

1R - 427-99

# APPROVALS

YEAR(S):

2013

**Hansen, Edward J., EMNRD**

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**From:** Hansen, Edward J., EMNRD  
**Sent:** Tuesday, September 17, 2013 10:18 AM  
**To:** Hack Conder (hconder@riceswd.com)  
**Cc:** Leking, Geoffrey R, EMNRD; Laura Pena (lpena@riceswd.com); Katie Jones <kjones@riceswd.com> (kjones@riceswd.com); Scott Curtis (scurtis@riceswd.com)  
**Subject:** Remediation Plan (1R427-99) Termination - ROC EME K-36 Site

**RE: Termination Request  
for the Rice Operating Company's  
EME K-36 Site  
Unit Letter K, Section 36, T20S, R36E, NMPM, Lea County, New Mexico  
Remediation Plan (1R427-99) Termination**

Dear Mr. Conder:

The New Mexico Oil Conservation Division (OCD) has received Rice Operating Company's report and request to close the above-referenced site, dated June 27, 2013 (received July 1, 2013) and additional information of September 12, 2013 (received September 16, 2013). The report 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 Operating Company has met the requirements of 19.15.29 NMAC; therefore, the OCD approves the report and hereby notifies you that the remediation plan (1R427-99) 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 505-476-3489.

Edward J. Hansen  
Hydrologist  
Environmental Bureau

# RICE *Operating Company*

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

RECEIVED OGD

240 JUL -1 P 2: 17

CERTIFIED MAIL

RETURN RECEIPT NO. 7007 2560 0000 4569 8890

**June 27, 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 K-36 (1R427-99): UL/K, Sec. 36, T20S, 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 2001, ROC initiated work on the former K-36 junction box. The site is located in UL/K, Sec. 36, T20S, R36E. NM OSE records indicate that groundwater would likely be encountered at a depth of approximately 115 +/- feet. The site was delineated using a backhoe to collect soil samples at regular intervals, creating a 10x10x4 ft deep excavation. Each sample was field titrated for chlorides. Representative composite samples of the excavation walls and bottom were sent to a commercial for analysis of chloride and TPH, resulting in a 4-wall chloride concentration of 272 mg/kg and concentrations of gasoline range organics (GRO) and diesel range organics (DRO) below detectable limits. The sample was also analyzed for BTEX resulting in concentrations below detectable limits. The bottom composite resulted in a chloride concentration of 704 mg/kg, a GRO concentration below detectable limits and a DRO concentration of 269 mg/kg. The sample was also analyzed for BTEX resulting in a benzene concentration below detectable limits, 0.006 mg/kg for toluene, 0.034 mg/kg for ethyl benzene and 0.045 mg/kg for total xylenes. A clay layer was installed and will provide a barrier that will inhibit the downward migration of chlorides to groundwater. The excavation was backfilled with the excavated soil to ground surface and contoured to the surrounding area. A new, watertight junction box was installed at the site and has since been removed.

On 5/16/2013, soil amendments were added to the site and the site was seeded with a blend of native vegetation. 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, laboratory analysis, PID sheet, chloride graph, revegetation form and seeding 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.

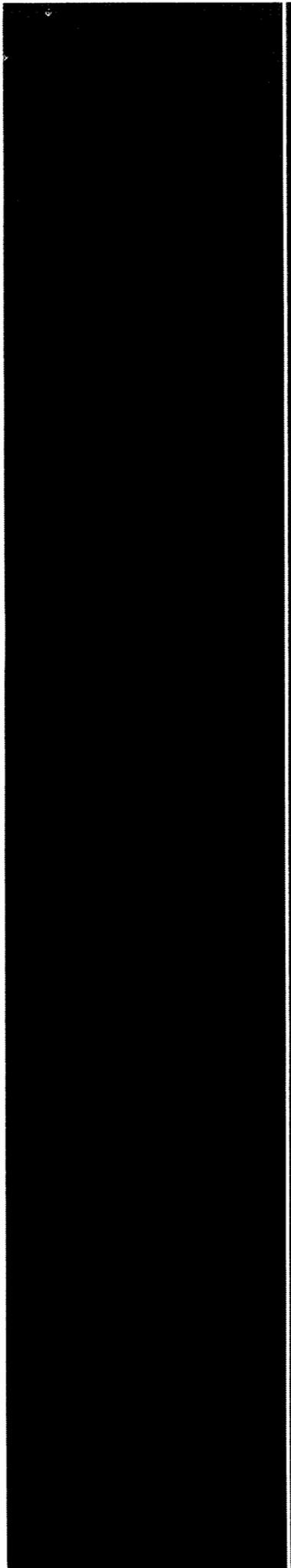
Please contact me at (575) 393-9174 if you have any questions or wish to discuss this site. Thank you for your time and consideration.

