# 1R- 428-49

## REPORTS

## DATE:



1R428-49 3-19-69

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Hobbs E-29 Vent

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## CLOSURE

## RICE OPERATING COMPANY JUNCTION BOX FINAL REPORT

|   |                |               |               | BOX LOCA      |                            |                      |            |                   |          |     |
|---|----------------|---------------|---------------|---------------|----------------------------|----------------------|------------|-------------------|----------|-----|
| SWD SYSTEM                              | JUNCTION       | UNIT          | SECTION       | TOWNSHIP      | RANGE                      | COUNTY               | BOX DI     | DIMENSIONS - FEET |          |     |
| Hobbs                                   | E-29 vent      | E             | 29            | 18S           | 38E                        | Lea                  | no boxS    | System abai       | ndonment |     |
| LAND TYPE:                              | BLM            | STATE         | FEE LAI       | NDOWNER       |                            | Petroleum C<br>(Oxy) | •          |                   |          |     |
| Depth to Grou                           | undwater       | 60            | feet          | NMOC          | D SITE ASS                 | ESSMENT              | RANKING SO | CORE:             | 20       |     |
| Date Started                            | d6/17/         | /2008         | Date Cor      | mpleted       | 6/20/2008<br>four trenches |                      | Witness    | n                 | 0        |     |
| Soil Excavated                          | d <u>27</u>    | cubic ya      | rds Exc       | avation Le    | ength 5_                   | Width                | 3          | Depth             | 12       | fee |
| Soil Disposed                           | d 0            | cubic yai     | rds Off       | site Facility | /n                         | /a                   | Location   |                   | n/a      |     |
| acterization Plan s                     | submitted by F | R.T. Hicks Co | insultants on | April 4,2008  | 8. The site inv            | estigation w         |            | <u> </u>          |          |     |
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KNOWLEDGE AND BELIEF.

REPORT ASSEMBLED BY Katie Jones

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DATE 3/19/2009

TITLE Environmental Engineering Assistant

## **Katie Jones**

| From:        | Katie Jones                             |
|--------------|---|
| Sent:        | Wednesday, March 18, 2009 1:51 PM       |
| То:          | kjones@riceswd.com                      |
| Subject:     | ROC Hobbs E-29 NMOCD #1R428-49          |
| Attachments: | ROC Hobbs E-29 Vent Closure Request.pdf |

From: Dale Littlejohn [mailto:dale@rthicksconsult.com]
Sent: Wednesday, September 24, 2008 9:19 PM
To: Edward J. EMNRD Hansen; wayne.price@state.nm.us
Cc: Hack Conder; Marvin Burrows; Katie; Randy Hicks (Randy Hicks)
Subject: ROC Hobbs E-29 NMOCD #1R428-49

Mr. Hansen,

On behalf of Rice Operating Company, R.T. Hicks Consultants is pleased to submit the attached Closure Request Letter for the Hobbs E-29 Vent Site, NMOCD Case #1R428-49. A hard copy will follow via regular mail.

As always, if you have any questions, please do not hesitate to contact me at the number below, or Hack Conder at the Rice office in Hobbs.

Thanks,

Dale T Littlejohn, PG R T Hicks Consultants Ltd (432) 528-3878 (office) (432) 689-4578 (fax)

## R. T. HICKS CONSULTANTS, LTD.

PO Box 7624 A Midland, Texas 79708 A 432.528.3878 A Fax: 432.689.4578

September 24, 2008

Mr. Ed Hansen New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

## RE: Hobbs SWD System E-29 Vent Site (NMOCD CASE #: 1R428-49)

Dear Mr. Hansen:

On behalf of Rice Operating Company (ROC), R.T. Hicks Consultants, Ltd. is submitting this request to close the regulatory file for the above referenced site. The investigation demonstrated that neither salt nor hydrocarbons are present in the vadose zone in quantities that represent a threat to ground water quality.

