1R-427-76

APPROVALS

YEAR(S):

Hansen, Edward J., EMNRD

From:	Hansen, Edward J., EMNRD
Sent:	Monday, June 03, 2013 2:25 PM
То:	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)</kjones@riceswd.com>
Subject:	Remediation Plan (1R427-76) Termination - ROC EME M-9-1 Site

RE: Termination Request for the Rice Operating Company's EME M-9-1 Site Unit Letter M, Section 9, T20S, R37E, NMPM, Lea County, New Mexico Remediation Plan (1R427-76) 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 May 22, 2013 (received May 30, 2013). The reports are 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 (1R427-76) 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.

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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

CERTIFIED MAIL RETURN RECEIPT NO. 7007 2560 0000 4569 9248

May 22, 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 MAY 3 0 2013

RECEIV

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

RE: Termination Request EME M-9-1 (1R427-76): UL/M, Sec. 9, T20S, R37E RICE Operating Company – Eunice Monument Eumont SWD System

Mr. Hansen:

Rice Operating Company (ROC) is the service provider (agent) for the EME Saltwater Disposal (SWD) System and has no ownership of any portion of the pipeline, well, or facility. The System is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis.

Background

In 2002, ROC initiated work on the former M-9-1 junction box. The site is located in UL/M, Sec. 9, T20S, R37E. NM OSE records indicate that groundwater would likely be encountered at a depth of approximately 18 +/- feet. On April 2, 2002, a monitoring well (MW-1) was installed a few feet south of the former junction boxes to further access if groundwater was impacted.

Excavation operations began with the removal of the junction boxes according to the Redwood Tank Replacement/Closure Plan for EME SWD Site M-9, including M-9-1, on June 19, 2002. After the former junction box was removed, the site was delineated using a backhoe to collect soil samples at regular intervals, creating a 110x100x20 ft deep excavation. Each sample was field titrated for chlorides, resulting in low concentrations. Representative composite samples of the excavation bottom and the excavation walls were sent to a commercial for analysis of chloride, TPH and BTEX, resulting in a sidewall chloride concentration of 245 mg/kg and concentrations of gasoline range organics (GRO), diesel range organics (DRO) and BTEX below detectable limits. The bottom composite resulted in a chloride concentration of 95 mg/kg and concentrations of GRO, DRO and BTEX below detectable limits. The site was backfilled to 4 ft below

ground surface (BGS) where a compacted red-bed clay layer was installed and density tested. The clay layer will provide a barrier that will inhibit the downward migration of chlorides to groundwater. The excavation was backfilled with remediated soil to ground surface and contoured to the surrounding area. The remediated soil was tested in 3 ft lifts, resulting in low concentrations of chloride. A new, water-tight junction box was built over the same location within an active facility; therefore, seeding is not necessary.

Due to the horizontal extent of the excavation, MW-1 was lost and a replacement monitor well (MW-1A) was installed adjacent to the southeast corner of the excavated area. From 2003 to 2007, six additional monitor wells were installed under the Stage 1 Abatement Plan for M-9 SWD (AP-65) and have since been plugged and abandoned.

On July 24, 2009, a termination request was submitted to NMOCD for the M-9 SWD facility site, which is inclusive of M-9-1, based on chloride concentrations in the vadose zone of all borings, monitoring wells, and excavations averaging less than 250 mg/kg, which is representative of background levels. The excavation, backfilling, and installation of a clay layer performed by ROC mitigated any potential threat of constituents of concern (BTEX, chlorides, or TDS) from the area into the vadose zone or groundwater. Groundwater quality conditions on site are at or near background levels and six years of groundwater monitoring have supported the conclusions herein. NMOCD approved the termination request on September 22, 2009.

The junction box site location map, area map, final report, laboratory analysis and current 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.