Sincerely,  
RICE Operating Company

A handwritten signature in black ink, appearing to read 'H. Conder', written in a cursive style.

Hack Conder  
Environmental Manager

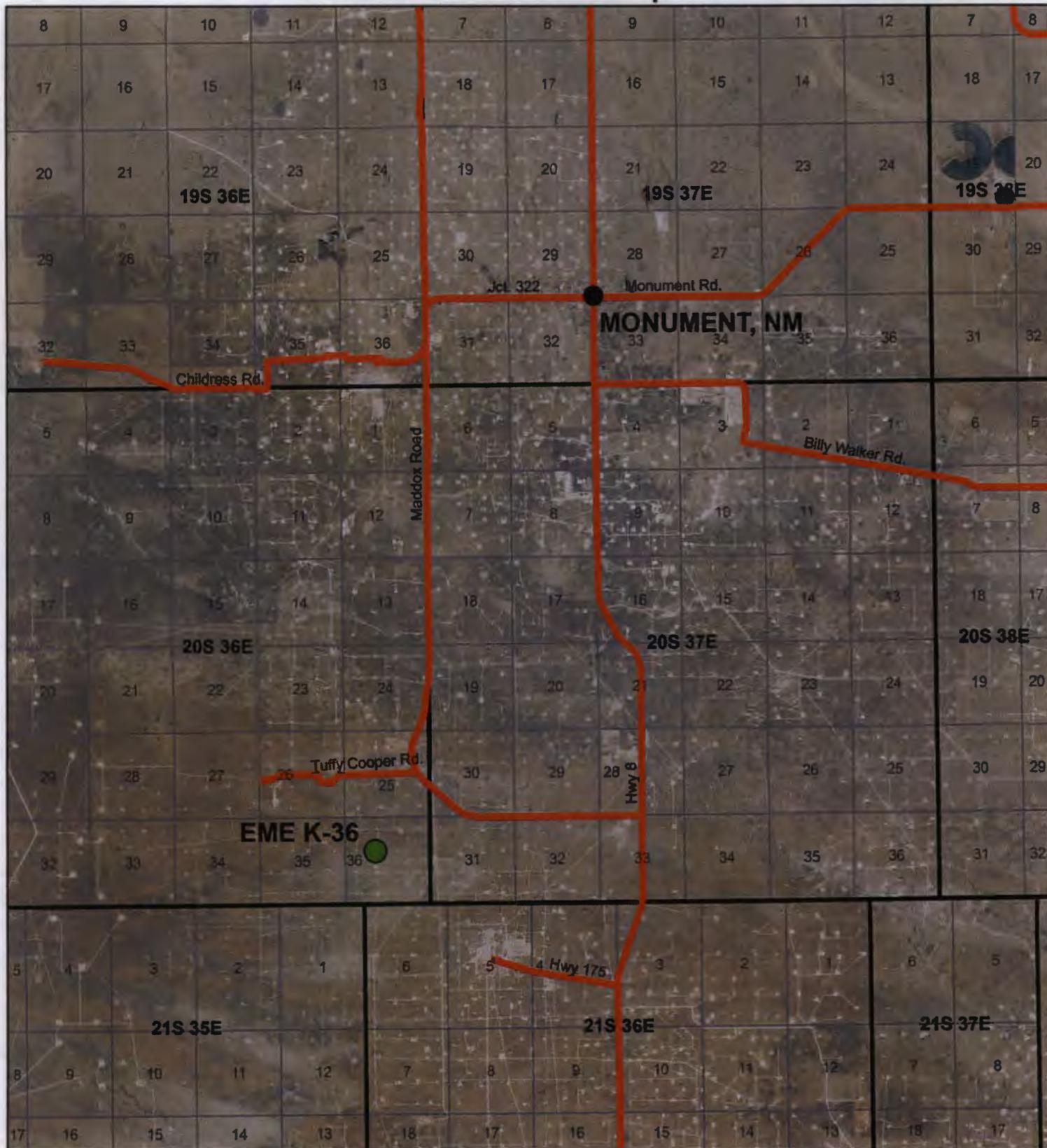
enclosures



# Site Maps

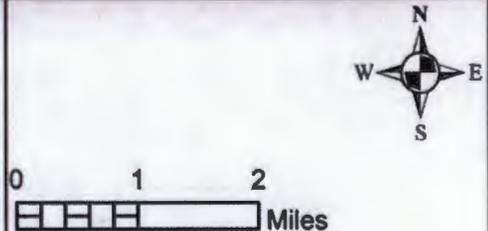
**RICE *Operating Company* (ROC)**  
112 West Taylor Hobbs, NM 88240  
Phone: (575) 393-9174 Fax: (575) 397-1471

