

1R - 425-02

**APPROVALS**

**YEAR(S):**

2012

---

**Hansen, Edward J., EMNRD**

---

**From:** Hansen, Edward J., EMNRD  
**Sent:** Monday, April 23, 2012 12:47 PM  
**To:** 'Hack Conder'  
**Cc:** Leking, Geoffrey R, EMNRD; 'Katie Jones'; 'Laura Pena'; 'Scott Curtis'  
**Subject:** Remediation Plan (1R425-02) Termination- ROC Vacuum BO EOL Site

**RE: Termination Request  
for the Rice Operating Company's  
Vacuum BO EOL Site  
Unit Letter G, Section 12, T18S, R34E, NMPM, Lea County, New Mexico  
Remediation Plan (1R425-02) 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 13, 2012 (received April 20, 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 (1R425-02) 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 OCD

2012 APR 20 A 9:10

## **RICE** *Operating Company*

122 West Taylor • Hobbs, New Mexico 88240

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

April 13, 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 BO EOL (1R425-02): UL/G, Sec. 12, T18S, 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 2004, ROC initiated work on the former BO EOL junction box as part of the system abandonment. The site is located in UL/G, Sec. 12, T18S, R34E. NM OSE records indicate that groundwater would likely be encountered at a depth of approximately 115 +/- feet. The site was delineated using a backhoe to collect soil samples at regular intervals, creating a 9x3x12-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 12-ft sample was sent to a commercial laboratory for analysis of chloride and TPH, resulting in a chloride concentration of 170 mg/kg, a concentration of gasoline range organics (GRO) below detectable limits, and a diesel range organics (DRO) concentration of 17.3 mg/kg. The excavated soil was returned to the excavation to ground surface and contoured to the surrounding area. The junction box final report, photo documentation, laboratory analysis, and PID sheet 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". The signature is fluid and cursive, with a long horizontal stroke at the end.

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	B.O. EOL	G	12	18S	34E	Lea	no box--eliminated		

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

Depth to Groundwater 115 feet NMOCD SITE ASSESSMENT RANKING SCORE: 0

Date Started 10/12/2004 Date Completed 11/10/2004 NMOCD Witness no

Soil Excavated 12 cubic yards Excavation Length 9 Width 3 Depth 12 feet

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

**FINAL ANALYTICAL RESULTS:** Sample Date 10/13/2004 Sample Depth 12 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 ppm	GRO mg/kg	DRO mg/kg	Chloride mg/kg
GRAB @ 12 ft BGS	0.0	<10.0	17.3	170

LOCATION	DEPTH (ft)	ppm
vertical at junction box	4	419
	5	389
	6	389
	7	419
	8	329
	9	329
	10	299
	11	269
	12	299

General Description of Remedial Action: This junction was eliminated and the Vacuum SWD system is to be abandoned in 2005. The box lumber was removed and a delineation trench was made with a backhoe directly under the junction site. Chloride field tests and PID screenings were performed on samples collected every vertical foot at 4-12 ft BGS.

Chloride field test concentrations were low and exhibited a general trend of decline with depth, indicative of non-saturated historical vadose conditions. PID levels were also low and concentrations were 0.0 ppm at every foot at 4-12 ft BGS. Soil observed in the delineation trench was a light tan sand and did not exhibit any signs of contamination. The trench was backfilled with the excavated soil and contoured to the surrounding surface. The disturbed surface is expected to return to productive capacity at a normal rate.

enclosures: chloride graph, photos, lab results, PID field screenings

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

SITE SUPERVISOR Rob Elam SIGNATURE not available COMPANY Curt's Environmental--Odessa, TX

REPORT ASSEMBLED BY Kristin Farris Pope SIGNATURE Kristin Farris Pope  
DATE 3/8/2005 TITLE Project Scientist

