

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 P 1:22

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 stylized, sweeping underline.

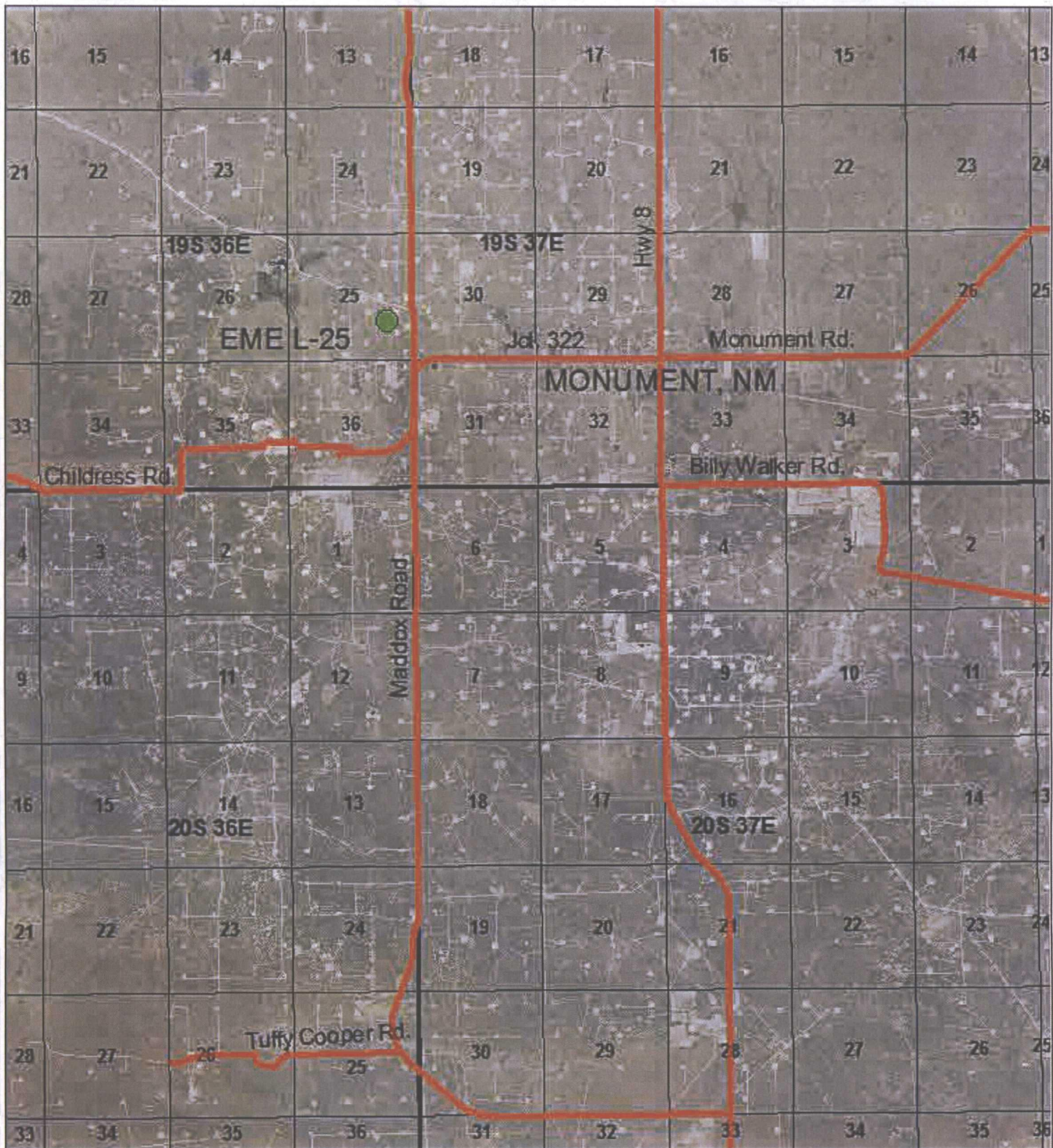
Hack Conder
Environmental Manager

enclosures



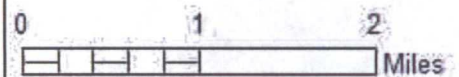
Site Location Map

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		
EME	L-25	L	25	19S	36E	LEA	Length 10	Width 8	Depth 5

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER JIMMIE T COOPER OTHER _____

Depth to Groundwater 63 feet NMOC 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 NMOC 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)

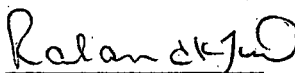
Sample Type: Soil
Sample Condition: Intact/ Iced/ 1.5 deg C
Project Name: Rice Operating
Project #: L-25
Project Location: Monument

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
Randal K. Tuttle

2-20-02
Date

ENVIRONMENTAL LAB OF I, LTD.

