

1R - 427-254

**APPROVALS**  
& 11.12.13 REQUEST

**YEAR(S):**

201~~3~~4

## **Lowe, Leonard, EMNRD**

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**From:** Lowe, Leonard, EMNRD  
**Sent:** Tuesday, April 01, 2014 9:23 AM  
**To:** 'Hack Conder (hconder@riceswd.com)'  
**Cc:** kjones@riceswd.com  
**Subject:** Approved Termination Request (1R-427-254) - EME Jct. I-1

**Importance:** High

**Termination Request Approved  
for the EME Jct. I-1 (1R427-254)  
Unit Letter I 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 12, 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-427-254) 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 Conservation Division/Energy Minerals and Natural Resources Department**

1220 South St. Frances

Santa Fe, New Mexico 87004

Office: 505-476-3492

E-mail: [leonard.lowe@state.nm.us](mailto:leonard.lowe@state.nm.us)

D. 3

Rice Environmental Consulting & Safety

P.O. Box 2948, Hobbs, NM 88241  
Phone 575.393.2967

CERTIFIED MAIL  
RETURN RECEIPT NO. 7007 2560 0000 4569 9019

**November 12, 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 Jct. I-1 (1R427-254): UL/I, 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 2008, ROC initiated work on the former I-1 junction box. The site is located in UL I, Sec. 1, T20S, R37E. NM OSE records indicate that groundwater would likely be encountered at a depth of approximately 55 +/- feet. However, soil bore installation activities performed at the site showed that there is no groundwater located beneath the site. The site was delineated using a backhoe to form a 5x3x15-ft deep excavation and soil samples were screened at regular intervals for both hydrocarbons and chlorides. Each sample was field titrated for chlorides and screened for TPH, resulting in chloride concentrations that decreased with depth. The 15 ft sample was sent to a commercial laboratory for analysis, resulting in a chloride concentration of 352 mg/kg and concentrations of gasoline range organics (GRO) and diesel range organics (DRO) below detectable limit. The excavation was backfilled with the excavated soil and capped with clean blow sand to ground surface and contoured to the surrounding area. On 9/29/2008, the site was seeded with a blend of native vegetation. A junction box is no longer needed at this site.

To further investigate the depth of the chloride and TPH presence, a soil boring was initiated on 9/27/2013 at 6 ft west of the former junction box. Each sample was field titrated for chlorides and field screened using a PID for hydrocarbons at regular intervals. The 15-ft, 20-ft and 25-ft samples were taken to a commercial laboratory for analysis of chloride and TPH. The 15-ft resulted in a chloride concentration of 416 mg/kg concentrations of GRO and DRO below detectable limits. The 20-ft sample resulted in a chloride concentration of 464 mg/kg

## Rice Environmental Consulting & Safety

P.O. Box 2948, Hobbs, NM 88241  
Phone 575.393.2967

concentrations of GRO and DRO below detectable limits. The 25-ft sample resulted in a chloride concentration of 304 mg/kg concentrations of GRO and DRO below detectable limits.

Red bed clay was encountered at 27 ft bgs which indicated the bottom of the aquifer. Since no groundwater was encountered, the bore was advanced to 32 ft bgs and packed open for 48 hours to allow any possible groundwater to accumulate. On October 4<sup>th</sup>, 2013, Arc Environmental was on site to gauge the bore for groundwater accumulation. They found no water in the bore. The entire bore hole was plugged with bentonite to ground surface.

Since there is no groundwater at the site, the former junction box will in no way contribute to the degradation of groundwater. 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, photodocumentation, chloride graph, laboratory analysis, PID sheet, soil bore plat, log, soil bore installation laboratory analysis, PID sheet, letter of no groundwater 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.

