1R - 427 - 38

APPROVALS





Hansen, Edward J., EMNRD

From:	Hansen, Edward J., EMNRD
Sent:	Wednesday, January 23, 2013 9:35 AM
То:	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)</kjones@riceswd.com>
Subject:	Remediation Plan (1R427-38) Termination - ROC EME Felton 'A' EOL Site

RE: Termination Request for the Rice Operating Company's EME Felton 'A' EOL Site Unit Letter F, Section 28, T21S, R36E, NMPM, Lea County, New Mexico Remediation Plan (1R427-38) 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 January 11, 2013 (received January 15, 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 (1R427-38) 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.

1

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 8746

January 11, 2013

ŝ

RECEIVED

Mr. Edward Hansen New Mexico Energy, Minerals, & Natural Resources Oil Conservation Division, Environmental Bureau 1220 S. St. Francis Drive Santa Fe, New Mexico 87505 JAN 1 0 2013

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

RE: Termination Request

EME Felton 'A' EOL (1R427-38): UL/F Sec. 28, 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 2003, ROC initiated work on the former Felton 'A' EOL junction box. The site is located in UL/F, Sec. 28, T21S, R36E. NM OSE records indicate that groundwater would likely be encountered at a depth of approximately 147 +/- feet. The site was delineated using a backhoe to collect soil samples at regular intervals, creating a 20x15x12 ft deep excavation. Each sample was field titrated for chlorides and field screened using a PID for hydrocarbons. The excavated soil was blended on site and representative composite samples of the excavation bottom, the excavation walls, and the remediated backfill were sent to a commercial laboratory for analysis of chloride and TPH, resulting in a sidewall chloride concentration of 320 mg/kg and concentrations of gasoline range organics (GRO) and diesel range organics (DRO) below detectable limits. The bottom composite resulted in chloride concentrations of 368 mg/kg and GRO and DRO concentrations below detectable limits. The remediated backfill resulted in a chloride concentration of 64 mg/kg kg and GRO and DRO concentrations below detectable limits. The remediated backfill was returned to the excavation to ground surface and contoured to the surrounding area. Due to the proximity to the facility and the road, the site was not seeded but is expected to return to productive capacity at a normal rate.

The junction box site location map, final report, photodocumentation, PID sheet, laboratory analysis, and current site photodocumentation are attached.

Recommendations

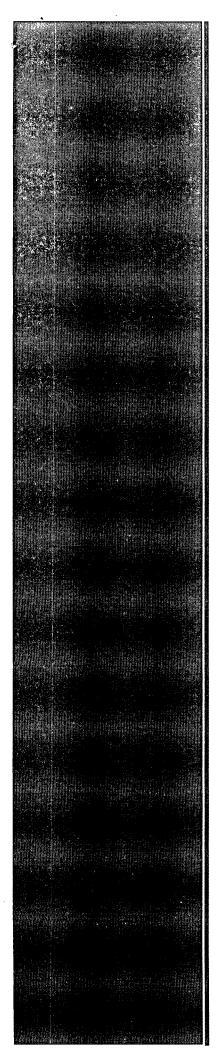
Site investigation demonstrates that residual chloride and hydrocarbons in the vadose zone will not with reasonable probability contaminate groundwater in excess of NMOCD standards. This site meets the requirements of the NMOCD-approved Revised Junction Box Upgrade Work Plan (July 16, 2003). As such, 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

