1R - 427-67

APPROVALS
& 11.25.13 REQUEST

YEAR(S):
2013 4

Lowe, Leonard, EMNRD

From: Lowe, Leonard, EMNRD
Sent: Tuesday, April 01, 2014 9:28 AM
To: Hack Conder (hconder@riceswd.com)
Cc: kjones@riceswd.com
Subject: Approved Termination Request (1R-427-67) - EME L-1

Importance: High

Termination Request Approved
for the EME L - 1 (1R427-67)
Unit Letter L Section 1, T20S, R37E, NMPM, Lea County, New Mexico

Dear Mr. Conder:

The New Mexico Oil Conservation Division (OCD) has received RICE Environmental 's Request to terminate the above-referenced site, dated November 25, 2013. The termination request 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 Environmental has met the requirements of 19.15.29 NMAC; therefore, the OCD approves the report and hereby notifies you that the remediation plan (1R-427-67) 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 505-476-3492.

Leonard Lowe
Environmental Engineer
[Environmental Bureau]
Oil **C**onservation **D**ivision/**E**nergy **M**inerals and **N**atural **R**esources **D**epartment
1220 South St. Frances
Santa Fe, New Mexico 87004
Office: 505-476-3492
E-mail: leonard.lowe@state.nm.us

P. 84

Rice Environmental Consulting & Safety
P.O. Box 2948, Hobbs, NM 88241
Phone 575.393.2967

CERTIFIED MAIL
RETURN RECEIPT NO. 7007 2560 0000 4569 9026

November 25, 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 L-1 (1R427-67): UL/L, Sec. 1, T20S, R37E
RICE Operating Company – Eunice Monument Eumont (EME) SWD System

Mr. Hansen:

RICE Operating Company (ROC) has retained Rice Environmental Consulting and Safety (RECS) to address potential environmental concerns at the above-referenced site in the EME Salt Water Disposal (SWD) system. ROC is the service provider (agent) for the EME 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 2002, ROC initiated work on the former L-1 junction box. The site is located in UL L, Sec. 1, T20S, R37E. Soil bore installation in the area of this site has proven there is no groundwater. The site was delineated using a backhoe to form a 12x15x4-ft deep excavation and soil samples were screened at regular intervals for both hydrocarbons and chlorides. Each sample was field titrated for chlorides. Representative samples of the sidewalls and bottom were sent to a commercial laboratory for analysis, resulting in a sidewalls chloride concentration of 798 mg/kg a gasoline range organics (GRO) concentration below detectable limits and a diesel range organics (DRO) concentration of 366 mg/kg. The bottom resulted in a chloride concentration of 610 mg/kg, a GRO concentration below detectable limits and a DRO concentration of 551 mg/kg. The excavation was backfilled with blended soil to ground surface and contoured to the surrounding area. A total of 12 cubic yards of excavated soil was properly disposed of at a NMOCD approved facility. A junction box is no longer needed at this site.

To further investigate the depth of chloride presence, a soil bore was initiated on September 27, 2013 at 5-ft west of the former junction box site. The boring was advanced to a depth of 12-ft below ground surface with soil samples collected every 3 ft. Each sample was field titrated for chlorides and field screened using a PID for hydrocarbons, resulting in low chloride concentrations. The 6-ft, 9-ft, and 12-ft samples were sent to a commercial laboratory for analysis. The 6 ft sample resulted in a chloride concentration of 48 mg/kg and concentrations of GRO and DRO below detectable limits. The 9-ft and 12-ft samples resulted in a chloride, GRO

Rice Environmental Consulting & Safety
P.O. Box 2948, Hobbs, NM 88241
Phone 575.393.2967

and DRO concentration below detectable limit. The entire bore hole was plugged with bentonite to ground surface. A soil bore was installed at EME Jct. I-1 (1R427-254), which is located just over a half mile west of the L-1 site, to a depth of 32 ft bgs. Red bed was encountered at approximately 27 ft bgs. After a 48 hour holdover period, the bore was gauged by Arc Environmental and the moisture content at that depth was non-detectable. A letter of no groundwater from Arc Environmental for the EME Jct. I-1 is enclosed.