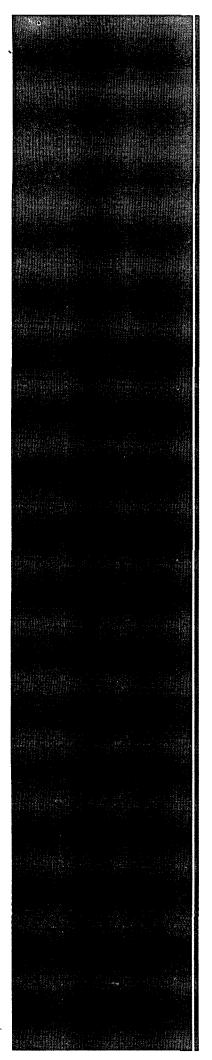
Please contact me at (575)393-9174 if you have any questions or wish to discuss this site. Thank you for your time and consideration.

Sincerely, RICE Operating Company

Hack Conder Environmental Manager

RECEIVED OCD

enclosures



Site Maps

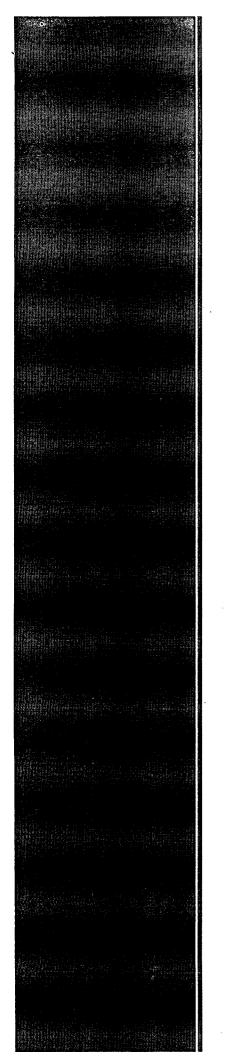
RICE *Operating Company* (ROC) 112 West Taylor Hobbs, NM 88240 Phone: (575) 393-9174 Fax: (575) 397-1471

Site Location Map

20 2	1	22	23	24	19	20	21	22	23	24	19 20
29 2	8	27	26 2	25	30	29	28	27	1	25	30 29
	19	95 36E		6.00	Jcl	322	Monume		6	and and a second	195 38E
32 3		34 Idress Rd	or a subscription of the Real Property of	MO 36	NUME	NT, NM 32	19S 33	37E	35	36	31 32
5				Maddox Road	6	5	ia i	3	2 Billy W	1. alker Rd.	6 5
8		in i		12 4	7	,	EME	10 M-9-1	II A	12	7 8
10 1	6 20	15 05 36E	14	13	18	-	16 20S	15 37E	14	.43	18 17 20S 38E
20 2	234 -	22	23	24	19	20		22	23	24	19 20
*		77-	Tuffy Co	25	30	29		27	28	25	30 29
32	66	34.	35	36	31	32	- 28	34	35	36	31 32
0 4		2	1	AL B	5	a Hwy 17	5	N	k	5	5
8 9	10	11	12	7		9	10	- ai	12	7	8
17 18	21S 3 15	14	13 HV	18 vy 176	17	16	1S 36E 15	14	13		S 37E 17
20 21	22	23	24	19	20	21	22	23 Hurk 8	24	19	20
29 28	27	26	25	30	29	28	21	26	2	30	29
		B.S				M-9 27-7				2	W E S
CONSULT	ING &	SAFETY	LLE		T20	SECTION S, R37E DUNTY,	Ξ	0 ELE Drawi	1 	2 Miles	5