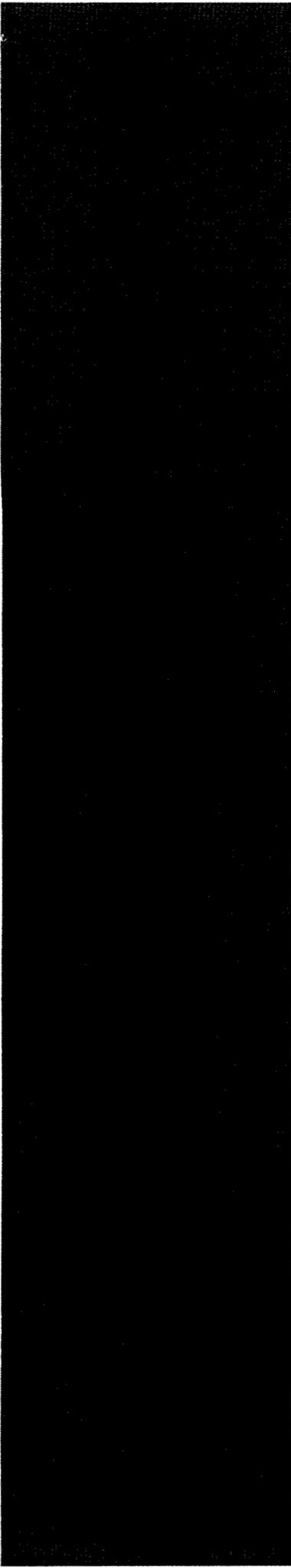
Please contact me at (575)393-2967 if you have any questions or wish to discuss this site. Thank you for your time and consideration.