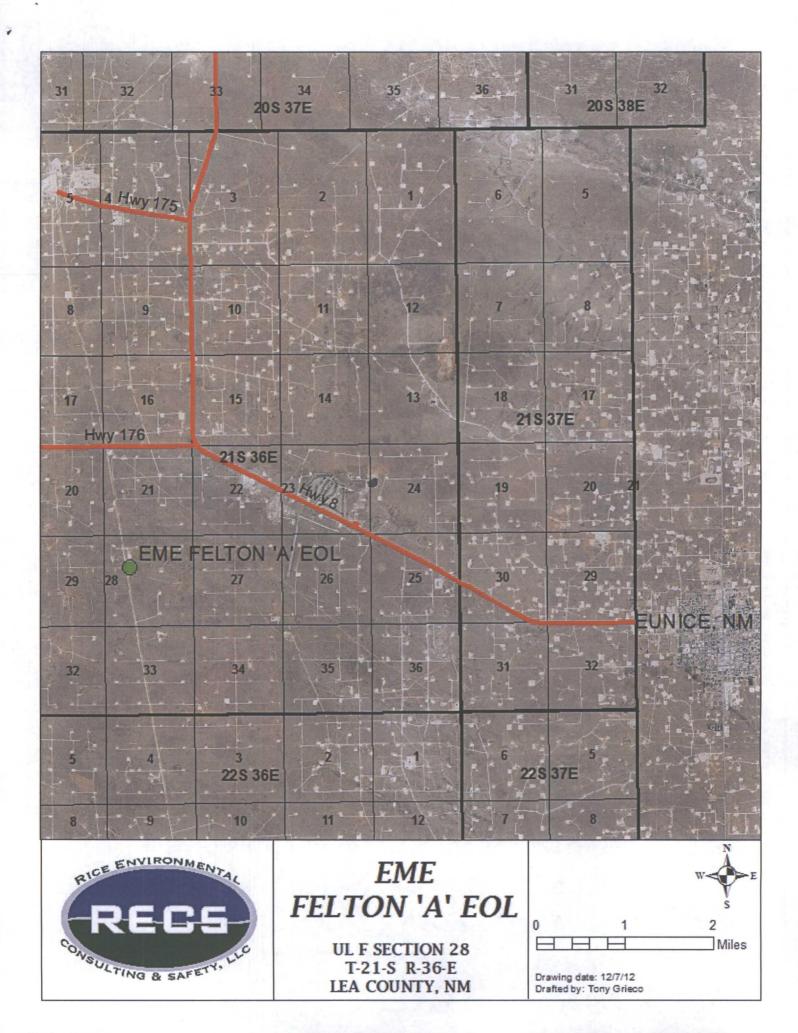
Hack Conder Environmental Manager

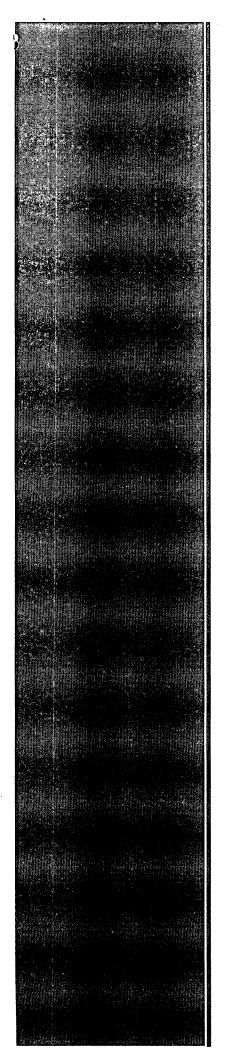
enclosures



Site Location Map

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





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	CATION	•				
SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DI	MENSIONS	- FEET	
EME	Felton 'A'	F		040	0.05		Length	Width	Depth	
EME	EOL	г	28	21S	36E	Lea	Move	100 ft North	nwest	
	3LM	STATE	FEE LA	NDOWNER	91% Das	co Land Corp	OTHER_			
Depth to Grour	ndwater	147	feet	NMOC	D SITE ASS	ESSMENT F	ANKING SC	CORE:	.0	
Date Started	8/8/2	2003	Date Co	mpleted	8/26/2003		Vitness	<u> </u>	ło	
Soil Excavated	133	cubic ya	rds Exc	avation L	ength 20	Width	15	Depth	12	feet
Soil Disposed	0	cubic ya	rds Of	fsite Facility	/	ı/a	Location_		n/a	

FINAL ANALYTICAL RESULTS: Sample Date

8/12/2003

Sample Depth

12 ft

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	PID ppm	<u>GRO</u> mg/kg	<u>DRO</u> mg/kg	<u>Chloride</u> mg/kg
SIDEWALLS	21.6	<10.0	<10.0	320
BOTTOM	34.1	<10.0	<10.0	368
REMEDIATED	16.1	<10.0	<10.0	64

General Description of Remedial Action: Delineation of this site yielded conclusive vertical and lateral chloride declination trends. PID readings were taken regularly and did not indicate the presence of elevated volatiles or TPH. The soil from the 20 x 15 x 12-ft deep excavation was blended thoroughly and then backfilled. These activities are not threatening to groundwater, human health, or the environment. A new water-tight junction box has been built 100 ft Northwest of this location. Due to the proximity to the production facility and the road, the disturbed surface was not seeded but is expected to return to productive capacity at a normal rate.