Area Map





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 LOC	ATION					
SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUN	the second s		ENSIONS - F	
EME	M-9-1	м	9	205	37E	LEA	Lengt	h	Width	Depth
LAND TYPE: E	BLM\$	STATE	FEE L/	NDOWNER	\$&W	CATTLE	<u>со</u> от	HER		
Depth to Grour	ndwater	18	feet	NMOCD	SITE ASSE	essmen	NT RANKIN	GSC	ORE:	20
Date Started	06/19/	2002	Date Co	mpleted	09/09/2002	00	D Witness		YES	
Soil Excavated	8000	cubic yai	rds Exa	cavation Le	ngth <u>110</u>	<u> </u>	/idth <u>100</u>		Depth	20feet
Soil Disposed		cubic yai	rds Of	fsite Facility			Loca	tion	·· <u>·························</u>	
FINAL ANALY	TICAL RI	ESULTS	S: Sampl	e Date	09/09/2	:002	Sample	e Depi	th	_20
Pr	ocure 5-poin BTEX and C	hloride lab	oratory test		pleted by us	ing an a	pproved lat			
Sample Location	Benzene mg/kg		uene E g/kg	thyl Benzene mg/kg	Total Xylen mg/kg	es	GRO mg/kg		DRO mg/kg	Chlorides mg/kg
SIDEWALLS	< 0.025		025	<0.025	< 0.025		<10	·	<10	245
BOTTOM	< 0.025	<0.	025	<0.025	< 0.025		<10		<10	95
General Descriptio				box was locate			СН	Lori	DE FIELD TI	ESTS
taken form the M-9 SW	D Facility reme	diation site.	The site was e	xcavated to 20'	bgs and		LOCATIC	N	DEPTH	mg/kg
then backfilled with 4' of	f clean overburg	den soil. A co	ompacted red-	bed clay liner w	vas installed		SIDEWAL	LS	13'	260
and density tested. The	e excavation wa	s backfilled w	vith remediated	d soil. The rem	ediated soil wa	25	BOTTO	И	20'	100
tested in 3' lifts. A moni	itor well was ins	talled to sam	ple groundwat	er constituents.	. Any remainin	g	4' fill above	gw	16'	220
hydrocarbon will natura	lly attenuate.						1st lift above	liner	12'	310
							2nd lift		9'	350
							3rd lift		6'	320
							4th lift		3'	360
							Surface		0'	471
						· -				

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

DATE	October 2, 2002	PRINTED NAME	D. E. Anderson
SIGNATURE	Cludenoz		Project Leader - Environmental

ANALYTICAL REPORT

Prepared for:

LOGAN ANDERSON RE ENVIRONMENTAL P.O. BOX 13418 ODESSA, TX 79768

Project:	Rice
PO#:	· · ·
Order#:	G0204401
Report Date:	09/04/2002

<u>Certificates</u> US EPA Laboratory Code TX00158

12600 West I-20 East, Odessa, TX 79765 Ph: 915-563-1800

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ENVIRONMENTAL LAB OF TEXAS SAMPLE WORK LIST

RE ENVIRONMENTAL P.O. BOX 13418 ODESSA, TX 79768 366-0804

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Order#: G0204401 Project: Project Name: Rice Location: M-9 EME

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The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

			Date / Time	Date / Time		
Lab ID:	<u>Sample :</u>	Matrix:	Collected	Received	Container	Preservative
0204401-01	Bottom Composite @20'	SOIL	8/28/02 15:00	8/29/02 16:30	4 oz Giass	Ice
La	b Testing:	Rejected: No	Tem	ıp: 0.5C	-	
	8015M 8021B/5030 BTEX					
	Chloride					

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ENVIRONMENTAL LAB OF TEXAS ANALYTICAL REPORT

LOGAN ANDE RE ENVIRONM P.O. BOX 13418 ODESSA, TX 7	IENTAL			Order#: Project: Project Nar Location:	G0204 ne: Rice M-9 E			
Lab ID:	0204401-01							·,
Sample ID:	Bottom Composite	@20'						. <i>.</i>
				8015M				
	Method	Date	Date	Sample	Dilution			
	Blank	Prepared	Analyzed	Amount	Factor	Analyst	Method	
			8/30/02	1	1	СК	8015M	
						:		
		Parameter		Resu mg/k		RL		
	G	BRO, C6-C12		<10.0	0	10.0		

8021B/5030 BTEX

<10.0

<10.0

10.0

10.0

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution Factor	Analyst	Method
0003022-02		9/1/02 9:30	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	<0.025	0.025
Toluene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%	
aaa-Toluene	106%	80	120
Bromofluorobenzene	119%	80	120

Approval: Cilk D. Keene 9/5/02

Raland K. Tuttle, Lab Director, QA Officer Celey D. Keene, Org. Tech. Director Jeanne McMurrey, Inorg. Tech. Director Sandra Biezugbe, Lab Tech.

