1R-

# REPORTS

DATE:

75 Wuthering Hts Drive Colorado Springs, 60 80921 Tel: 719-339-6791 E-mail: lpg@texerra.com

June 21<sup>st</sup>, 2011

/ A //: 3

Mr. Edward Hansen New Mexico Energy, Minerals, & Natural Resources Oil Conservation Division, Environmental Bureau 1220 S. St. Francis Drive Santa Fe, New Mexico 87505 RECEIVED COL

**RE: TERMINATION REQUEST** 

Rice Operating Company – BD SWD System BD P-19 EOL (1R-499): UL/P sec. 19 T21S R37E

Sent via E-mail and Certified U.S. Mail w/ Return Receipt No. 7011 0110 0001 5863 4790

### Mr. Hansen:

RICE Operating Company (ROC) has retained Texerra to address potential environmental concerns at the above-referenced site in the BD Salt Water Disposal (SWD) system. ROC is the service provider (agent) for the BD 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/usage basis.

### Background and Previous Work

The site is located approximately 3 miles west-northwest of Eunice, New Mexico at UL/P sec. 19 T21S R37E as shown on the Site Location Map (Figure 1).

On July 17th, 2004, ROC discovered a leak of produced water. Approximately 675 barrels of produced water were estimated to have been released, pooling in down-gradient low-lying areas before being removed by a vacuum truck. An initial C-141 was submitted to NMOCD on June 27th, 2008 (Figure 2). As depth to groundwater is greater than 100 ft, the potential for groundwater impact from this relatively small spill is exceedingly slight. On January 7th, 2011, ROC submitted a CAP to NMOCD which was approved on February 21st, 2011.

### CAP Work

As part of the approved CAP, ROC scraped the upper six inches of soil from the affected areas outside of the caliche lease road and disposed of the material at a NMOCD approved disposal facility on June 15th, 2011. A total of 48 yards were taken to Sundance Services for disposal. 72 cubic yards of clean soil was imported from Wallach in Eunice to the site, spread over the scraped areas and contoured to the natural terrain (Appendix A). Hay was mixed into the topsoil and the site was seeded with native vegetation (Appendix B). A silt

### Rice Operating Company - BD P-19

net fencing was placed around the scraped areas to provide a windbreak to allow the seed to remain in place.

Re-vegetation of the ground surface will limit infiltration of precipitation and the subsequent migration of chlorides to groundwater. Plants capture water through their roots, thereby reducing the volume of water infiltrating below the root zone. This natural "infiltration barrier" helps protect groundwater as the decreased flux of water through the subsurface slows the transportation rate of residual chloride.

These activities have met the work plan outlined in the Corrective Action Plan. Therefore, we request that the site be granted termination status of the regulatory file.

Texerra appreciates the opportunity to work with you on this project. Please call Hack Conder at (575) 393-9174 or me if you have any questions or wish to discuss the site.

Sincerely,

L. Peter Galusky Texerra

Attachments (in separate .pdf file):

Figure 1 – Site Location Map

Figure 2 – Initial C-141

Appendix A – Laboratory analysis of the backfill and PID sheet

Appendix B – Re-vegetation form and Photo documentation



Figures

P.O. Box 5630 Hobbs, NM 88241 Phone 575.393.4411 Fax 575.393.0293

## Site Map

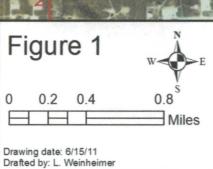




## BD P-19 EOL

UL/P SECTION 19 T-21-S R-37-E

NMOCD Case #: 1R-499



District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

### State of New Mexico **Energy Minerals and Natural Resources**

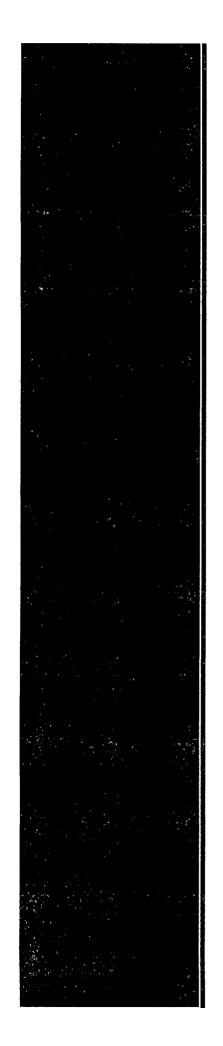
Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-141 Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