Vegetation has rebounded at this site; vegetation will act as an evapo-transpiration barrier that will also inhibit the downward migration of chlorides and hydrocarbons. Plants capture water through their roots and so reduce the amount of water infiltrating below the root zone.

The junction box site location map, area map, final report, laboratory analysis, disposal manifest, photodocumentation, soil bore plat, log, soil bore installation laboratory analysis, PID sheet, letter of no groundwater and current documentation 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)393-2967 if you have any questions or wish to discuss this site. Thank you for your time and consideration.

Sincerely,

L Flores

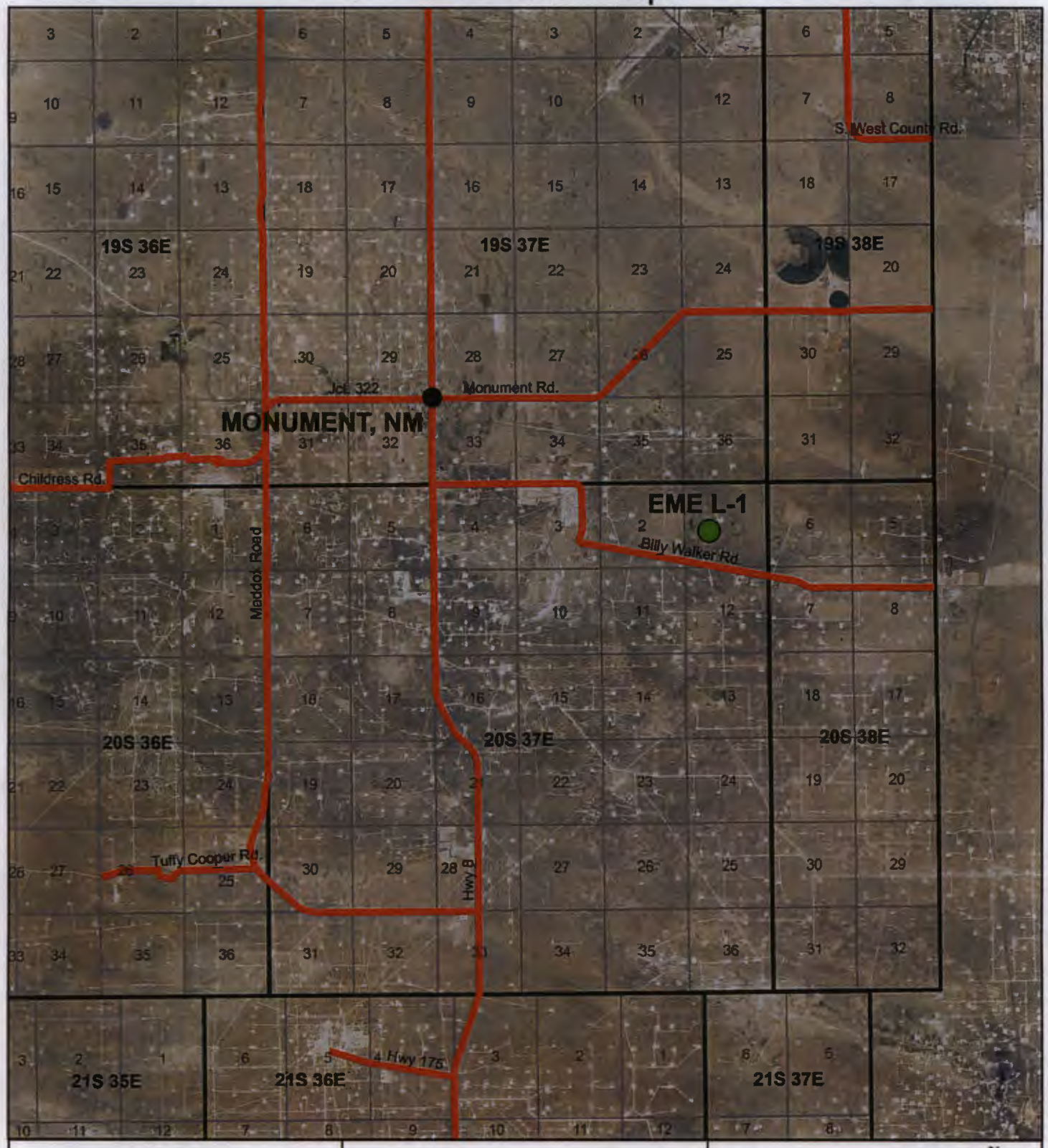
Laura Flores
Project Manager
RECS

enclosures

Site and Area Maps

RICE Environmental Consulting and Safety (RECS)
P.O. Box 2948, Hobbs, NM 88241
Phone 575.393.2967

Site Location Map



RICE ENVIRONMENTAL CONSULTING & SAFETY, LLC
RECS

EME L-1 (1R427-67)

UL/L SECTION 1
T20S, R37E
LEA COUNTY, NM

N
W E
S

0 1 2 Miles

Drawing date: 5/6/13 LS

Area Map

RICE ENVIRONMENTAL CONSULTING & SAFETY, LLC

RECS

EME L-1 (1R427-67)

UL/L SECTION 1
T20S, R37E
LEA COUNTY, NM

N
W E
S

0 1,500 3,000
Feet

Drawing date: 5/6/13 LS

Junction Box Report

RICE Environmental Consulting and Safety (RECS)
P.O. Box 2948, Hobbs, NM 88241
Phone 575.393.2967

RICE OPERATING COMPANY
JUNCTION BOX FINAL REPORT

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
							Length	Width	Depth
EME	L-1	L	1	20S	37E	LEA			

LAND TYPE: BLM _____ STATE X FEE LANDOWNER _____ OTHER _____

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

Date Started 02/28/2002 Date Completed 03/05/2002 OCD Witness NO

