: Termination Request  
for the Rice Operating Company's  
Vacuum Marathon McAlister EOL Site  
Unit Letter M, Section 25, T17S, R34E, NMPM, Lea County, New Mexico  
Remediation Plan (1R425-71) 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 June 1, 2012 (received June 7, 2012) and additional photo-documentation received June 22, 2012. 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 (1R425-71) 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

RECEIVED

JUN -7 2012

**RICE** *Operating Company*

122 West Taylor • Hobbs, New Mexico 88240

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

Oil Conservation Division

1220 S. St. Francis Drive

Santa Fe, NM 87505

CERTIFIED MAIL

RETURN RECEIPT NO. 7007 2560 0000 4569 8593

June 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  
Vacuum Marathon McAlister EOL (1R425-71): UL/M, Sec. 25, T17S, R34E  
RICE Operating Company – Vacuum SWD System

Mr. Hansen:

Rice Operating Company (ROC) is the service provider (agent) for the abandoned Vacuum 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 2005, ROC initiated work on the former Marathon McAlister EOL junction box as part of the system abandonment. The site is located in UL/M, Sec. 25, T17S, R34E. NM OSE records indicate that groundwater would likely be encountered at a depth of approximately 95 +/- feet. The site was delineated using a backhoe to collect soil samples at regular intervals, creating a 5x3x15-ft deep excavation. The site could not be excavated any large due to site being located near a battery and a lease road. Chloride field tests were performed on each sample which yielded some elevated concentrations. Organic vapors were measured using a PID, which yielded low concentrations. The excavated soil was returned to the excavation to ground surface. Clean, imported soil was used as a top cap and to contour the site to the surrounding area. On 5/29/2008, the site was seeded with a blend of native vegetation and is expected to return to a productive capacity at a normal rate.

To further investigate the depth of chloride presence, a soil bore was initiated on 2/9/2009 at the former junction box site. The boring was advanced to 30 ft BGS with soil samples collected every 5 ft. The 20 and 30 ft samples were sent for laboratory analysis, resulting in a chloride concentration of 352 mg/kg and concentrations of gasoline range organics (GRO) and diesel range organics (DRO) below detectable limits at 20 ft BGS. The 30 ft sample resulted in a chloride concentration of 272 mg/kg, a GRO concentration below detectable limits, and a DRO concentration of 31.5 mg/kg. The junction box final report, photo documentation, laboratory analysis, PID sheet and boring log 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

**RICE OPERATING COMPANY  
JUNCTION BOX FINAL REPORT**

**BOX LOCATION**

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
							Length	Width	Depth
Vacuum	Marathon McAlister EOL	M	25	17S	34E	Lea	eliminated		

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

Depth to Groundwater: 95 feet NMOCD SITE ASSESSMENT RANKING SCORE: 10

Date Started: 9/8/2005 Date Completed: 2/9/2009 OCD Witness: no

Soil Excavated: 8.3 cubic yards Excavation Length: 5 Width: 3 Depth: 15 feet

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

**FINAL ANALYTICAL RESULTS:** Sample Date: 2/9/2009 Sample Depth: 20 ft, 30 ft

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

**CHLORIDE FIELD TESTS**

Sample Location	PID (field) ppm	GRO mg/kg	DRO mg/kg	Chloride mg/kg
SOIL BORING #1 @ 20'	0.0	<10.0	<10.0	352
SOIL BORING #1 @ 30'	0.0	<10.0	31.5	272

LOCATION	DEPTH	mg/kg
vertical delineation trench at the junction (source)	3'	269
	4'	369
	5'	381
	6'	680
	7'	982
	8'	855
	9'	765
	10'	799
	11'	598
	12'	766
	13'	1455
	13'	1654
	14'	1783
	15'	660
	15'	282
SOIL BORING at the junction (2/9/2009)	20'	363
	25'	336
	30'	279

**General Description of Remedial Action:** This junction was addressed during the Vacuum SWD System abandonment. The former junction box was investigated using a backhoe to collect soil samples at regular intervals. The overall junction box excavation had dimensions of 5x3x15-ft deep. The site could not be excavated any larger due to the location being near a battery and a lease road. Chloride field tests were performed on each sample which yielded elevated concentrations. Organic vapors were measured using a PID which yielded low concentrations. The excavated soil was returned to the excavation and clean, imported soil was used fill the excavation to ground surface and to contour the site to the surrounding area. On 5/29/2008, the site was seeded with a blend of native vegetation and is expected to return to a productive capacity at a normal rate. To further investigate depth of chloride presence, a soil boring was initiated on 2/9/2009 at the former junction box site. The boring was advanced to 30 ft BGS while soil samples were collected every 5 ft and field tested for chloride and organic vapors. The field tests yielded low concentrations of both. The 20' and 30' ft samples were analyzed by a commercial laboratory for chloride and TPH which confirmed low concentrations. The entire bore hole was plugged with bentonite to the ground surface.