CHLORIDE FIELD TESTS

LOCATION	DEPTH (ft)	ppm
Vertical	5	725
	6	595
	7	548
	8	566
	9	475
	10	410
	11	321
	12	268
bottom comp.	12	386
4-wall comp.	n/a	387

cc: diagram, lab results, chloride graph, PID test results, photos

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

DATE _	10/8/2003	PRINTED NAME	Kristin Farris	
SIGNATU	RE Knistin Sani	TITLE	Project Scientist	

EME Felton 'A' EOL



Old Junction Box Before NORM Removal



Backfilled with New Box in Background

August 2003



20 x 15 x 12-ft deep Excavation



New Junction Box 100 ft Northwest

	DATE	، پیسر مؤمدی DEPTH	CL	PID	TPH	SOIL COMPOSITION
_	8-12-03,	Bottom/2'	386	34.1	368	
		V-WILL .		· 01.6	320	
С.	8-18-03	tour pice	429		64	
C	8-12-03.	n. n. up	446	30,9	·	
C	Electe	n. wallo	-2-2-	29,4	•	
C.	8-12-63	E. Land 110	5-25	29.4	· · · · · · · · · · · · · · · · · · ·	
		•			· ·	-
	· · ·					······
				·		
				; ; ;		
		;	· · · · · · · · · · · · · · · · · · ·			·
			· · · · · · · · · · · · · · · · · · ·	:	· · ·	
		· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	
•				·		
	·	······				·
		······			· ·	
	<u> </u>	· · · · · · · · · · · · · · · · · · ·	<u></u>	· · · · · · · · · · · · · · · ·		
	•	· · · · · · · · · · · · · · · · · · ·		······	· -····	· · · · · · · · · · · · · · · · · · ·
			·			
	••••••••••••••••••••••••••••••••••••••	· · · · · · · · · · · · · · · · · · ·			1	·
		······································		<u> </u>	······································	
	······································			· · · · · · · · · · · · · · · · · · ·	<u> </u>	· · · · · · · · · · · · · · · · · · ·
		····· ·		·····	:	
		······			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
		<u> </u>			······································	
				· · · · · · · · · · · · · · · · · · ·	• .	······································
	····		· · · · · · · · · · · · · · · · · · ·	······································		
		······································		····	······ ·······························	
	•	:			· · · · · · · · · · · · · · · · · · ·	· · ·
						·
	· · · · · · · · · · · · · · · · · · ·					×
•					· · · · · · · · · · · · · · · · · · ·	1
	:		·		····	· ·
	: 	· · · · · · · · · · · · · · · · · · ·		······································		
					· · · · · · · · · · · · · · · · · · ·	

.

Hory Stink



PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

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

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

Receiving Date: 08/25/03 Reporting Date: 08/26/03 Project Number: NOT GIVEN Project Name: NOT GIVEN Project Location: NOT GIVEN Analysis Date: 08/26/03 Sampling Date: 08/25/03 Sample Type: SOIL Sample Condition: COOL & INTACT Sample Received By: BC Analyzed By: AH

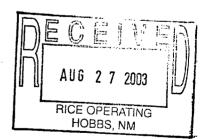
LAB NUMBER

SAMPLE ID

Cl⁻ (mg/Kg)

H7946-1	OXY FELTON "A" EOL	320
	4 SIDE WALL COMP.	
Quality Control		1070
True Value QC	· · · · · · · · · · · · · · · · · · ·	1000
% Recovery		107
Relative Percent D	Difference	1.9

METHOD: Standard Methods 4500-CI'B Note: Analysis performed on w:v aqueous extract.



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. ARDINAL LABORATORIES, INC.

