

1R - 427-118

REPORTS

DATE:

FEB 2014

Rice Environmental Consulting & Safety

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

NOV 12 2013
7:00 PM

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 M-10 (1R427-118): UL/M, Sec. 10, T21S, R36E
RICE Operating Company – Eunice Monument Eumont (EME) 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 and Previous Work

In 2001, ROC initiated work on the former M-10 junction box. The site is located in UL M, Sec. 10, T21S, R36E. An updated survey of NM OSE records, conducted in 2013, indicate that groundwater would likely be encountered at a depth of approximately 196 +/- feet. The site was delineated using a backhoe to form a 10x10x6-ft deep excavation and soil samples were screened at regular intervals for chlorides. Each sample was field titrated for chlorides. Representative composite samples of the sidewalls and bottom were submitted to a commercial laboratory to be analyzed for chloride, TPH, and BTEX. The sidewall composite resulted in a chloride concentration of 198 mg/kg, gasoline range organics (GRO) and BTEX concentration below detectable limits, a diesel range organics (DRO) concentration of 334 mg/kg. The bottom composite sample resulted in a chloride concentration of 1,130 mg/kg, a GRO concentration of 104 mg/kg, a DRO concentration of 3,780 mg/kg and BTEX concentrations below detectable limits. A compacted clay layer was installed and will provide a barrier that will inhibit the downward migration of chlorides to groundwater. A total of 12 cubic yards of excavated soil was properly disposed of at a NMOCD approved facility. The excavation was backfilled to ground surface and contoured to the surrounding area. A new, watertight junction box was installed at the site; therefore, seeding is not necessary.

Further investigation

To further investigate the depth of chloride presence, a soil bore was initiated on February 11, 2013 at 10 ft northeast of the former junction box site. The boring was advanced to a depth of 30 ft below ground surface (bgs) with soil samples collected every 5 ft. Each sample was field titrated for chlorides and field screened using a PID for hydrocarbons, resulting in low

Rice Environmental Consulting & Safety

P.O. Box 2948, Hobbs, NM 88241

Phone 575.393.2967

concentrations. The 20 ft and 30 ft samples were sent to a commercial laboratory for analysis. The 20 ft sample resulted in a chloride concentration of 912mg/kg. DRO and GRO concentrations were below detectable limits. The 30 ft sample resulted in a chloride concentration of 176 mg/kg. DRO and GRO concentrations were below detectable limits. The entire bore hole was plugged with bentonite to ground surface.

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, junction box report, soil bore plat, log, laboratory analysis 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,



Laura Flores
Project Manager
RECS

Enclosures



Site Maps

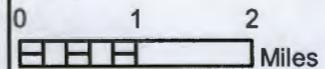
RICE *Operating Company* (ROC)
112 West Taylor Hobbs, NM 88240
Phone: (575) 393-9174 Fax: (575) 397-1471

Site Location Map



**EME M-10
(1R427-118)**

UL/M SECTION 10
T21S, R36E
LEA COUNTY, NM



Drawing date: 5/6/13 LS

Area Map



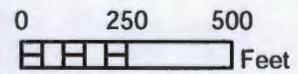
Legend

- ACTIVE LINE
- ISOLATED-LOCATED
- - - ISOLATED-PROJECTED

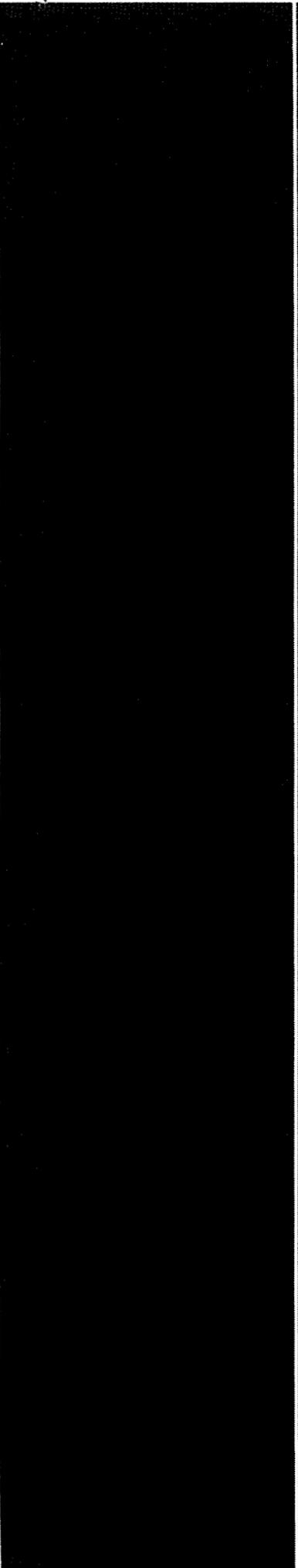


EME M-10

UL/M SECTION 10
T21S, R36E
LEA COUNTY, NM



Drawing date: 8/7/13 LS



Junction Box Report

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

427-118

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	M	10	21S	36E	LEA	5'	5'	5'