Vacuum B.O. EOL

Unit 'G', Sec. 12, T18S, R34E



undisturbed junction box

4/23/2002



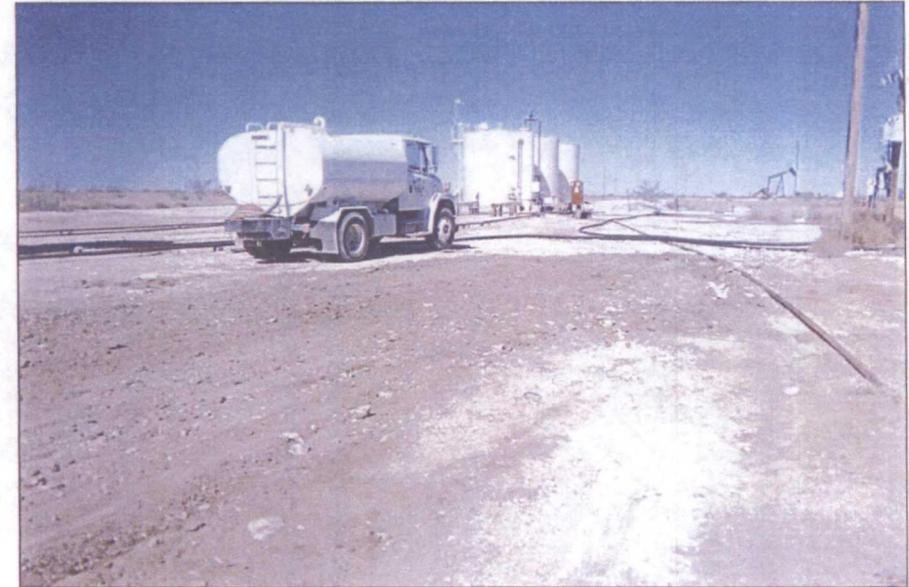
junction box removed; old plumbing

4/25/2002



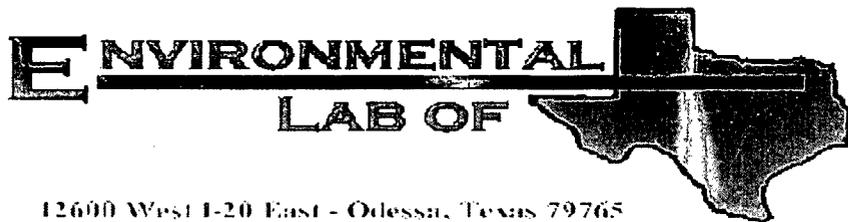
backfilling delineation trench

11/10/2004



backfilled trench

11/10/2004



12600 West I-20 East - Odessa, Texas 79765

COPY

## Analytical Report

Prepared for:

Roy Rascon  
Rice Operating Co.  
122 W. Taylor  
Hobbs, NM 88240

Project: Exxon B.O. EOL  
Project Number: None Given  
Location: Vacuum

Lab Order Number: 4J15007

Report Date: 10/19/04

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Exxon B.O. EOL  
Project Number: None Given  
Project Manager: Roy Rascon

Fax: (505) 397-1471

Reported:  
10/19/04 10:45

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
12' Bottom (Grab)	4J15007-01	Soil	10/13/04 08:30	10/14/04 18:45

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Exxon B.O: EOL  
Project Number: None Given  
Project Manager: Roy Rascon

Fax: (505) 397-1471  
Reported:  
10/19/04 10:45

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>12' Bottom (Grab) (4J15007-01) Soil</b>									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EJ41501	10/15/04	10/16/04	EPA 8015M	
Diesel Range Organics >C12-C35	17.3	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	17.3	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		95.0 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		108 %	70-130		"	"	"	"	

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Exxon B.O. EOL  
Project Number: None Given  
Project Manager: Roy Rascon

Fax: (505) 397-1471

Reported:  
10/19/04 10:45

**General Chemistry Parameters by EPA / Standard Methods**  
**Environmental Lab of Texas**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>12' Bottom (Grab) (4J15007-01) Soil</b>									
Chloride	170	20.0	mg/kg Wet	2	EJ41819	10/15/04	10/18/04	SW 846 9253	
% Moisture	11.0		%	1	EJ41811	10/15/04	10/18/04	% calculation	

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Exxon B.O. EOL  
Project Number: None Given  
Project Manager: Roy Rascon