Sincerely,



Laura Flores  
Project Manager  
RECS

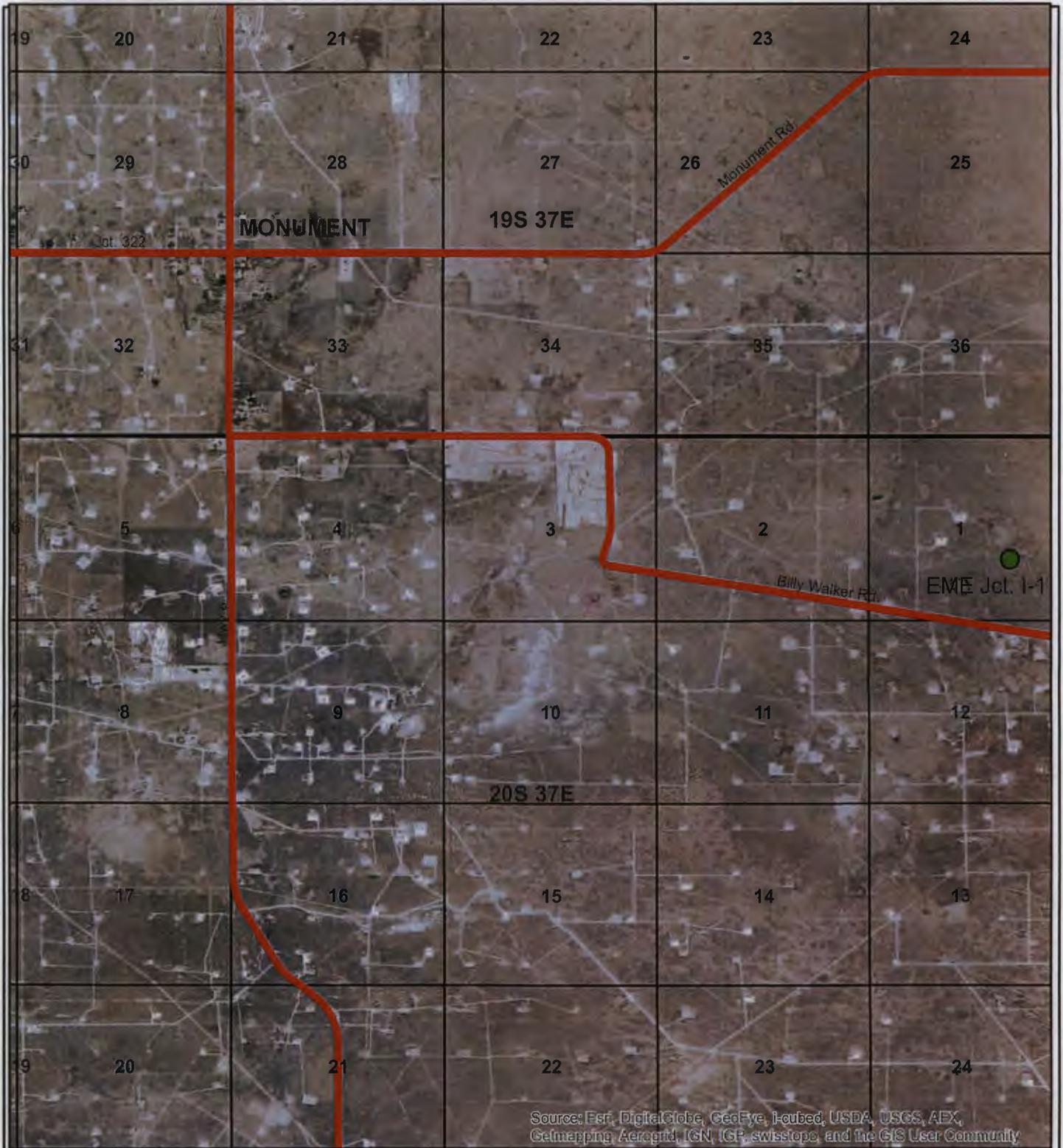
enclosures



# Site and Area Maps

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

# SITE MAP

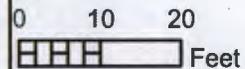


Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



## EME Jct. 1-1

1R427-254  
UL/I Sec. 1  
T20S-R37E



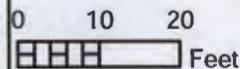
Drawing date: 10/22/2013 JS

# AREA MAP

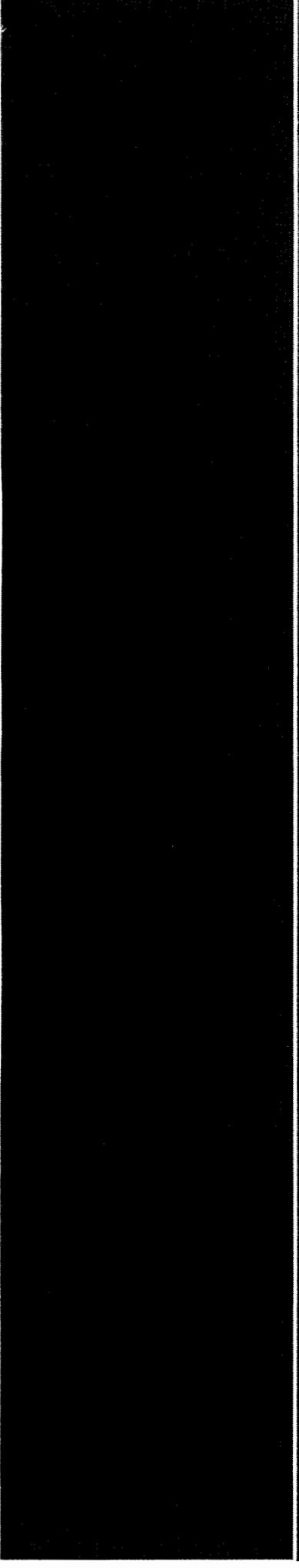


## EME Jct. I-1

1R427-254  
UL/I  
Sec. 1-T20S-R37E



Drawing date: 10/22/2013 JS



# 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 6'	Width 4'	Depth 4'
Eunice Monument Eumont (EME)	Jct. I-1	I	1	20S	37E	Lea	eliminated		

LAND TYPE: BLM \_\_\_ STATE X FEE LANDOWNER \_\_\_\_\_ OTHER \_\_\_\_\_

Depth to Groundwater 55 feet NMOCD SITE ASSESSMENT RANKING SCORE: 20

Date Started 9/18/2008 Date Completed 9/18/2008 OCD Witness no

Soil Excavated 8 cubic yards Excavation Length 5 Width 3 Depth 15 feet

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

**FINAL ANALYTICAL RESULTS:** Sample Date 9/18/2008 Sample Depth 15 ft

TPH and Chloride laboratory test results completed by using an approved lab and testing procedures pursuant to NMOCD guidelines.