5

ULU L

naar

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ر

	(915) 673-7001 F.	ax (91	5) 67	73-70	20	(505) 30	3-23	326	Fax	(505) 39	3-247	6	.							, 	ť	açıe	of		
Сотралу Мате:	Fice Opena						7											ANA	LYS	S RI	QUE	ST				
Project Manager:	Rocker	K ~		tise /	6.	و بر		<u>iii</u>		Π.	PO	8:				-			T	T			1			
	W. Tsylor								any						1					1						
	- State:		88	324	10		N	ttn:						1	{	}				1			1		(
	- 393-9/24						A	ddri	8 .6;					I					1					Í	l l	
	- 397 -1421						c	lty:									1		1]	Ì			1]	
Project #:	Project On						8	late:			ZIp:			5				1						1		
Project Hame:							P	honi	e #1:					. 4						1	1		1			
Project Location:							Fa	ax Ø:						.)					1			1		Í		
FOR LAD USE OHLY				 _	MA	TRD		Ľ	RES	5.	SAMPL!	NG		ì		1		1			1			· ·		
LAB I.D.	Sample I.D.	JIRAB CR (CLOMP	CONTAINERS	GROUNDWATER.	OIL	OIL	THER	; QiQ	DE / COOL	NTHER :	DATE		F	<160.												
1174466-1	Pay Fecton A'c		0		u U	010	10		X	2	8.25.03			$\overline{\mathbf{X}}$	a	<u> </u>	·f			+	+	•	·{ -	·	·	·†
	Fridenaucomp		15	 <u> </u>	- <u>In</u>	f	- {	-	a	{	4-2			Α-		1		1						··· ·		1
			-1					-		[1	<u> </u>	1	1	1	1	1		1		
																							<u></u>			
]		I		_							<u> </u>			1	ļ					
				 						~]							ļ]				
				┞┼-]	·· — —	 	<u> </u>			·}	<u> </u>	Į]			
	u			╏╌┼╌		┝┥											┦───	l		-{						
			1		+		- <u> </u>			-1			[{		·}	·{	}				[·			
	n a statistic management in a second a statistic and the second and the second and the second and the second a statistic and the second and t																1			cnations				an terrational execution and an give det		
indexi . In he overCahed Cardinat	be finite for incidential or according to the second of a second of the	nangina, bir	: unding	without in-	farliten,	Cutt mena	hiero c	diane i	lose of i	U=4, 0	e loop of publics b					4.147				ane all the of contects						•
ampler Relingvish	Betl : Charte		~	Fiece					alt an agginer t		Ī	Phone						ional	ax 8:	ومريقة المريبية اللا	مەر يە ئى يىت س ە			40 mg 1944 u ve		
->= ~ ~ ~	The Etcz The	D:									ŀ	Fax Re REMAR	KS:													
elingulated By:	E. LI ETGI Tim Incle Onel	25-0 25-0	23	Rec	Ived	Byr.	Lab 74 J	Bta	<u>ल</u> जि	7		Ja		C		ey :	10	R	,	L						
Delivered By: 10	Ircle Onel	0.00			nple	Candil	U.	p			D BY:			•												
, Sampler UP8 - BL				с С	el I Ves No		és ()		(b	nitie	4a)															

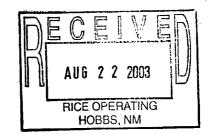


PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

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

ANALYTICAL RESULTS FOR RICE OPERATING CO. ATTN: ROY R. RASCON 122 W. TAYLOR HOBBS, NM 88240 FAX TO:

Receiving Date: 08/19/03 Reporting Date: 08/20/03 Project Number: NOT GIVEN Project Name: EME OXY FELTON "A" Project Location: NOT GIVEN



Sampling Date: 08/18/03 Sample Type: SOIL Sample Condition: COOL & INTACT Sample Received By: GP Analyzed By: BC/AH

LAB NÜMBER SAMPLE ID	GRO (C ₆ -C ₁₀) (mg/Kg)	DRO (>C ₁₀ -C ₂₈) (mg/Kg)	Cl* (mg/Kg)
	(mg/ng)	(9/1(9)	(mg/ng)
ANALYSIS DATE	08/19/03	08/19/03	08/20/03
H7926-1 BACKFILL 5-PT. COMP.	<10.0	<10.0	.64**
Quality Control	779	752	1050
True Value QC	800	800	1000
% Recovery	97.3	94.0	105
Relative Percent Difference	0.7	8.1	5.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; CI: Std. Methods 4500-CI B *Analysis performed on a 1:4 w:v aqueous extract. **Matrix interference (color) observed.

Date

H7926.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.

ARDINAL LABORATORIES, INC.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ь. Х

- 2	111 Beechwood, Abilene, 7 (915) 673-7001 Fax (915)															Page_	0	f	_					
Company Name	KICE DREP. CO	······································					Ì			_	LTO				_	-	ANA	LYSIS	RE	QUE	ST			
Project Manage	" Roy R. RASCON	, , , , , , , , , , , , , , , , , , ,					P.(0. #				0000000000				1	1		T	T				
Address: / 2	2.W. TAY LOR 55 State						Co	mpa	any:															
City: Hob	ວິ Stati	e: NM zip	: 8	282	40		At	tn:	-															
Phone #: 39	3-9/74 Fax #						Ad	Idree	35:							·		1						{
Project #:	Proje	ct Owner:			City:																			
Project Name:	EME OXY Felton "A	t"					St	ato:			Zip:													
Project Location	ect Location:												Ш											
Sampler Name:	-		Fax #:																					
FOR LAB USE ONLY					MATR	IX I		PRE	SER	W	SAMPL	NG	15											
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER WASTEWATER	Solt	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	TPH 80	21-										
41926-1	BACKFILL SPT Com	P C	G		V		1-		$\overline{\mathbf{A}}$	-	8-18-03	0830	$\overline{}$	$\overline{}$				1						
							_		-	_								<u> </u>						
			_				\perp												<u> </u>	<u> </u>				
										_									.					i
										-														·
					++					-														
					+-+	+	+-		+															
	· · · · · · · · · · · · · · · · · · ·				++		+		-												1			
analyses, Al claims includin service, in no event shell Ca	d Demograe, Cardinate liability and clerate auckarive r 3 those for regigence and any other cause whatsoev rdnal be liable for incidental or consequential damage 13 out of or related to the performance of services he	ver shall be deemed we we, including without limi	iyəd ar Laticə, çavrdlə	teen med bunknees as of who	le in writing Internaption ther such c	and rec s, loss	ohed t of use,	or loss	inal with of prol	hin 30 Baind	deys after comp curred by client, i	lation of the applic a subsidiaries, or otherwise,				•	30 ank	days past (all costs e	the states of the states of collection	when of 24%		from Exe o	ciginal data	
Sampler Relinqu	uished: 5767 Date:	-1/5-03 Re	COIA	ed By	:							Phone Res Fax Resul REMARKS	t: 3:	O Ye O Ye	8 C	l No l No	Add'l	Phone Fax #:	#:					
Delivered By	god of a radial to the performance of vertices the ilished: 5767 Date: 5767 Date: 5767 Date: 08/1 Time: 4 ! : (Circle One) - Bus - Other:	9/20-3 Ret 55P	celv	Sal Co	r: (Lat mple C pol In No	ondit tact	Jon s				ED BY: als)	f.c.	x	<i>501</i> 99	. ~		ie e							