# Site Location Map



**EME K-36  
(1R427-99)**

**UL/K SECTION 36  
T20S, R36E  
LEA COUNTY, NM**



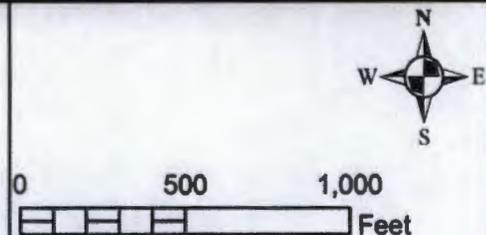
Drawing date: 6/25/13 LS

# Area Map



**EME K-36  
(1R427-99)**

UL/K SECTION 36  
T20S, R36E  
LEA COUNTY, NM



Drawing date: 6/25/13 LS

# 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	K-36	K	36	20S	36E	LEA	7	7	4

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

Depth to Groundwater 115 feet NMOCD SITE ASSESSMENT RANKING SCORE: 0

Date Started 11/07/2001 Date Completed 11/07/2001 OCD Witness NO

Soil Excavated 0 cubic yards Excavation Length 10 Width 10 Depth 4 feet

Soil Disposed 0 cubic yards Offsite Facility \_\_\_\_\_ Location \_\_\_\_\_

**FINAL ANALYTICAL RESULTS:** Sample Date 11/07/2001 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	< 0.005	< 0.005	< 0.005	<0.015	<50	<50	272
BOTTOM	< 0.005	0.006	0.034	0.045	<50	269	704

General Description of Remedial Action: Initial closure testing demonstrated contaminant

levels below NMOCD guidelines. Installed a compacted clay liner and water proof junction box.

Backfilled with blended soil below NMOCD guidelines.

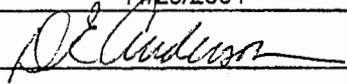
**CHLORIDE FIELD TESTS**

LOCATION	DEPTH	mg/kg
SIDEWALLS	3'	275
BOTTOM	4'	725

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

DATE 11/29/2001

PRINTED NAME D. E. Anderson

SIGNATURE 

TITLE Project Leader - Environmental



**CARDINAL  
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: CHRIS RODRIGUEZ  
122 W. TAYLOR  
HOBBS, NM 88240  
FAX TO: (505) 397-1471

Receiving Date: 11/07/01  
Reporting Date: 11/12/01  
Project Number: K-36  
Project Name: K-36 BOX UPGRADE  
Project Location: EME

Sampling Date: 11/07/01  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: BC  
Analyzed By: BC/HM

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)	CI* (mg/Kg)
ANALYSIS DATE		11/09/01	11/09/01	11/08/01
H6269-1	WALL COMP.	<50	<50	272
H6269-2	BOTTOM COMP.	<50	269	704
Quality Control		829	782	980
True Value QC		800	800	1000
% Recovery		104	97.8	98.0
Relative Percent Difference		8.7	0.1	0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; CI: Std. Methods 4500-CIB

\*Analyses performed on 1:4 w:v aqueous extracts.

Burgett L Cooke  
Chemist

11/12/01  
Date

H6269A.XLS

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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.



PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603  
 PHONE (505) 393-2328 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
 RICE OPERATING CO.  
 ATTN: CHRIS RODRIGUEZ  
 122 W. TAYLOR  
 HOBBS, NM 88240  
 FAX TO: (505) 397-1471

Receiving Date: 11/07/01  
 Reporting Date: 11/12/01  
 Project Number: K-38  
 Project Name: K-36 BOX UPGRADE  
 Project Location: EME

Sampling Date: 11/07/01  
 Sample Type: SOIL  
 Sample Condition: COOL & INTACT  
 Sample Received By: BC  
 Analyzed By: BC

LAB NUMBER	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE		11/07/01	11/07/01	11/07/01	11/07/01
H8269-1	WALL COMP.	<0.005	<0.005	<0.005	<0.015
H8269-2	BOTTOM COMP.	<0.005	0.008	0.034	0.045
Quality Control		0.112	0.103	0.110	0.327
True Value QC		0.100	0.100	0.100	0.300
% Recovery		112	103	110	109
Relative Percent Difference		3.8	1.6	1.6	2.3

