# 1R-427-294

# APPROVALS

YEAR(S): 20/3

#### Hansen, Edward J., EMNRD

From: Hansen, Edward J., EMNRD

Sent: Tuesday, July 16, 2013 10:20 AM

To: Hack Conder (hconder@riceswd.com)

Cc: Leking, Geoffrey R, EMNRD; Laura Pena (Ipena@riceswd.com); Katie Jones

<kjones@riceswd.com> (kjones@riceswd.com); Scott Curtis (scurtis@riceswd.com)

Subject: Remediation Plan (1R427-294) Termination - ROC EME Jct K-15 Site

**RE: Termination Request** 

for the Rice Operating Company's

EME Jct K-15 Site

Unit Letter K, Section 15, T21S, R36E, NMPM, Lea County, New Mexico

Remediation Plan (1R427-294) 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). 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 (1R427-294) 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 EVED OCD

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

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 Jct. K-15 (1R427-294): UL/K, Sec. 15, 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 2009, ROC initiated work on the former K-15 junction box. The site is located in UL/K, Sec. 15, T21S, R36E. NM OSE records indicate that groundwater would likely be encountered at a depth of approximately 175 +/- feet. The site was delineated using a backhoe to collect soil samples at regular intervals, creating a 5x3x9 ft deep excavation. Each sample was field titrated for chlorides and field screened using a PID for hydrocarbons, resulting in low chloride concentrations. The 9 ft sample was sent to a commercial for analysis of chloride and TPH, resulting in a chloride concentration of 80 mg/kg and concentrations of gasoline range organics (GRO) and diesel range organics (DRO) below detectable limits. The excavation was backfilled with the excavated soil to ground surface and contoured to the surrounding area. On 2/25/2009, the site was seed with a blend of native vegetation. A junction box is no longer needed at the site.

On 5/6/2013, RECS personnel were on site to conduct surface restoration. Imported top soil was used to promote vegetative growth. A sample of the imported top soil was field titrated for chlorides and field screened using a PID for hydrocarbons, resulting in low concentrations of chloride and a PID reading of 11.4 ppm. A representative sample was taken to a commercial laboratory for analysis of chloride, resulting in a concentration

below detectable limits. 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 evapotranspiration 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** 

Hack Conder

Environmental Manager

enclosures

Site Maps

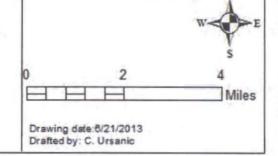
RICE *Operating Company* (ROC) 112 West Taylor Hobbs, NM 88240 Phone: (575) 393-9174 Fax: (575) 397-1471

100		8	9	_10	11	12	7	-8	9	10	-11	12	7	8	
		17	16	15	14	13	18	17	16	15	14	13	18	17	
		20	21	22 9S 36E	23	24	19	20	21 198 3	22 7E	23	24 M	19S	20	
		29	28	1000		25	30 Jan	29	28	27	26	25	30	29	
		32	33	34 0	35 hildress R		31	32	33	NUN 34	ENT,	N N 36	31	32	
-		5	4	3	2	Road	6	5	4	3	2 Billy Wa	1 Near Ra	6	5	
1		8	9	10	.11	12 W	7	8	9	10	11	12	7	8	
	1	17	16	15	14	13	18	17	16		14	13	18	17	
		20	21	22	23	24	19	20	20S	3/E 22	23	24	19	38E 20	
		29	28	1	Tulfy Coo	per Rd.	30	29	28	27	26	25	30	29	
		32.	33	34	35	36	31	32	33	34	35	36	31	32	
	1/5	4		2	1	6	5	Huy 17	3	2	1	6	5	2000	4
N.	8	9	10	11	12	7	8	9	10	11	12	7	8		
	17	16	15 21 S 35	14 E	13		218 31	5E 16	15EI	ME J	ct. K	15	21 S 37E		
	20	21	22	STATE OF	24	19	20	21	22	May 6	1000	19	20	21	
	29	28	27	26	25	30	29	28	27	26	25	30			
bi	ng	33	34	35	36	31	32	33	34 Hallis Coll	35 Earlie	36 Br Seegrap	31 iles LLC			recretion



