

**1R - 427-65**

**REPORTS**

**DATE:**

**4-11-13**

# RICE Operating Company

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

RECEIVED OGD

APR 12 10:22 AM

CERTIFIED MAIL

RETURN RECEIPT NO. 7007 2560 0000 4569 9347

April 11, 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: Update Report  
EME L-25 (1R427-65): UL/L, Sec. 25, T19S, 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 2002, ROC initiated work on the former L-25 junction box. The site is located in UL/L, Sec. 25, T19S, R36E. NM OSE records indicate that groundwater would likely be encountered at a depth of approximately 63 +/- feet. However, a soil bore drilled at the site found groundwater to be located at 14 +/- feet. After the former junction box was removed, the site was delineated using a backhoe to collect soil samples at regular intervals, creating a 20x20x5 ft deep excavation. Each sample was field titrated for chlorides and field screened using a PID for hydrocarbons. Representative samples were collected from the excavation walls and excavation bottom and sent to a commercial laboratory for analysis. The sidewall sample resulted in a chloride concentration of 1,760 mg/kg and concentrations of gasoline range organics (GRO), diesel range organics (DRO) and BTEX below detectable limits. The bottom composite sample resulted in a chloride concentration of 3,830 mg/kg, GRO and BTEX concentrations below detectable limits and a DRO concentration of 24 mg/kg. The excavation was backfilled with the excavated soil to 5 ft below ground surface (BGS). From 5 – 4 ft BGS, a 1 foot thick clay barrier was installed. The remaining excavation was backfilled using the remaining backfill to ground surface and contoured to the surrounding area. The clay layer will

provide a barrier that will inhibit the downward migration of chlorides to groundwater. A new, watertight junction was installed at the site.

To further investigate the depth of chloride presence, a soil bore was initiated on February 11, 2013, at 12 ft northeast of the former junction box site. The boring was advanced to a depth of 10 ft BGS with soil samples collected every 5 ft. Each sample was field titrated for chlorides and field screened using a PID for hydrocarbons. The 5 ft and 10 ft samples were sent to a commercial laboratory for analysis. The 5 ft sample resulted in a chloride concentration of 2,160 mg/kg and GRO and DRO concentrations below detectable limits. The 10 ft sample resulted in a chloride concentration of 2,800 mg/kg and GRO and DRO concentrations below detectable limits. The entire bore hole was plugged with bentonite to ground surface.

The junction box site location map, final report, laboratory analysis, disposal manifest, soil bore plat, log, laboratory analysis, and photodocumentation are attached.

**Recommendations**

Based on the results of the soil bore, further investigation of the site is warranted.

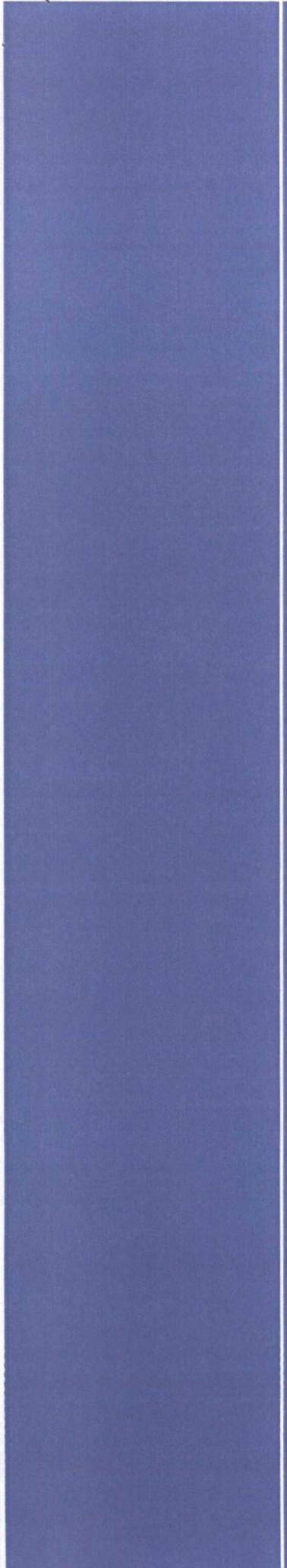
Please contact me at (575)393-9174 if you have any questions or wish to discuss this site. Thank you for your time and consideration.