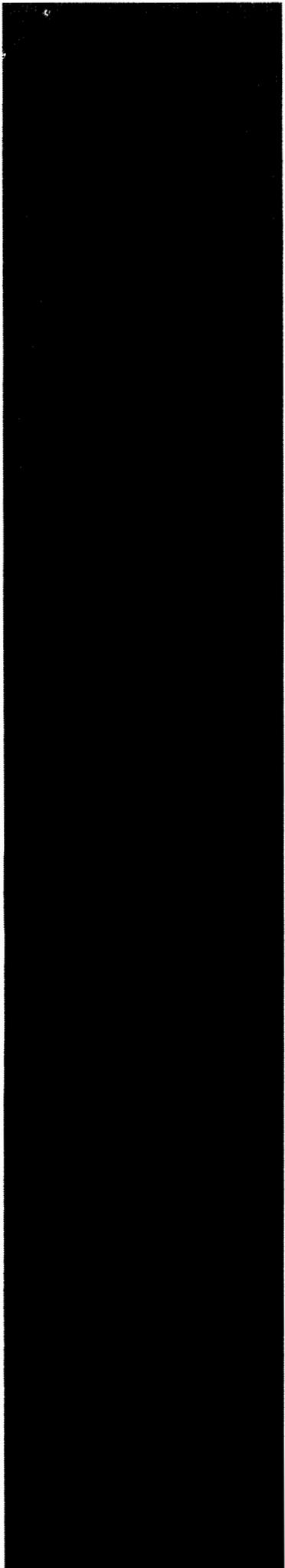
METHOD: EPA SW-846 8260

*Burgett A. Loebe*  
 Chemist

11/12/01  
 Date

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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.





# Revegetation Documentation

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



PO Box 5630  
 Hobbs, NM 88241  
 Phone: (575) 393-4411  
 Fax: (575) 393-0293

## REVEGETATION FORM

### 1. General Information

Site name: EME K-36						
U/L K	Section 36	Township 20S	Range 36E	County Lea	Latitude N 32° 31' 45.541"	Longitude W 103° 18' 42.5"
Contact Name: Hack Conder						
Email: <a href="mailto:hconder@rice-ees.com">hconder@rice-ees.com</a>						
Site size: 50x50 2,500 square feet				Map detail of site attached <input type="checkbox"/>		
Additional information:						

### 2. Soils *\*Do not rip caliche subsoils; caliche rocks brought to the surface by ripping shall be removed.*

Salvaged from site <input checked="" type="checkbox"/>	Bioremediated <input type="checkbox"/>	Imported <input type="checkbox"/>	Blended <input checked="" type="checkbox"/>	Depth (in):
Texture: Sandy	Describe soil & subsoil: Caliche and Sand Mix			
Soil prep methods: Rip <input checked="" type="checkbox"/>	Depth(in): 6"	Disc <input checked="" type="checkbox"/>	Depth (in): 3"	Rollerpack <input type="checkbox"/>
Date completed: 11/7/2001				

### 3. Bioremediation

Fertilizer <input type="checkbox"/>	Hay <input type="checkbox"/>	Other <input checked="" type="checkbox"/> 6 Bags Bio Nhance
Type:		Describe: 1 Bag Manure
Lbs/acre:		3 Bags Garden Soil

### 4. Seeding *\*Attach seed bag tags to this form. Seed bag tags shall contain the site name and S-T-R.*

Custom seed mix <input checked="" type="checkbox"/>	Prescribed mix <input type="checkbox"/>	Seed mix name: 3 Lbs. Lea Co. Mix, 3 Boyd Johnston Lbs. Race Horse Oats and Mix ½ lbs. 3 Lbs. Sudan Grass	Seeding date: 5/16/2013
Broadcast <input checked="" type="checkbox"/>			
Method: Mechanical Seeder			
Soil conditions during seeding: Dry <input checked="" type="checkbox"/> Damp <input type="checkbox"/> Wet <input type="checkbox"/>			
Photos attached <input type="checkbox"/>	Observations: The seed was tilled into the site.		
Number of photos:			

### 5. Certification I hereby certify that the information in this form and attachments is true and complete to the best of my knowledge and belief.

Name: Kyle Norman	Title: Environmental Tech	Date: 5/16/2013
Signature:		