Soil Excavated 25 cubic yards Excavation Length 12 Width 15 Depth 4 feet

Soil Disposed 12 cubic yards Offsite Facility J&L LANDFARM Location MONUMENT, NM

FINAL ANALYTICAL RESULTS: **Sample Date** 03/01/2002 **Sample Depth** 4'

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	Chlorides mg/kg
SIDEWALLS	<0.025	<0.025	<0.025	<0.025	<10	366	798
BOTTOM	<0.025	<0.025	<0.025	<0.025	<10	551	610

General Description of Remedial Action: Delineated vertical and lateral extent. Found impact below NMOCD guidelines. Backfilled with blended soil. This site is no longer a junction and does not require a box. Natural attenuation will remediate the remaining hydrocarbon.

CHLORIDE FIELD TESTS

LOCATION	DEPTH	mg/kg
SIDEWALLS	3'	1100
BOTTOM	4'	1000
Vertical trench	6'	350

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

DATE March 19, 2002 PRINTED NAME D. E. Anderson

SIGNATURE _____ TITLE Project Leader - Environmental

ANALYTICAL REPORT

Prepared for:

DEREK ROBINSON
RE ENVIRONMENTAL
P.O. BOX 13418
ODESSA, TX 79768

Project:	Rice L-1 Jcfbiy
Order#:	G0202718
Report Date:	03/07/2002

Certificates
US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

RE ENVIRONMENTAL
P.O. BOX 13418
ODESSA, TX 79768
366-0804

Order#: G0202718
Project:
Project Name: Rice
Location: L-1

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.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0202718-01	4 pt. Wall Comp. @ 3'	SOIL	03/01/2002 9:45	03/04/2002 9:25	Bottle	n/a
	Lab Testing:	Rejected: No		Temp: 20.5C		
	8015M TPH GRO/DRO 8021B/5030 BTEX Chloride					
0202718-02	5 pt. Bottom Comp. @4'	SOIL	03/01/2002 10:00	03/04/2002 9:25	Bottle	n/a
	Lab Testing:	Rejected: No		Temp: 20.5C		
	8015M TPH GRO/DRO 8021B/5030 BTEX Chloride					

