1R - 427-37

APPROVALS

YEAR(S):

2013

Hansen, Edward J., EMNRD

From: Hansen, Edward J., EMNRD
Sent: Monday, January 28, 2013 3:56 PM
To: Hack Conder (hconder@riceswd.com)
Cc: Leking, Geoffrey R, EMNRD; Laura Pena (lpena@riceswd.com); Katie Jones <kjones@riceswd.com> (kjones@riceswd.com); Scott Curtis (scurtis@riceswd.com)
Subject: Remediation Plan (1R427-37) Termination - ROC EME M-10-1 Site

RE: Termination Request
for the Rice Operating Company's
EME M-10-1 Site
Unit Letter M, Section 10, T21S, R36E, NMPM, Lea County, New Mexico
Remediation Plan (1R427-37) 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 January 18, 2013 (received January 23, 2013). 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 (1R427-37) 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

RICE *Operating Company*
112 West Taylor • Hobbs, New Mexico 88240
Phone: (575) 393-9174 • Fax: (575) 397-1471

CERTIFIED MAIL
RETURN RECEIPT NO. 7007 2560 0000 4569 8753

January 18, 2013

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
EME M-10-1 (1R427-37): UL/M Sec. 10, T21S, R36E
RICE Operating Company – Eunice Monument Eumont SWD System

Mr. Hansen:

Rice Operating Company (ROC) is the service provider (agent) for the EME 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 2003, ROC initiated work on the former M-10-1 junction box. The site is located in UL/M, Sec. 10, T21S, R36E. NM OSE records indicate that groundwater would likely be encountered at a depth of approximately 200 +/- feet. The site was delineated using a backhoe to collect soil samples at regular intervals, creating a 25x24x12 ft deep excavation. Each sample was field titrated for chlorides and field screened using a PID for hydrocarbons, resulting in slightly elevated chloride concentrations. Representative composite samples of the excavation bottom and the excavation walls were sent to a commercial laboratory for analysis of chloride and TPH, resulting in a sidewall chloride concentration of 240 mg/kg and concentrations of gasoline range organics (GRO) and diesel range organics (DRO) below detectable limits. The bottom composite resulted in chloride concentration of 688 mg/kg and concentrations of gasoline range organics (GRO) and diesel range organics (DRO) below detectable limits. The remediated backfill resulted in chloride concentration of 464 mg/kg and concentrations of gasoline range organics (GRO) and diesel range organics (DRO) below detectable limits.

To further investigate the depth of chloride presence, two soil bores were initiated on September 19, 2003. The borings were advanced to a total depth of 22 ft BGS with soil

samples collected at regular intervals. SB-1 (10 ft east of the source) was taken to a commercial laboratory for analysis of chloride, resulting in a concentration of 142 mg/kg at 22 ft BGS. SB-2 (15 ft south of the source) was taken to a commercial laboratory for analysis of chloride, resulting in a concentration below detectable limits at 22 ft BGS.

From 12-10.5 ft BGS, a 1.5 thick clay liner was installed with a compaction test performed on October 13, 2003. The backfill was returned to the excavation to ground surface and contoured to the surrounding area. On 12/12/2003, the site was seeded with a blend of native vegetation and is expected to return to a productive capacity at a normal rate.

A new, watertight junction box was built over this site, and is now an access point for pigging and scrapping, as line maintenance. This requires a drivable surface around the junction box, making caliche necessary, and vegetation not necessary.

The junction box site location map, final report, photodocumentation, PID sheet, laboratory analysis, clay compaction test, and current photodocumentation 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.

