

1R - 427-360

REPORTS

DATE:

5-8-13

RICE *Operating Company*

122 West Taylor • Hobbs, New Mexico 88240

Phone: (575) 393-9174 • Fax: (575) 397-1471

CERTIFIED MAIL

RETURN RECEIPT NO. 7007 2560 0000 4569 9231

RECEIVED

May 8, 2013

MAY 20 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

Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505

RE: Termination Request
EME C-10 EOL (1R427-360): UL/C, Sec. 10, T21S, 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 2010, ROC initiated work on the former C-10 EOL junction box. The site is located in UL/C, Sec. 10, T21S, R36E. NM OSE records indicate that groundwater would likely be encountered at a depth of approximately 200 +/- feet. The site was delineated using a backhoe to collect soil samples at regular intervals, creating a 30x10x12 ft deep excavation. Each sample was field titrated for chlorides and field screened using a PID for hydrocarbons, resulting in chloride concentrations that decreased with depth and low PID readings. The excavated soil was blended on site and representative composite samples of the excavation walls, bottom and blended backfill were sent to a commercial for analysis of chloride and TPH, resulting in a 4-wall chloride concentration of 640 mg/kg and concentrations of gasoline range organics (GRO) concentration and diesel range organics (DRO) below detectable limits. The bottom composite resulted in a chloride concentration of 592 mg/kg and concentrations of GRO and DRO below detectable limits. The blended backfill resulted in a chloride concentration of 528 mg/kg and concentrations of GRO and DRO below detectable limits. The excavation was backfilled with the blended, excavated soil to 2 ft below ground surface. The remaining excavation was backfilled with clean imported soil to ground surface and contoured to the surrounding area. On 10/27/2010, the site was seed with a blend of native vegetation.

On 4/3/2013, soil amendments were added to the site and the site was reseeded 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 site revegetation form and photos of these activities are attached.

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.