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

DEREK ROBINSON
RE ENVIRONMENTAL
P.O. BOX 13418
ODESSA, TX 79768

Order#: G0202718
Project:
Project Name: Rice
Location: L-1

Lab ID: 0202718-01
Sample ID: 4 pt. Wall Comp. @ 3'

8015M TPH GRO/DRO

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0000762-02		03/04/2002 19:24	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	<10	10.0
DRO, >C12-C28	366	10.0

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0000781-02		03/04/2002 18:05	1	1	CK	8021B

Parameter	Result µg/kg	RL
Benzene	<25	25.0
Ethylbenzene	<25	25.0
Toluene	<25	25.0
p/m-Xylene	<25	25.0
o-Xylene	<25	25.0

Lab ID: 0202718-02
Sample ID: 5 pt. Bottom Comp. @4'

8015M TPH GRO/DRO

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0000762-02		03/04/2002 19:36	1	1	CK	8015

Parameter	Result mg/kg	RL
GRO, C6-C12	<10	10.0
DRO, >C12-C28	551	10.0

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

DEREK ROBINSON		Order#:	G0202718
RE ENVIRONMENTAL		Project:	
P.O. BOX 13418		Project Name:	Rice
ODESSA, TX 79768		Location:	L-1

Lab ID: 0202718-02
Sample ID: 5 pt. Bottom Comp. @4'

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0000781-02		03/04/2002 17:53	1	1	CK	8021B

Parameter	Result µg/kg	RL
Benzene	<25	25.0
Ethylbenzene	<25	25.0
Toluene	<25	25.0
p/m-Xylene	<25	25.0
o-Xylene	<25	25.0

Approval: Raland K Tuttle 3-07-02
Raland K. Tuttle, Lab Director, QA Officer — Date
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Irene Perry, QA Assistant
Sandra Biezugbe, Lab Tech.
Curt Cowdrey, Lab Tech.
Sara Molina, Lab Tech.

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

DEREK ROBINSON		Order#:	G0202718
RE ENVIRONMENTAL		Project:	
P.O. BOX 13418		Project Name:	Rice
ODESSA, TX 79768		Location:	L-1

Lab ID: 0202718-01
Sample ID: 4 pt. Wall Comp. @ 3'

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	798	mg/kg	1	10	9253	03/05/2002	CC

Lab ID: 0202718-02
Sample ID: 5 pt. Bottom Comp. @4'

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	610	mg/kg	1	10	9253	03/05/2002	CC

Approval: Raland K Tuttle 3-07-02
Raland K. Tuttle, Lab Director, QA Officer — Date
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Irene Perry, QA Assistant
Sandra Biezugbe, Lab Tech.
Curt Cowdrey, 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

8015M TPH GRO/DRO

Order#: G0202718

BLANK	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/kg	0000762-02			<10		
DRO, >C12-C28-mg/kg	0000762-02			<10		
MS	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/kg	0202714-01	34	476	445	86.3%	
DRO, >C12-C28-mg/kg	0202714-01	565	476	876	65.3%	
MSD	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/kg	0202714-01	34	476	516	101.3%	14.8%
DRO, >C12-C28-mg/kg	0202714-01	565	476	1060	104.%	19.%
SRM	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/kg	0000762-05		500	574	114.8%	0.%
DRO, >C12-C28-mg/kg	0000762-05		500	551	110.2%	0.%

