

1R - 425-75

**APPROVALS**

**YEAR(S):**

2012

**Hansen, Edward J., EMNRD**

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**From:** Hansen, Edward J., EMNRD  
**Sent:** Monday, August 13, 2012 1:59 PM  
**To:** Hack Conder (hconder@riceswd.com)  
**Cc:** Leking, Geoffrey R, EMNRD; Laura Pena (lpena@riceswd.com); Scott Curtis (scurtis@riceswd.com)  
**Subject:** Remediation Plan (1R425-75) Termination - ROC Vacuum Jct C-7 Site

**RE: Termination Request  
for the Rice Operating Company's  
Vacuum Jct C-7 Site  
Unit Letter C, Section 7, T18S, R35E, NMPM, Lea County, New Mexico  
Remediation Plan (1R425-75) 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 8, 2012 (received June 12, 2012) and the photo documentation of August 13, 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 (1R425-75) 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 JUN 12 P 12:43

**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 8593

June 8, 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 Jct. C-7 (1R425-75): UL/C, Sec. 7, T18S, R35E  
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 2006, ROC initiated work on the former C-7 junction box as part of the system abandonment. The site is located in UL/C, Sec. 7, T18S, R35E. NM OSE records indicate that groundwater would likely be encountered at a depth of approximately 100 +/- feet. The site was delineated using a backhoe to collect soil samples at regular intervals, creating a 20x20x12-ft deep excavation. Each sample was field titrated for chlorides and field screened using a PID for hydrocarbon. Representative composite samples of the 4-WALL, excavation bottom, and blended backfill were sent to the laboratory for analysis of chloride, TPH, and BTEX, resulting in a 4-WALL chloride concentration of 64 mg/kg, a gasoline range organics (GRO) concentration of 28.5 mg/kg, and a diesel range organics (DRO) concentration of 974 mg/kg. The excavation bottom laboratory analysis resulted in chloride concentrations of <16 mg/kg, a GRO concentration of 138 mg/kg, a DRO concentration of 1,370 mg/kg, a benzene and toluene concentration below detectable limits, an ethyl benzene concentration of 0.134 mg/kg, and a total xylenes

concentration of 0.097 mg/kg. The blended backfill laboratory analysis resulted in a chloride concentration of 64 mg/kg, a GRO concentration of 13.2 mg/kg, and DRO concentration of 960 mg/kg. The excavated soil was blended on site with clean imported soil. The blended backfill was returned to the excavation to ground surface and contoured to the surrounding area. On 3/20/2006, 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 TPH presence, a soil boring was initiated on 2/9/2009 at the former junction box site. The boring was advanced to a total depth of 30 ft BGS with soil samples collected every 5 ft and field tested for chlorides and organic vapors. The 30 ft sample was sent to a laboratory for analysis of chloride and TPH, resulting in a chloride concentration of 16 mg/kg, and GRO and DRO concentrations below detectable limits. The entire bore hole was plugged with bentonite to ground surface. 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

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

Hack Conder  
Environmental Manager

enclosures

## BOX LOCATION

Soil Disposed	120	cubic yards	Offsite Facility	Sundance	Location	Eunice, NM
---------------	-----	-------------	------------------	----------	----------	------------

PROJECT LEADER Larry Bruce Baker Jr. SIGNATURE *Larry Bruce Baker Jr.* DATE 11-13-09



## Vacuum Jct. C-7

Unit C, Section 7, T18S, R35E



former junction box site

4/18/2002



excavating the former junction box site

10/4/2006



seeding backfilled site

11/6/2006



soil boring the former junction box site

2/9/2009

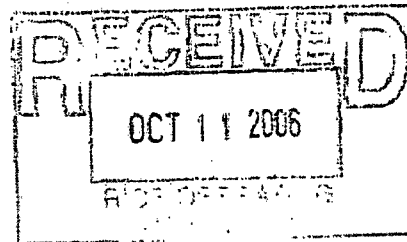


# ARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2325 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
RICE OPERATING CO.  
ATTN: ROY R. RASCON  
122 W. TAYLOR  
HOBBS, NM 88240  
FAX TO: (505) 397-1471



Receiving Date: 10/05/06  
Reporting Date: 10/09/06  
Project Number: NOT GIVEN  
Project Name: VACUUM JCT. C-7  
Project Location: NOT GIVEN

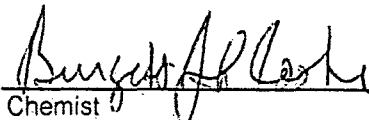
Sampling Date: 10/03/06 & 10/04/06  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: BC  
Analyzed By: BC/HM

COPY

LAB NUMBER	SAMPLE ID	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/Kg)	DRO (>C <sub>10</sub> -C <sub>28</sub> ) (mg/Kg)	CI* (mg/Kg)
ANALYSIS DATE		10/08/06	10/08/06	10/09/06
H11619-2	BTTM FIELD COMP. @ 12'	138	1370	<16
H11619-3	BACKFILL COMP.	13.2	960	64
H11619-4	4 WALL COMP. 20'x20'	28.5	974	64
Quality Control		769	784	490
True Value QC		800	800	500
% Recovery		96.1	98.0	98.0
Relative Percent Difference		2.4	1.2	2.0