Date

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

DRO, >C12-C35

TOTAL, C6-C35

Page 1 of 1

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12600 West I-20 East, Odessa, TX 79765 Ph: 915-563-1800

Sara Molina, Lab Tech.

ENVIRONMENTAL LAB OF TEXAS ANALYTICAL REPORT

LOGAN ANDE RE ENVIRON P.O. BOX 1341 ODESSA, TX	MENTAL 8		Ordern Projec Projec Locatio	t: t Name:	G0204401 Rice M-9 EME	· -	•	
Lab ID: Sample ID:	0204401-01 Bottom Composite @20'		·	;		-		
Test Parar Parameter	neters	Result	Units	Dilutic <u>Facto</u>	or <u>RL</u>	Method	Date Analyzed	<u>Analyst</u>
Chloride	· _ ·	94.5	mg/kg]	20	9253	9/4/02	SB

9/5/02 Approval: Date

Raland K. Tuttle, Lab Director, QA Officer Celey D. Keene, Org. Teck. Director Jeanne McMurrey, Inorg. Tech. Director Sandra Biezugbe, Lab Tech. Sara Molina, Lab Tech.

N/A = Not Applicable RL = Reporting Limit

Page 1 of 1

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ENVIRONMENTAL LAB OF TEXAS QUALITY CONTROL REPORT

8015M

Order#: G0204401

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0003018-02			<10.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0204400-04	198	952	1124	97.3%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0204400-04	198	952	1144	99.4%	1.8%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0003018-05		1000	1030	103.%	

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ENVIRONMENTAL LAB OF TEXAS QUALITY CONTROL REPORT 8021B/5030 BTEX

Order#: G0204401

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0003022-02			<0.025		
Ethylbenzene-mg/kg		0003022-02			<0.025		
Toluene-mg/kg		0003022-02			<0.025		······
p/m-Xylene-mg/kg		0003022-02	· ·		<0.025		
o-Xylene-mg/kg		0003022-02		·	<0.025		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Велzene-mg/kg		0204388-07	0	0.1	0.089	89.%	· <u>····</u>
Ethylbenzene-mg/kg		0204388-07	0	0.1	0.090	90.%	
Toluene-mg/kg	· · · · · · · · · · · · · · · · · · ·	0204388-07	0	0.1	0.091	91.%	······································
p/m-Xylene-mg/kg	· · · · · · · · · · · · · · · · · · ·	0204388-07	0	0.2	0.188	94.%	
o-Xylene-mg/kg	· · · ·	0204388-07	0	0.1	0.091	91.%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0204388-07	0	0.1	0.094	94.%	5.5%
Ethylbenzene-mg/kg		0204388-07	0	0.1	0.095	95.%	5.4%
Toluene-mg/kg		0204388-07	0	0.1	0.097	97.%	6.4%
p/m-Xylene-mg/kg	·.	0204388-07	0	0.2	0.198	99.%	5.2%
Yylene-mg/kg		0204388-07	.0	0.1	0.095	95.%	4.3%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0003022-05		0.1	0.096	96.%	
Ethylbenzene-mg/kg		0003022-05		0.1	0.097	97.%	
Toluene-mg/kg		0003022-05		0.1	0.098	98.%	
o/m-Xylene-mg/kg		0003022-05		0.2	0.201	100.5%	
o-Xylene-mg/kg		0003022-05		0.1	0.097	97.%	