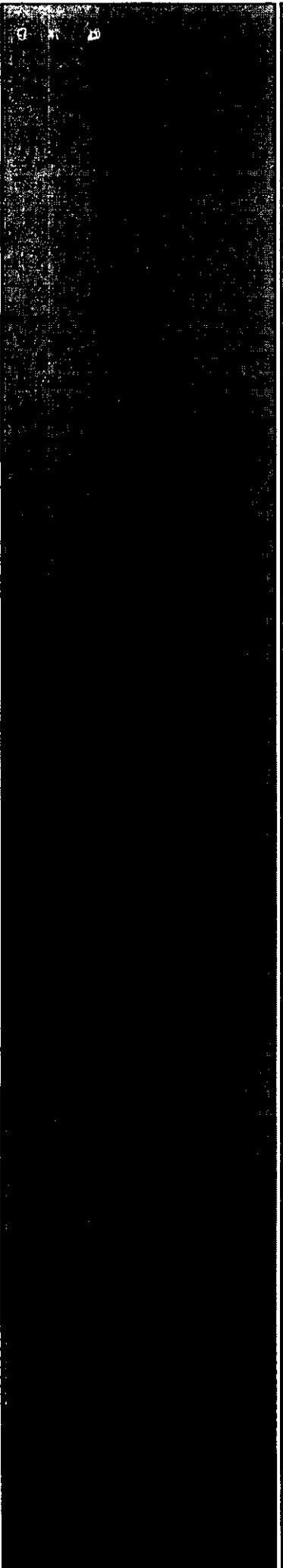
Sincerely,
RICE Operating Company



Hack Conder
Environmental Manager

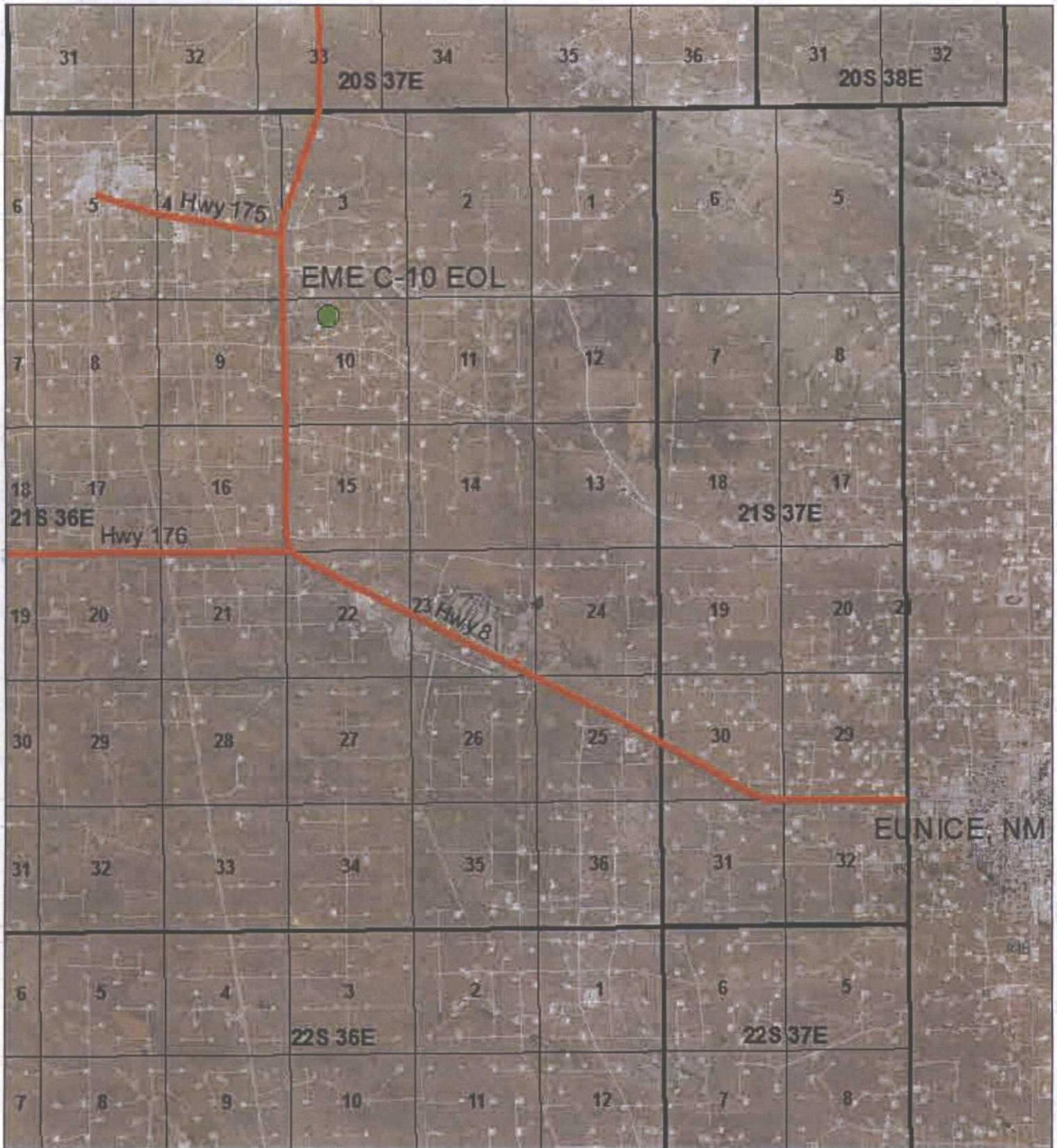
enclosures

RECEIVED OGD
2013 MAY 17 P 2:25



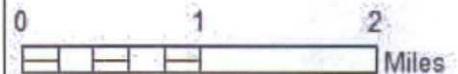
Site Maps

