

1R - 425-89

**APPROVALS**

**YEAR(S):**

2012

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**Hansen, Edward J., EMNRD**

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**From:** Hansen, Edward J., EMNRD  
**Sent:** Tuesday, July 17, 2012 2:48 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 (1R425-89) Termination - ROC Vacuum K-33 EOL Site

**RE: Termination Request  
for the Rice Operating Company's  
Vacuum K-33 EOL Site  
Unit Letter K, Section 33, T17S, R35E, NMPM, Lea County, New Mexico  
Remediation Plan (1R425-89) 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 22, 2012 (received June 28, 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 (1R425-89) 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 28 2012

**RICE** *Operating Company* Oil Conservation Division  
122 West Taylor • Hobbs, New Mexico 88240 1220 S. St. Francis Drive  
Phone: (575) 393-9174 • Fax: (575) 397-1471 Santa Fe, NM 87505

CERTIFIED MAIL

RETURN RECEIPT NO. 7007 2560 0000 4569 8647

June 22<sup>nd</sup>, 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 K-33 EOL (1R425-89): UL/K, Sec. 33, T17S, 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 2010, ROC initiated work on the former K-33 EOL junction box as part of the system abandonment. The site is located in UL/K, Sec. 33 T17S, R35E. NM OSE records indicate that groundwater would likely be encountered at a depth of approximately 62 +/- feet. The site was delineated using a backhoe to collect soil samples at regular intervals, creating a 7x3x12-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 256 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 to ground surface and contoured to the surrounding area. On 5/21/2010, 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, 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", written in a cursive style.

Hack Conder  
Environmental Manager

enclosures



# Vacuum K-33 EOL

Unit K, Section 33, T17S, R35E



Delineation trench being excavated

4/20/2010



Collecting sample

4/20/2010



Seeding excavation

5/21/2010



Racking in seed

5/21/2010



**ARDINAL  
LABORATORIES**

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

ANALYTICAL RESULTS FOR  
RICE OPERATING COMPANY  
ATTN: BRUCE BAKER  
112 W. TAYLOR  
HOBBS, NM 88240

Receiving Date: 04/28/10  
Reporting Date: 04/30/10  
Project Number: NOT GIVEN  
Project Name: VAC. K-33 EOL  
Project Location: VAC. K-33 EOL

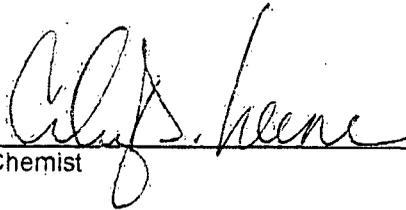
Sampling Date: 04/27/10  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: JH  
Analyzed By: AB/HM

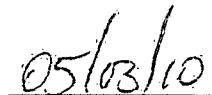
|                      |                                    |                                      |         |
|----------------------|------------------------------------|--------------------------------------|---------|
|                      | GRO                                | DRO                                  | CI*     |
|                      | (C <sub>8</sub> -C <sub>10</sub> ) | (>C <sub>10</sub> -C <sub>28</sub> ) |         |
| LAB NUMBER SAMPLE ID | (mg/kg)                            | (mg/kg)                              | (mg/kg) |

| ANALYSIS DATE               | 04/29/10 | 04/29/10 | 04/30/10 |
|-----------------------------|----------|----------|----------|
| H19770-1 SOURCE GRAB @ 12'  | <10.0    | <10.0    | 256      |
|                             |          |          |          |
|                             |          |          |          |
|                             |          |          |          |
|                             |          |          |          |
|                             |          |          |          |
|                             |          |          |          |
|                             |          |          |          |
|                             |          |          |          |
| Quality Control             | 579      | 566      | 500      |
| True Value QC               | 500      | 500      | 500      |
| % Recovery                  | 116      | 113      | 100      |
| Relative Percent Difference | 5.0      | 2.8      | < 0.1    |

COPY

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; CI: Std. Methods 4500-CI'B  
\*Analysis performed on a 1:4 w:v aqueous extract.  
Reported on wet weight.