Fax: (505) 397-1471

Reported:  
10/19/04 10:45

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD	RPD Limit	Notes
<b>Batch EJ41501 - Solvent Extraction (GC)</b>										
<b>Blank (EJ41501-BLK1)</b>					Prepared: 10/15/04 Analyzed: 10/16/04					
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	35.9		mg/kg	50.0		71.8	70-130			
Surrogate: 1-Chlorooctadecane	39.0		"	50.0		78.0	70-130			
<b>LCS (EJ41501-BS1)</b>					Prepared: 10/15/04 Analyzed: 10/16/04					
Gasoline Range Organics C6-C12	444	10.0	mg/kg wet	500		88.8	75-125			
Diesel Range Organics >C12-C35	460	10.0	"	500		92.0	75-125			
Total Hydrocarbon C6-C35	904	10.0	"	1000		90.4	75-125			
Surrogate: 1-Chlorooctane	45.6		mg/kg	50.0		91.2	70-130			
Surrogate: 1-Chlorooctadecane	40.5		"	50.0		81.0	70-130			
<b>Calibration Check (EJ41501-CCV1)</b>					Prepared: 10/15/04 Analyzed: 10/16/04					
Gasoline Range Organics C6-C12	442		mg/kg	500		88.4	80-120			
Diesel Range Organics >C12-C35	483		"	500		96.6	80-120			
Total Hydrocarbon C6-C35	925		"	1000		92.5	80-120			
Surrogate: 1-Chlorooctane	50.3		"	50.0		101	70-130			
Surrogate: 1-Chlorooctadecane	56.5		"	50.0		113	70-130			
<b>Matrix Spike (EJ41501-MS1)</b>					Source: 4J14026-05 Prepared: 10/15/04 Analyzed: 10/16/04					
Gasoline Range Organics C6-C12	573	10.0	mg/kg dry	549	ND	104	75-125			
Diesel Range Organics >C12-C35	633	10.0	"	549	ND	115	75-125			
Total Hydrocarbon C6-C35	1210	10.0	"	1100	ND	110	75-125			
Surrogate: 1-Chlorooctane	55.4		mg/kg	50.0		111	70-130			
Surrogate: 1-Chlorooctadecane	58.1		"	50.0		116	70-130			
<b>Matrix Spike Dup (EJ41501-MSD1)</b>					Source: 4J14026-05 Prepared: 10/15/04 Analyzed: 10/16/04					
Gasoline Range Organics C6-C12	591	10.0	mg/kg dry	549	ND	108	75-125	3.09	20	
Diesel Range Organics >C12-C35	623	10.0	"	549	ND	113	75-125	1.59	20	
Total Hydrocarbon C6-C35	1210	10.0	"	1100	ND	110	75-125	0.00	20	
Surrogate: 1-Chlorooctane	59.3		mg/kg	50.0		119	70-130			
Surrogate: 1-Chlorooctadecane	60.1		"	50.0		120	70-130			

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 4 of 6

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Exxon B.O. EOL  
Project Number: None Given  
Project Manager: Roy Rascon

Fax: (505) 397-1471  
**Reported:**  
10/19/04 10:45

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch EJ41811 - % Solids</b>										
<b>Blank (EJ41811-BLK1)</b> Prepared: 10/15/04 Analyzed: 10/18/04										
% Moisture	0.0		%							
<b>Duplicate (EJ41811-DUP1)</b> Source: 4J14025-01 Prepared: 10/15/04 Analyzed: 10/18/04										
% Moisture	9.0		%		9.0			0.00	20	
<b>Batch EJ41819 - Water Extraction</b>										
<b>Blank (EJ41819-BLK1)</b> Prepared & Analyzed: 10/18/04										
Chloride	ND	20.0	mg/kg Wet							
<b>Matrix Spike (EJ41819-MS1)</b> Source: 4J14026-07 Prepared: 10/14/04 Analyzed: 10/18/04										
Chloride	478	20.0	mg/kg Wet	500	0.00	95.6	80-120			
<b>Matrix Spike Dup (EJ41819-MSD1)</b> Source: 4J14026-07 Prepared: 10/14/04 Analyzed: 10/18/04										
Chloride	478	20.0	mg/kg Wet	500	0.00	95.6	80-120	0.00	20	
<b>Reference (EJ41819-SRM1)</b> Prepared & Analyzed: 10/18/04										
Chloride	5000		mg/kg	5000		100	80-120			

Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: Exxon B.O. EOL  
Project Number: None Given  
Project Manager: Roy Rascon

Fax: (505) 397-1471

Reported:  
10/19/04 10:45

### Notes and Definitions

DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference  
LCS Laboratory Control Spike  
MS Matrix Spike  
Dup Duplicate

Report Approved By:

*Raland K Tuttle*

Date:

10/19/04

Raland K. Tuttle, Lab Manager  
Celey D. Keene, Lab Director, Org. Tech Director  
Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director  
James L. Hawkins, Chemist/Geologist  
Sandra Biezugbe, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

COPY

### RICE OPERATING COMPANY

122 WEST TAYLOR  
HOBBS, NEW MEXICO 88240  
PHONE: (505) 393-9174 FAX: (505) 397-1471

### VOC FIELD TEST REPORT FORM

MINI RAE PLUS CLASSIC PHOTOIONIZATION GAS DETECTOR

MODEL NO: PGM 761S  
CALIBRATION GAS  
GAS COMPOSITION: ISOBUTYLENE

SERIAL NO: ~~104412~~ 104550

100 PPM  
BALANCE  
FILL DATE: 4-19-04  
ACCURACY:  $\pm 2\%$

LOT NO: 03-2475  
EXP. DATE: 10-19-04  
METER READING  
ACCURACY: 100.0

SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE
VAC	B. O. Exxon EOL	G	12	18	34

SAMPLE	PID RESULT	SAMPLE	PID RESULT
Source 4'	3.3		
5'	1.4		
6'	0		
7'	0		
8'	0		
9'	0		
10'	0		
11'	0		
12'	0		

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

*Rob Elam*

Signature

Title

10-12-04

Date