enclosures: photos, lab results, PID (field) screenings, boring log, chloride curve

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

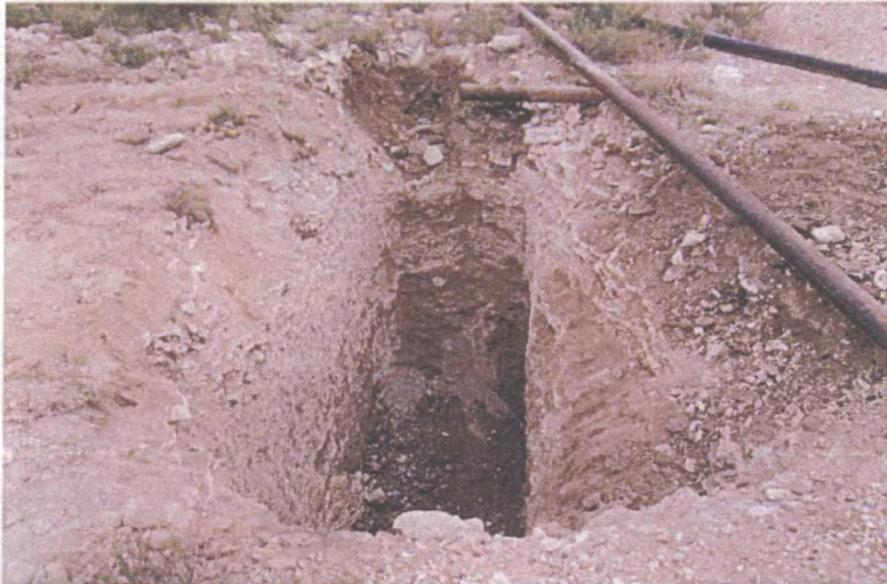
SITE SUPERVISOR: Roy Rascon SIGNATURE: \_\_\_\_\_ not available COMPANY: RICE OPERATING COMPANY

REPORT ASSEMBLED BY: Katie Jones INITIAL: D

PROJECT LEADER: Larry Bruce Baker Jr. SIGNATURE: Larry Bruce Baker Jr. DATE: 10-15-09

# Vacuum Marathon McAlister EOL

Unit M, Section 25, T17S, R34E



excavation at the former junction box

5/28/2008



backfilling the excavation

5/28/2008



seeding the backfilled site

5/29/2008



soil boring the former junction box site

2/9/2009



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

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MAR 03 2009  
RICE OPERATING  
HOBBS, NM

ANALYTICAL RESULTS FOR  
RICE OPERATING COMPANY  
ATTN: HACK CONDER  
122 W. TAYLOR  
HOBBS, NM 88240  
FAX TO: (575) 397-1471

COPY

Receiving Date: 02/10/09  
Reporting Date: 02/27/09\*\*  
Project Owner: NOT GIVEN  
Project Name: VACUUM MARATHON McALISTER  
Project Location: NOT GIVEN

Sampling Date: 02/09/09  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: ZL  
Analyzed By: AB/HM

LAB NUMBER SAMPLE ID	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/kg)	DRO (>C <sub>10</sub> -C <sub>20</sub> ) (mg/kg)	Cl* (mg/kg)
ANALYSIS DATE	02/10/09	02/10/09	02/10/09
H16863-1 SB #1 @ 20'	<10.0	<10.0	352
H16863-2 SB #2 @ 30'	<10.0	31.5	272
Quality Control	549	562	500
True Value QC	500	500	500
% Recovery	110	112	100
Relative Percent Difference	3.0	7.1	2.0

METHODS: TPH GRO & DRO: EPA SW-846-8015 M; Cl: Std. Methods 4500-ClB  
\*Analyses performed on 1:4 w:v aqueous extracts.

\*\*Revised Report.