  
\_\_\_\_\_  
Chemist

  
\_\_\_\_\_  
Date

H19770 TCL RICE

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# 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 Company</u>           |                          | <b>BILL TO</b>               |             | <b>ANALYSIS REQUEST</b> |                                     |     |        |        |            |                                     |        |                |               |                                     |                                     |  |  |  |  |  |  |  |  |  |  |
| Project Manager: <u>Bruce Baker</u>                   |                          | P.O. #:                      |             |                         |                                     |     |        |        |            |                                     |        |                |               |                                     |                                     |  |  |  |  |  |  |  |  |  |  |
| Address: <u>122 W. Taylor</u>                         |                          | Company:                     |             |                         |                                     |     |        |        |            |                                     |        |                |               |                                     |                                     |  |  |  |  |  |  |  |  |  |  |
| City: <u>Hobbs</u> State: <u>NA</u> Zip: <u>88240</u> |                          | Attn:                        |             |                         |                                     |     |        |        |            |                                     |        |                |               |                                     |                                     |  |  |  |  |  |  |  |  |  |  |
| Phone #: <u>393-9174</u> Fax #: <u>397-1171</u>       |                          | Address:                     |             |                         |                                     |     |        |        |            |                                     |        |                |               |                                     |                                     |  |  |  |  |  |  |  |  |  |  |
| Project #:  |                          | Project Owner:               |             |                         |                                     |     |        |        |            |                                     |        |                |               |                                     |                                     |  |  |  |  |  |  |  |  |  |  |
| Project Name: <u>Vec. K-33 EOL</u>                    |                          | City:                        |             |                         |                                     |     |        |        |            |                                     |        |                |               |                                     |                                     |  |  |  |  |  |  |  |  |  |  |
| Project Location:                                     |                          | State: Zip:                  |             |                         |                                     |     |        |        |            |                                     |        |                |               |                                     |                                     |  |  |  |  |  |  |  |  |  |  |
| Sampler Name: <u>Zach Conder</u>                      |                          | Phone #:                     |             |                         |                                     |     |        |        |            |                                     |        |                |               |                                     |                                     |  |  |  |  |  |  |  |  |  |  |
| Fax #:  |                          |                              |             |                         |                                     |     |        |        |            |                                     |        |                |               |                                     |                                     |  |  |  |  |  |  |  |  |  |  |
| FOR LAB USE ONLY                                      |                          |                              |             |                         |                                     |     |        |        |            |                                     |        |                |               |                                     |                                     |  |  |  |  |  |  |  |  |  |  |
| Lab I.D.  | Sample I.D.              | (GRAB OR (COMP. # CONTAINERS | GROUNDWATER | WASTEWATER              | SOIL                                | OIL | SLUDGE | OTHER: | ACID/BASE: | ICE / COOL                          | OTHER: | DATE           | TIME          |                                     |                                     |  |  |  |  |  |  |  |  |  |  |
| <u>H1977D-1</u>                                       | <u>Source grab @ 12'</u> | <u>6</u>                     | <u>1</u>    |                         | <input checked="" type="checkbox"/> |     |        |        |            | <input checked="" type="checkbox"/> |        | <u>4-27-10</u> | <u>4:00pm</u> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |  |  |  |  |  |  |  |  |  |  |
|   |                          |                              |             |                         |                                     |     |        |        |            |                                     |        |                |               | <b>COPY</b>                         |                                     |  |  |  |  |  |  |  |  |  |  |

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|                              |  |                                 |   |                      |
|------------------------------|--|---------------------------------|---|----------------------|
| Relinquished By:             | Date: _____  | Received By: _____              | Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No        | Add'l Phone #: _____ |
|                              | Time: _____  |                                 | Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No          | Add'l Fax #: _____   |
| Relinquished By: _____       | Date: <u>4/28/10</u>   | Received By: <u>Jodi Denson</u> | REMARKS: <u>Email results to bbaker@rice.swd.com and jpurvis@rice.swd.com</u> |                      |
|                              | Time: <u>10:45</u>   |                                 |   |                      |
| Delivered By: (Circle One)   | Sample Condition   | CHECKED BY: <u>JH</u>           |   |                      |
| Sampler - UPS - Bus - Other: | Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/><br>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | (Initials)                      |   |                      |