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

Depth to Groundwater >100 feet NMOCD SITE ASSESSMENT RANKING SCORE: 0

Date Started 09/24/2001 Date Completed 02/27/2001 OCD Witness NO

Soil Excavated 20 cubic yards Excavation Length 10 Width 10 Depth 6 feet

Soil Disposed 12 cubic yards Offsite Facility SUNDANCE Location EUNICE,NM

FINAL ANALYTICAL RESULTS: Sample Date 10/14/2001 Sample Depth 6'

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	<0.005	<0.005	<0.005	<0.015	<50	334	198
BOTTOM	<0.005	<0.005	<0.005	<0.015	104	3780	1130

General Description of Remedial Action: Delineated vertical and lateral extent to below

NMOCD guidelines. Installed compacted clay liner and water tight junction box and backfilled.

CHLORIDE FIELD TESTS

LOCATION	DEPTH	mg/kg
SIDEWALLS	2'	160
BOTTOM	6'	990

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

DATE 02/14/2001 PRINTED NAME James Strugill

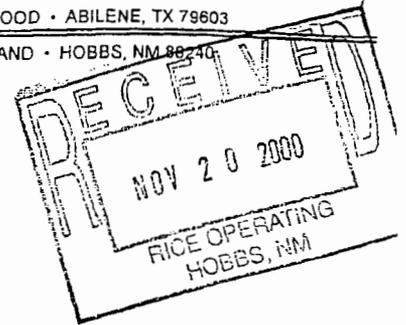
SIGNATURE James Strugill TITLE Environmental Technician



**ARDINAL
LABORATORIES**

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240



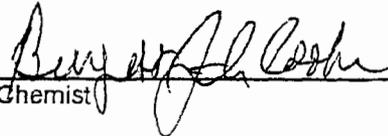
ANALYTICAL RESULTS FOR
RICE OPERATING CO.
ATTN: JAMES STURGILL
122 W. TAYLOR
HOBBS, NM 88240
FAX TO:

Receiving Date: 11/14/00
Reporting Date: 11/15/00
Project Number: NOT GIVEN
Project Name: M-10 SIDES & BOTTOM EME
Project Location: UM SEC 10-T21S-R36E

Sampling Date: 11/14/00
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: AH
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		11/14/00	11/14/00	11/15/00
H5341-1	M-10-SIDE	<50	334	198
H5341-2	M-10-BOTTOM	104	3780	1130
Quality Control		787	804	954
True Value QC		800	800	1000
% Recovery		98.3	100	95.4
Relative Percent Difference		7.7	0.9	4.9

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


Chemist

11/15/00
Date

H5341A.XLS

Sundance Services, Inc.

P.O. Box 1737 ★ Eunice, NM 88231
(505) 394-2511

NC 35382

LEASE OPERATOR/SHIPPER/COMPANY:

LEASE NAME: M-10

TRANSPORTER COMPANY:

TIME:

AM/PM

DATE: 1/14/95

VEHICLE NO.:

DRIVER NO.:

CHARGE TO:

TYPE OF MATERIAL

Production Water

Drilling Fluids

Completion Fluids

Tank Bottoms

Contaminated soil

C-117 No.: _____

Other Material:

BS&W Content: _____

Description: _____

VOLUME OF MATERIAL BBLs. _____ :

YARD _____ :

AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HERewith IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, et seq., THE NM HEALTH AND SAF. CODE § 361.001, et seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.

ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL.

THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident.

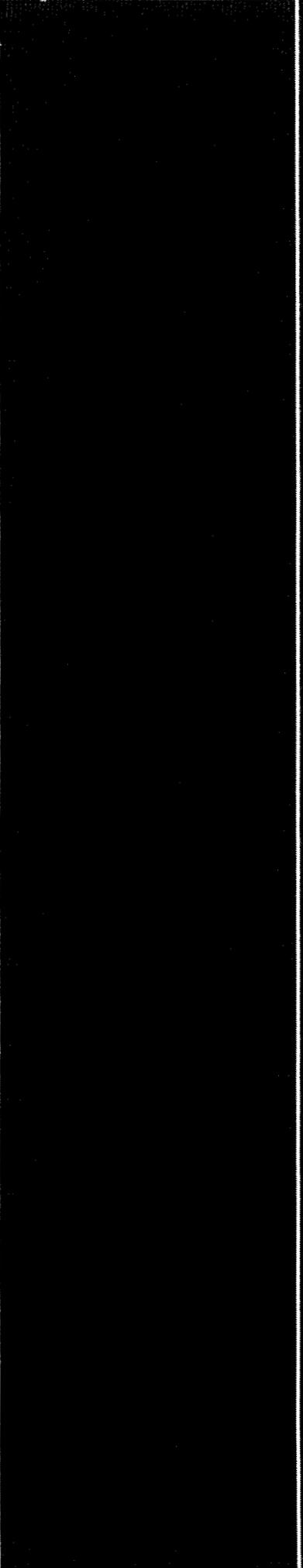
DRIVER: [Signature]