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ENVIRONMENTAL LAB OF TEXAS QUALITY CONTROL REPORT

Test Parameters

Order#: G0204401

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0003049-01	· · · · · · · · · · · · · · · · · · ·		<20.0	†	·····
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0204401-01	94.5	667	756	99.2%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0204401-01	94.5	667	744	97.4%	1.6%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0003049-04		5000	· 4960	99.2%	

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Envi mental Lab of Texas 12600 West I-20 East Odessa, Texas 79763 Phone: 915-563-1800 A Fax: 915-563-1713																	_					QUES			
Project Manager: Ponnie Andle	55m				_						Pr	ojec	t Na	me: _	•	Ľ	\overline{i}	2							
Project Manager: Ponnie Ande Company Name RE Environ me	entral_									•		٩r	.o}ec	:t #:_											
Company Address:			•								Į	Proj	ect L	.00;		N	7-	- 9		E	p.	1Ĕ	•		
City/State/Zip:														-							_				-
		5 N													_										_
Telephone No:		Fax No:																							
Sampler Signature:		······································														· .	Anal	yze	For:]	
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		· · · · · · · · · · · · · · · · · · ·	r		Pre	serva	live			Mati	ix		Τ				1	1	1						
LAB# ((ab use only))	Date Sampled	Time Sampled	No. of Containers	Ice	HNO3	HOEN	H ₂ SO ₄	Nans Other (Specify)	Water	Studge	Soll Other / snarl[v):	TPH: 418.1 (8015M) 1005 1005	Calions (Ca, Mg, Na, K)	Anians (cl)SO4, CO3, HCO3)	SAR / ESP / CEC	Melals: As Ag Ba Cd Cr Pb Hg S	V dialines Semivotatiles	BTEX 80218/5030	RCI	N.O.R.M.	Total Gamma			RUSH TAT (Pre-Schedule)	Standard 1A1
DROSSION Bottom Composite @20'	8-28-02	3:00 P	1	λ	<u>.</u>						V	X		X				X	3						7
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Special Instructions	-													107	minia	10.00			- 	2248	#123 a	N/5/15	SAUNT	1177222	
Fax Results to D	onnie A	tudars	~ ~										•	Opt less					ecel				が出		
Relinquished by: Date Time Degu Chills 8-29-02 4:30	Received by:	100 5			·				D	ate		Th	me			816) 1		staff.	st in	11-14	Sill's	学习行			
Relinquished by: Dale Time	Received by E	The M		Uð	iz l	2			2 2 2		7	TI 16	ne 1 30					日本	AC.			95			

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ANALYTICAL REPORT

Prepared for:

LOGAN ANDERSON RE ENVIRONMENTAL P.O. BOX 13418 ODESSA, TX 79768

 Project:
 Rice

 PO#:
 G0204422

 Order#:
 09/06/2002

Certificates US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS I, LTD.

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ENVIRONMENTAL LAB OF TEXAS SAMPLE WORK LIST

RE ENVIRONMENTAL P.O. BOX 13418 ODESSA, TX 79768 366-0804 Order#:G0204422Project:Project Name:Location:M-9

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

Lab ID:	Sample :	<u>Matrix:</u>	<u> </u>	Date / Time <u>Collected</u>	Date / Ti	d <u>Containe</u>	r	Preservative
0204422-01	5 pt. Wall Comp. @ 13'	SOIL		8/30/02 15:00	9/3/02 11:30	4 oz glass		Ice
La	<u>ab Testing:</u>	Rejected:	No	Ten		· •		
	8015M							
	8021B/5030 BTEX							
	Chloride			<u></u>			· · · · · · · · · · · · · · · · · · ·	
0204422-02	4 pt. Bottom Comp. @ 16'	SOIL		8/30/02 15:00	9/3/02 11:30	· 4 oz glass	· ·	Ice
<u>La</u>	ib Testing:	Rejected:	No	Tem	p: 16.5 C		•	
	8015M			x				
	8021B/5030 BTEX							
·	Chloride	ă.						

ENVIRONMENTAL LAB OF TEXAS I, LTD.