**EME K-36 (1R427-99)**  
Unit Letter K, Section 36, T20S, R36E



Spreading amendments, facing east

5/16/2013



Seeding and tilling site, facing north

5/16/2013



Tilling site, facing west

5/16/2013



Site completed, facing north

5/16/2013

# **RICE** *Operating Company*

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

RECEIVED OGD

2013 SEP 16 P 1:45

CERTIFIED MAIL

RETURN RECEIPT NO. 7007 2560 0000 4569 8944

**September 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: Further Investigation & Termination Request  
EME K-36 (1R427-99): UL/K, Sec. 36, T20S, 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 2001, ROC initiated work on the former K-36 junction box. The site is located in UL/K, Sec. 36, T20S, R36E. NM OSE records indicate that groundwater would likely be encountered at a depth of approximately 115 +/- feet. The site was delineated using a backhoe to collect soil samples at regular intervals, creating a 10x10x4 ft deep excavation. Each sample was field titrated for chlorides. Representative composite samples of the excavation walls and bottom were sent to a commercial for analysis of chloride and TPH, resulting in a 4-wall chloride concentration of 272 mg/kg and concentrations of gasoline range organics (GRO) and diesel range organics (DRO) below detectable limits. The sample was also analyzed for BTEX resulting in concentrations below detectable limits. The bottom composite resulted in a chloride concentration of 704 mg/kg, a GRO concentration below detectable limits and a DRO concentration of 269 mg/kg. The sample was also analyzed for BTEX resulting in a benzene concentration below detectable limits, 0.006 mg/kg for toluene, 0.034 mg/kg for ethyl benzene and 0.045 mg/kg for total xylenes. A clay layer was installed and will provide a barrier that will inhibit the downward migration of chlorides to groundwater. The excavation was backfilled with the excavated soil to ground surface and contoured to the surrounding area. A new, watertight junction box was installed at the site and has since been removed.

On 5/16/2013, soil amendments were added to the site and the site was seeded with a blend of native vegetation. 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.

A Termination Request was submitted to NMOCD on June 27, 2013. NMOCD requested further delineation of the site on August 26, 2013.

#### **Further investigation**

To further investigate the depth of chloride presence, a soil bore was initiated on July 25, 2013 at 12 ft northeast of the former junction box site. The boring was advanced to a depth of 40 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 concentrations that did not change with depth. The 25 ft and 40 ft samples were sent to a commercial laboratory for analysis. The 25 ft samples resulted in a chloride concentration of 688 mg/kg and concentrations of GRO and DRO below detectable limits. The 40 ft sample resulted in a chloride concentration of 160 mg/kg and concentrations of GRO and DRO below detectable limits. The entire bore hole was plugged with bentonite to ground surface.

The junction box site location map, area map, soil bore plat, log, laboratory analysis and 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.

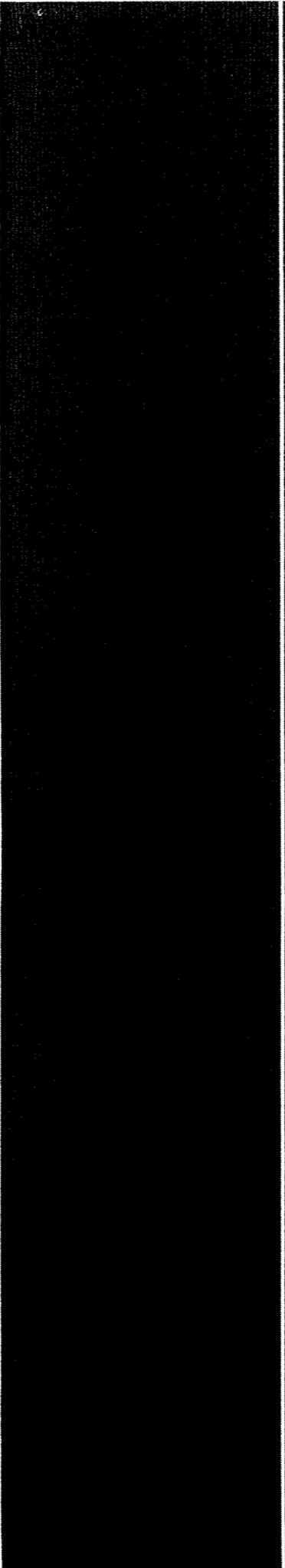
Please contact me at (575)393-2967 if you have any questions or wish to discuss this site. Thank you for your time and consideration.