### Background

The Hobbs SWD E-29 Vent Site is located west-northwest of the city of Hobbs at T-18-S, R-38-E, Section 29, in Unit E as shown in Plate 1. The NMOCD-approved Investigation Characterization Plan (ICP), dated April 4, 2008 is provided as Attachment A to this letter and includes information from the December 2002 investigation.

### **Field Program**

As a part of the approved ICP, ROC installed and sampled four 12-foot deep backhoe trenches on June 17, 2008 to delineate the vertical and horizontal extent of chlorides and hydrocarbons in the soil. The trenches encountered broken to soft caliche interbedded with greenish-brown to light brown fine grained unconsolidated sand.

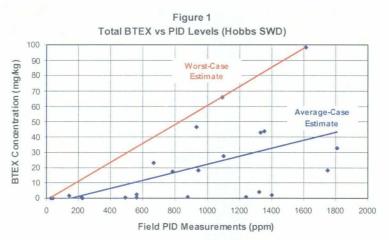
Plate 2 is a summary map prepared by Hicks Consultants that presents the results of the field chloride analyses, hydrocarbon screening data, and laboratory results. Field screening of the chloride levels in the soil were all below 180 mg/kg. The highest "laboratory confirmed" chloride concentration (112 mg/kg) was encountered twelve feet below the surface at the location of the former junction box. None of the chloride concentrations exceed the NMOCD Small Landfarm closure performance standard (500 mg/kg) described in Rule 19.15.36.16(E).

Field screening of hydrocarbons in the soil indicate that the PID levels are less than 115 ppm below a depth of 7 feet across the site. The highest concentration (713 ppm PID) was encountered at a location five feet north of the former junction box and a depth of 3 feet below the surface. PID levels at this location decrease with depth and are less than 100 ppm below 7 feet. September 24, 2008 Page 2

Soil samples for laboratory analyses were recovered at the 12-foot depth in each of the four trenches. Only the sample from the east trench contained detectable hydrocarbons (0.178 mg/kg Total BTEX) and none of the samples contained detectable benzene. Attachment B provides the laboratory reports for chloride and hydrocarbon field data verification samples.

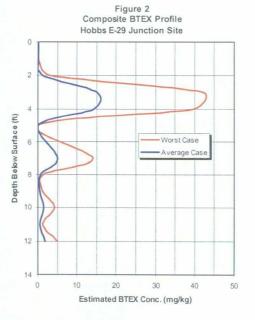
### Results

An estimate of the total BTEX concentrations has been prepared using PID and laboratory data from several ROC sites in the Hobbs SWD system. The general relationship between field PID readings and Total BTEX concentrations is shown in Figure 1 below:



Using this chart, the maximum field PID from the E-29 site (713 ppm) would be representative of a BTEX concentration of between 15 mg/kg (average-case) and 42 mg/kg (worst-case), neither of which exceed the NMOCD Small Landfarm closure performance standard of 50 mg/kg for Total BTEX.

Figure 2 is a composite hydrocarbon concentration profile using the highest PID readings from each of the sampling trenches, then converting them to worst-case and average-case Total BTEX concentrations using equations that describe the lines in Figure 1. It indicates that the hydrocarbon-impacted soil has not significantly migrated below the pipeline



depth and therefore would not likely become a threat to the underlying ground water, located at a depth of approximately 60 feet below the surface.

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#### Recommendations

We conclude, based on these results that this site is in compliance with the mandates of Rule 116 such that the small amounts of remaining hydrocarbon and chloride-impacted soil do not and will not endanger public health or the environment and do not present a threat to fresh water. We respectfully request NMOCD give notification of closure of the regulatory file for this site in writing.

Please contact us at our office or Hack Conder of ROC if you have any questions concerning this submission.

Sincerely, R.T Hicks Consultants, Ltd.

Dale T. Little solo

Dale T Littlejohn Geologist

Copy: Hack Conder, ROC NMOCD Hobbs