

1R - 428-59

REPORTS

DATE:

10-7-10

# R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Fax: 505.266.0745

October 7, 2010

RECEIVED OCD

2010 OCT -8 A 10:33

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

**RE: Rice Operating Company, Hobbs SWD System A-6 Vent Site: T-19-S, R-38-E,  
Section 6, Unit A, Lea County, New Mexico, (NMOCD CASE #1R428-59),  
Report on Corrective Actions Taken**

Mr. Hansen:

On behalf of Rice Operating Company (ROC), R.T. Hicks Consultants, Ltd. is submitting this description of Corrective Actions for the Hobbs A-6 Vent site per NMOCD request. As stated in our June 8, 2010 CAP, our investigation demonstrates that residual salt and hydrocarbons in the vadose zone will not with reasonable probability contaminate ground water or surface water, in excess of the standards in Subsections B and C of 19.15.30.9 NMAC through leaching, percolation or other transport mechanisms, or as the water table elevation fluctuates. A monitoring well located as close as possible to the former Vent site (about 85-feet down gradient) shows no evidence of ground water impairment. Revegetation of the site, our recommended corrective action, meets the mandate of NMOCD Rules for protection of surface water and the environment.

## Corrective Actions

Our recommended corrective action for the site is re-vegetation of the ground surface to limit infiltration of precipitation and the subsequent migration of constituents of concern to ground water. Attachment A includes documentation of re-seeding efforts. These included:

- Scraping the site down to 1 ft below grade,
- Removing 36 cubic yards of soil from surface of site for disposal at Sundance facility,
- Importing 36 yards of clean blow sand,
- Blending soil amendments into imported soil,
- Installing silt net fencing around the site in a 20 ft x 25 ft area
- Placing imported and amended soil inside fenced area and seeding with native grasses



**Figure 1. Photo documentation of site vegetation, August 2010.**

**Ground Water Monitoring**

The table below presents all collected ground water data from the site to date. Attachment B contains the most recent laboratory analyses results with chain of custody documentation. Per NMOCD request, ground water was analyzed for Total Petroleum Hydrocarbons (TPH) in July of 2010. Ground water quality data show concentrations of analyzed constituents do not exceed WQCC standards.

**Table 1. All Collected Ground Water Monitoring Results, MW-1, A-6 Vent**

Date	Chloride	Sulfate	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	GRO (C8-C10)	DRO (>C10-C28)	DRO EXT (>C28-C35)
	(mg/L)									
3/31/2009	44	136	609	ND	ND	ND	ND	Not Analyzed		
6/10/2009	40	123	654	ND	ND	ND	ND			
9/14/2009	40	113	645	ND	ND	ND	ND			
11/20/2009	40	90.6	611	ND	ND	ND	ND			
3/17/2010	40	146	661	ND	ND	ND	ND			
6/8/2010	44	130	673	ND	ND	ND	ND			
7/14/2010	44	115	644	ND	ND	ND	ND			

ND: Not Detected above laboratory detection limit

**Further Action**

Per NMOCD request, ROC will obtain ground water samples from MW-1 and analyze for chloride, TDS, BTEX and TPH semi-annually (twice a year) from the present day through June of 2014. An alternative sampling frequency may be requested in the future depending on results.

Please contact Hack Conder of ROC at 575-393-9174 if you have any questions concerning this submission. Thank you for your time and consideration.

Sincerely,  
R.T Hicks Consultants, Ltd.



Katie Lee  
Project Scientist

Copy: Hack Conder, ROC

# **Attachment A**

## **Re-Seeding Site Documentation**

**R.T. Hicks Consultants, Ltd.**

901 Rio Grande Blvd. NW, Suite F-142  
Albuquerque, NM 87104

Hobbs A-6 vent  
(UL A, Section 6, T19S, R38E)

7/2/2010 Site was scraped down approximately 1 ft below ground surface (BGS). 36 cubic yards were properly disposed of at the OCD approved facility Sundance. 36 cubic yards of clean blow sand was imported to the site. The imported soil was blended with peanut hay, 2 bags (4 cubic feet) of peat moss, and 6 bags (6 cubic feet) of organic compost. Silt net fencing was installed around the site, a 20x25 ft area.