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ENVIRONMENTAL LAB OF TEXAS ANALYTICAL REPORT

LOGAN ANDER RE ENVIRONM P.O. BOX 13418 ODESSA, TX 79	ENTAL			Order#: Project: Project Na Location:		G0204 Rice M-9	4422		
Lab ID:	0204422-01					`			
Sample ID:	5 pt. Wall Comp	. @ 13'					•		
				8015M		•			
	Method <u>Blank</u>	Date Prepared	Date <u>Analyzed</u>	Sample <u>Amount</u>		lution actor	Analyst	Method	
			9/3/02	1		1	CK	8015M	
		Parameter		Res mg/	kg		RL		
		GRO, C6-C12		<10			10.0		
		DRO, >C12-C35		<10			10.0		•
		TOTAL, C6-C35		<10	.0		10.0		
	Method <u>Blank</u> 0003053-02	Date <u>Prepared</u>	8021B Date <u>Analyzed</u> 9/5/02 13:19	2/5030 BTE. Sample <u>Amount</u> 1	Dili <u>Fa</u>	ution <u>ctor</u> 25	<u>Analyst</u> CK	<u>Method</u> 8021B	
	·	Parameter	<u> </u>	Rest mg/ł			RL	· .	
		Benzene		<0.0	25		0.025		
		Ethylbenzene		<0.02			0.025		
		Toluene		<0.02	25		0.025		

Surrogates	% Recovered	QC Li	mits (%)
aaa-Toluene	114%	80	120
Bromofluorobenzene	115%	80	120

< 0.025

< 0.025

0.025 0.025

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

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p/m-Xylene

o-Xylene

12600 West I-20 East, Odessa, TX 79765 Ph: 915-563-1800

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

LOGAN ANDERS RE ENVIRONMEN P.O. BOX 13418 DDESSA, TX 7970	NTAL			Order#: Project: Project Name: Location:	G0204422 Rice M-9		
Lab ID:	0204422-02						
Sample ID:	4 pt. Bottom Con	ap. @ 16'					
				8015M		•	
	Method	Date	Date	Sample D	ilution		
	Blank	Prepared	Analyzed	Amount F	factor Analys	t Method	
			9/3/02	1	1 CK	8015M	
·		Parameter		Result mg/kg	RL		
		GRO, C6-C12		<10.0	10.0		
		D.D.O. 010 000		. 50.3	10.0		
	· .	DRO, >C12-C35	. •				
		TOTAL, C6-C35		50.3 8/5030 BTEX	10.0		
			8021E Date <u>Analyzed</u>	50.3 B/5030 BTEX Sample Di	10.0 Iution actor <u>Analyst</u>	Method	
	Method	Date <u>Prepared</u>	Date	50.3 S/5030 BTEX Sample Di Amount Fr	lution	Method 8021B	
	Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u> 9/5/02	50.3 8/5030 BTEX Sample Di <u>Amount</u> Fr 1 Result	lution <u>actor Analyst</u>		
	Method <u>Blank</u> 0003053-02	TOTAL, C6-C35 Date <u>Prepared</u>	Date <u>Analyzed</u> 9/5/02	50.3 50.3 5030 BTEX Sample Di <u>Amount</u> Fr 1	lution <u>actor Analyst</u> 25 CK		
	Method <u>Blank</u> 0003053-02	Date <u>Prepared</u> Parameter	Date <u>Analyzed</u> 9/5/02	50.3 B/5030 BTEX Sample Di <u>Amount</u> Fr 1 Result mg/kg	lution actor <u>Analyst</u> 25 CK RL		
	Method <u>Blank</u> 0003053-02	Date <u>Prepared</u> Parameter Benzene	Date <u>Analyzed</u> 9/5/02	Solution States	lution actor <u>Analyst</u> 25 CK RL 0.025		
	Method <u>Blank</u> 0003053-02	Date <u>Prepared</u> Parameter Benzene Ethylbenzene	Date <u>Analyzed</u> 9/5/02	50.3 50.3 50.3 50.3 50.3 Sample Di Amount Fr 1 Result mg/kg <0.025 <0.025	lution actor <u>Analyst</u> 25 CK RL 0.025 0.025		
	Method <u>Blank</u> 0003053-02	Date Prepared Parameter Benzene Ethylbenzene Toluene	Date <u>Analyzed</u> 9/5/02	50.3 2/5030 BTEX Sample Di Amount Fr 1 Result mg/kg <0.025	lution actor <u>Analyst</u> 25 CK RL 0.025 0.025 0.025		
	Method <u>Blank</u> 0003053-02	Date <u>Prepared</u> Parameter Benzene Ethylbenzene Toluene p/m-Xylene o-Xylene	Date <u>Analyzed</u> 9/5/02 14:25	50.3 8/5030 BTEX Sample Di Amount Fr 1 Result mg/kg <0.025	Analyst actor Analyst 25 CK RL 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025		
	Method <u>Blank</u> 0003053-02	Date <u>Prepared</u> Parameter Benzene Ethylbenzene Toluene p/m-Xylene	Date <u>Analyzed</u> 9/5/02 14:25	50.3 8/5030 BTEX Sample Di Amount Fr 1 Result mg/kg <0.025	Analyst actor Analyst 25 CK RL 0.025 0.025 0.025 0.025 0.025 0.025 0.025 10.025 0.025 10.025 0.025 10.025 0.025		

