

1R - 426-1

## REPORTS

DATE:

8/06/2005



Infrastructure, buildings, environment, communications

RECEIVED

AUG 29 2005

OIL CONSERVATION  
DIVISION

Wayne Price  
New Mexico Oil Conservation Division  
1220 So. Saint Francis Drive  
Santa Fe, New Mexico 87505  
**Sent Certified Mail**

ARCADIS G&M, Inc.  
1004 N. Big Spring Street  
Suite 300  
Midland Texas 79701  
Tel 432.687.5400  
Fax 432.687.5401  
[www.arcadis-us.com](http://www.arcadis-us.com)

**Subject:**

Request for Closure  
Rice Operating Company Blinbry-Drinkard M-14 Junction Box Site  
T21S, R37E, Section 14, Unit M Eunice, Lea County, New Mexico

**Date:**  
26 August 2005

Dear Mr. Price,

On behalf of Rice Operating Company (ROC), ARCADIS G&M respectfully submits this request for the above-referenced site. A Junction Box Disclosure report was completed for this site on July 29, 2003 and submitted to the New Mexico Oil Conservation Division (NMOCD) per the ROC Junction Box Upgrade Workplan. An Investigation Workplan (attached) was submitted to the NMOCD on April 1, 2004.

**Contact:**  
Sharon Hall

**Phone:**  
432 687-5400

**Email:**  
[shall@arcadis-us.com](mailto:shall@arcadis-us.com)

**Site History and Background**

The junction box was removed from the subject site. Following removal of the junction box, soil was excavated from the site. Per request of the landowner, the excavated soil was disposed at a permitted facility. The excavation measured 30 feet long by 30 feet wide and 12 feet deep.

Soil from the sidewalls and bottom of the excavation was sampled and analyzed for benzene, toluene, ethylbenzene, xylenes, (BTEX) GRO, DRO and chlorides. Additionally, soil samples were field tested for chlorides. Laboratory and field analytical results are shown in Tables 1 and 2 of the attached Investigation Workplan. The sidewall sample consisted of a 4-point composite sample, and the bottom sample consisted of a 5-point composite sample.

Based on the results of the soil sampling analytical results, elevated chloride and total petroleum hydrocarbon (TPH) concentrations are present at the subject site. The excavation was backfilled with clean fill provided by the landowner, and the site was graded and seeded with native vegetation.

As proposed in the Investigation Workplan, a soil boring was installed at the subject site at the former junction box location on May 10, 2005. Soil samples were collected

**Part of a bigger picture**

# ARCADIS

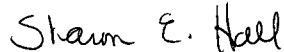
Wayne Price  
August 26, 2005

at regular intervals no greater than five feet, screened in the field using a photo ionization detector (PID) and field tested for chlorides using field adapted method 9253. Soil lithology and the presence of any observed staining or odor was recorded and is shown in the attached Boring Log. Two samples, the sample collected at total depth of the boring and the sample collected from the interval one to five feet above the total depth was submitted to a laboratory for laboratory analysis for chlorides and BTEX. The analytical report is attached.

The soil boring was drilled to a total depth of 61 feet below ground surface. The boring terminated in Triassic red shale and no groundwater was encountered in the boring. Based on the fact that no groundwater is present at the junction box site and that impacted surface soils have been excavated ARCADIS respectfully requests closure of the site on behalf of ROC. If you have any questions or require additional information please do not hesitate to call me at 432 687-5400 or Kristin Pope at (505) 393-9174.

Very Truly Yours,

ARCADIS G&M, Inc.



Sharon E. Hall  
Site Evaluation Department Manager

Copies:

Carolyn Haynes- Rice Operating Company  
Kristin Pope- Rice Operating Company

Attachments:

Investigation Workplan

Boring Log

New Mexico Office of The State Engineer Well Record

Analytical report

Junction Box Final Report

**RICE OPERATING COMPANY  
JUNCTION BOX FINAL REPORT**

**BOX LOCATION**

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
BD	M-14	M	14	21 S	37 E	Lea	Length	Width	Depth
no box--junction eliminated									

LAND TYPE: BLM \_\_\_\_\_ STATE \_\_\_\_\_ FEE LANDOWNER Charles Bettis OTHER \_\_\_\_\_

Depth to Groundwater none feet NMOCD SITE ASSESSMENT RANKING SCORE: 0

Date Started 4/15/2003 Date Completed 5/10/2005 OCD Witness No

Soil Excavated 400 cubic yards Excavation Length 30 Width 30 Depth 12 feet

Soil Disposed 400 cubic yards Offsite Facility Sundance Location Eunice, NM

**FINAL ANALYTICAL RESULTS:** Sample Date 4/24/2003, soil bore on 5/10/2005 Sample Depth 12, 55-60, 61 ft

Procure 5-point composite sample of bottom and 4-point composite sample of sidewalls. TPH, BTEX, and Chloride laboratory test results completed by using an approved lab and testing procedures pursuant to NMOCD guidelines.