# EME Jct. K-15

UL K Section 15 T-21-S R-36-E 1R427-294

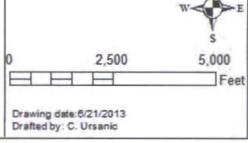






# EME Jct. K-15

UL K Section 15 T-21-S R-36-E 1R427-294



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

	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BUX DI	MENSIONS - FE	to bear 4
Eunice Monument Eumont (EME)	Jct. K-15	K	15	21S	36E	Lea	Length	Width	Depth
gaman (cinc)				-		-		Cintinucco	
LAND TYPE:	BLM	STATE_X	FEELA	NDOWNER .			OTHER_		
Depth to Grou	indwater	175	feet	NMOCD	SITE ASS	ESSMENT	RANKING SO	CORE:	0
								1187	
Date Started	1/13/	2009	_ Date Co	mpleted	1/20/2009	oct	) Witness	no	
Soil Excavated	5	cubic y	ards Ex	cavation Ler	ngth 5	Wid	th3	Depth	feet
Soil Dispose	0	cubic y	ards Of	fsite Facility	r	Va	Location	n/a	
NAL ANALYT	ICAL RE	SULTS:	Samp	ole Date	1/13/200	09	Sample De	pth	9 ft
DI ( ) ( D) ( ) ( )				Lear College	16.4	4.			
PH and Chloride I testi			t to NMOCD		roved lab a	and	CHLOR	IDE FIELD TI	ESTS
Sample	PID (fie	eld) I (ble	GRO	DRO	Chloride			Wante.	
	100 100 100	1.38	ng/kg	mg/kg	mg/kg		LOCATION	DEPTH	mg/kg
Location	ppm			The second secon			and the first of the control of	The second second	The second
			<10.0	<10.0	80		background	6"	120
SOURCE 9' GRA	B 2.1	1 .	<10.0	<10.0	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )			5'	120 90
SOURCE 9' GRA	B 2.1	1 .	<10.0	<10.0	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	ng	vertical delineation		
SOURCE 9' GRA	n of Remedi	al Action:	<10.0 This junction	<10.0	inated durin	-	vertical delineation trench at the	5'	90
SOURCE 9' GRA	n of Remedi	al Action:	This junction	<10.0 n box was elim unction box wa	ninated durings removed.		vertical delineation trench at the junction	5' 6'	90
eneral Description pipeline replacement	n of Remediant/upgrade pro	al Action: ogram. Afte	This junction or the former just to collect soil	<10.0  n box was elimunction box was samples at re	ninated durings removed,	als	vertical delineation trench at the	5' 6' 7'	90 90 120
eneral Description pipeline replacement investigation was conducing a 5x3x9-ft-description of the street investigation of the street inves	n of Remediant/upgrade pronducted using	al Action: ogram. Afte g a backhoe	This junction or the former just to collect soil to suggests love	<10.0  n box was elimunction box was samples at review concentration.	ninated durings removed, as removed, as removed, as a removed, as a removed as a re	als c	vertical delineation trench at the junction	5' 6' 7' 8'	90 90 120 120
eneral Description pipeline replacement investigation was conducing a 5x3x9-ft-deports and chloride control of the control of	n of Remediant/upgrade producted using eep excavation encentrations s	al Action: ogram. Afte g a backhoe n. Field dat similar to tha	This junction or the former just to collect soil as suggests love at of the backg	<10.0  n box was elimunction box was samples at revocamentration. The description of the control	ninated durings removed, egular intervals of organiceepest sam	als c	vertical delineation trench at the junction (source)	5' 6' 7' 8' 9'	90 90 120 120 150
eneral Description pipeline replacement investigation was conducing a 5x3x9-ft-doors and chloride control BGS, was sent to a	n of Remediant/upgrade producted using eep excavation encentrations sa commercial	al Action: ogram. After g a backhoe n. Field dat similar to that laboratory for	This junction of the former just to collect soil that a suggests love at of the backgor analysis of the suggests of the backgor analysis of the suggests of th	<10.0 n box was elimination box was samples at review concentration or control	ninated durings removed, as removed, as gular intervals of organicepest same PH which co	ple,	vertical delineation trench at the junction (source)	5' 6' 7' 8' 9'	90 90 120 120 150
Eneral Description of pipeline replacement investigation was conducing a 5x3x9-ft-dispors and chloride control BGS, was sent to assert to the extive vegetation and investigation and investigat	n of Remediant/upgrade producted using eep excavation incentrations is a commercial licavation to gro	al Action: ogram. Afte a a backhoe n. Field dat similar to the laboratory fo	This junction or the former just to collect soil to suggests love at of the backgor analysis of the and contours	<10.0 n box was elimention box was samples at revive concentration fround. The dechloride and Thed to the surround.	ninated durings removed, as removed, as removed, as gular intervents of organic eepest same PH which contains areas and areas and areas areas and areas area	ple,	vertical delineation trench at the junction (source)	5' 6' 7' 8' 9'	90 90 120 120 150
eneral Description pipeline replacement investigation was conducing a 5x3x9-ft-deports and chloride control to the extension of the extension	n of Remediant/upgrade producted using eep excavation incentrations is a commercial licavation to gro	al Action: ogram. Afte a a backhoe n. Field dat similar to the laboratory fo	This junction or the former just to collect soil to suggests love at of the backgor analysis of the and contours	<10.0 n box was elimention box was samples at revive concentration fround. The dechloride and Thed to the surround.	ninated during as removed, agular interval ns of organic eepest samped which containing area and rate.	ple, onfirmed lov	vertical delineation trench at the junction (source) v concentrations 2009, the site wa	5' 6' 7' 8' 9'  The excavate as seeded with	90 90 120 120 150 ed soil a blend of