Sincerely,  
RICE Operating Company

A handwritten signature in black ink, appearing to read "H. Conder", with a long horizontal flourish extending to the right.

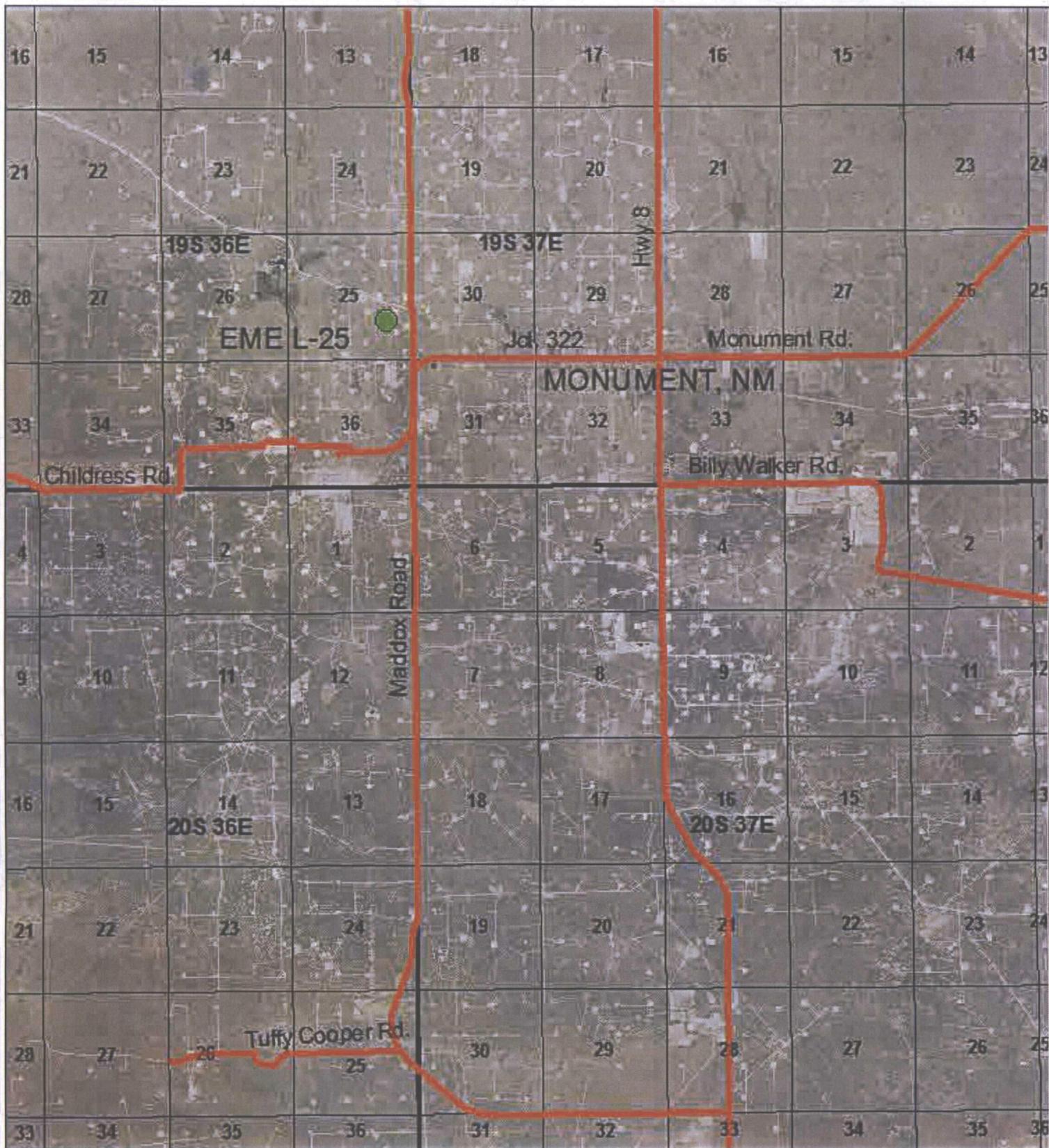
Hack Conder  
Environmental Manager

enclosures



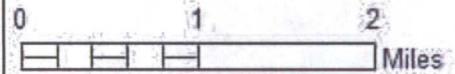
## Site Location Map

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

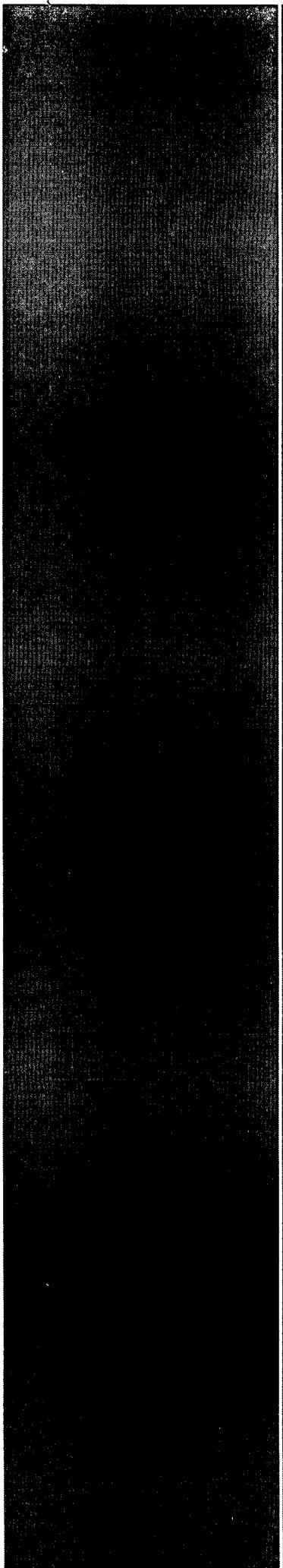


**EME L-25  
(1R427-65)**

Unit Letter L, Section 25,  
T-19-S, R-36-E  
Lea County, New Mexico



Drawing date: 3/5/13



# 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	L-25	L	25	19S	36E	LEA	10	8	5

LAND TYPE: BLM \_\_\_\_\_ STATE \_\_\_\_\_ FEE LANDOWNER JIMMIE T COOPER OTHER \_\_\_\_\_

Depth to Groundwater 63 feet NMOCD SITE ASSESSMENT RANKING SCORE: 10

Date Started 2/14/2002 Date Completed 2/18/2002 OCD Witness NO

Soil Excavated 70 cubic yards Excavation Length 20 Width 20 Depth 5 feet

Soil Disposed 50 cubic yards Offsite Facility C&C LANDFARM Location MONUMENT, NM

**FINAL ANALYTICAL RESULTS:** Sample Date 2/15/2002 Sample Depth 5'

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	<10	1760
BOTTOM	<0.025	<0.025	<0.025	<0.025	<10	24	3830

General Description of Remedial Action: Delineated vertical and lateral extent.

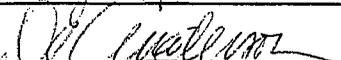