**CHLORIDE FIELD TESTS**

Sample Location	PID (field) ppm	GRO mg/kg	DRO mg/kg	Chloride mg/kg
SOURCE 15' GRAB	0.0	<25.0	<25.0	352

LOCATION	DEPTH	mg/kg
background	6"	173
vertical delineation trench at the junction (source)	5'	552
	6'	329
	7'	722
	8'	651
	9'	652
	10'	772
	11'	785
	12'	753
	13'	727
	14'	704
	15'	436

**General Description of Remedial Action:** This junction was eliminated during the pipeline replacement/upgrade program. After the former junction box was removed, an investigation was conducted using a backhoe to collect soil samples at regular intervals producing a 5x3x15-ft-deep excavation. Chloride field tests performed on each sample yielded generally low concentrations that decreased with depth. Organic vapors were measured using a PID, which also yielded low concentrations. The deepest sample, 15 ft BGS, was analyzed by a commercial laboratory for chloride and TPH, which confirmed low concentrations. The excavated soil was returned to the excavation and clean blow sand was used as a top cap and to contour the site to the surrounding area. On 9/29/2008, the site was seeded with a blend of native vegetation and is expected to return to a productive capacity at a normal rate.

enclosures: photos, lab results, PID (field) screenings, chloride curve

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

SITE SUPERVISOR Darnell Mitchell SIGNATURE Darnell Mitchell COMPANY RICE OPERATING COMPANY

REPORT ASSEMBLED BY Katie Jones INITIAL KJ

PROJECT LEADER Larry Bruce Baker Jr. SIGNATURE Larry Bruce Baker Jr. DATE 12-2-09

# EME Jct. I-1

Unit I, Section 1, T20S, R37E



undisturbed junction box

9/18/2008



collecting a soil sample

9/18/2008



site prior to backfill

9/18/2008



seeding backfilled site

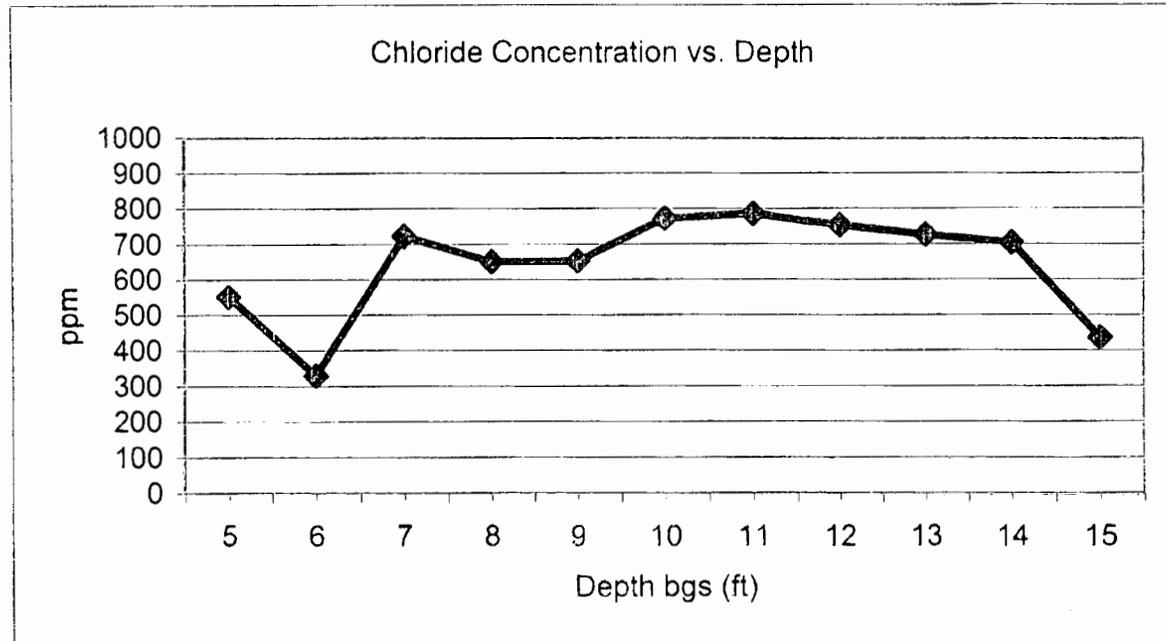
9/29/2008

# EME Jct. I-1

Unit 'I', Sec. 1, T20S, R37E

Backhoe samples at the junction (source)

Depth bgs (ft)	[Cl <sup>-</sup> ] ppm
5	552
6	329
7	722
8	651
9	652
10	772
11	785
12	753
13	727
14	704
15	436