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



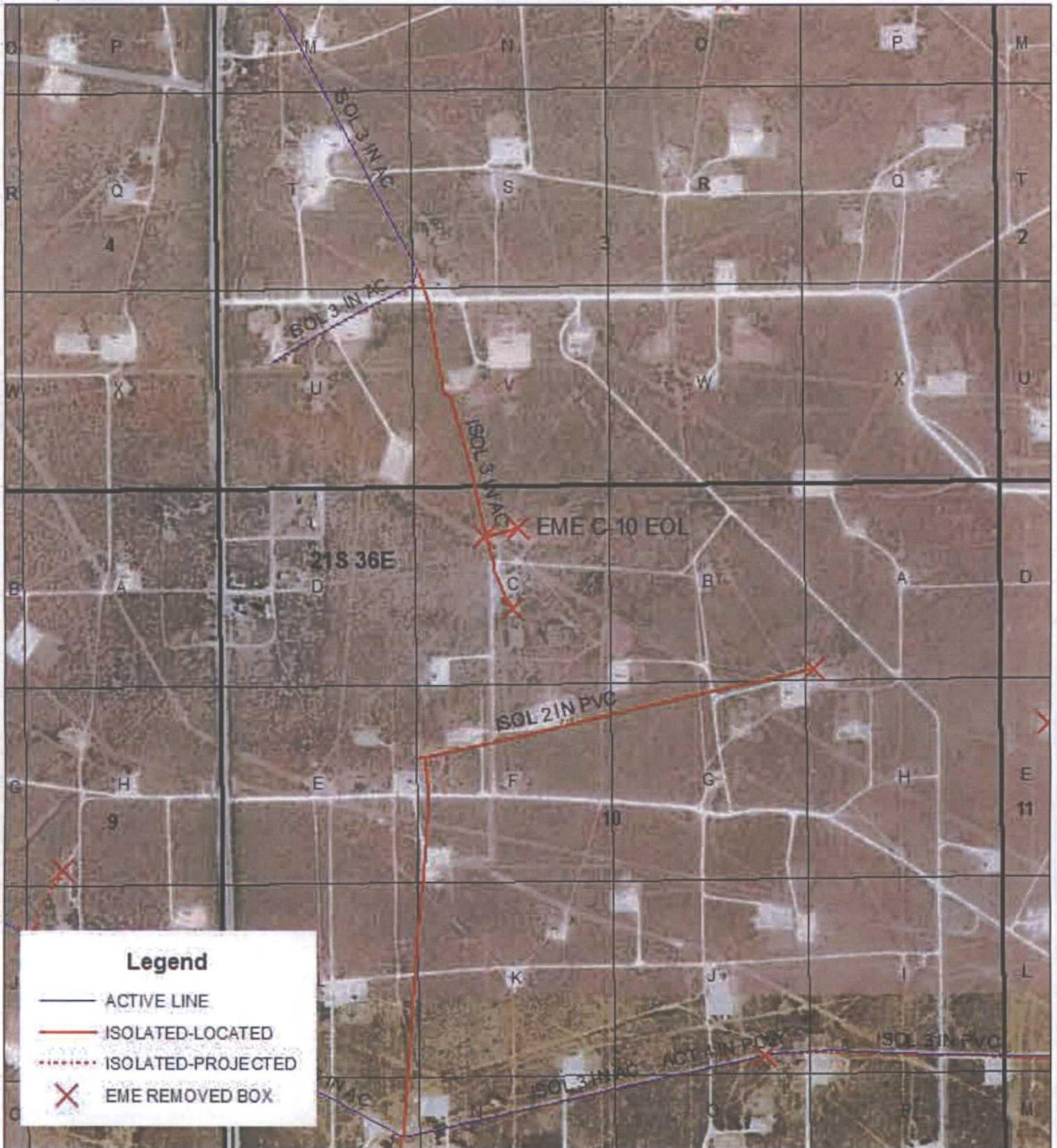
EME C-10 EOL

UL C SECTION 10
T-21-S R-36-E
LEA COUNTY, NM



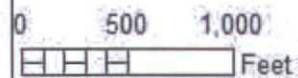
Drawing date: 1/21/13
Drafted by: Tony Grieco