Vertical delineation found a decline in TPH from 2480 ppm at 4' bgs to 10 ppm at 8'bgs and chloride dropped from 4000 ppm at 4' to 600 ppm at 8'. These results indicate impact probably did not reach groundwater. A compacted clay barrier to vertical transmissivity and water tight junction box was installed and backfilled.

**CHLORIDE FIELD TESTS**

LOCATION	DEPTH	mg/kg
SIDEWALLS	4'	1500
BOTTOM	5'	3100
Vertical Trench	4'	4000
	6'	1000
	8'	600

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

DATE March 5, 2002 PRINTED NAME D. E. Anderson

SIGNATURE  TITLE Project Leader - Environmental

# ENVIRONMENTAL

# LAB OF I, LTD.

"Don't Treat Your Soil Like Dirt!"

RE ENVIRONMENTAL  
ATTN: DEREK ROBINSON  
P.O. BOX 13418  
ODESSA, TEXAS 79768-3418  
FAX: 366-0804  
FAX: 505-397-1471 (Donnie Anderson)

Sample Type: Soil  
Sample Condition: Intact/ Iced/ 1.5 deg C  
Project Name: Rice Operating  
Project #: L-25  
Project Location: Monument

Sampling Date: See Below  
Receiving Date: 02/15/02  
Analysis Date: 02/18/02

ELT#	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C28 mg/kg	SAMPLE DATE
0202613-01	4 pt Wall Comp. @ 4'	<10	<10	02/14/02
0202613-02	5 pt Bottom Comp. @ 5'	<10	24	02/15/02

QUALITY CONTROL	477	550
TRUE VALUE	500	500
% INSTRUMENT ACCURACY	95	110
SPIKED AMOUNT	476	476
ORIGINAL SAMPLE	<10	<10
SPIKE	593	644
SPIKE DUP	563	598
% EXTRACTION ACCURACY	118	126
BLANK	<10	<10
RPD	5.19	7.41

Methods: SW 846-8015M



Celey D. Keene  
Raland K. Tuttle

2-20-02  
Date

# ENVIRONMENTAL LAB OF I, LTD.

"Don't Treat Your Soil Like Dirt!"