7/6/2010 The blended soil was returned to the scraped area and the site was seeded with 3 lbs of Pecos Mix, 3 lbs of wild oats, and ½ lbs of blue grama. The seed was chained in and the silt netting and fence was completed around the site.



112 West Taylor  
 Hobbs, NM 88240  
 Phone: (575) 393-9174  
 Fax: (575) 393-0293

## REVEGETATION FORM

### 1. General Information

Site name: Hobbs A-6 Vent (IR 0428-59)						
U/L A	Section 6	Township 19S	Range 38E	County LEA	Latitude N 32°41.599'	Longitude W103°10.951'
Contact Name: Bruce Baker						
Email: bbaker@riceswd.com						
Site size: 500 square feet			Map detail of site attached <input type="checkbox"/>			
Additional information:						

### 2. Soils

*\*Do not rip caliche subsoils; caliche rocks brought to the surface by ripping shall be removed.*

Salvaged from site <input type="checkbox"/>	Bioremediated <input type="checkbox"/>	Imported <input checked="" type="checkbox"/>	Blended <input type="checkbox"/>	Depth (in):	
Texture: Sandy		Describe soil & subsoil: Sand over Caliche			
Soil prep methods: Rip <input type="checkbox"/>	Depth(in):	Disc <input type="checkbox"/>	Depth (in):	Rollerpack <input type="checkbox"/>	
Date completed: 7/06/2010					

### 3. Bioremediation

Fertilizer <input type="checkbox"/>	Hay <input checked="" type="checkbox"/>	Other <input checked="" type="checkbox"/>
Type:	Describe: Organic compost and Peat moss	
Lbs/acre:		

### 4. Seeding

*\*Attach seed bag tags to this form. Seed bag tags shall contain the site name and S-T-R.*

Custom seed mix <input checked="" type="checkbox"/>	Prescribed mix <input type="checkbox"/>	Seed mix name: Pecos mix	Seeding date: 7/6/2010
Broadcast <input checked="" type="checkbox"/>			
Method: Broadcast by hand			
Soil conditions during seeding: Dry <input type="checkbox"/> Damp <input checked="" type="checkbox"/> Wet <input type="checkbox"/>			
Photos attached <input type="checkbox"/>	Observations: 3 lbs. Pecos Mix, 3 lbs. Racehorse Oats, 1/2 lb Blue Grama		
Number of photos:			

### 5. Certification: I hereby certify that the information in this form and attachments is true and complete to the best of my knowledge and belief.

Name: Joe Gatts	Title: Environmental Tech.	Date: 7/22/10
Signature: <i>Joe Gatts</i>		

Hobbs A-6 vent (1R428-59)



scraping the site



hauling in clean, imported soil to blend with peanut hay



adding amendments



spreading clean, imported soil blended with peanut hay and amendments



seeding the site



site complete

# **Attachment B**

## **Laboratory Results**

**R.T. Hicks Consultants, Ltd.**

901 Rio Grande Blvd. NW, Suite F-142  
Albuquerque, NM 87104



**ARDINAL  
LABORATORIES**

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

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July 27, 2010

Hack Conder  
Rice Operating Company  
112 West Taylor  
Hobbs, NM 88240

Re: Hobbs A-6 Vent (Revised Report)

Enclosed are the results of analyses for sample number H20363, received by the laboratory on 07/16/10 at 1:35 pm.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

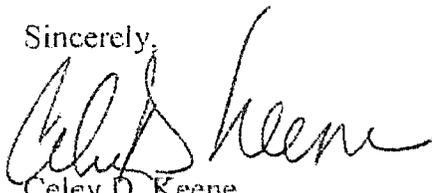
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.2	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 5 (includes Chain of Custody)

Sincerely,



Celey D. Keene  
Laboratory Director

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This report conforms with NELAP requirements.



# ARDINAL LABORATORIES

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

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

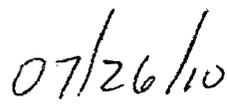
Receiving Date: 07/16/10  
Reporting Date: 07/20/10  
Project Number: NOT GIVEN  
Project Name: HOBBS A-6 VENT  
Project Location: T19S R38E SEC6A ~ LEA COUNTY, NM

Sampling Date: 07/14/10  
Sample Type: WATER  
Sample Condition: COOL & INTACT  
Sample Received By: JH  
Analyzed By: HM

LAB NO.	SAMPLE ID	Cl <sup>-</sup> (mg/L)	SO <sub>4</sub> (mg/L)	TDS (mg/L)
Analysis Date:		07/20/10	07/20/10	07/19/10
H20363-1	MONITOR WELL #1	44	115	644
Quality Control		510	39.6	NR
True Value QC		500	40.0	NR
% Recovery		102	99.1	NR
Relative Percent Difference		< 0.1	3.0	1.6
METHOD: Standard Methods, EPA		4500-Cl <sup>-</sup> B	375.4	160.1

Not accredited for Chloride, Sulfate and TDS.