Raland K. Tuttle, Lab Director, QA Officer Celey D. Keene, Org. Tech. Director Jeanne McMurrey, Inorg. Tech. Director Sandra Biezugbe, Lab Tech. Sara Molina, Lab Tech.

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

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Date

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ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

LOGAN ANDE RE ENVIRONN P.O. BOX 13412 ODESSA, TX	MENTAL 8		Order Projec Projec Locati	t: t Name: R	50204422 lice 1-9			
Lab ID: Sample ID:	0204422-01 5 pt. Wall Comp. @ 13'							
Test Param Parameter Chloride	ameters	<u>Result</u> 245	<u>Units</u> mg/kg	Dilution <u>Factor</u> 1	<u>RL</u> 20	<u>Method</u> 9253	Date <u>Analyzed</u> 9/4/02	<u>Analyst</u> SB
Lab ID: Sample ID:			,	· · · ·	e."			
Test Param Parameter	neters	Result	Units	Dilution <u>Factor</u>	<u>RL</u>	Method	Date Analyzed	<u>Analyst</u>
Chloride		354	mg/kg	1	20	9253	9/4/02	SB
				Celey D. Ko Jeanne McM	eene, Org. T Aurrey, Inor rugbe, Lab T		cer D	9-06-0 ate

RL = Reporting Limit N/A = Not Applicable

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ENVIRONMENTAL LAB OF TEXAS QUALITY CONTROL REPORT

8015M

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Order#: G0204422

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0003048-02			<10.0		
CONTROL SOIL	LAB-ID #	Sample Concentr.	Spike : Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0003048-03		952	1003	105.4%	
CONTROL DUP	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0003048-04		952	992	104.2%	1.1%
SRM SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result.	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0003048-05	1	1000	1040	104.%	

ENVIRONMENTAL LAB OF TEXAS I, LTD.