Area Map

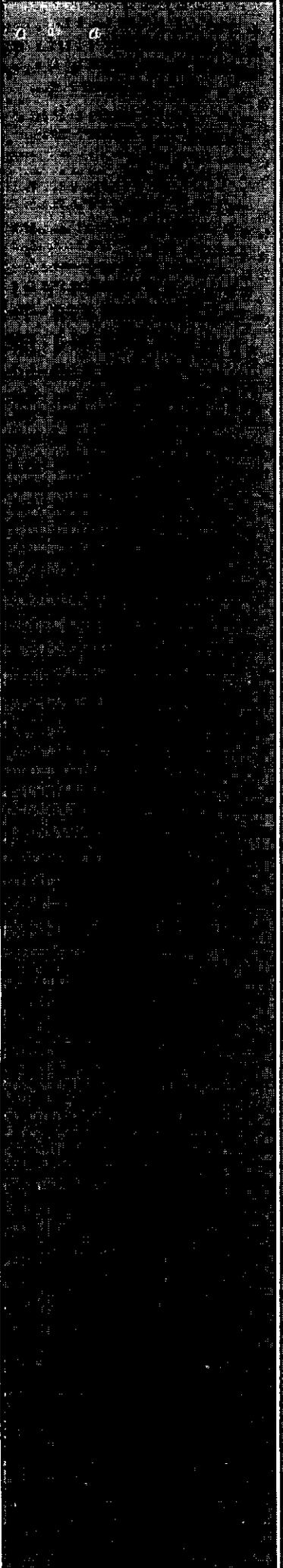


EME
EOL C-10
UL/C SECTION 10
T-21-S R-36-E
LEA COUNTY, NM

NMOCD CASE #: 1R427-360



Drawing date: 4/25/13
Drafted by: T. Grieco



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
Eunice Monument Eumont (EME)	C-10 EOL	C	10	21S	36E	Lea	Eliminated		

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER Millard Deck OTHER _____

Depth to Groundwater 200 feet NMOCD SITE ASSESSMENT RANKING SCORE: 20*

Date Started 9/29/2010 Date Completed 10/27/2010 OCD Witness no

Soil Excavated 133.3 cubic yards Excavation Length 30 Width 10 Depth 12 feet

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

FINAL ANALYTICAL RESULTS: Sample Date 10/5/2010 Sample Depth 12 ft

Procure 5-point composite sample of bottom and 4-point composite sample of sidewalls. 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
4-WALL COMP.	16.4	<10.0	<10.0	640
BOTTOM COMP.	0.7	<10.0	<10.0	592
BACKFILL COMP.	0.0	<10.0	<10.0	528

LOCATION	DEPTH	mg/kg
4-wall comp.	n/a	486
Bottom Comp.	12'	576
Backfill Comp.	n/a	513
Vertical delineation trench at 5 ft. south of (source)	2	285
	4	668
	6	651
	8	645
	10	612
	12	499

General Description of Remedial Action: This junction and line were 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 30x10x12 ft-deep excavation. Chloride field tests performed on each sample yielded relatively low concentrations. Organic vapors were measured using a PID, which yielded low concentrations. The excavated soil was blended on site

and representative composite samples were collected from the blended backfill, the bottom of the excavation, and the excavation walls. The representative samples were sent to a commercial laboratory for analysis of chloride and TPH. The blended backfill was returned to the excavation to 2 ft below ground surface (BGS). The remaining excavation was backfilled with clean, imported soil to ground surface and contoured to the surrounding area. On 10/27/2010, the site was seeded with a blend of native vegetation and is expected to return to a productive capacity at a normal rate.

*Housing and Windmill 1258 ft west

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 Dak Harris SIGNATURE *Dak Harris* COMPANY RICE OPERATING COMPANY

REPORT ASSEMBLED BY Robert Egans INITIAL *RE*

PROJECT LEADER Larry Bruce Baker Jr. SIGNATURE *Larry Bruce Baker Jr.* DATE 3-29-11

EME C-10 EOL

Unit C, Section 10, T21S, R36E



Site prior to delineation

9/29/2010



Collecting sample

9/29/2010



Final delineation trench

10/5/2010



Covering seed

10/27/2010



October 13, 2010

Bruce Baker
Rice Operating Company
112 W. Taylor
Hobbs, NM 88240

RE: EME C-10 EOL (21/36)

Enclosed are the results of analyses for samples received by the laboratory on 10/05/10 16:27.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

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 (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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style.