eneral Description pipeline replacement investigation was conducing a 5x3x9-ft-deports and chloride control of BGS, was sent to a sereturned to the extension of the sereturned to the	n of Remediant/upgrade producted using eep excavation incentrations is a commercial licavation to gro	al Action: ogram. Afte a a backhoe n. Field dat similar to the laboratory fo	This junction or the former just to collect soil to suggests love at of the backgor analysis of the and contours	<10.0 n box was elimention box was samples at revive concentration fround. The dechloride and Thed to the surround.	ninated during as removed, as removed, as removed, as gular intervals of organic eepest samped which contains area and rate.	ple, onfirmed lov	vertical delineation trench at the junction (source)	5' 6' 7' 8' 9'  The excavate as seeded with	90 90 120 120 150 ed soil a blend of
eneral Description pipeline replacement investigation was conducing a 5x3x9-ft-deports and chloride control to the extension of the extension	n of Remediant/upgrade producted using eep excavation incentrations is a commercial licavation to gro	al Action: ogram. Afte a a backhoe n. Field dat similar to the laboratory fo	This junction or the former just to collect soil to suggests love at of the backgor analysis of the and contours	<10.0 n box was elimention box was samples at revive concentration fround. The dechloride and Thed to the surround.	ninated during as removed, as removed, as removed, as gular intervals of organic eepest samped which contains area and rate.	ple, onfirmed lov	vertical delineation trench at the junction (source) v concentrations 2009, the site wa	5' 6' 7' 8' 9'  The excavate as seeded with	90 90 120 120 150 ed soil a blend of
eneral Description pipeline replacement investigation was conducing a 5x3x9-ft-deport and chloride control BGS, was sent to a sereturned to the extive vegetation and investigation and investig	n of Remediant/upgrade producted using eep excavation incentrations is a commercial licavation to gross expected to	al Action: ogram. After g a backhoe n. Field dat similar to the laboratory for	This junction or the former just to collect soil to suggests love at of the backgor analysis of the and contours productive cap	<10.0 n box was elimination box was samples at revive concentration fround. The dechloride and The	ninated durings removed, as removed, as removed, as removed, as removed, as removed, as removed and removed and rate.	ple, onfirmed lov n. On 2/25/2	vertical delineation trench at the junction (source) v concentrations 2009, the site wa	5' 6' 7' 8' 9'  The excavate as seeded with	90 90 120 120 150 ed soil a blend of
eneral Description pipeline replacement investigation was conducing a 5x3x9-ft-dipors and chloride control BGS, was sent to a sereturned to the extive vegetation and investigation and investig	n of Remediant/upgrade producted using eep excavation incentrations is a commercial licavation to gross expected to	al Action: ogram. Afte g a backhoe n. Field dat imilar to the laboratory found surface return to a	This junction or the former just to collect soil to suggests love at of the backgor analysis of the and contours productive cap	<10.0  n box was elimunction box was samples at revivoncentration or concentration or conce	ninated durings removed, as removed, as removed, as removed, as removed, as removed, as removed and removed and rate.	ple, onfirmed lov n. On 2/25/2	vertical delineation trench at the junction (source)  v concentrations 2009, the site was results, PID (fig.	5' 6' 7' 8' 9'  The excavate as seeded with	90 90 120 120 150 ed soil a blend of
eneral Description pipeline replacement investigation was conducing a 5x3x9-ft-deports and chloride control of the extension	n of Remediant/upgrade producted using eep excavation incentrations is a commercial cavation to gross expected to	al Action: ogram. Afte g a backhoe n. Field dat imilar to the laboratory found surface return to a	This junction or the former just to collect soil to suggests love at of the backgror analysis of the and contours productive cap	<10.0 n box was elimination box was samples at revive concentration fround. The dechloride and The	ninated durings removed, as removed, as removed, as removed, as removed, as removed, as removed and removed and rate.	ple, onfirmed lov n. On 2/25/2	vertical delineation trench at the junction (source)  v concentrations 2009, the site was results, PID (fig.	5' 6' 7' 8' 9'  The excavate as seeded with eld) screenings	90 90 120 120 150 ed soil a blend of
eneral Description pipeline replacement investigation was conducing a 5x3x9-ft-deports and chloride control and the second to the extension of	n of Remediant/upgrade producted using eep excavation incentrations is a commercial cavation to gross expected to	al Action: ogram. After g a backhoe n. Field dat imiliar to the laboratory fe ound surface return to a g	This junction or the former just to collect soil to suggests love at of the backgror analysis of the and contours productive cap	<10.0 n box was elimination box was samples at revive concentration fround. The dechloride and The	ninated durings removed, as removed, as removed, as removed, as removed, as removed, as removed and removed and rate.	ple, onfirmed lov n. On 2/25/2	vertical delineation trench at the junction (source)  v concentrations 2009, the site was results, PID (fig.	5' 6' 7' 8' 9'  The excavate as seeded with eld) screenings	90 90 120 120 150 ed soil a blend of