Sincerely,  
RICE Operating Company



Laura Flores  
Environmental Project Assistant Manager

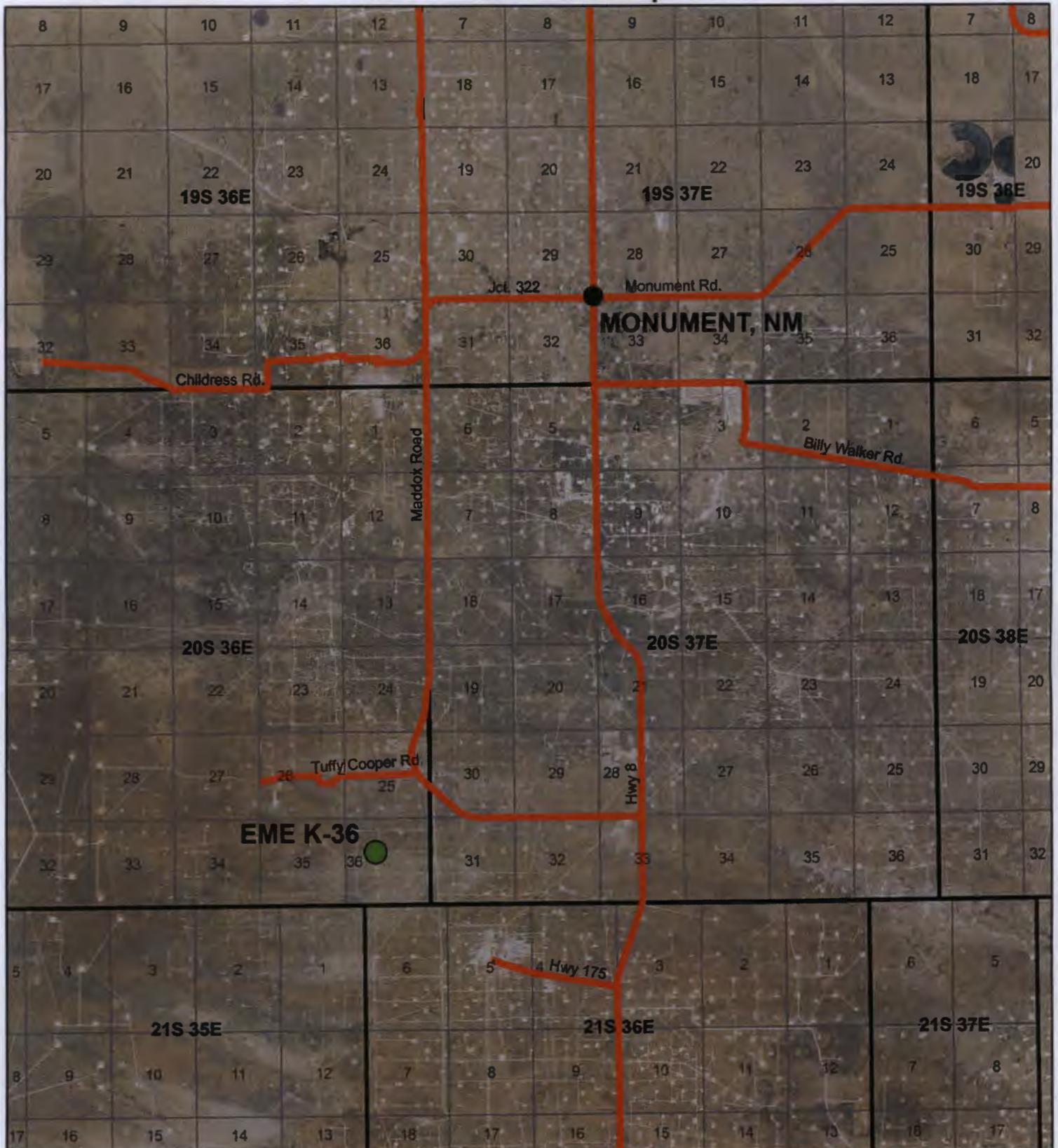
enclosures



## Site Maps

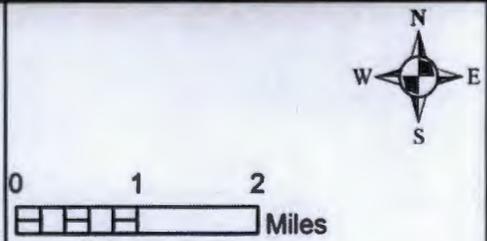
**RICE *Operating Company* (ROC)**  
112 West Taylor Hobbs, NM 88240  
Phone: (575) 393-9174 Fax: (575) 397-1471