Celey D. Keene
Lab Director/Quality Manager

Analytical Results For:

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

Received:	10/05/2010	Sampling Date:	10/05/2010
Reported:	10/13/2010	Sampling Type:	Soil
Project Name:	EME C-10 EOL (21/36)	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: 5 PT BOTTOM COMP @ 12' (H020981-01)

Chloride, SM4500C1-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	592	16.0	10/07/2010	ND	416	104	400	0.00		
TPH 8015M		mg/kg		Analyzed By: AB						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	10/12/2010	ND	187	93.7	200	13.2		
DRO >C10-C28	<10.0	10.0	10/12/2010	ND	192	96.1	200	3.60		

Surrogate: 1-Chlorooctane 98.4 % 70-130
 Surrogate: 1-Chlorooctadecane 110 % 70-130

Sample ID: 4 WALL COMP @ 10 X 30 (H020981-02)

Chloride, SM4500C1-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	640	16.0	10/07/2010	ND	416	104	400	0.00		
TPH 8015M		mg/kg		Analyzed By: AB						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	10/12/2010	ND	187	93.7	200	13.2		
DRO >C10-C28	<10.0	10.0	10/12/2010	ND	192	96.1	200	3.60		

Surrogate: 1-Chlorooctane 129 % 70-130
 Surrogate: 1-Chlorooctadecane 146 % 70-130

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	10/05/2010	Sampling Date:	10/05/2010
Reported:	10/13/2010	Sampling Type:	Soil
Project Name:	EME C-10 EOL (21/36)	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: BLENDED BACKFILL (H020981-03)

Chloride, SM4500C1-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	528	16.0	10/07/2010	ND	416	104	400	0.00		
TPH 8015M		mg/kg		Analyzed By: AB						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	10/12/2010	ND	187	93.7	200	13.2		
DRO >C10-C28	<10.0	10.0	10/12/2010	ND	192	96.1	200	3.60		
Surrogate: 1-Chlorooctane	101 %	70-130								
Surrogate: 1-Chlorooctadecane	120 %	70-130								

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- 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



CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325) 673-7020

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>Rice Operating Company</u>		BILL TO		ANALYSIS REQUEST											
Project Manager: <u>Bruce Baker</u>		P.O. #:													
Address: <u>122 W. Taylor</u>		Company:													
City: <u>Hobbs</u> State: <u>NM</u> Zip: <u>88240</u>		Attn:													
Phone #: <u>575-393-9174</u> Fax #: <u>575-397-1471</u>		Address:													
Project #: _____ Project Owner:		City:													
Project Name:		State: _____ Zip: _____													
Project Location: <u>EME C-10 FOL (21-36)</u>		Phone #:													
Sampler Name: <u>Dak Harris</u>		Fax #:													

FOR LAB USE ONLY		CIRAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV		SAMPLING		DATE	TIME	TPH	CL
Lab I.D.	Sample I.D.			GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE/COOL	OTHER					
<u>H20981-1</u>	<u>5 PT Bottom Comp @ 10x30</u>	<u>C</u>	<u>1</u>			<u>✓</u>				<u>✓</u>			<u>10/5/10</u>	<u>10:10</u>	<u>✓</u>	<u>✓</u>	
	<u>2 4 Wall Comp @ 10x30</u>	<u>C</u>	<u>1</u>			<u>✓</u>				<u>✓</u>			<u>10/5/10</u>	<u>10:40</u>	<u>✓</u>	<u>✓</u>	
	<u>3 Blended Backfill</u>	<u>C</u>	<u>1</u>			<u>✓</u>				<u>✓</u>			<u>10/5/10</u>	<u>11:48</u>	<u>✓</u>	<u>✓</u>	

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 the client for the analysis. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 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.