### EME Jct. K-15





excavating the source, facing south

1/13/2009



1/13/2009



collecting a soil sample, facing south

1/13/2009



seeding backfilled site, facing south

2/25/2009

final excavation, facing north



ANALYTICAL RESULTS FOR RICE OPERATING COMPANY ATTN: ERIC GARRISON 122 W. TAYLOR HOBBS, NM 88240

Receiving Date: 01/13/09
Reporting Date: 01/19/09
Project Number: NOT GIVEN
Project Name: EME JCT K-15

Project Location: EME JCT K-15

Quality Control

True Value QC

Relative Percent Difference

% Recovery

COPY

GRO

422

500

84.4

4.7

Sampling Date: 01/13/09 Sample Type: SOIL

Sample Condition: COOL & INTACT

Sample Received By: ML Analyzed By: AB/HM

DRO

458

500

91.6

4.8

500

500

100

2.0

LAB NUMBER SAMPLE ID	(C <sub>8</sub> -C <sub>10</sub> ) (mg/kg)	(>C <sub>10</sub> -C <sub>28</sub> ) (mg/kg)	Ci* (mg/kg)
ANALYSIS DATE	01/17/09	01/17/09	01/14/09
H16675-1 SOURCE BTTM GRAB @ 9'	<10.0	<10.0	80
	1		
	-	1	

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; CI: Std. Methods 4500-CIB \*Analysis performed on a 1:4 w:v aqueous extract.