## **Release Notification and Corrective Action**

						OPERA'	ГOR		☐ Initial Report ☑ Final Report								
Name of Co	ompany:	Rice Operati	ng			Contact:	Tony Grieco										
		ylor St., Hob	bs, NM	88240		Telephone No.: (505) 393-9174											
Facility Na	me: BD					Facility Typ	e: Salt Water C	atheri	ng System	l							
Surface Ow	ner: Milla	rd Deck	Mineral C	)wner:	BLM			Lease N	No.								
				LOCA	TIO	N OF RE	LEASE										
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	East/\	ast/West Line   County								
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Source of Re	lease: A fo	ur-inch PVC	45 degre	e 'L' failed		Date and H 7/17/04	lour of Occurrence 7:30 AM	e:		Hour of Dis 7:30 AM	covery	•					
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By Whom?						Date and Hour											
Was a Water	course Read		Yes 🗵	No		If YES, Volume Impacting the Watercourse.											
If a Watercon	irse was Im	pacted, Descr	ihe Fully :	<b>k</b>		.l.											
Describe Cau	ise of Probl	em and Reme	dial Actio	n Taken.*: <b>A four</b>	inch P	VC 45 degre	e 'L' failed. A n	ew 'L'	was instal	led as a per	manen	t repair.					
						k was dispatched which recovered and properly disposed 685 bbls of fluid. sal facility, and 36 yds of clean material were imported.											
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							OIL CON	SERV	ATION	DIVISIO	N						
Signature:																	
Printed Name	e: Tony G	rieco				Approved by District Supervisor:											
Title: Envir						Approval Dat	e:		Expiration Date:								
E-mail Addre	ess: <b>tgrieco</b>	@riceswd.co		Conditions of	Approval:		Attached										
Date: 6/27/	08	Phor	ne: ( <b>505</b> ) 3	93-9174					•								



## Appendix A

Laboratory analysis of the backfill and PID sheet

P.O. Box 5630 Hobbs, NM 88241 Phone 575.393.4411 Fax 575.393.0293



June 17, 2011

Hack Conder

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: MAJOR PROJECT BD P-19 EOL

Enclosed are the results of analyses for samples received by the laboratory on 06/15/11 16:45.

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 Hydorcarbons

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

Cardinal Laboratories is accreditated 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 524.4 Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Celeg D. Keine

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



### Analytical Results For:

Rice Operating Company Hack Conder

112 W. Taylor Hobbs NM, 88240

Fax To: (575) 397-1471

Received:

06/15/2011

Sampling Date:

06/15/2011

Reported:

06/17/2011

Sampling Type:

Soil

Project Name:

MAJOR PROJECT BD P-19 EOL

Sampling Condition:

\*\* (See Notes)

Project Number:

NONE GIVEN

Sample Received By:

Jodi Henson

Project Location:

**NOT GIVEN** 

### Sample ID: IMPORTED SOIL COMP (H101251-01)

Chloride, SM4500CI-B		mg,	/kg	Analyze	d By: HM					
	Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
	Chloride	16.0	16.0	06/16/2011	ND	448	112	400	0.00	

Cardinal Laboratories \*=Accredited Analyte

Celey D. Keine Celey D. Keene, Lab Director/Quality Manager



#### **Notes and Definitions**

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

\*\* Samples not received at proper temperature of 6°C or below.

\*\*\* Insufficient time to reach temperature.

Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories \*=Accredited Analyte

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 waked unless made in writing and recoved by Cardinal within their) (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 aubstitionies, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether sucl claims is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report/used except in full with written approved of Cardinal Laboratories.