RE ENVIRONMENTAL  
ATTN: DEREK ROBINSON  
P.O. BOX 13418  
ODESSA, TEXAS 79768-3418  
FAX: 366-0804  
FAX: 505-397-1471 (Donnie Anderson)

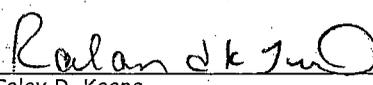
Sample Type: Soil  
Sample Condition: Intact/ Iced/ 1.5 deg C  
Project Name: Rice Operating  
Project #: L-25  
Project Location: Monument

Sampling Date: See Below  
Receiving Date: 02/15/02  
Analysis Date: 02/18/02

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg	SAMPLE DATE
0202613-01	4 pt Wall Comp. 4'	<0.025	<0.025	<0.025	<0.025	<0.025	02/14/02
0202613-02	5 pt Bottom Comp. @ 5'	<0.025	<0.025	<0.025	<0.025	<0.025	02/15/02

QUALITY CONTROL	0.091	0.094	0.086	0.186	0.086
TRUE VALUE	0.100	0.100	0.100	0.200	0.100
% INSTRUMENT ACCURACY	91	94	86	93	86
SPIKE AMOUNT	0.100	0.100	0.100	0.200	0.100
ORIGINAL SAMPLE	<0.025	<0.025	<0.025	<0.025	<0.025
SPIKE	0.092	0.096	0.093	0.201	0.091
SPIKE DUP	0.088	0.092	0.089	0.192	0.088
% EXTRACTION ACCURACY	92	96	93	100	91
BLANK	<0.025	<0.025	<0.025	<0.025	<0.025
RPD	4.44	4.26	4.40	4.58	3.35

METHODS: EPA SW 846-8021B ,5030

  
\_\_\_\_\_  
Celey D. Keene  
Ralanda K. Tuttle

2-10-02  
Date

# ENVIRONMENTAL LAB OF I, LTD.

"Don't Treat Your Soil Like Dirt!"

RE ENVIRONMENTAL  
ATTN: DEREK ROBINSON  
P.O. BOX 13418  
ODESSA, TEXAS 79768-3418  
FAX: 366-0804  
FAX: 505-397-1471. (Donnie Anderson)

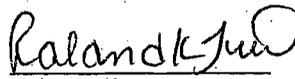
Sample Type: Soil  
Sample Condition: Intact/ Iced/ 1.5 deg C  
Project Name: Rice Operating  
Project #: L-25  
Project Location: Monument

Sampling Date: See Below  
Receiving Date: 02/15/02  
Analysis Date: 02/19/02

ELT#	FIELD CODE	Chloride mg/kg	SAMPLE DATE
0202613-01	4 pt Wall Comp. @ 4'	1760	02/14/02
0202613-02	5 pt Bottom Comp. @ 5'	3830	02/15/02

QUALITY CONTROL	5050
TRUE VALUE	5000
% INSTRUMENT ACCURACY	101
SPIKED AMOUNT	588
ORIGINAL SAMPLE	1760
SPIKE	2430
SPIKE DUP	2390
% EXTRACTION ACCURACY	106
BLANK	<5.00
RPD	1.07

Methods: SW 846-9253

  
Celey D. Keene  
Raland K. Tuttle

2-20-02  
Date



C & C LANDFARM, INC.

BOX 55

MONUMENT, NEW MEXICO 88265

PHONE: (505) 397-2045

(505) 397-2860

(505) 392-2236

1200

002051

COMPANY NAME Rice Oper. Co.

COMPANY REPRESENTATIVE NAME Janice Robinson

LEASE NAME L-25

SEC.