Relinquished By:	Date:	Received By:	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
	Time:		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By: <u>Dak Harris</u>	Date: <u>10/5/10</u>	Received By: <u>Jodi Henson</u>	REMARKS: <u>E-Mail Results TO:</u>	
Delivered By: (Circle One)	Time: <u>4:27</u>		<u>K Jones @ RiceSund.COM</u>	
Sampler - UPS - Bus - Other:	Sample Condition	CHECKED BY: <u>JTH</u>	<u>Baker " " "</u>	
	Cool Intact		<u>Kegans " " "</u>	
	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
	<input type="checkbox"/> Yes <input type="checkbox"/> No			

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

#26

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

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

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO: <i>925621</i>	EXPIRATION DATE: <i>9-27-12</i>
METER READING ACCURACY: <i>100</i>	

ACCURACY : +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
<i>EME</i>	<i>C-10 EOL</i>	<i>C</i>	<i>10</i>	<i>21</i>	<i>36</i>

SAMPLE ID	PID	SAMPLE ID	PID
<i>BOTTOM 5PT COMP</i>	<i>0.7</i>		
<i>Blended Backfill</i>	<i>0</i>		
<i>1/4 WALL COMP.</i>	<i>16.4</i>		

COPY

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

SIGNATURE: *Dab Amis*

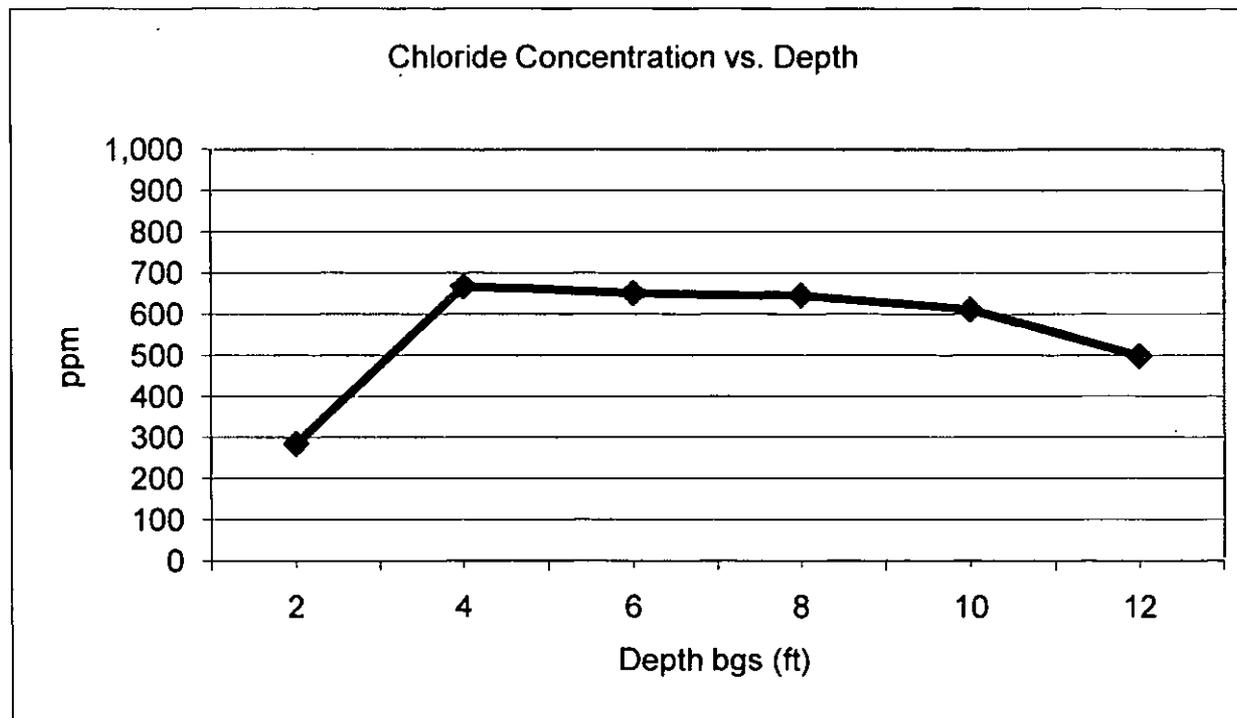
DATE: *10/5/10*

EME C-10 EOL

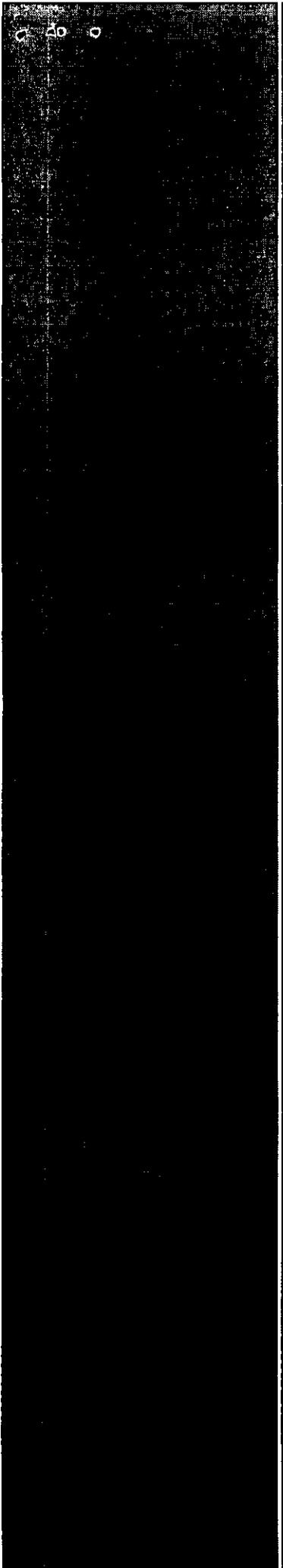
Unit 'C', Sec. 10, T21S, R36E

Backhoe samples at 5' south of the junction (source)

Depth bgs (ft)	[Cl] ppm
2	285
4	668
6	651
8	645
10	612
12	499



Groundwater = 200 ft