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0202718

BLANK	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg	0000781-02			<25		
Ethylbenzene-µg/kg	0000781-02			<25		
Toluene-µg/kg	0000781-02			<25		
p/m-Xylene-µg/kg	0000781-02			<25		
o-Xylene-µg/kg	0000781-02			<25		
CONTROL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg	0000781-03		100	114	114.%	
Ethylbenzene-µg/kg	0000781-03		100	112	112.%	
Toluene-µg/kg	0000781-03		100	115	115.%	
p/m-Xylene-µg/kg	0000781-03		200	230	115.%	
o-Xylene-µg/kg	0000781-03		100	114	114.%	
CONTROL DUP	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg	0000781-04		100	112	112.%	1.8%
Ethylbenzene-µg/kg	0000781-04		100	111	111.%	0.9%
Toluene-µg/kg	0000781-04		100	113	113.%	1.8%
p/m-Xylene-µg/kg	0000781-04		200	227	113.5%	1.3%
o-Xylene-µg/kg	0000781-04		100	114	114.%	0.%
SRM	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/kg	0000781-05		100	112	112.%	0.%
Ethylbenzene-µg/kg	0000781-05		100	111	111.%	0.%
Toluene-µg/kg	0000781-05		100	114	114.%	0.%
p/m-Xylene-µg/kg	0000781-05		200	229	114.5%	0.%
o-Xylene-µg/kg	0000781-05		100	112	112.%	0.%

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0202718

BLANK	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0000769-01			< 5.0		
CONTROL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0000769-02		5000	5140	102.8%	
MS	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0202723-01	786	625	1396	97.6%	
MSD	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0202723-01	786	625	1374	94.1%	1.6%

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: Derek Robinson
Company Name: RE Environmental
Company Address:
City/State/Zip:
Telephone No:
Fax No:
Sampler Signature: Derek Robinson

Project Name: Rice
Project #:
Project Loc: L-1
PO #:

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	Preservative: HNO_3	Preservative: HCl	Preservative: NaOH	Preservative: H_2SO_4	Preservative: None	Preservative: Other (Specify)	Matrix: Water	Matrix: Sludge	Matrix: Soil	Matrix: Other (specify)	Analyze For: TDS / 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								RUSH TAT (Pre-Schedule)	Standard TAT
020271B C1	4 pt. Wall Comp. @ 3'	3-1-02	9:45 Am	1	✓									✓		✓			✓				✓									
C2	Spl. Bottom Comp. @ 4'	3-1-02	10:00 Am	1	✓									✓		✓			✓				✓									

Special Instructions:
Fax Results to Donnie Anderson + Derek Robinson

Relinquished by:	Date	Time	Received by:	Date	Time
	3-4-2	0925			
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Suzanne McNeeley	3-4-2	0925

Sample Containers Intact? Y N
Temperature Upon Receipt: 20.5°C
Laboratory Comments:

TRANSPORTERS MANIFEST

MANIFEST#_____

SHIPPING FACILITY NAME & ADDRESS:

RICE OPERATING COMPANY
122 WEST TAYLOR
HOBBS, NM 88240

LOCATION OF MATERIAL:

SEC. 1 T 20 S R 37 E

SYSTEM EME SWD

JCT. E L-1

ALL This Info must be on Sundance ticket

Co. Man Donnie Anderson

TRANSPORTER NAME & ADDRESS:
RE Environmental
Post Office Box 13418
Odessa, TX 79768

DESCRIPTION OF WASTE:

OILFIELD CONTAMINATED SOIL
EXEMPT

QUANTITY YARDS 12 yds

FACILITY CONTACT: Donnie Anderson

PHONE 370-5841

DATE 3-4-02

SIGNATURE OF CONTACT: D Anderson

NAME OF TRANSPORTER: (DRIVER)

DATE: 3/4/02

SIGNATURE OF DRIVER Chris Stark

DISPOSAL SITE:

~~SUNDANCE SERVICES INC.~~
~~PARADO FACILITY~~
~~P.O. BOX 1737~~
~~EUNICE ,NM 88231~~

J + L LandFarm

DATE: 3-4-02

SIGNATURE OF REPRESENTATIVE Joe San. Robert

EME L-1 Junction Box Upgrade

Remediation Complete

No Junction Box

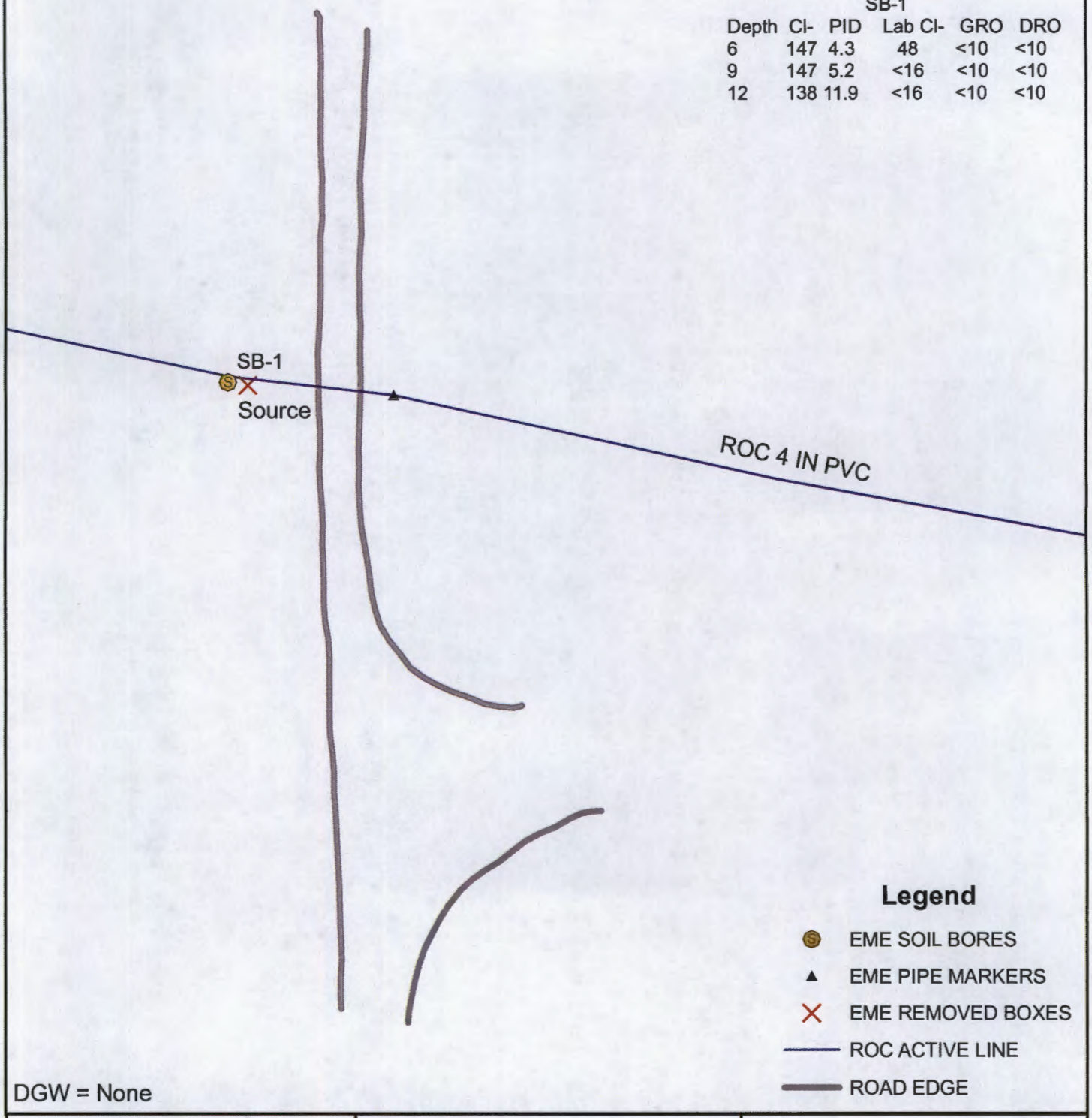
Soil Bore Installation Documentation

RICE Environmental Consulting and Safety (RECS)
P.O. Box 2948, Hobbs, NM 88241
Phone 575.393.2967

Soil Bore Installation

SB-1

Depth	Cl-	PID	Lab Cl-	GRO	DRO
6	147	4.3	48	<10	<10
9	147	5.2	<16	<10	<10
12	138	11.9	<16	<10	<10