# Site Location Map



**EME K-36  
(1R427-99)**

**UL/K SECTION 36  
T20S, R36E  
LEA COUNTY, NM**



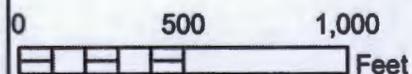
Drawing date: 6/25/13 LS

# Area Map

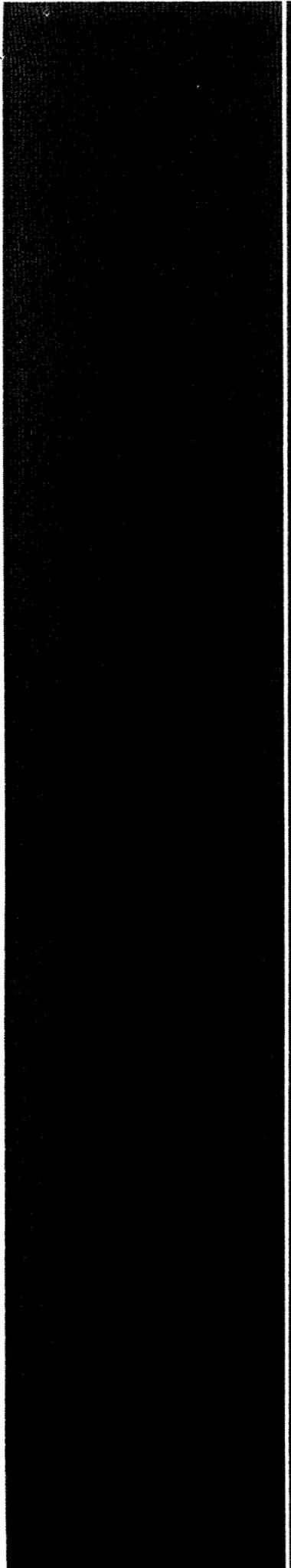


**EME K-36  
(1R427-99)**

UL/K SECTION 36  
T20S, R36E  
LEA COUNTY, NM



Drawing date: 6/25/13 LS

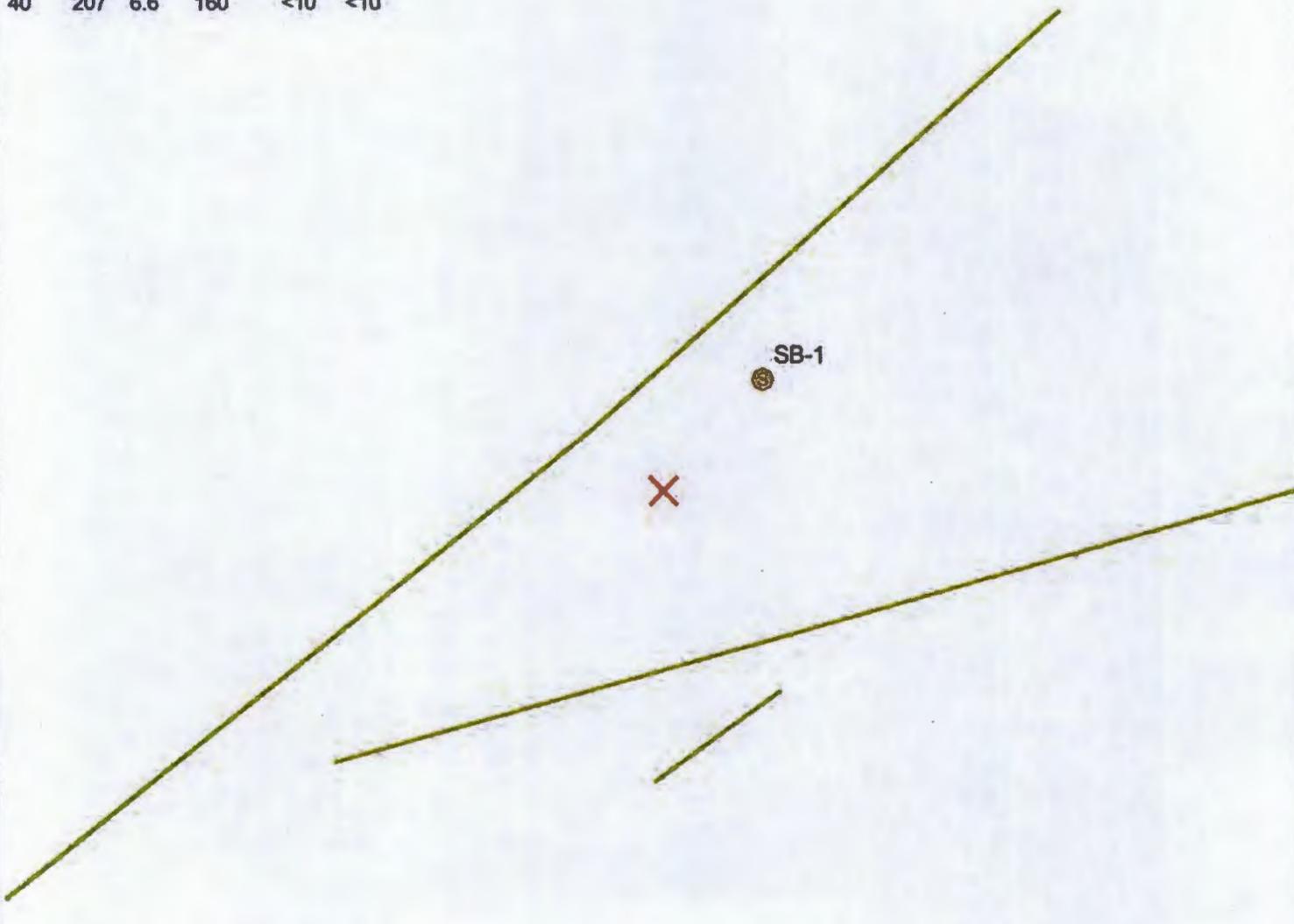


# Soil Bore Installation Documentation

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

# Soil Bore Installation

Depth	Cl-	PID	LAB Cl-	GRO	DRO
SS	146	0.1			
5	394	0.2			
10	178	0.1			
15	451	0.2			
20	543	0.2			
25	626	0.5	688	<10	<10
30	478	0.3			
35	289	0.3			
40	207	6.6	160	<10	<10