  
Chemist

  
Date

H20363 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.



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

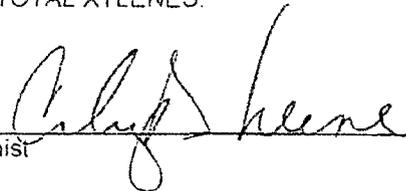
Receiving Date: 07/16/10  
Reporting Date: 07/20/10  
Project Number: NOT GIVEN  
Project Name: HOBBS A-6 VENT  
Project Location: T19S-R38E-SEC6 A- LEA CO., NM

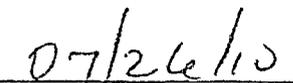
Sampling Date: 07/14/10  
Sample Type: WATER  
Sample Condition: COOL & INTACT  
Sample Received By: JH  
Analyzed By: ZL

LAB NUMBE SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE	07/19/10	07/19/10	07/19/10	07/19/10
H20363-1 MONITOR WELL #1	<0.001	<0.001	<0.001	<0.003
Quality Control	0.010	0.010	0.010	0.031
True Value QC	0.010	0.010	0.010	0.030
% Recovery	100	100	100	103
Relative Percent Difference	9.8	8.6	9.6	5.6

METHOD: EPA SW-846 8021B

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE,  
AND TOTAL XYLENES.

  
\_\_\_\_\_  
Chemist

  
\_\_\_\_\_  
Date

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, Inc.

101 East Marland - Hobbs, New Mexico 88240  
 Tel (575) 393-2326  
 Fax (575) 393-2475

**Company Name:** RICE Operating Company  
**Project Manager:** Hack Conder  
 Address: 122 W Taylor Street - Hobbs, New Mexico 88240  
 Phone #: (575) 393-9174  
 Fax #: (575) 397-1471

**LAB Order ID #**  
**ANALYSIS REQUEST**  
 (Circle or Specify Method No.)

Turn Around Time - 24 Hours	
Chlorides	X
Total Dissolved Solids	X
Sulfates	X
Anions (Cl, SO4, CO3, HCO3)	
Cations (Ca, Mg, Na, K)	
Moisture Content	
BOD, TSS, pH	
Pesticides 8081A/608	
PCBs 8082/608	
GC/MS Semi. Vol. 8270C/625	
GC/MS Vol. 8260B/624	
RCI	
TCLP Pesticides	
TCLP Semi Volatiles	
TCLP Volatiles	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	
TPH 8015 Extended DRO	X
TPH 418.1/TX1005 / TX1005 Extended (C35)	
BTEX 8021B/602	X
MTBE 8021B/602	

**Project #:** Hobbs A-6 Vent  
**Project Location:** T19S R38E Sec 6A ~ Lea County - New Mexico  
**Sampler Signature:** Rozanne Johnson (575) 631-9310  
 rozanne@valornet.com

**LAB USE ONLY**  
 1203631 Monitor Well #1

LAB #	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX		PRESERVATIVE METHOD				DATE (2010)	SAMPLING TIME	
				WATER	SOIL	AIR	SLUDGE	HCL (2.4ml VOA)	HNO3			NaHSO4
		G	3	X				2		1	7-14	8:10

**Relinquished by:** Rozanne Johnson Date: 7/14/10 Time: 13:34  
**Received by:** [Signature] Date: [Blank] Time: [Blank]

**Delivered By:** (Circle One) Sampler - UPS - Bus - Other:  
 Received By: (Laboratory Staff) Date: 7/16/10 Time: 1:35  
 Checked by: [Signature] (Initials) GA

**REMARKS:**  
 Email Results to: hconder@riceswd.com  
 iweinheimer@riceswd.com  
 kjonas@riceswd.com  
 rozanne@valornet.com

#26