DGW = None

RICE ENVIRONMENTAL CONSULTING & SAFETY, LLC

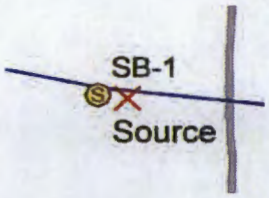
EME L-1
1R427-67

UL L SECTION 1
T-20-S R-37-E
LEA COUNTY, NM

N W E S

0 30 60 Feet

Drawing date: 10/4/13
Drafted by: L. Weinheimer

Logger:	Edward Cesareo		RICE ENVIRONMENTAL RECS CONSULTING & SAFETY, LLC
Driller:	Harrison & Cooper, Inc.		**Project Name:** EME L-1 **Well ID:** SB-1
Drilling Method:	Air Rotary		
Start Date:	9/27/2013		
End Date:	9/27/2013		

Comments: SB-1 is 5 ft west of the former junction box site. All samples were from cuttings.

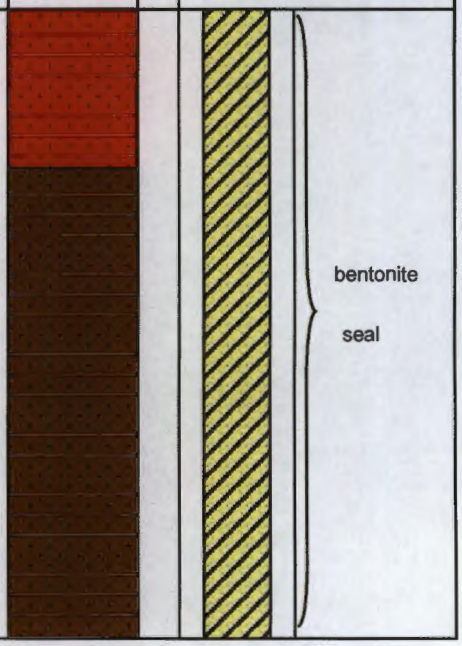
DRAFTED BY: L Weinheimer

TD = 12 ft GW = None

Location: UL/L sec. 1 T20S R37E

Lat: 32°36'2.877"N **Long:** 103°12'35.354"W **County:** Lea **State:** NM

Depth (feet)	Chloride field tests	LAB	PID	Description
				RED SAND
6 ft	147	Cl- 48	4.3	
		GRO <10		BROWN SAND
		DRO <10		
9 ft	147	Cl- <16	5.2	
		GRO <10		
		DRO <10		
12 ft	138	Cl- <16	11.9	
		GRO <10		
		DRO <10		



CARDINAL Laboratories

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

October 02, 2013

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: EME JUNCTION L-1

Enclosed are the results of analyses for samples received by the laboratory on 09/27/13 15:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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 (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Rice Operating Company
KATIE JONES
112 W. Taylor
Hobbs NM, 88240
Fax To: (575) 397-1471

Received:	09/27/2013	Sampling Date:	09/27/2013
Reported:	10/02/2013	Sampling Type:	Soil
Project Name:	EME JUNCTION L-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	T20S R37E		

Sample ID: SB #1 6' (H302359-01)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	10/01/2013	ND	432	108	400	3.77	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/30/2013	ND	217	108	200	5.63	
DRO >C10-C28	<10.0	10.0	09/30/2013	ND	211	106	200	5.36	

Surrogate: 1-Chlorooctane	*87.6 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*95.2 %*	*63.6-154*

Sample ID: SB #1 9' (H302359-02)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/01/2013	ND	432	108	400	3.77	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/30/2013	ND	217	108	200	5.63	
DRO >C10-C28	<10.0	10.0	09/30/2013	ND	211	106	200	5.36	

Surrogate: 1-Chlorooctane	*84.8 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*93.2 %*	*63.6-154*

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Rice Operating Company
KATIE JONES
112 W. Taylor
Hobbs NM, 88240
Fax To: (575) 397-1471

Received:	09/27/2013	Sampling Date:	09/27/2013
Reported:	10/02/2013	Sampling Type:	Soil
Project Name:	EME JUNCTION L-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	T20S R37E		