Revegetation Form and Photodocumentation

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 C-10 EOL						
U/L C	Section 10	Township T-21-S	Range R-36-E	County Lea	Latitude N32*49970550	Longitude W103*25591600
Contact Name: Hack Conder						
Email: hconder@rice-ecs.com						
Site size: 3,000 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 type="checkbox"/>	Bioremediated <input type="checkbox"/>	Imported <input checked="" type="checkbox"/>	Blended <input checked="" type="checkbox"/>	Depth (in):
Texture: Describe soil & subsoil:				
Soil prep methods: Rip <input type="checkbox"/>	Depth(in):	Disc <input checked="" type="checkbox"/>	Depth (in): 3"	Rollerpack <input type="checkbox"/>
Date completed: 10/27/2010				

3. Bioremediation

Fertilizer <input type="checkbox"/>	Hay <input type="checkbox"/>	Other <input checked="" type="checkbox"/> 6 Bags Restore Nhance
Type:		Describe: 4 Bags Pete Moss 2 Bags Potting Soil 1 Bag Manure
Lbs/acre:		

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 type="checkbox"/>	Prescribed mix <input type="checkbox"/>	Seed mix name: 3 lbs. Lea Co. Mix/3 lbs. Side Oats/3 lbs. Blue Grama	Seeding date: 4/3/2013
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:	
Number of photos:		The Seed Was Disked into the Soil	

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: 4/3/2013
Signature:		

EME C-10 EOL (1R427-360)

UL/C, Section 10, T21S, R36E



Tilling site, facing west

4/3/2013



Spreading amendments, facing east

4/3/2013



Seeding site, facing west

4/3/2013



Site complete, facing south

4/3/2013