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

#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:

|                                     |                 |                       |  |                 |                       |
|-------------------------------------|-----------------|-----------------------|--|-----------------|-----------------------|
| <input checked="" type="checkbox"/> | Model: PGM 7300 | Serial No: 590-000183 |  | Model: PGM 7600 | Serial No: 110-023920 |
|                                     | Model: PGM 7300 | Serial No: 590-000508 |  | Model: PGM 7600 | Serial No: 110-013744 |
|                                     | Model: PGM 7300 | Serial No: 590-000504 |  | Model: PGM 7600 | Serial No: 110-013676 |

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

|                     |                                  |
|---------------------|----------------------------------|
| LOT NO: 927041      | EXPIRATION DATE: 11-16-2012      |
| FILL DATE: 11-13-09 | METER READING ACCURACY: 99.9 ppm |

ACCURACY : +/- 2%

| SYSTEM | JUNCTION | UNIT | SECTION | TOWN SHIP | RANGE |
|--------|----------|------|---------|-----------|-------|
| Vacuum | K-33 EOL | K    | 33      | 175       | 35E   |

| SAMPLE ID  | PID | SAMPLE ID   | PID |
|------------|-----|-------------|-----|
| Background | 0.1 | Soilce @ 1' | 1.8 |
|            |     | 2'          | 1.0 |
|            |     | 3'          | 0.4 |
|            |     | 4'          | 0.7 |
|            |     | 5'          | 1.5 |
| COPY       |     |             |     |
|            |     |             |     |
|            |     |             |     |
|            |     |             |     |
|            |     |             |     |
|            |     |             |     |
|            |     |             |     |

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

SIGNATURE:



DATE: 4-20-10

# 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:                      |  |  |
| <input checked="" type="checkbox"/> | Model: PGM 7300    Serial No: 590-000183 |  | Model: PGM 7600    Serial No: 110-023920 |
|                                     | Model: PGM 7300    Serial No: 590-000508 |  | Model: PGM 7600    Serial No: 110-013744 |
|                                     | Model: PGM 7300    Serial No: 590-000504 |  | Model: PGM 7600    Serial No: 110-013676 |

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

|                            |  |
|----------------------------|--|
| LOT NO: <u>927091</u>      | EXPIRATION DATE: <u>11-16-2012</u>       |
| FILL DATE: <u>11-13-09</u> | METER READING ACCURACY: <u>100.0 ppm</u> |

ACCURACY : +/- 2%

| SYSTEM        | JUNCTION        | UNIT     | SECTION   | TOWN SHIP  | RANGE       |
|---------------|-----------------|----------|-----------|------------|-------------|
| <u>Naevom</u> | <u>K-33 EOL</u> | <u>K</u> | <u>33</u> | <u>17S</u> | <u>35 E</u> |

| SAMPLE ID | PID | SAMPLE ID          | PID         |
|-----------|-----|--------------------|-------------|
|           |     | <u>Source @ 6'</u> | <u>18.2</u> |
|           |     | <u>7'</u>          | <u>47.5</u> |
|           |     | <u>8'</u>          | <u>23.8</u> |
|           |     | <u>9'</u>          | <u>15.7</u> |
|           |     | <u>10'</u>         | <u>17.8</u> |
|           |     | <u>11'</u>         | <u>10.5</u> |
|           |     | <u>12'</u>         | <u>3.3</u>  |
|           |     |                    |             |
|           |     |                    |             |
|           |     |                    |             |
|           |     |                    |             |
|           |     |                    |             |

COPY

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

SIGNATURE: 

DATE: 4-27-10