Sample Location	Benzene mg/kg	Toluene mg/kg	Ethyl Benzene mg/kg	Total Xylenes mg/kg	GRO mg/kg	DRO mg/kg	Chloride mg/kg
4-WALL COMP.	<0.025	<0.025	<0.025	<0.025	16.2	621	5810
BOTTOM COMP.	<0.025	<0.025	<0.025	<0.025	<10.0	40	7020
BORE @ 55-60 ft	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	8900
BORE @ 60-61 ft	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	4710

**General Description of Remedial Action:**

The site was delineated using a backhoe and chloride concentrations did not exhibit a decline with depth. The excavated soil from the 30 x 30 x 12-ft-deep excavation was disposed of at a permitted facility and the landowner's clean soil was used to backfill on 6/26/2003. At the landowner's request, no liner or barrier was installed. The disturbed surface was seeded with a blend of native vegetation. NMOCD was notified of potential groundwater impact at this site on 4/30/2003. The junction box report detailing these activities was delivered to NMOCD with the 2003 yearly junction box reports. This site was deemed a major project and ROC contracted Arcadis, G & M of Midland, Texas to investigate potential environmental concerns at this site. A work plan for this site was submitted to NMOCD on 4/1/2004 and approval was granted on 11/18/2004. On 5/10/2005, a rig was mobilized at the site and a soil bore was initiated to delineate the extent of impact. The bore was advanced to a depth of 61 ft where Triassic red shale was encountered. No groundwater was present below this site, therefore, allowing the constituents of concern to remain in place does not pose a threat to groundwater. Closure of this regulatory file is requested.

cc: bore log, photos, lab analysis

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

DATE 8/25/2005 PRINTED NAME Kristin Farris Pope

SIGNATURE \_\_\_\_\_ TITLE Project Scientist

## BD jct. M-14

delineation soil bore

May 10, 2005



former junction box site marked with flagged stake (before drilling)



NEW MEXICO OFFICE OF THE STATE ENGINEER  
WELL RECORD

## 1. OWNER OF WELL

Name: **Rice Operating Co.** Work Phone: \_\_\_\_\_  
Contact: \_\_\_\_\_ Home Phone: \_\_\_\_\_  
Address: **122 W. Taylor** \_\_\_\_\_  
City: **Hobbs** State: **NM** Zip: **88240**

## 2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A. 1/4 1/4 1/4 Section: **14** Township: \_\_\_\_\_ Range: \_\_\_\_\_ N.M.P.M.  
in **Unit M, 21S, 37E, Lea County** County.

B. X = \_\_\_\_\_ feet, Y = \_\_\_\_\_ feet, N.M. Coordinate System  
\_\_\_\_\_ Zone in the \_\_\_\_\_ Grant.  
U.S.G.S. Quad Map \_\_\_\_\_

C. Latitude: **32** d **28** m **26.2** s Longitude: **103** d **08** m **31.6** s

D. East \_\_\_\_\_ (m), North \_\_\_\_\_ (m), UTM Zone 13, NAD \_\_\_\_\_ (27 or 83)

E. Tract No. \_\_\_\_\_, Map No. \_\_\_\_\_ of the \_\_\_\_\_ Hydrographic Survey

F. Lot No. \_\_\_\_\_, Block No. \_\_\_\_\_ of Unit/Tract \_\_\_\_\_ of the  
\_\_\_\_\_ Subdivision recorded in \_\_\_\_\_ County.

G. Other: \_\_\_\_\_

H. Give State Engineer File Number if existing well: \_\_\_\_\_

I. On land owned by (required): **Rice Operating Co.**

## 3. DRILLING CONTRACTOR

License Number: **WD-1456**

Name: **White Drilling Company, Inc.** Work Phone: **325-893-2950**  
Agent: **John W. White** Home Phone: **325-893-2950**  
Mailing Address: **P.O. Box 906** \_\_\_\_\_  
City: **Clyde** State: **TX** Zip: **79510**

## 4. DRILLING RECORD:

Drilling began: **05/10/05**; Completed: **05/10/05**; Type tools: **Air Rotary**;  
Size of hole: **7 7/8** in.; Total depth of well: **61.0** ft.;  
Completed well is: **shallow** (shallow, artesian);  
Depth to water upon completion of well: **DRY** ft.