Chemist

01/19/09

ARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240

	(575) 393-2326 F	ax (575) 393-2	476												Lada	- 01	
ompany Nam	· Rice ofer	cating					BII	LL TO		1			ANAL	YSIS	REQUES	Т	
roject Manag	Rice OPE	rison				P.(	D. #;										
striness: /2	2W Table					Co	mpany:										
ty: 200	55	State: NN	Zip	8	3240	Aft	0:										
hone # 393	3.9134	Fax#: 397	-74	17/		Ad	dress:										
roject#:		Project Owner				Cit	y:			1		0					
oject Name:	EME JUT B	1-15				Sta	ute:	Zip;		7		6					
roject Locatio	Eric GARI	-15				Ph	one #:			12		(	(O)	^			
aurpler Name	Eric GARI	130n				Fa	x #:			H	- 1		1	0)			
C VECTORY			6	-	MATRIX	-	PRESERV	SAMPLI	NG	2		1			>	1	
-			OMP	S	er w		111			12	7			9			
Lab I.D.	Sample I	ID	B (C	NER	ATE		m ai			3	1			1 31		1	
Edu M.D.	Sample		0	MTAI	TEM.	E 2	COO			80	7	1		1			
			(G)P.	00 #	SOIL	H	S S S S S S S S S S S S S S S S S S S	DATE	TIME	30	V					-	
1166751	Source BAN	162609	6	1	1	1	1	1-13-09	14:00	X	X						
			-	-	1 1	_	-			-	-		-		-		
		-	-	-	- 11		1			-		-	-	-	-		
			-	-		+	1			-		-		-	-		
		-	-			-											
		-				-	1										
		7			1 1	1			1								
							t.										
		L			,	1	1.								1 5		
SCHOOL HAVE SUR	and Darmages Cacaner's lability and shoung most for magagande and any awar Cardina, be nept a for movement of confi-	Divine whistigavar spain by	deatha	d watered	it writes made in writing a	FUG 1808	rived by Cardmal v	edia. Zynn Df, nene	remitterious at a	pe sobscrip	le .	30 gays p	and think left libe		ac annum from th	eccounts mera in a original date of it	
	and an of it takes are the confirment	a of services hereunder by	Cardinal		sass of whather such cla	in is bee	sed upon any of th	a allow slated re	Phone Re	(P-	D		Add'l Pl				
100	5 -	1-13-09	in in	1	/-/	1	1/	1	Fax Result	11:	- CI	No	Add'l Fa				-
nece	arrison	330	De	4	sty	6	Jus			K	esul	15				1	
alinquished i	DY.	Date:	146	cylv	ed of						1	1	160	00:	0547	0/ 101	~
		Time:					A PART	100			DE	sake	1	PEIC	0000	d.con	
Jelivered B	v: (Circle One)		Ten	np.	Sample Cond		CHECK	(ED BY:			T	0,0	1.6	a Ric	eswe	4. Con	n
ampler - UP:	S Bus - Other:	Ni.			Y Yes	es	1//	18/3			0	ul c	1176	,	,,,,,,		
		111	-	-	] No L	ND.	100	11	1		-		-			-	

Transfer Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

# RICE OPERATING COMPANY

PHONE: (505) 393-9174 FAX: (505) 397-1471
PID METER CALIBRATION & FIELD REPORT FORM

ÇK.		١.
MODEL	-	
NO.		
j		

MODEL: PGM 7600

SERIAL NO: 110-013676

MODEL: PGM 7600

SERIAL NO: 110-013744

MODEL: PGM 7600 MODEL: PGM 7600 SERIAL NO: 110-12383 SERIAL NO: 110-012920 COPY

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO: 08-3425 EXPIRATION DATE: 03-29-09