"Don't Treat Your Soil Like Dirt!"

RE ENVIRONMENTAL
ATTN: DEREK ROBINSON
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ODESSA, TEXAS 79768-3418
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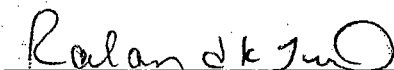
Sample Type: Soil
Sample Condition: Intact/ Iced/ 1.5 deg C
Project Name: Rice Operating
Project #: L-25
Project Location: Monument

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
SPIKED 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
Randal K. Tuttle

2-20-02
Date

ENVIRONMENTAL LAB OF I, LTD.

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

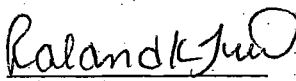
Sample Type: Soil
Sample Condition: Intact/ Iced/ 1.5 deg C
Project Name: Rice Operating
Project #: L-25
Project Location: Monument

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

002051

COMPANY NAME

COMPANY REPRESENTATIVE NAME

LEASE NAME

SEC.

TOWNSHIP

RANGE

TRUCKING COMPANY NAME

DRIVERS SIGNATURE

TYPE OF MATERIAL BEING HAULED AND QUANTITY

COPY OF ANALYSIS ATTACHED, IF REQUIRED

TPHC

BENZENE

TOLUENE

ETHYL BENZENE

PARA XYLENE

ATTENDANT ON DUTY

DATE

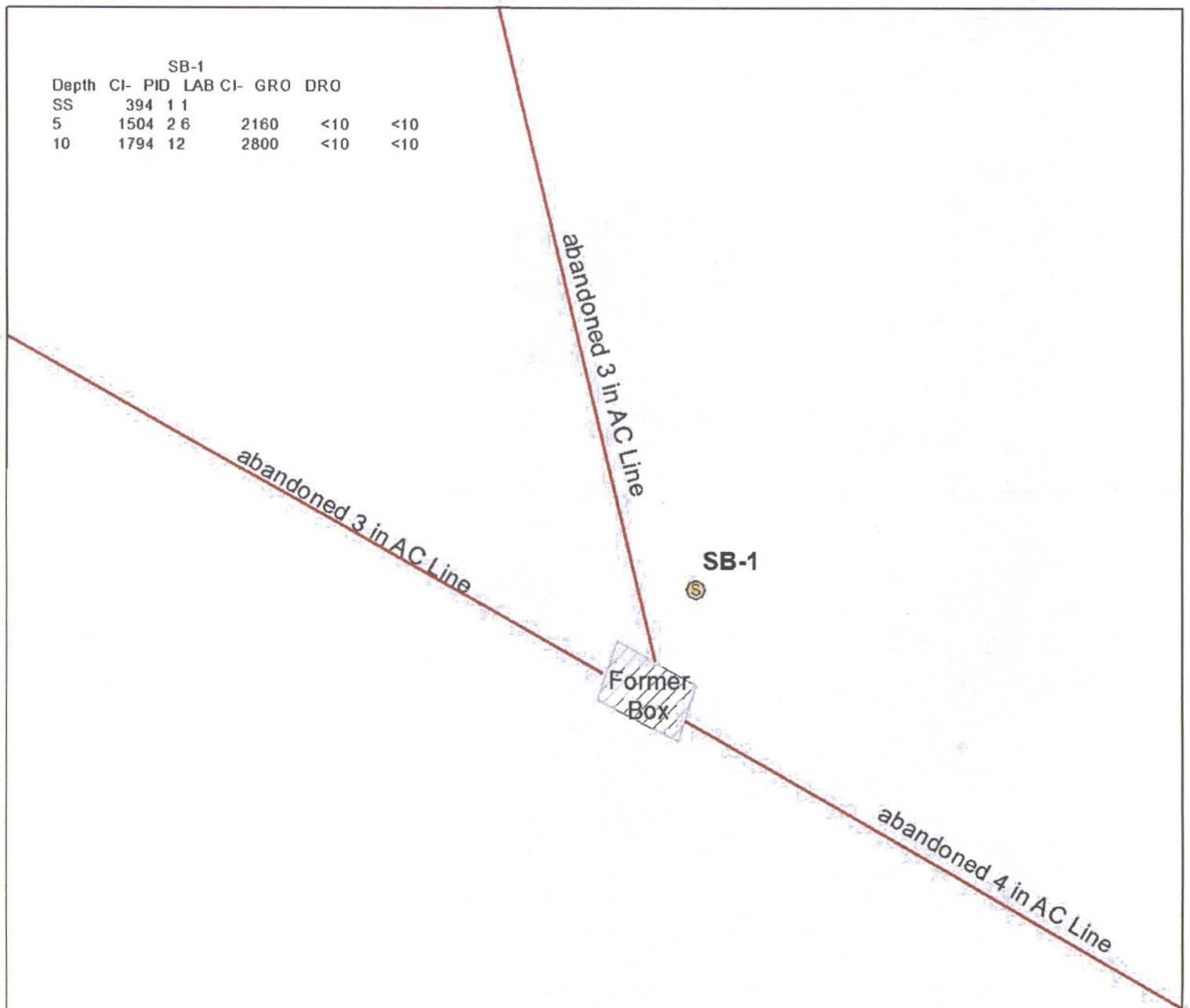


Soil Bore Installation

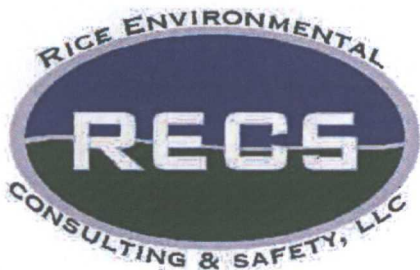
RICE *Operating Company* (ROC)
112 West Taylor Hobbs, NM 88240
Phone: (575) 393-9174 Fax: (575) 397-1471

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

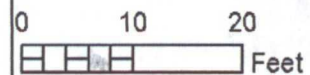


DGW = 14 ft

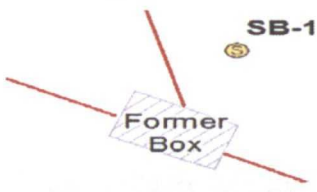







EME L-25

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



Drawing date 2/19/2013
Drafted by LS

Logger:	Kyle Norman					
Driller:	Harrison & Cooper, Inc.		Project Name:	Well ID:		
Drilling Method:	Air Rotary		EME L-25	SB-1		
Start Date:	2/11/2013		Location: UL/L sec. 25 T19S R36E			