Groundwater = 55 ft



**ARDINAL  
LABORATORIES**

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

ANALYTICAL RESULTS FOR  
RICE OPERATING COMPANY  
ATTN: DARNELL MITCHELL  
122 W. TAYLOR  
HOBBS, NM 88240

COPY

Receiving Date: 09/18/08  
Reporting Date: 09/19/08  
Project Number: NOT GIVEN  
Project Name: NOT GIVEN  
Project Location: EME JCT. I-1

Sampling Date: 09/18/08  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: ML  
Analyzed By: AB/TR

LAB NUMBER	SAMPLE ID	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/kg)	DRO (>C <sub>10</sub> -C <sub>28</sub> ) (mg/kg)	Cl <sup>-</sup> (mg/kg)
ANALYSIS DATE		09/19/08	09/19/08	09/19/08
H15948-1	INITIAL SOURCE @ 15FT.	<25.0	<25.0	352
Quality Control		483	477	490
True Value QC		500	500	500
% Recovery		96.6	95.4	98.0
Relative Percent Difference		14.7	19.7	< 0.1

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl<sup>-</sup>: Std. Methods 4500-Cl<sup>-</sup>B

\*Analysis performed on a 1:4 w:v aqueous extract.

*Ann S. Moore*  
\_\_\_\_\_  
Chemist

09 22 08  
\_\_\_\_\_  
Date

H15948 TCL 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 profit, 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

101 East Marjand, Hobbs, NM 88240

(575) 393-2326 Fax (575) 393-2476

Page \_\_\_\_ of \_\_\_\_

Company Name: <u>Rice operating</u>		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>											
Project Manager: <u>Darrell Mitchell</u>		P.O. #:		<div style="text-align: center; font-size: 48px; opacity: 0.5;">COPY</div>											
Address: <u>122 W. Taylor</u>		Company: <u>SAME</u>													
City: <u>Hobbs</u> State: <u>N.M</u> Zip: <u>88240</u>		Attn:													
Phone #: Fax #: <u>575-397-1471</u>		Address:													
Project #: Project Owner:		City:													
Project Name:		State: Zip:													
Project Location: <u>EME Ict. I-1</u>		Phone #:													
Sampler Name: <u>Darrell Mitchell</u>		Fax #:													

FOR LAB USE ONLY		# CONTAINERS	MATRIX					PRESERV.		SAMPLING		DATE	TIME
Lab I.D.	Sample I.D.		GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE / COOL	OTHER		
<u>H15948-1</u>	<u>INITIAL SOURCE #15<sup>FT</sup></u>	<u>6</u>			<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>			<u>9-18-08</u>	<u>2:25pm</u>

8015M FAX  
CL

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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:	<input type="checkbox"/> No	Add'l Phone #:
	Time:		Fax Result:	<input type="checkbox"/> No	Add'l Fax #:
Retinquished By:	Date:	Received By:	REMARKS:		
<u>Darrell Mitchell</u>	<u>9-18-08</u>	<u>Mitch Baker</u>	<u>RESULTS B. Baker @ Rice SWD .COM</u>  <u>J Purvis @ Rice SWD .COM</u>		
Delivered By: (Circle One)	Time:				
Sampler - UPS - Bus - Other:	Temp.	Sample Condition	CHECKED BY:		
		Cool Intact	(Initials)		
		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>MBB</u>		
		<input type="checkbox"/> Yes <input type="checkbox"/> No			

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

# RICE OPERATING COMPANY

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

CK.	<input type="checkbox"/>
MODEL	<input type="checkbox"/>
NO.	<input type="checkbox"/>

MODEL: PGM 7600	SERIAL NO: 110-013676
MODEL: PGM 7600	SERIAL NO: 110-013744
MODEL: PGM 7600	SERIAL NO: 110-12383
MODEL: PGM 7600	SERIAL NO: 110-012920

COPY

MODEL PGM 7300  
 GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO: 073353	EXPIRATION DATE: 5-16-09
FILL DATE: 11-16-08	METER READING ACCURACY: 99.9

ACCURACY : +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
EME	I-1	I	1	20S	R-37E