*Alan Keane*  
\_\_\_\_\_  
Chemist

02/27/09  
\_\_\_\_\_  
Date

H16863 TCL RICE

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. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



# CARDINAL LABORATORIES

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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>RICE OPERATING</u>		<b>BILL TO</b>		ANALYSIS REQUEST																							
Project Manager: <u>HACK CONDEZ</u>		P.O. #:		COPY																							
Address: <u>122 W. TAYLOR</u>		Company:																									
City: <u>HOBBS</u> State: <u>NM</u> Zip: <u>88240</u>		Attn:																									
Phone #: <u>393-9174</u> Fax #: <u>393-1471</u>		Address:																									
Project #: _____ Project Owner: _____		City:																									
Project Name: <u>VACUUM MARATHON MAALISTER</u>		State: _____ Zip: _____																									
Project Location: _____		Phone #: _____																									
Sampler Name: <u>TONY GRIECO</u>		Fax #: _____																									
CLORIDE												7248015M															
FOR LAB USE ONLY																											
Lab I.D.		Sample I.D.		# CONTAINERS	MATRIX				PRESERV			SAMPLING															
				(GIRAB OR COOMP)	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE/COOL	OTHER	DATE	TIME												
<u>H16863-1</u>		<u>SB#1 20'</u>		<u>G</u>			<u>✓</u>					<u>✓</u>		<u>2/9/09</u>	<u>9:10</u>												
<u>-2</u>		<u>SB#2 30'</u>		<u>G</u>			<u>✓</u>					<u>✓</u>		<u>2/9/09</u>	<u>9:14</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. 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 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 or 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: <u>[Signature]</u>		Date: _____		Received By: <u>[Signature]</u>		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Phone #:	
		Time: _____		<u>2/10/09 7:45 AM</u>		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Fax #:	
Relinquished By: _____		Date: _____		Received By: _____		REMARKS: <u>email results</u> <u>lweinhammer@riceswd.com</u> <u>heweler@riceswd.com</u> <u>j.purvis@riceswd.com</u>			
Delivered By: (Circle One)		Sample Condition		CHECKED BY: (Initials)					
<input checked="" type="checkbox"/> UPS <input type="checkbox"/> Bus <input type="checkbox"/> Other:		Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No							

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

COPY

<b>Logger:</b>	Tony Grieco	<b>Client:</b>	RICE Operating Company	<b>Well ID:</b>  SB - 1
<b>Driller:</b>	Harrison & Cooper, Inc. Drilling	<b>Project Name:</b>	Vacuum Marathon McCallister	
<b>Drilling Method:</b>	Air rotary	<b>Location:</b>	Vacuum SWD System	
<b>Start Date:</b>	2-9-09		unit 'M' Sec.25 T17S, R34E	
<b>End Date:</b>	2-9-09		Lea County, NM	
<b>Comments:</b> Located: at the center of the former junction box site  TD = 30 ft      GW = 97 ft				

Depth (feet)	chloride field tests	PID	Description	Lithology	Soil Bore Construction
15	282	0	15 - 30 ft VERY FINE TO FINE SAND dry		bentonite seal
20	363	0			
Lab Cl-	352				
DRO					
GRO	<10/<10				
25	336	0			
30	279	0			
Lab Cl-	272				
DRO					
GRO	31.5/<10				

# RICE OPERATING COMPANY

122 West Taylor ~ Hobbs, NM 88240

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

## PID METER CALIBRATION & FIELD REPORT FORM

CK	<input type="checkbox"/>
MODEL	<input checked="" type="checkbox"/>
NO.	<input type="checkbox"/>

MODEL: PGM 7300 SERIAL NO: 590-000183  
 MODEL: PGM 7300 SERIAL NO: 590-000504  
 MODEL: PGM 7600 SERIAL NO: 110-12383  
 MODEL: PGM 7600 SERIAL NO: 110-02920

COPY

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO:	EXPIRATION DATE: 9-11-09
FILL DATE:	METER READING ACCURACY: 100.0

ACCURACY: +/- 2%

SYSTEM	SITE	UNIT	SECTION	TOWNSHIP	RANGE
Vacuum	Marathon McCullister	M	25	T17S	R34E

SAMPLE ID: SB #1

DEPTH	PID	DEPTH	PID	DEPTH	PID	DEPTH	PID
15'	0						
20'	0						
25'	0						
30'	0						

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

Signature

*[Handwritten Signature]*

Date

2-9-09

### SITE MAP

Lot # & Fill date are not available since the gas was provided as part of the new PID. meth.