Celey D. Kuna



### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

Company Name: Project Manager: Hack County						1	BILL TO ANALYSIS REQUEST																			
Project Manage	Hack Courter				-	_[/	P. O	). # <i>:</i>									T	T	Т				T			
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FOR LAB USE ONLY	0.	- 1		MA	TRIX	( 		PRE	SER	Υ	SAMPL	INC	3					ļ								
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP. # CONTAINERS	GROUNDWATER	WASTEWATER		SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	יחבוא :	D475		71145	76												
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† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

Page 4 of 4

## RICE ENVIRONMENTAL CONSULTING & SAFETY

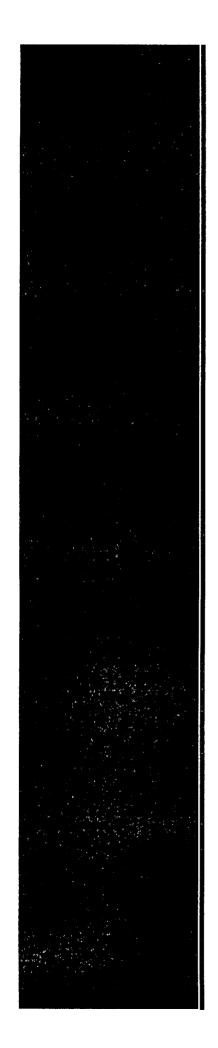
122 West Taylor Hobbs, NM 88240 PHONE: (505) 393-9174 FAX: (505) 397-1471 PID METER CALIBRATION & FIELD REPORT FORM

CK.	MODEL: PGM 7300	SERIAL	NO: 590-000508		
MODEL	MODEL: PGM 7300		NO: 590-000504		
NO.	MODEL: PGM 7320		NO: 592-903318		
<u>x</u>	MODEL: PGM 7300	SERIAL	NO: 590-000183		
	GAS COMPOSITION	ON: ISOBUTY	LENE 100PPM / AIR:	BALANCE	·····
LOT NO :930132			EXPIRATION DATE	:4/28/13	
	METI	ER READING	ACCURACY:100.00	· · · · · · · · · · · · · · · · · · ·	
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BD_	P-19 EOL	19	P	21	3.
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				· · · · · · · · · · · · · · · · · · ·	

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

SIGNATURE:

DATE: / 1-/5-1/



# $\begin{array}{c} Appendix \ B \\ \text{Re-vegetation form and Photo documentation} \end{array}$

RICE Environmental Consulting and Safety (RECS) P.O. Box 5630 Hobbs, NM 88241 Phone 575.393.4411 Fax 575.393.0293



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

## REVEGETATION FORM

1. Genera	al Information			,		•		
Site Name: BD	P-19 EOL		•					
U/L	Section	Township	Range	County	Latitude	Longitude		
P	19	21S	37E	Lea	N 32°27'28.95	W 103°11'46.583		
Contact Name:	Hack Conder	•						
Email: hconder	@riceswd.com							
Site size: 3,324	square feet		Map o	letail of site att	ached 🔲			
Additional info	rmation:							
2. Soils Salvaged from	site	nediated	Imported 🛛	Blended	1 De	pth (in.):		
Texture:		soil and subsoi		Dichaca _	<u> </u>	рш (ш.).		
Soil prep metho		Depth (in.):	Disc	Depth (in.):	Rollerpa	<u>.</u> ГП		
Date complete:		Depth (III.).	Disc []	Depth (III.).	Roncipa	~~ <u> </u>		
3. Biorem Fertilizer Type: Lbs/acre:	nediation		Other Describe:					
4. Seeding								
Custom seed m	ix 🔲   Prescrib	ed mix 🔲 🔝	Seed mix name: 3	.75 lbs Johnson	Mix   Seeding d	ate: 6/16/2011		
Broadcast								
	seeding and hand							
	during seeding:			et 🗌				
Photos attached	$\boxtimes$		Observations:					
5. Certific								
Name: Jordan	Woodfin /	Title: E	nvironmental Tec	h L	Date: 6/16/2011			
Signature.	سو/	1 Danh	Usall 1					
	/		I					

### BD P-19 EOL Unit P, Section 19, T21S, R37E



site prior to surface restoration, facing south



blending the imported soil with peanut hay



seeding the backfilled area, facing south



scraping to a depth of 6 inches, facing north



backfilling the scraped area, facing south



site complete, facing north



site prior to scraping, facing northeast



scraping the site to a depth of 6 inches and hauling off soil, facing west



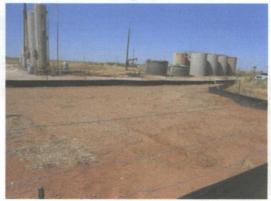
seeding the backfilled area, facing south



site scraped to a depth of 6 inches, facing east



backfilling the scraped area, facing west



site complete, facing southwest