TOWNSHIP

RANGE

TRUCKING COMPANY NAME R.E. Ennis

DRIVERS SIGNATURE Paul Robinson

TYPE OF MATERIAL BEING HAULED AND QUANTITY 50 yds

Cont Soil

COPY OF ANALYSIS ATTACHED, IF REQUIRED Less than 10,000

TPHC \_\_\_\_\_

BENZENE \_\_\_\_\_

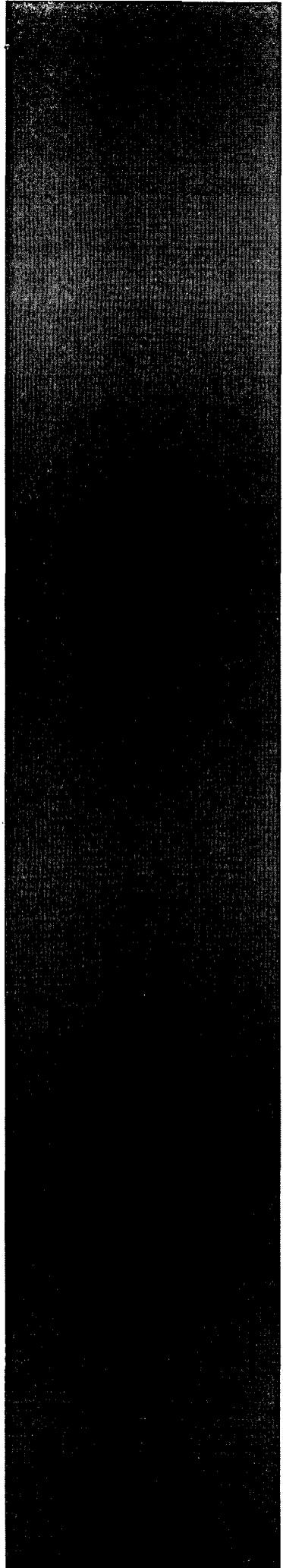
TOLUENE \_\_\_\_\_

ETHYL BENZENE \_\_\_\_\_

PARA XYLENE \_\_\_\_\_

ATTENDANT ON DUTY [Signature]