# RICE OPERATING COMPANY

122 West Taylor Hobbs, NM 88240  
 PHONE: (505) 393-9174 FAX: (505) 397-1471  
 PID METER CALIBRATION & FIELD REPORT FORM



MODEL NO: PGM 761S SERIAL #104412

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO : 04-2747	EXPIRATION DATE: 6-1-06
FILL DATE: 2-1-05	METER READING ACCURACY: 100.5

ACCURACY : +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
VAC	MARATHON McCALISTER EOL	M	25	17S	34E

SAMPLE ID	PID	SAMPLE ID	PID
1'		13'	0
2'			
3'	46'		
4'	0.01		
5'	0.01		
6'	0.01		
7'	0.01		
8'	0.01		
9'	0.01		
10'	0.01		
11'	0.01		
12'	0.01		

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

SIGNATURE:

*Loy R. Ross*

DATE: 9-8-05

# RICE OPERATING COMPANY

122 West Taylor Hobbs, NM 88240  
 PHONE: (505) 393-9174 FAX: (505) 397-1471  
 PID METER CALIBRATION & FIELD REPORT FORM

COPY

MODEL: PGM 7600 SERIAL #: 110-013744

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO : 07-3353	EXPIRATION DATE: 5-16-09
FILL DATE: 11-16-07	METER READING ACCURACY: 100.0

ACCURACY: +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
VAC	MARATHON McCALISTER EOL	M	25	17S	35E

SAMPLE ID	PID	SAMPLE ID	PID
VERT @ SOURCE @ 13'	0		
14'	0		
15'	0		

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

SIGNATURE:

*Ray R. Rascon*

DATE: 5-22-08

**Hansen, Edward J., EMNRD**

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**From:** Laura Pena <lpena@riceswd.com>  
**Sent:** Friday, June 22, 2012 3:48 PM  
**To:** Hansen, Edward J., EMNRD  
**Cc:** Hack Conder  
**Subject:** ROC - Vacuum Marathon McAlister EOL (1R425-71) Photo Documentation  
**Attachments:** Vacuum Marathon McAlister EOL (1R425-71) Photo Documentation.pdf

Mr. Hansen,

Attached is the photo documentation for the Vacuum Marathon McAlister EOL (1R425-71) site as requested.

Let Hack Conder or me know if you have any questions or require any additional information.

Thank you,

Laura Peña  
Environmental Project Scientist  
RICE Operating Company

Vacuum Marathon McAlister EOL (1R425-71)  
Unit M, Section 25, T17S, R35E



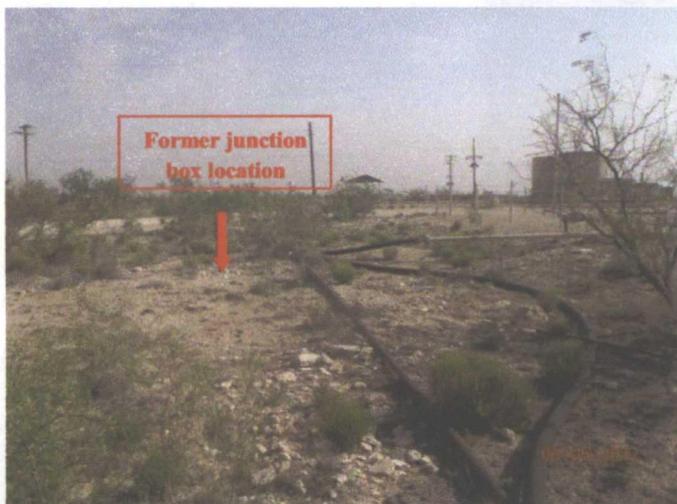
Facing north

6/9/2005



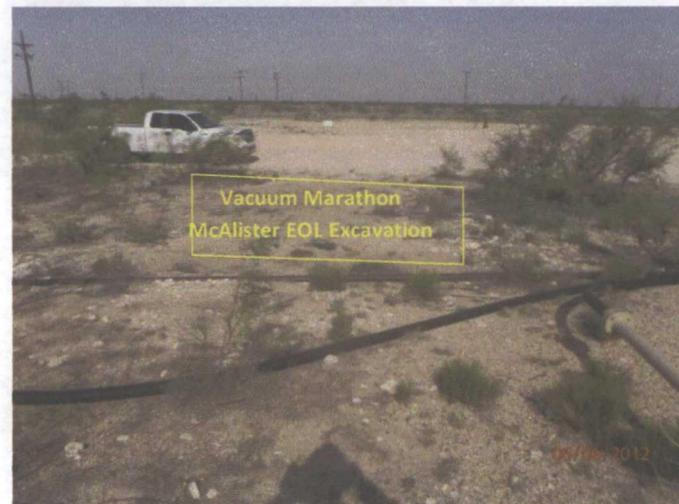
Facing west

9/8/2005



Facing north

6/6/2012



Facing west

6/6/2012