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

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

  
Chemist

10/10/06  
Date

H11619A

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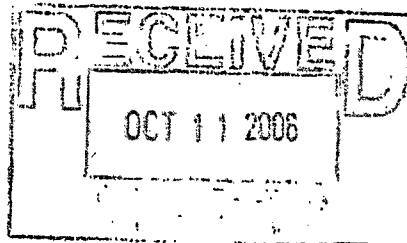


# ARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

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

ANALYTICAL RESULTS FOR  
RICE OPERATING CO.  
ATTN: ROY R. RASCON  
122 W. TAYLOR  
HOBBS, NM 88240  
FAX TO: (505) 397-1471



Receiving Date: 10/05/06  
Reporting Date: 10/09/06  
Project Number: NOT GIVEN  
Project Name: VACUUM JCT. C-7  
Project Location: NOT GIVEN

Sampling Date: 10/03/06  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: BC  
Analyzed By: BC

COPY

LAB NO.	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE		10/06/06	10/06/06	10/06/06	10/06/06
H11619-1	COMPOSITE, BTTM #1-#5	<0.005	<0.005	0.500	0.360
H11619-2	BTTM FIELD COMP. @ 12'	<0.005	<0.005	0.134	0.097
Quality Control		0.104	0.099	0.102	0.300
True Value QC		0.100	0.100	0.100	0.300
% Recovery		104.0	98.9	102	100.0
Relative Percent Difference		0.7	<0.1	1.3	3.9

METHOD: EPA SW-846 8260

Chemist

10/9/07  
Date

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Cardinal shall not 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.





# CARDINAL LABORATORIES, INC.

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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page \_\_\_\_ of \_\_\_\_

Company Name: <u>Rice Operating Co.</u>				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>							
Project Manager: <u>Roy R. Rascon</u>				P.O. #:				<div style="text-align: center; font-size: 2em; transform: rotate(-45deg);">COPY</div>							
Address: <u>122 W. Taylor</u>				Company:											
City: <u>Hobbs</u> State: <u>N.M.</u> Zip: <u>88240</u>				Attn:											
Phone #: <u>393-9174</u> Fax #: <u>397-1471</u>				Address:											
Project #: <u>AFBO Vacuum Jct. C-7</u> Project Owner:				City:											
Project Name:				State: Zip:											
Project Location:				Phone #:											
Sampler Name: <u>McDonnell</u>				Fax #:											

Lab I.D.	Sample I.D.	(S)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.			SAMPLING		TPH	CI-	BTEX							
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE / COOL	OTHER	DATE	TIME										
H11619-1	Bttm #1	G	1			✓					✓		10-3-06	9:30 A.M.										
	Bttm #2	G	1			✓					✓		10-3-06	9:30 A.M.										
	Bttm #3	G	1			✓					✓		10-3-06	9:30 A.M.										
	Bttm #4	G	1			✓					✓		10-3-06	9:30 A.M.										
	Bttm #5	G	1			✓					✓		10-3-06	9:30 A.M.										
H11619-2	Bttm Field Comp. @12'	C	1			✓					✓		10-3-06	9:30 A.M.	✓	✓	✓							
	Backfill Comp.	C	1			✓					✓		10-4-06	12:50 P.M.	✓	✓								
	4 Well Comp. 20'x20'	C	1			✓					✓		10-4-06	12:40 P.M.	✓	✓								

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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 collections, including attorney's fees.

Sampler Relinquished:	Date:	10-5-06	Received By:	<div style="text-align: center;"> </div>	Phone Result:	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Time:	5:00 P.M.			Fax Result:	<input type="checkbox"/> Yes <input type="checkbox"/> No
Relinquished By:	Date:		Received By: (Lab Staff)	<div style="text-align: center;"> </div>	REMARKS: BTTM # 1-5 composite in lab & RUN BTEX	
	Time:					
Delivered By: (Circle One)			Sample Condition			
Sampler - UPS - Bus - Other:			Temp. °C	Intact?	(Initials)	
			Cool	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

† Cardinal cannot accept verbal changes. Please fax written changes to (325) 673-7020.