Sample ID: SB #1 12' (H302359-03)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/01/2013	ND	432	108	400	3.77	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/30/2013	ND	217	108	200	5.63	
DRO >C10-C28	<10.0	10.0	09/30/2013	ND	211	106	200	5.36	

Surrogate: 1-Chlorooctane	*78.8 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*87.5 %*	*63.6-154*

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Celey D. Keene, Lab Director/Quality Manager

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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

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	RICE Operating	**BILL TO**	
Project Manager:	Katie Jones	**P.O. #:**	
Address:	112 W. Taylor	**Company:**	
City:	Hobbs **State:** NM **Zip:** 88240	**Attn:**	
Phone #:	**Fax #:**	**Address:**	
Project #:	**Project Owner:**	**City:**	
Project Name:		**State:** **Zip:**	
Project Location:	EME JCT. L-1 T-20-S/R-37-E	**Phone #:**	
Sampler Name:	Edward Cesareo	**Fax #:**	

FOR LAB USE ONLY			(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: Chlorides	TPH 8015 M	BTEX	Texas TPH	Complete Cations/Anions	TDS
Lab I.D.	Sample I.D.																				
H302359																					
1	SB#1	6'	C	1			✓					✓		9-27-13	2:20	✓	✓				
2	SB#1	9'	C	1			✓					✓		"	2:25	✓	✓				
3	SB#1	12'	C	1			✓					✓		"	2:30	✓	✓				

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Relinquished By:	Date: 9-27-13	**Received By:**	Phone Result: ☐ Yes ☑ No Add'l Phone #:
	Time: 3:05		Fax Result: ☐ Yes ☑ No Add'l Fax #:
Relinquished By:	Date:	**Received By:**	REMARKS:
	Time:		email results hconder@rice-ecs.com; Lweinheimer@rice-ecs.com; kjones@riceswd.com; Lpena@riceswd.com; Knorman@rice-ecs.com ecesareo@rice-ecs.com

Delivered By: (Circle One) Sampler - UPS - Bus - Other:

Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No

CHECKED BY: (Initials)

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

#54

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 NO.			
	X	MODEL: PGM 7300	SERIAL NO: 590-000508
		MODEL: PGM 7300	SERIAL NO: 590-000504
		MODEL: PGM 7320	SERIAL NO: 592-903318
		MODEL: PGM 7300 X	SERIAL NO: 590-902553

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT # IAM-248-100-1	EXPIRATION DATE:8-15-16
METER READING ACCURACY: 100PPM	

ACCURACY : +/- 2%

COMPANY
ROC

SITE	UNIT	SECTION	TOWN SHIP	RANGE
EME L-1	L	1	20-S	37-E

SAMPLE ID	PID	SAMPLE ID	PID
SB#1 6'	4.3		
SB#1 9'	5.2		
SB#1 12'	11.9		

SIGNATURE : Steve Casaro

DATE : 9-27-13

Letter of No Groundwater Documentation

RICE Environmental Consulting and Safety (RECS)
P.O. Box 2948, Hobbs, NM 88241
Phone 575.393.2967

Arc Environmental
P. O. Box 1772
Lovington, New Mexico 88260
(575) 631-9310
Rozanne Johnson ~ rozanne@valornet.com

October 4, 2013

Mr. Hack Conder
RICE Operating Company
112 West Taylor
Hobbs, New Mexico 88240

Re: EME Junction I-1

Mr. Conder,

On Thursday October 3, 2013 soil bore #1 at the EME Junction I-1, Lea County T20S, R37E, Sec 1 Unit Letter I was checked with a Solinist Water Level Meter for water accumulation within the borehole. The meter indicated no water within the borehole at a total depth of 29.82 feet.

Sincerely,
Arc Environmental

Rozanne Johnson
Rozanne Johnson

Electronic Copy: Hack Conder
Katie Jones
Kyle Norman

Current Photodocumentation

RICE Environmental Consulting and Safety (RECS)
P.O. Box 2948, Hobbs, NM 88241
Phone 575.393.2967

EME L-1 (1R427-67)
Unit Letter L, Section 1, T20S, R37E

Facing east 10/15/2013

Facing south 10/15/2013