(SIGNATURE)

FACILITY REPRESENTATIVE: _____

(SIGNATURE)

White-Sundance Canary-Sundance Acct#1 Pink-Sundance Acct#2 Gold-Transporter
Revised 12/27/95



Soil Bore Installation Documentation

RICE *Operating Company* (ROC)
419 West Cain Hobbs, NM 88240
Phone: (575) 393-2967 Fax: (575) 393-0293

February 15, 2013

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

RE: EME M-10

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	Sampling Date:	02/11/2013
Reported:	02/15/2013	Sampling Type:	Soil
Project Name:	EME M-10	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SB-1 @ 20' (H300386-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	912	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 86.1 % 65.2-140
 Surrogate: 1-Chlorooctadecane 96.3 % 63.6-154

Sample ID: SB-1 @ 30' (H300386-02)

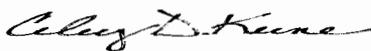
Chloride, SM4500Cl-B		mg/kg		Analyzed By: DW						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	02/14/2013	ND	416	104	400	3.77		
TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	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 86.9 % 65.2-140
 Surrogate: 1-Chlorooctadecane 96.7 % 63.6-154

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

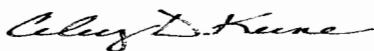
Notes and Definitions

- 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

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: PGM 7300	SERIAL NO: 590-000508
MODEL	x	MODEL: PGM 7300	SERIAL NO: 590-000504
NO.		MODEL: PGM 7320	SERIAL NO: 592-903318
		MODEL: PGM 7300	SERIAL NO: 590-000183

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO : HAL-248-100-1	EXPIRATION DATE: 7/01/2015
METER READING ACCURACY: 99.9 PPM	

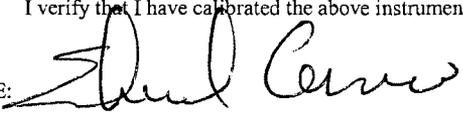
ACCURACY : +/- 2%

COMPANY
RICE

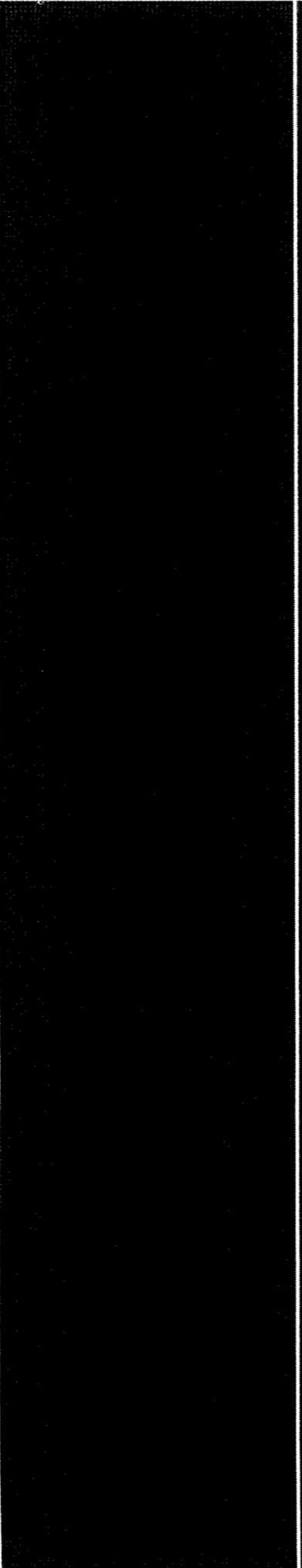
SITE	UNIT	SECTION	TOWN SHIP	RANGE
EME M-10	M	10	T-21-S	R-36-E

SAMPLE ID	PID	SAMPLE ID	PID
Soil Bore #1 @ Surface	0.9		
Soil Bore #1 @ 5'	1.6		
Soil Bore #1 @ 10'	5.1		
Soil Bore #1 @ 15'	1.1		
Soil Bore #1 @ 20'	2.4		
Soil Bore #1 @ 25'	7.9		
Soil Bore #1 @ 30'	1.3		

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

SIGNATURE: 

DATE: 2-11-2013



Current Photodocumentation

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

EME M-10 (1R427-118)
UL/M, Section 10, T21S, R36E



Facing north

7/3/2013



Facing east

7/3/2013