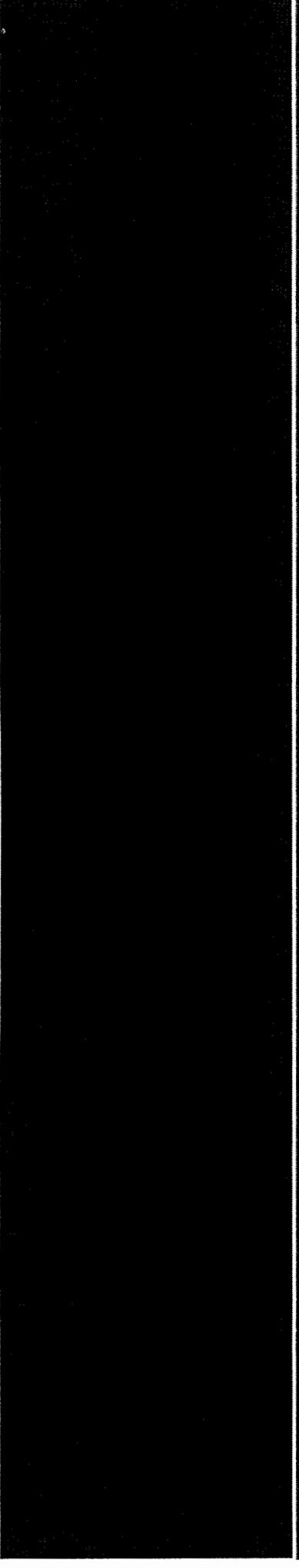
### INITIAL SOURCE

SAMPLE ID	PID	SAMPLE ID	PID
5	0.0		
6	0.0		
7	0.0		
8	0.0		
9	0.0		
10	0.0		
11	0.0		
12	0.0		
13	0.0		
14	0.0		
15	0.0		

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

SIGNATURE: *Daniel ...*

DATE: 9-18-08

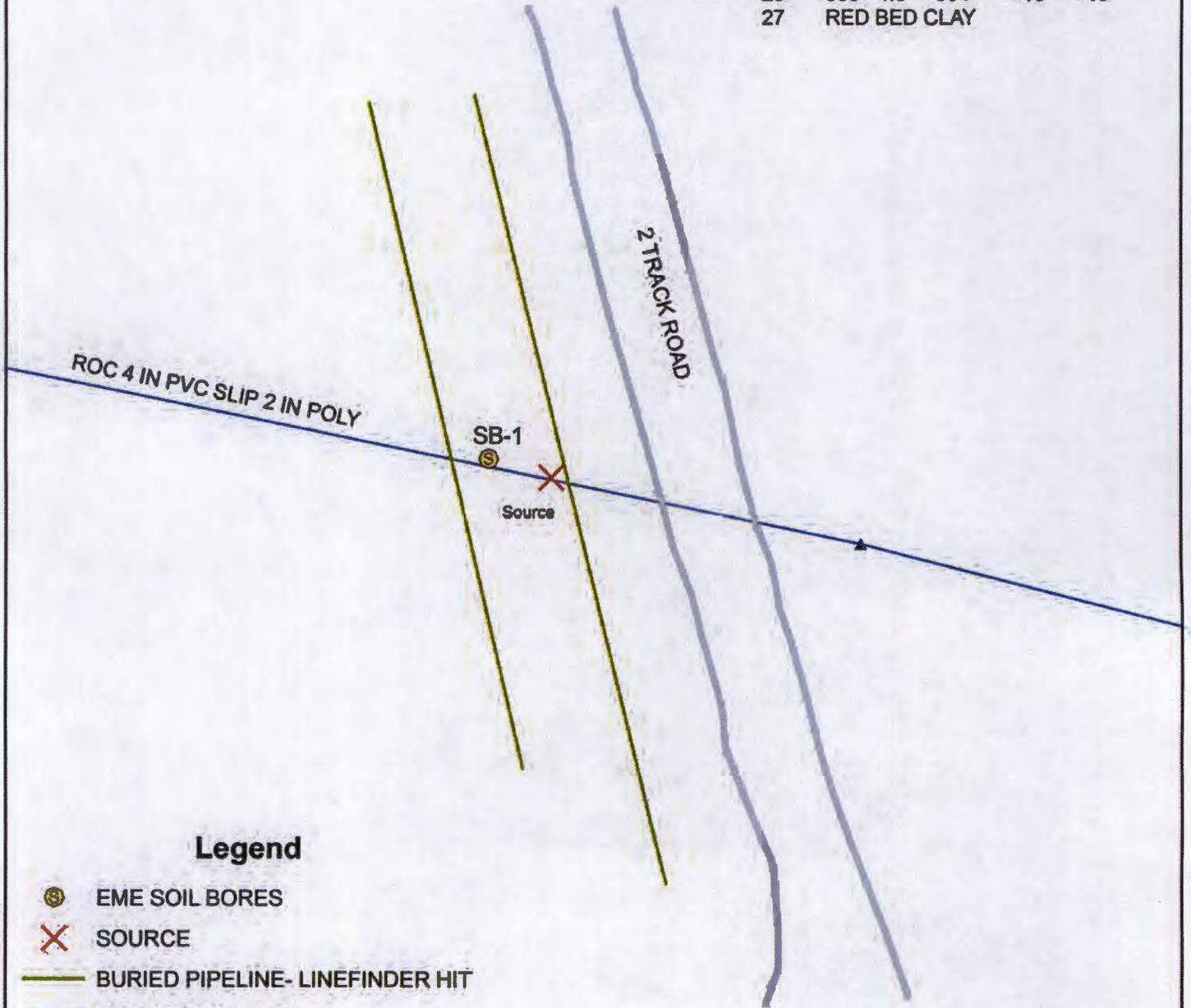


# Soil Bore Installation Documentation

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

# Soil Bore Installation

Depth	SB-1					
	CI-	PID	Lab CI-	GRO	DRO	
15	393	11.7	416	<10	<10	
20	307	8.8	464	<10	<10	
25	585	4.6	304	<10	<10	
27	RED BED CLAY					



## Legend

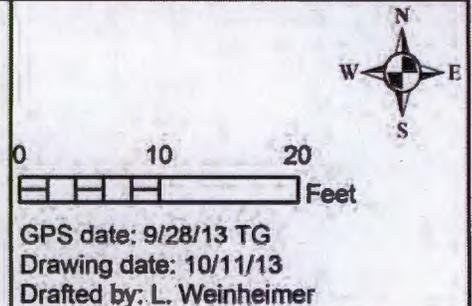
-  EME SOIL BORES
-  SOURCE
-  BURIED PIPELINE- LINEFINDER HIT
-  ROC ACTIVE LINE
-  ROC PIPE MARKERS

DGW: None



**EME I-1**  
**1R427-254**

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



Logger:	Edward Cesareo			
Driller:	Harrison & Cooper, Inc.			
Drilling Method:	Air Rotary			
Start Date:	9/27/2013			
End Date:	9/27/2013			
Project Name:		EME jct. I-1	Well ID:	SB-1

Comments: SB-1 is located 6 ft west of the former junction box site  
 All samples from cuttings. Red bed clay occurred at 27 ft bgs.  
 DRAFTED BY: L. Weinheimer  
 TD = 32 ft GW = None

Location: UL/I sec. 1 T20S R37E  
 Lat: 32°35'57.2"N County: Lea  
 Long: 103°12'2.56"W State: NM

Depth (feet)	Chloride field tests	LAB	PID	Description	Lithology	Well Construction
SS				BROWN SAND		
5 ft						
10 ft				CALICHE		
15 ft	393	Cl-416	11.7			
		GRO <10				
		DRO <10				
20 ft	307	Cl-464	8.8	CALICHE WITH PEA STONE		bentonite seal
		GRO <10				
		DRO <10				
25 ft	585	Cl-304	4.6			
		GRO <10				
		DRO <10				
27 ft				RED BED CLAY		
32 ft						

October 02, 2013

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: EME I-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](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

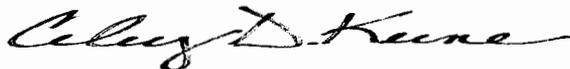
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	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

Lab Director/Quality Manager

**Analytical Results For:**

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

 Received: 09/27/2013  
 Reported: 10/02/2013  
 Project Name: EME I-1  
 Project Number: NONE GIVEN  
 Project Location: T20S R37E

 Sampling Date: 09/27/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: SB #1 15' (H302360-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>416</b>	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		
<i>Surrogate: 1-Chlorooctane</i>		88.6 %	65.2-140							
<i>Surrogate: 1-Chlorooctadecane</i>		96.7 %	63.6-154							

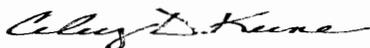
**Sample ID: SB #1 20' (H302360-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>464</b>	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		
<i>Surrogate: 1-Chlorooctane</i>		87.0 %	65.2-140							
<i>Surrogate: 1-Chlorooctadecane</i>		95.4 %	63.6-154							

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 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 the 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.