FILL DATE: 02-29-08 METER READING ACCURACY: 100 PPm

ACCURACY: +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE
Em E	15-15	K	15	213	362

In Tal Source SAMPLEID		Buckersund SAMPLE ID	
SAMPLE ID	PID	SAMPLE ID	.PID
5	5.1	6 A1	0.0
6	2.7		
7.	1.8		I
8	1.4		
9	251	,	
			-
		,	1

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

SIGNATUE MC Barrison

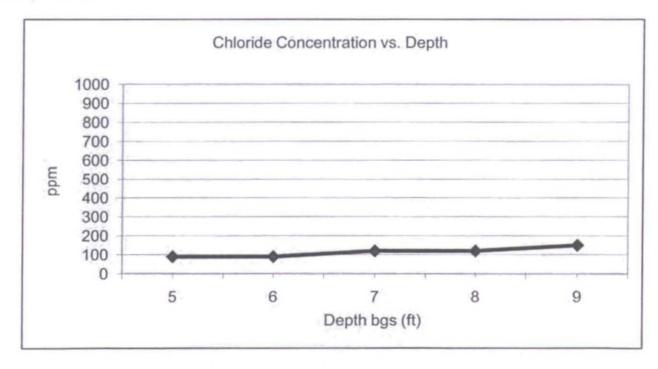
DATE: 1-13-09

# EME Jct. K-15

Unit 'K', Sec. 15, T21S, R36E

Backhoe samples at the junction (source)

Depth bgs (ft)	[CI] ppm
5	90
6	90
7	120
8	120
9	150



Groundwater = 175 ft



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 EME Jct. K-15 Site name: U/L Longitude Section Township Range County Latitude W103\*15.504 K 15 T-21-S R-36-E Lea N32\*28.275 Hack Conder Contact Name: Email: hconder@rice-ecs.com Site size: 40'x30' 1,200 square feet Map detail of site attached Additional information: 2. Soils \*Do not rip caliche subsoils; caliche rocks brought to the surface by ripping shall be removed. Salvaged from site X Bioremediated Imported 🖂 Blended X Depth (in): Texture: Sandy Describe soil & subsoil: Caliche and Sand Mix Soil prep methods: Rip 🛛 Depth(in): Disc 🛛 Depth (in): Rollerpack Date completed: 1/20/2009 3. Bioremediation Other 24 Bags Bio Nhance Fertilizer Hay \_ Type: Describe: 1 Bag Manure Lbs/acre: 2 Bags Garden Soil \*Attach seed bag tags to this form. Seed bag tags shall contain the site name and S-T-R. Custom seed mix X Prescribed mix 2Lbs, Lea Co. Mix, 2Lbs. Seed mix name: Seeding date: Race Horse Oats and 5/16/2013 2Lbs. Sudan Grass Broadcast X Method: Mechanical Seeder Soil conditions during seeding: Dry 🛛 Damp Wet Photos attached 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. Kyle Norman Title: Environmental Tech 5/16/2013 Signature:



May 08, 2013

KYLE NORMAN

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: EME JCT K-15

Enclosed are the results of analyses for samples received by the laboratory on 05/07/13 9:00.

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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> accredited certif.html.

Cardinal Laboratories is accreditated 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.

Celey D. Keene

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:

05/07/2013

Reported: Project Name: 05/08/2013

Project Number:

EME JCT K-15 NONE GIVEN

Project Location:

Chloride, SM4500CI-B

NOT GIVEN

Sampling Date:

05/06/2013

Sampling Type:

Soil

Sampling Condition:

\*\* (See Notes)

Sample Received By:

Jodi Henson

#### Sample ID: IMPORTED SOIL (H301077-01)

		110	January 1						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	05/08/2013	ND	416	104	400	3.77	

Analyzed By: DW

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim ansing, 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 whistoever 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 related only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keine



ND

#### **Notes and Definitions**

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

Analyte NOT DETECTED at or above the reporting limit

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 whistoever 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 related only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratonies.