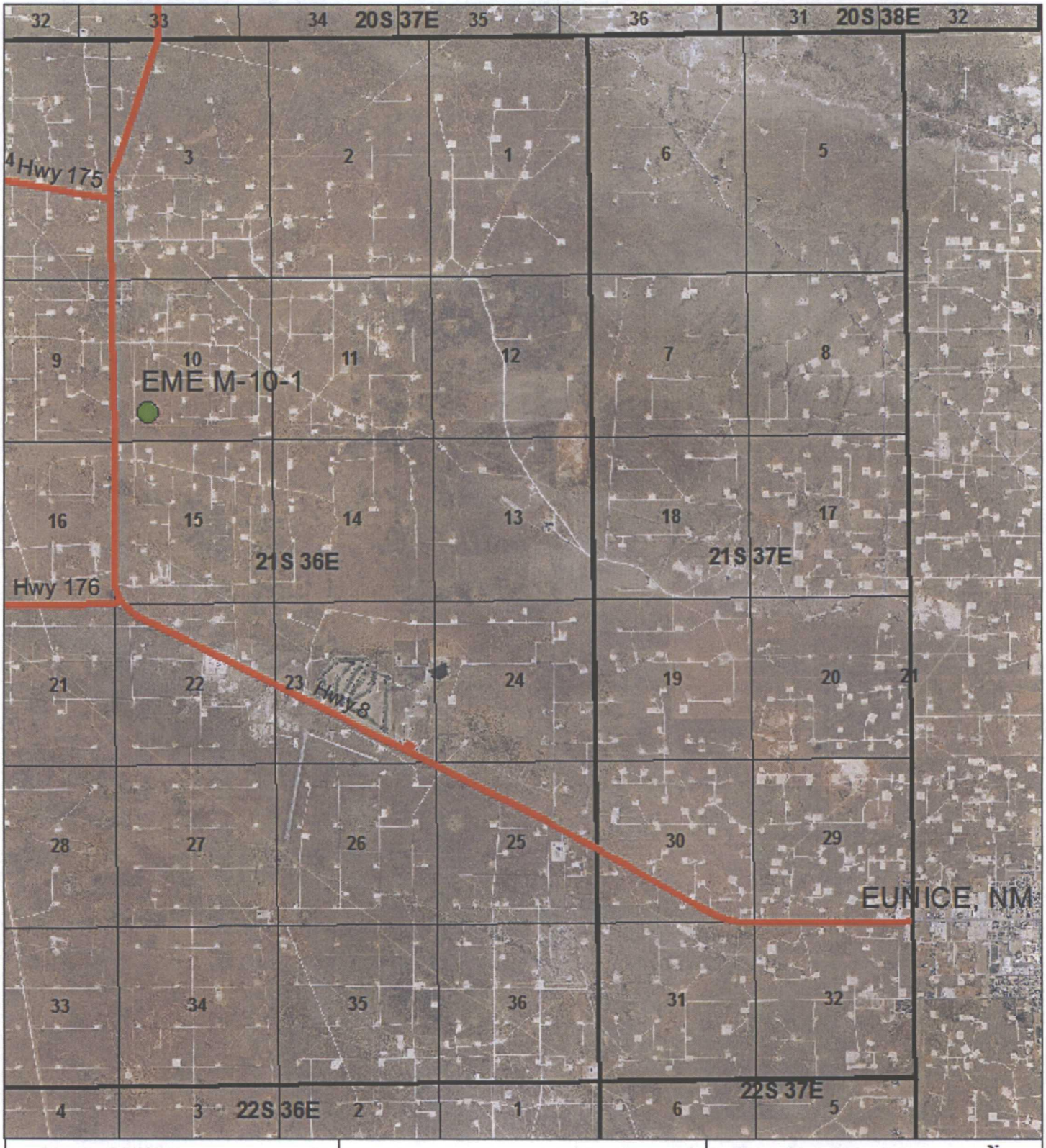
Sincerely,
RICE Operating Company

Hack Conder
Environmental Manager

enclosures

Site Location Map

RICE *Operating Company* (ROC)
112 West Taylor Hobbs, NM 88240
Phone: (575) 393-9174 Fax: (575) 397-1471



RICE ENVIRONMENTAL CONSULTING & SAFETY, LLC
RECS

EME M-10-1

UL M SECTION 10
T-21-S R-36-E
LEA COUNTY, NM

N
W E
S

0 0.5 1
Miles

Drawing date: 12/7/12
Drafted by: Tony Grieco

Junction Box Report

RICE *Operating Company* (ROC)
112 West Taylor Hobbs, NM 88240
Phone: (575) 393-9174 Fax: (575) 397-1471

RICE OPERATING COMPANY
JUNCTION BOX FINAL REPORT

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
							Length	Width	Depth
EME	M-10-1	M	10	21 S	36 E	Lea	7	5	10

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER Millard Deck OTHER _____

Depth to Groundwater 200 feet NMOCD SITE ASSESSMENT RANKING SCORE: 0

Date Started 9/11/2003 Date Completed 10/30/2003 OCD Witness No

Soil Excavated 266 cubic yards Excavation Length 25 Width 24 Depth 12 feet

Soil Disposed 0 cubic yards Offsite Facility n/a Location n/a

FINAL ANALYTICAL RESULTS: **Sample Date** 9/30/2003 **Sample Depth** 12 ft bgs

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	PID ppm	GRO mg/kg	DRO mg/kg	Chloride mg/kg
SIDEWALLS	18.5	<10.0	<10.0	240
BOTTOM	17.1	<10.0	<10.0	688
REMEDIATED	21.7	<10.0	<10.0	464
Bore 10 ft east @ 22 ft	XXX	XXX	XXX	142
Bore 15 ft south @ 22	XXX	XXX	XXX	<20