# RICE OPERATING COMPANY

122 West Taylor Hobbs, NM 88240

Phone: (505) 393-9174 Fax: (505) 397-1471

## VOC FIELD TEST REPORT FORM

PID METER READING & CALIBRATION

CK. ☐ MODEL: PGM 761S  
 MODEL ☒ MODEL: PGM 761S  
 NO. ☐ MODEL: PGM 7600

SERIAL NO: 104412  
 SERIAL NO: 104490  
 SERIAL NO: 110-12383

LOT NO: 75-2992  
 FILL DATE: 11-28-05  
 ACCURACY: +/- 2%

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

**COPY**

EXP. DATE: 5-28-07  
 METER READING ACCURACY: 100.0

SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE
Vacuun	Jct. C-7	C	7	18	35

SAMPLE S. well	PID Results	Sample West well	PID Results
1	0.1	1	0.1
2	0.1	2	0.1
3	0.1	3	0.1
4	0.1	4	0.1
5	0.1	5	0.1
Spt. Comp. S. well	0.1	Spt. Comp. W. well	0.1
E. well		4 well comp.	0.0
1	0.0		
2	0.0	Backfill comp.	0.0
3	0.0		
4	0.0		
5	0.0		
Spt. Comp. E. well	0.0		

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

SIGNATURE: [Signature]

DATE: 11-4-06

# RICE OPERATING COMPANY

122 West Taylor Hobbs, NM 88240

Phone: (505) 393-9174 Fax: (505) 397-1471

# VOC FIELD TEST REPORT FORM

## PID METER READING & CALIBRATION

CK.  
MODEL  
NO.

✓

MODEL: PGM 761S  
MODEL: PGM 761S  
MODEL: PGM 7600

SERIAL NO: 104412  
SERIAL NO: 104490  
SERIAL NO: 110-12383

LOT NO: 05-245

FILL DATE: 11-25-05

ACCURACY:  $\pm 2\%$

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

EXP. DATE: 5-28-07

METER READING ACCURACY: 54.4

COPY ME

SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE
Vacuum	Jct. C-7	C	7	18	35

[illegible]

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

SIGNATURE: \_\_\_\_\_

DATE: 11-3-06

<b>Logger:</b>		Tony Grieco		<b>Client:</b>		RICE Operating Company		<b>Well ID:</b>	
<b>Driller:</b>		Harrison & Cooper, Inc. Drilling		<b>Project Name:</b>		Vacuum jct. C-7		SB - 1	
<b>Drilling Method:</b>		Air rotary		<b>Location:</b>		Vacuum SWD System			
<b>Start Date:</b>		2-9-09		unit 'C' Sec.7 T18S, R35E Lea County, NM					
<b>End Date:</b>		2-9-09							
<b>Comments:</b>									
Located: center of former junction box site									
TD = 30 ft      GW = 100 ft									

Depth (feet)	chloride field tests	PID	Description	Lithology	Soil Bore Construction	
15	148	105.1	10 - 30 ft VERY FINE TO FINE SAND dry			bentonite seal
20	122	46.5				
25	87	4.4				
30	117	1.9				
DRO GRO	<10, <10					
Lab Cl-	16					

COPY



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

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 C-7  
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>28</sub> ) (mg/kg)	Cl <sup>-</sup> (mg/kg)
ANALYSIS DATE		02/10/09	02/10/09	02/10/09
H16865-1	SB #1 @ 30'	<10.0	<10.0	16
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-Cl B

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

**\*\*Revised Report.**

Chemist

Date

H16865 TCL RICE

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## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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# RICE OPERATING COMPANY

122 West Taylor Hobbs, NM 88240  
 PHONE: (575) 393-9174 FAX: (575) 397-1471  
 PID METER CALIBRATION & FIELD REPORT FORM

COPY

Check Model Number:

<input checked="" type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

Model: PGM 7300 Serial No: 590-000183  
 Model: PGM 7300 Serial No: 590-000508  
 Model: PGM 7300 Serial No: 590-000504

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

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: 100-6602-670	EXPIRATION DATE: 9/11/09
FILL DATE:	METER READING ACCURACY: 100

ACCURACY : +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
VAC	C-7	C	7	18 S	35 E

SOIL BORE # 1 32° 42.082' N 103° 29.933' W

SAMPLE ID	PID	SAMPLE ID	PID
15'	105.1		
20'	46.5		
25'	4.4		
30'	1.9		

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

SIGNATURE:

*[Handwritten Signature]*

DATE:

2/9/09

**Hansen, Edward J., EMNRD**

---

**From:** Laura Pena <lpena@riceswd.com>  
**Sent:** Monday, August 13, 2012 11:29 AM  
**To:** Hansen, Edward J., EMNRD  
**Cc:** Hack Conder; Katie Jones  
**Subject:** FW: ROC - Vacuum Jct. C-7 (1R425-75) Photo Documentation  
**Attachments:** Vacuum Jct. C-7 (1R425-75) Photo Documentation.pdf

Mr. Hansen,

Attached is the photo documentation resubmission of the Vacuum Jct. C-7 (1R425-75) site.

Thank you,  
Laura

---

**From:** Laura Pena  
**Sent:** Friday, August 03, 2012 3:47 PM  
**To:** Edward J. Hansen, EMNRD  
**Cc:** Hack Conder  
**Subject:** ROC - Vacuum Jct. C-7 (1R425-75) Photo Documentation

Mr. Hansen,

Attached is the photo documentation for the Vacuum Jct. C-7 (1R425-75) 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 Jct. C-7 (1R425-75)  
Unit C, Section 7, T17S, R35E



Facing northwest

3/3/2006



Facing north

3/6/2006



Facing northwest

6/26/2012



Facing southeast

6/26/2012