Comments: Located 12 ft northeast of former junction box. All samples are from cuttings. DRAFTED BY: T. Jennings TD = 10 ft GW = 14 ft			Lat: 32°37'47"N County: Lea Long: 103°18'52"W State: NM			
Depth (feet)	Chloride field tests	LAB	PID	Description	Lithology	Well Construction
				Brown Sand		
SS	394		1.1			
				Brown moist sand with some Caliche		bentonite seal
5 ft	1504	CI-2160 GRO <10	2.6			
		DRO <10		Tan sand with some Caliche		
10 ft	1794	CI-2800 GRO <10	12.0			
		DRO <10				

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.

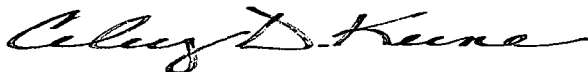
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

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
 Reported: 02/15/2013
 Project Name: EME L-25
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 02/11/2013
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

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
Chloride	2160	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	
Surrogate: 1-Chlorooctane		81.4 %	65.2-140						
Surrogate: 1-Chlorooctadecane		94.8 %	63.6-154						

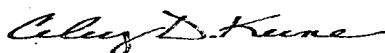
Sample ID: SB-1 @ 10' (H300388-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2800	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	
Surrogate: 1-Chlorooctane		76.0 %	65.2-140						
Surrogate: 1-Chlorooctadecane		96.4 %	63.6-154						

Cardinal Laboratories

*=Accredited Analyte

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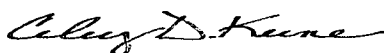
Celey D. Keene, Lab Director/Quality Manager

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**

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Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

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