File Number: **BDM-14**

NEW MEXICO OFFICE OF THE STATE ENGINEER  
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness	Description of	Estimated Yield
From	To	in feet	water-bearing formation	(GPM)

6. RECORD OF CASING

Diameter	Pounds	Threads	Depth in Feet		Length	Type of Shoe	Perforations	
(inches)	per ft.	per in.	Top	Bottom	(feet)		From	To

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole	Sacks	Cubic Feet	Method of Placement
From	To	Diameter	of mud	of Cement	
61.0	3.0	7 7/8"	29		Hand Pour
3.0	0.0	7 7/8"	2.5	0.68	Hand Mix

8. PLUGGING RECORD

Plugging Contractor: \_\_\_\_\_  
Address: \_\_\_\_\_  
Plugging Method: \_\_\_\_\_  
Date Well Plugged: \_\_\_\_\_

Plugging approved by: \_\_\_\_\_  
State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			
5			

File Number: \_\_\_\_\_

Form: wr-20

page 2 of 4

Trn Number: \_\_\_\_\_

File Number: **BDM-14**

NEW MEXICO OFFICE OF THE STATE ENGINEER  
WELL RECORD

## 9. LOG OF HOLE

[illegible]

File Number:

Form: wr-20

Trn Number:

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page 3 of 4



**BDM-14**

NEW MEXICO OFFICE OF THE STATE ENGINEER  
WELL RECORD

10. ADDITIONAL STATEMENTS OR EXPLANATIONS:

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

**05/26/05**

 $(\text{mm/dd/year})$ 

**FOR STATE ENGINEER USE ONLY**

Quad \_\_\_\_\_; FWL \_\_\_\_\_; FSL \_\_\_\_\_; Use \_\_\_\_\_; Location No. \_\_\_\_\_

File Number: \_\_\_\_\_  
Form: wr-20 \_\_\_\_\_ page 4 of 4

Trn Number:

**ARCADIS**

# BORING LOG

BORING NO.

**BD M-14**

1004 N. Big Spring St. Suite 300, Midland, TX 79701-3383 Tel: 432 687-5400 Fax: 432 687-5401

Page 1 of 2

PROJECT NUMBER: MT000834.0001

DRILLING CO: White Drilling Company

CLIENT NAME: Rice Operating Company

DRILLING METHOD: Rotary/Air

PROJECT NAME: Junction Boxes Investigation

DRILLER: Bo Atkins

SITE LOCATION: Lea County, New Mexico

LOGGER: R. Lang

UNIQUE NUMBER: 31-014-00721

FILE NAME: BD M-14.dat

DATE BEGUN: 5/10/05

DATE COMPLETED: 5/10/05

DEPTH	SAMPLED	SAMPLING METHOD	ANALYZED	MOISTURE	RECOVERY	PID READING	CHLORIDES	LITHOLOGY	DESCRIPTION
0									
-5		Shovel				66	290		SAND: GLEY 2 6/1 10 BG greenish gray, medium grained to fine grained SAND, subangular, well sorted, loose to very soft, odor.
-10		Shovel				33	344		
-15		Shovel				15.6	1139		SANDSTONE: 5 YR reddish yellow, fine grained, subangular, well sorted, very soft, CALICHE nodules, soft to hard.
-20		Shovel				20.5	4233		
-25		Shovel				5.5	1998		SAND: 5 YR 7/4 pink, fine grained, subangular, well sorted, loose, CALICHE nodules, rare SANDSTONE 5 YR 7/4 fine grained, subangular, well sorted, hard interbeds, slightly moist.
-30		Shovel				7.4	2528		

**ARCADIS**

# BORING LOG

BORING NO.

**BD M-14**

1004 N. Big Spring St. Suite 300, Midland, TX 79701-3383 Tel: 432 687-5400 Fax: 432 687-5401

Page 2 of 2

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DEPTH	SAMPLED	SAMPLING METHOD	ANALYZED	MOISTURE	RECOVERY	PID READING	CHLORIDES	LITHOLOGY	DESCRIPTION
-35		Shovel				5.9	1919		
-40		Shovel				2.5	3640		
-45		Shovel				5.6	5012		SAND: 5 YR 7/4 pink, fine grained, loose, well sorted, became moist at -49.0', some thin CLAY interbeds.
-50		Shovel				6.2	7658		
-55		Rock Core				4.5	6692		
		Shovel				3.8	5696		
-60		Shovel				4.3	8863		SHALE: 10 R 5/4 weak red, finely to coarsely bedded, SILTY, rare nodules, GLEY 1 8/1 light greenish gray, dry.
		Rock Core				6.9	3642		