DATE 2-19-02

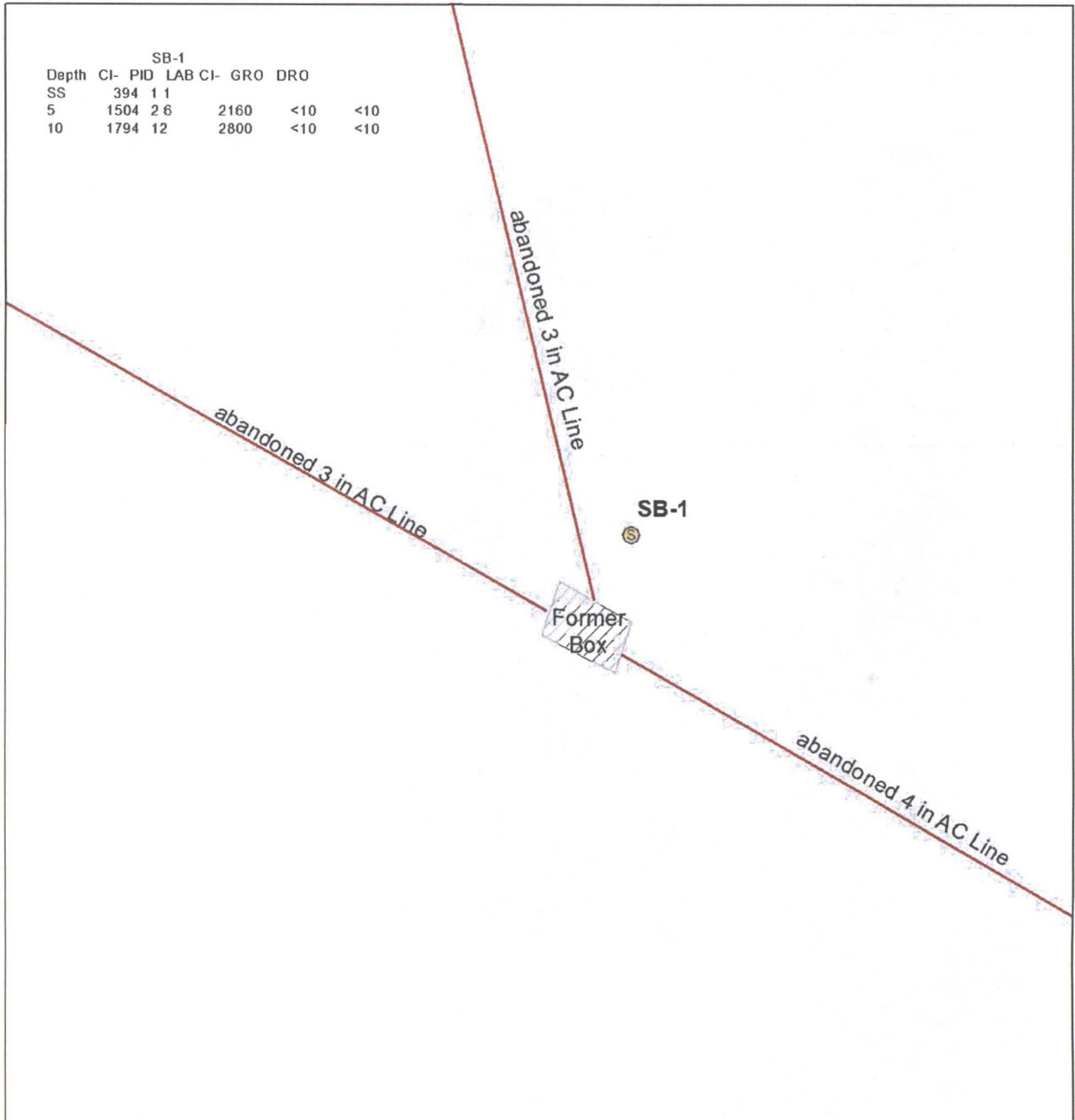


# Soil Bore Installation

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

# Soil Bore Installation

SB-1					
Depth	CI-	PID	LAB	CI-	GRO DRO
SS	394	1	1		
5	1504	2	6	2160	<10
10	1794	12		2800	<10

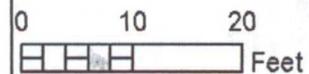


DGW = 14 ft



**EME L-25**

UP/L sec. 25  
T-19-S R-36-E  
LEA COUNTY, NM



Drawing date 2/19/2013  
Drafted by LS



February 15, 2013

Hack Conder  
Rice Operating Company  
112 W. Taylor  
Hobbs, NM 88240

RE: EME L-25

Enclosed are the results of analyses for samples received by the laboratory on 02/11/13 16:20.

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).

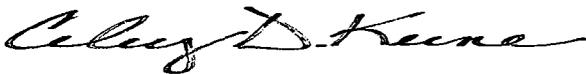
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

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  
 Hack Conder  
 112 W. Taylor  
 Hobbs NM, 88240  
 Fax To: (575) 397-1471

Received:	02/11/2013	Sampling Date:	02/11/2013
Reported:	02/15/2013	Sampling Type:	Soil
Project Name:	EME L-25	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: SB-1 @ 5' (H300388-01)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: DW							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>2160</b>	16.0	02/14/2013	ND	416	104	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	02/14/2013	ND	210	105	200	2.24		
DRO >C10-C28	<10.0	10.0	02/14/2013	ND	194	96.8	200	5.26		
<i>Surrogate: 1-Chlorooctane</i>	<i>81.4 %</i>	<i>65.2-140</i>								
<i>Surrogate: 1-Chlorooctadecane</i>	<i>94.8 %</i>	<i>63.6-154</i>								

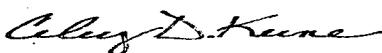
**Sample ID: SB-1 @ 10' (H300388-02)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: DW							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>2800</b>	16.0	02/14/2013	ND	416	104	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	02/14/2013	ND	210	105	200	2.24		
DRO >C10-C28	<10.0	10.0	02/14/2013	ND	194	96.8	200	5.26		
<i>Surrogate: 1-Chlorooctane</i>	<i>76.0 %</i>	<i>65.2-140</i>								
<i>Surrogate: 1-Chlorooctadecane</i>	<i>96.4 %</i>	<i>63.6-154</i>								

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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Cardinal Laboratories

\*=Accredited Analyte

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---

Celey D. Keene, Lab Director/Quality Manager



# EME L-25

UL/L, Section 25, T19S, R36E



Drilling the site, facing northwest 2/11/2013



Plugging the soil bore with bentonite 2/11/2013



Completed soil bore, facing west 2/11/2013