## Legend

-  FORMER JCT. BOX SITE
-  BURIED LINES
-  EME SOIL BORES

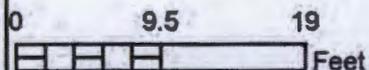
DGW = 115



## EME K-36

LEGALS: UL/K sec. 36  
T-20-S R-36-E  
LEA COUNTY, NM

NMOCD #: 1R427-99



GPS date: 7/26/13 TG  
Drawing date: L. Weinheimer  
Drafted by: 7/29/13



July 29, 2013

KYLE NORMAN

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: EME JCT K-36

Enclosed are the results of analyses for samples received by the laboratory on 07/26/13 9:11.

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).

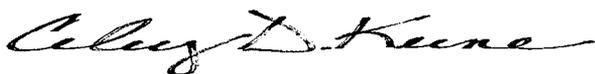
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

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

 Received: 07/26/2013  
 Reported: 07/29/2013  
 Project Name: EME JCT K-36  
 Project Number: NONE GIVEN  
 Project Location: T. 20S. R.36E

 Sampling Date: 07/25/2013  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Celey D. Keene

**Sample ID: SB @ 40' (H301761-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>160</b>	16.0	07/29/2013	ND	400	100	400	3.92	
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	07/26/2013	ND	188	93.9	200	7.00	
DRO >C10-C28	<10.0	10.0	07/26/2013	ND	195	97.4	200	9.12	
<i>Surrogate: 1-Chlorooctane</i>	<i>86.0 %</i>	<i>65.2-140</i>							
<i>Surrogate: 1-Chlorooctadecane</i>	<i>108 %</i>	<i>63.6-154</i>							

**Sample ID: SB @ 25' (H301761-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>688</b>	16.0	07/29/2013	ND	400	100	400	3.92	
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	07/29/2013	ND	177	88.5	200	2.97	
DRO >C10-C28	<10.0	10.0	07/29/2013	ND	180	90.0	200	3.74	
<i>Surrogate: 1-Chlorooctane</i>	<i>83.2 %</i>	<i>65.2-140</i>							
<i>Surrogate: 1-Chlorooctadecane</i>	<i>104 %</i>	<i>63.6-154</i>							

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



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Celey D. Keene, Lab Director/Quality Manager

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

Company Name: <u>ROC</u>		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>																			
Project Manager: <u>Kyle Norman</u>		P.O. #:																					
Address:		Company:																					
City:	State:	Zip:	Attn:																				
Phone #:	Fax #:	Address:																					
Project #:	Project Owner:		City:																				
Project Name:		State:	Zip:																				
Project Location: <u>EME jct K-36 T. 20S. R.36E.</u>		Phone #:																					
Sampler Name: <u>Kyle Schnaidt</u>		Fax #:																					
FOR LAB USE ONLY																							
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS											MATRIX					PRESERV.		SAMPLING		CI- TPH
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE	ICE / COOL	OTHER:	DATE	TIME									
<u>H3017161</u>																							
<u>1</u>	<u>SB@ 40'</u>		<u>1</u>			<u>X</u>							<u>7-25-13</u>	<u>10:35</u>									
<u>2</u>	<u>SB@ 25'</u>		<u>1</u>			<u>X</u>							<u>7-25-13</u>	<u>10:40</u>									

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Relinquished By: <u>Kyle Schnaidt</u>	Date: <u>7/26/13</u> Time: <u>9:11</u>	Received By: <u>[Signature]</u>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
Relinquished By:	Date:	Received By:	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No	CHECKED BY: (Initials) <u>[Signature]</u>	
REMARKS: <u>h condor@rice-ecs.com</u> <u>knorman@rice-ecs.com</u> <u>jtkamplara@rice-ecs.com</u> <u>kschnaidt@rice-ecs.com</u> <u>lweinheimer@rice-ecs.com</u>				

**EME K-36**  
**Unit Letter K, Section 36, T-20-S, R-36-E**



Drilling SB-1, facing west

7/25/13



Plugging SB-1 in total with bentonite

7/25/13