ENVIRONMENTAL LAB OF TEXAS QUALITY CONTROL REPORT 9021P/5020 PTEY

8021B/5030 BTEX

Order#: G0204422

BLANK	······································		Sample	Spike	QC Test	Pat (9/)	
	SOIL	LAB-ID #	Concentr.	Concentr.	Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0003053-02		· · · · · · · · · · · · · · · · · · ·	<0.025		
Ethylbenzene-mg/kg		0003053-02			<0.025		
Toluene-mg/kg		0003053-02		1	<0.025		
p/m-Xylene-mg/kg	· · · · · · · · · · · · · · · · · · ·	0003053-02			<0.025		
o-Xylene-mg/kg		0003053-02	-		<0.025		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0204422-01	0	0.1	0.093	93.%	
Ethylbenzene-mg/kg		0204422-01	0	0.1	0.095	95.%	
Foluene-mg/kg		0204422-01	0	0.1	0.095	95.%	
/m-Xylene-mg/kg	· · · · · · · · · · · ·	0204422-01	. 0	. 0.2	0.196	98.%	• • • • • • • • • • • • • • • • • • • •
-Xylene-mg/kg		0204422-01	0	0.1	0.095	95.%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0204422-01	0	0.1	0.094	94.%	1.1%
Ethylbenzene-mg/kg		0204422-01	0	0.1	0.096	96.%	1.%
foluene-mg/kg		0204422-01	0	0.1	0.096	96.%	1.%
o/m-Xylene-mg/kg	····	0204422-01	0	0.2	0.198	99.%	1.%
Cylene-mg/kg		0204422-01	0	0.1	0.096	96.%	1.%
.RM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0003053-05	· · · · · · · · · · · · · · · · · · ·	0.1	0.105	105.%	
Ethylbenzene-mg/kg		0003053-05		0.1	0.105	105.%	
oluene-mg/kg		0003053-05		0.1	0.108	108.%	
/m-Xylene-mg/kg	***	0003053-05		0.2	0.215	107.5%	
-Xylene-mg/kg		0003053-05		0.1	0.104	104.%	

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ENVIRONMENTAL LAB OF TEXAS QUALITY CONTROL REPORT

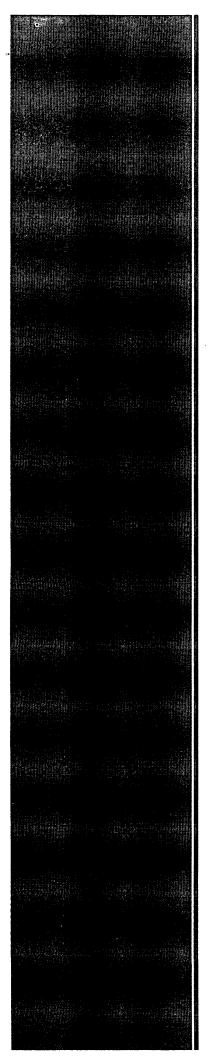
Test Parameters

Order#: G0204422

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0003050-01			<20.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0204410-15	5320	5000	10300	99.6%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0204410-15	5320	5000	10200	97.6%	1.%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0003050-04	· · · · · · · · · · · · · · · · · · ·	5000	4960	99.2%	

ENVIRONMENTAL LAB OF TEXAS I, LTD.

500 West I-20 East essa, Texas 79763	۲ م	one: 915-563- ax: 915-563-	713									01	IAIN OI	000			/	2	,,				•		
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Sampler Signal		<u></u> .		· · · · · · · · · · · · · · · · · · ·														Analy	ze F	or:				1	
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1122				pled	bled	ainers					5			15M JIDOS	Cations (Ca, Mg. Na, K)	1, coo, neoo	Melais: As Ag Ba Cd Cr Pb Hg		030					RUSH TAT (Pre-Schedule)	 ta
02.04422				Date Sampled	Time Sampled	No. of Containers		-	T		Other (Specify)		Soil Diner (energiv	TPH: 418.1 8	Calions (Ca, Mg. Na,	SAR / ESP / CEC	s: As Ag	Volatites Semivolatites	BTEX 80218/5030	Þ	otal Gamma			H TAT Hard TA	daro 1,
AB # (lab use only)		CODE				ź	빌	PH PH	NaOH	H ₂ SO ₄ Nane	ğ	Vati Slud	Soil	TPH	Calio	SAR	Metal	Volaliles Semivola	BTEX	RCI N.O.R.M	Total			RUS	Stan
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Current Photodocumentation

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

EME M-9-1 (1R427-76) UL/M, Section 9, T20S, R37E



Facing north

3/26/2013



Facing south

3/26/2013