Celey D. Keene, Lab Director/Quality Manager

**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 I-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	T20S R37E		

**Sample ID: SB #1 25' (H302360-03)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>304</b>	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	98.4 %	65.2-140
Surrogate: 1-Chlorooctadecane	101 %	63.6-154

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 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 the 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.



Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

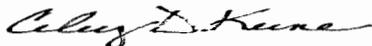
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

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\*=Accredited Analyte

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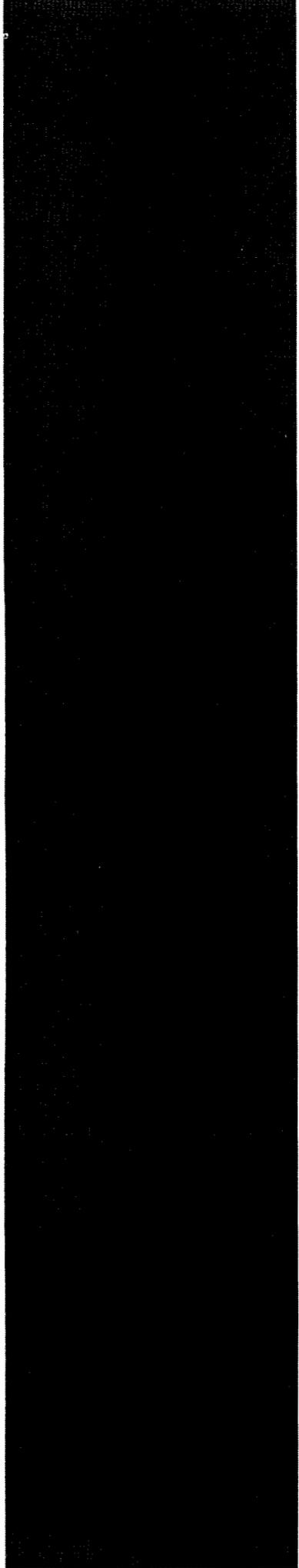


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Celey D. Keene, Lab Director/Quality Manager







# 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

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October 4, 2013

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

**Re: EME Junction I-1**

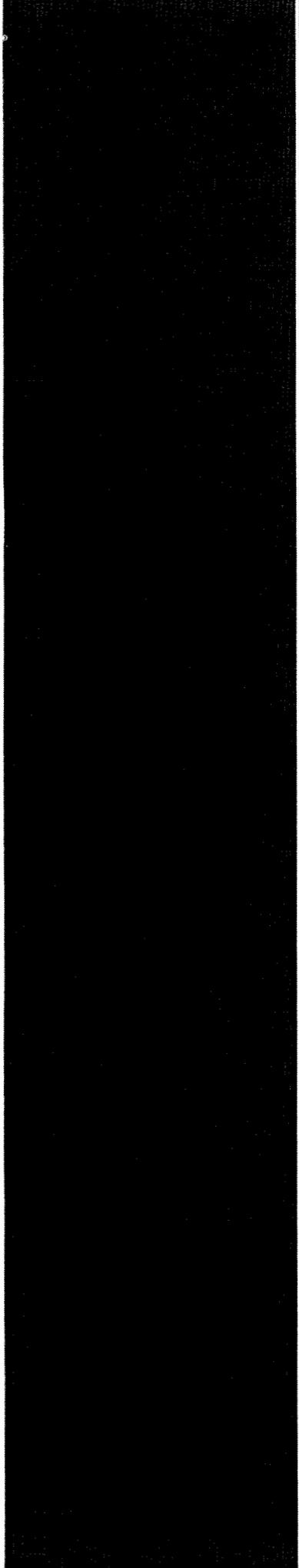
Mr. Conder,

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 Jct. I-1 (1R427-254)**  
Unit Letter I, Section 1, T20S, R37E



Facing north

10/15/2013



Facing east

10/15/2013