Celey D. Keine

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	Rice Operating	,									3//	450.00		<b>3</b>				ANA	LYS	SIS	RE	QUE	ST			
Project Manage	RICE Operating							P.	0.#	t:							1			T		Π	Г	1		
Address:								Co	omp	any	:	*											1	1		1
ity:	State:	Zip	):					At	tn:										1					1		
hone #:	Fax #:	1					*	Ac	idre	ss:			10						1					-		
roject #:	Project Owne	r:						Ci	ty:						*	1.										1
roject Name:			-					St	ate:			Zip:	2			1									1	1
the state of the s	n: EME ICT K-15							Ph	none	#:		3			-			1.						1		
ampler Name:	Robert Egans		Œ		i.	×		Fa	x #:								1					1	1			
FOR LAB USE ONLY		Τ.	Г		M	ATRI	X	Ξ	PR	ESE	RV.	SAMPLI	NG	1		1.	.1							1		1
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP	# CONTAIN	GROUNDWATER	WASTEWATER	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE 5-6-13	TIME	1 41-												i
2	Traborne 2001	10	-		-	+	+	-	$\vdash$		-	0-6-15		-	-	-	-	+	+-	+	-	-	-	1	-	-
		+		$\vdash$	+	+	+		-		$\dashv$					+	-	-	ē ,	$\dashv$		-	$\vdash$	+	+-	-
		1			+	+	1	Sign.					74.		_	+	1	+	+	+			1	+		_
		T	$\vdash$			1	13	7100	1		3.							1	1	7				1		
	* * *					3	16	- 3		1									$\top$							
-					+0	T	-01	1	250				4				14.									
								1				10	a	. 2											12.0	
					-	1		. 1		12			*		-				-		*					
						-									L									,		
lyses. All claims includi vice. In no event shall C	nd Damages. Cardinafs liability and client's exclusive remedy for githose for negligence and eny office cause whatsoever shall be ardinal be liable for incidental or correspential damages, including go out of or related to the performance of services hereunder by	deeme	d walv ut limit L rega	ed unle ation, b	ss made usiness f whethe	in writ	ting and ptions,	d rece loss o	eived b	y Card or loss	final w	rithin 30 days after ofits incurred by o	r completion of t	the applicab aries, ise,	ble Y	/ee	□ No	[Add	I Pho	ne #						
Aulet) elinquished B	tess Maion	4	K	Wed I	le	- (	1	Ye	21	n	1	on	Fax Resu REMARK	it:	□ Y	es I	□ No	Add	I Fax	#:		aq	13 1	Ball	er	
	Time:											B	-													1
Delivered By	: (Circle One)				cool	Inta	act			CHI	K	ED BY:									101					

# RICE ENVIRONMENTAL CONSULTING & SAFETY

122 West Taylor Hobbs, NM 88240 PHONE: (505) 393-9174 FAX: (505) 397-1471 DID METER CALIDDATION & PIET D BERORT CORM

		PID METER CA	LIBRATIO	& FIELD KEPOKI F	OKM	
CK. MODEL NO.	x	MODEL: PGM 7300 MODEL: PGM 7300 MODEL: PGM 7320 MODEL: PGM 7300	SERIAL SERIAL	NO: 590-000508 NO: 590-000504 NO: 592-903318 NO: 590-000183		
		GAS COMPOSITION	: ISOBUTY	LENE 100PPM / AIR: 1	BALANCE	
LOT NO:	HAL-248-100	-1	40	EXPIRATION DATE:	7/01/2015	
		METER I	READING A	CCURACY: 100 PPM		
ACCURAG	CY: +/- 2%					
			CO	MPANY		
				Rice		
	SIT	E	UNIT	SECTION	TOWN SHIP	RANGE

SITE	UNIT	NIT SECTION TOWN SHIP				
EME Jct, K-15	K	15	T-21-S	R-36-E		

SAMPLE ID	PID	SAMPLE ID	PID
Coopers Pit Top Soil	11.4		
			3
	-		
			1

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

DATE: 5-7-13