General Description of Remedial Action: Delineation with a backhoe did not yield a sufficient decline in chloride concentrations with depth. PID readings were minimal and lab results confirmed that TPH concentrations are well below NMOCD guidelines. The location was bored to determine the vertical extent of chloride impact and tests of the returns conclusively indicate that chloride ceases well above groundwater depth (see graphs). A 1.5 ft compacted clay barrier was installed at the bottom of the 25 x 24 x 12-ft-deep excavation to inhibit further downward migration of chloride. The excavated soil was landfarmed at the location and then backfilled into the hole and leveled. The disturbed surface has been re-seeded with a blend of native vegetation and will be monitored for growth. A new watertight junction box has been built over this site.

enclosed: lab results, chloride graphs, diagram, photos, clay compaction test

CHLORIDE FIELD TESTS

LOCATION	DEPTH (ft)	ppm
Vertical	8	880
	9	1280
	10	964
	11	807
	12	940
4-wall comp.	n/a	611
bottom comp.	12	534
remed. comp.	n/a	745
bore 15 ft south	22	201
bore 10 ft east	22	222

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

DATE 12/24/2003 PRINTED NAME Kristin Farris

SIGNATURE Kristin Farris TITLE Project Scientist

EME jct. M-10-1

Old wooden box prior to excavation

Backhoe excavation & delineation

Density & compaction test of clay

Seeding disturbed area; new plastic junction box in background

ETGI Composite Set Box Final report 24'x25'x12' dee

SITE EXCAVATION INFORMATION

EME 70-16-1

DATE	DEPTH	CL	PID	TPH	SOIL COMPOSITION
9-30-03	Bottom 12'	534	17.1		mix
	S. wall	611	18.5		
	Remediated Backfill	745	21.7		
	N. wall 12'	311	14.6		
	S. wall 12'	256	11.1		
	W. wall 10'	796	10.2		
	E. wall 15'	613	13.9		

ANALYTICAL REPORT

Prepared for:

Kristin Farris
Rice Operating
122 W. Taylor
Hobbs, NM 88240

Project: EME M 10-1

PO#:

Order#: G0307652

Report Date: 10/08/2003

Certificates
US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

Rice Operating	Order#: G0307652
122 W. Taylor	Project: Bore Samples
Hobbs, NM 88240	Project Name: EME M 10-1
505-397-1471	Location: None Given

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0307652-01	10' E. Source @ 22'	SOIL	9/19/03 10:30	10/6/03 8:00	Plastic Bag	ice
	Lab Testing: Chloride	**Rejected:** No		**Temp:** 4.0 C		
0307652-02	15' S. Source @ 22'	SOIL	9/19/03 14:30	10/6/03 8:00	Plastic Bag	ice
	Lab Testing: Chloride	**Rejected:** No		**Temp:** 4.0 C		

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Kristin Farris		Order#:	G0307652
Rice Operating		Project:	Bore Samples
122 W. Taylor		Project Name:	EME M 10-1
Hobbs, NM 88240		Location:	None Given

Lab ID: 0307652-01
Sample ID: 10' E. Source @ 22'

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	142	mg/kg	1	20	9253	10/7/03	SB

Lab ID: 0307652-02
Sample ID: 15' S. Source @ 22'

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	<20	mg/kg	1	20	9253	10/7/03	SB

Approval: Celey D. Keene 10/9/03
Date

Raland K. Tuttle, Lab Director, QA Officer
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

RL = Reporting Limit N/A = Not Applicable

ENVIRONMENTAL LAB OF TEXAS I, LTD. 12600 West I-20 East, Odessa, TX 79765 Ph: 915-563-1800

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0307652

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0007064-01			<20		
MS SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0307648-01	1030	500	1540	102.%	
MSD SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0307648-01	1030	500	1560	106.%	1.3%
SRM SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0007064-04		5000	4960	99.2%	

Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: KRISTIN FARRIS
Company Name: RICE OPER. CO.
Company Address: 122 W. TAYLOR
City/State/Zip: Hobbs, NM. 88240
Telephone No: 505-393-9174
Fax No: 505-397-1471
Sampler Signature: Ray R. Rascon

Project Name: EME M 10-1
Project #: BORE SAMPLES
Project Loc:
PO #:

L3071652

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	HNO3	HCl	NaOH	H2SO4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify)	Analyze For: TCLP: TDS / CL / SAR / EC	TPH 418.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030	TOTAL: Cl-						RUSH TAT (Pre-Schedule)	Standard TAT
01	10' E. SOURCE @ 22'	9-19-03	1030	1	✓									✓										✓							
02	15' S. SOURCE @ 22'	9-19-03	230	1	✓									✓										✓							

Special Instructions:

Sample Containers Intact? (Y) N
Temperature Upon Receipt:
Laboratory Comments:
4° C Plastic bag
Ice

Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by: CD Haynes	Date 10/3/03	Time 1914	Received by ELOT: [illegible] Anderson	Date 10/6/03	Time 0800

CARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
RICE OPERATING CO.
ATTN: ROY RASCON
122 W. TAYLOR
HOBBS, NM 88240
FAX TO: (505) 393-1471

Receiving Date: 09/30/03
Reporting Date: 10/01/03
Project Number: NOT GIVEN
Project Name: EME M-10-1
Project Location: LEA CO., NM

Sampling Date: 09/30/03
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: BC/AH

LAB NUMBER	SAMPLE ID	GRO (C_6-C_{10}) (mg/Kg)	DRO (>C_{10}-C_{28}) (mg/Kg)	Cl* (mg/Kg)
ANALYSIS DATE		09/30/03	09/30/03	10/01/03
H8051-1	BOTTOM 12'	<10.0	<10.0	688
H8051-2	4 WALLS	<10.0	<10.0	240
H8051-3	REMEDIATED BACKFILL	<10.0	<10.0	464
Quality Control		806	792	1050
True Value QC		800	800	1000
% Recovery		101	90.0	105
Relative Percent Difference		1.4	11.3	6.7

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl^-: Std. Methods 4500-Cl^-B
*Analyses performed on 1:4 w:v aqueous extracts.

Chemist

10/1/03
Date

H8051.XLS

CARDINAL LABORATORIES, INC.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

2111 Beechwood, Abilene, TX 79603 (915) 673-7001 Fax (915) 673-7020
101 East Marland, Hobbs, NM 88240 (505) 393-2326 Fax (505) 393-2476

Page____ of____

Company Name:	Rice Operation Co.	BILL TO	PO #:
Project Manager:	Ray Eason		
Address:	122 W. Taylor	Company:	Rice
City: Hobbs	State: NM Zip: 88240	Attn:	
Phone #:	505-393-9174	Address:	
Fax #:	505-392-1421	City:	
Project #:	Project Owner:	State:	Zip:
Project Name:	EME M-10-1	Phone #:	
Project Location:	Lea	Fax #:	

FOR LAB USE ONLY				MATRIX							PRES.			SAMPLING		ANALYSIS REQUEST														
LAB I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID:	ICE / COOL	OTHER:	DATE	TIME	TPH 8015	Chloride														
H20514	Bottom 12'	C	6			X						X	9-30-03	10:11	X	X														
-2	4 Walls	C	6			X						X	9-30-03	10:29	X	X														
-3	Remediated Backfill	C	6			X						X	9-30-03	10:35	X	X														

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 the client for the 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 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.

Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Sampler Relinquished:	Date:	Received By:		Phone Result: ☐ Yes ☐ No	Additional Fax #:
	Time:			Fax Result: ☐ Yes ☐ No	
Relinquished By:	Date: 9-30-03	Received By: (Lab Staff)		REMARKS: Fax copy to rice	
Ray Stall	Time: 4:10PM				
Delivered By: (Circle One)		Sample Condition: Cool ☒ Yes ☐ No / Intact ☐ Yes ☐ No	CHECKED BY: (Initials)		
Sampler - UPS - Bus - Other:					

† Cardinal cannot accept verbal changes. Please fax written changes to 915-673-7020.

LABORATORY TEST REPORT

PETTIGREW and ASSOCIATES, P.A.

1110 N. GRIMES
HOBBS, NM 88240
(505) 393-9827

AASHTO R18

DEBRA P. HICKS, P.E./L.S.I.
WILLIAM M. HICKS, III, P.E./P.S.

To:	Rice Operating Corporation Attn: Carolyn Haynes 122 W. Taylor Hobbs, NM 88240	**Material:**	Red Clay
		Test Method:	ASTM: D 2922
Project:	M 10-1		
Date of Test:	October 13, 2003	**Depth:**	Finished Subgrade

Test No.	Location	Dry Density % Maximum	% Moisture	Depth
SG-1	SW Corner of Pit	101.7	19.4	

RECEIVED
OCT 16 2003
RICE OPERATING
HOBBS, NM

Control Density:	104.2 ASTM: D 698	**Optimum Moisture:**	23.1%
Required Compaction:	95%		
Lab No.:	03 6302-6303		
Copies To:	Rice Operating		

PETTIGREW and ASSOCIATES

BY: S.E/T.

Current Photodocumentation

RICE *Operating Company* (ROC)
112 West Taylor Hobbs, NM 88240
Phone: (575) 393-9174 Fax: (575) 397-1471

EME M-10-1 (1R427-37)
Unit Letter M, Section 10, T21S, R36E

Facing North 12/17/2012

Facing West 12/17/2012