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



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: KRISTIN FARRIS 122 W. TAYLOR HOBBS, NM 88240 FAX TO: (505) 397-1471

Receiving Date: 08/12/03 Reporting Date: 08/13/03 Project Number: NOT GIVEN Project Name: OXY FELTON A EOL Project Location: EME Sampling Date: 08/12/03 Sample Type: SOIL Sample Condition: COOL & INTACT Sample Received By: BC Analyzed By: BC/AH

LAB NUMBER SAMPLE ID	GRO (C ₆ -C ₁₀) (mg/Kg)	DRO (>C ₁₀ -C ₂₈) (mg/Kg)	Cl* (mg/Kg)
ANALYSIS DATE	08/12/03	08/12/03	08/13/03
H7907-1 W. WALL	<10.0	<10.0	400
Quality Control	779	752	1000
True Value QC	800	800	1000
% Recovery	97.3	94.0	100
Relative Percent Difference	0.7	8.1	3.0

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

Date

H7907.XLS

PLEASE NOTE: Llability 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 one event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of prefits 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.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

 \odot

	2111 Beechwood, Abliene, 1X 79603 101 East Marland, (915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fa																					Page	()1	-	
Company Name	RICE Operat	ing Comp	20	N									LL TO						ANAL	YSI	S RE	QUE	ST		-	
Project Manage	"Kristin Fa	rits T		T					Ρ.0). #:					1	Γ	<u> </u>	T	T		T		<u> </u>			·
	W. Taylor								Co	mpa	any:	F	RICE		1	{	Į	1	{	{	1					
City: Hobbs		State: NM	Zip:	8	82	40			Att						1				1				1			Į
Phone #: 393	3-9174	Fax #: 397-1							Ad	dree	18 :								1		•			1		
Project #:		Project Owner:		•			_		CIt	y:					1		l l				1					[
Project Name:													Zip:				1	1						l .		
Project Location	: EME								Ph	0110	# :								1	ļ			Į			
Sampler Name:									Fax	:#:					5							i i				
FOR LAB USE ONLY		1		T		MAT	RIX			PRE	SER	٤٧.	SAMPL	NG	\sim								l	Į .		
Lab I.D.	Sample I.	D.	(G)RAB OR (C)OMP	* CONTAINERS	WASTEWATER	Soil	CRUDE OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	TPH 80	c/.										
W2907+	WWALL					$\boldsymbol{\star}$					x		8-12-03	1100												
(_	_																
										_							ļ		_				I			
				_ -							_				-				.	ļ	<u> </u>	 	<u> </u>			
				-	_		_				-+				-		 		.			 				
											-+			}				-[-[
						+-					+	-1								{			 			
				+		+	-				+	-†	·····				 		1			1				··
				-1-											1		<u> </u>		1		1	<u> </u>	 			
analyses. All claims including service. In no event shell Cat	Destinges, Cardina's lability and elsen's those for negligence and any other caus deal be liable for incidential or conseque y out of or related to the performance of	se whichsoever shall be decom retail decoupes, including witho	id webs ut trata	nd ar in- tices, in	es medi aliment	e in writi Etiorrupi	ing and tions, 1	frecent To seci	nad by una, c	/Cardi x lose	nai with of profi	da 30 Ita inc) days after comp surred by client, i	dellars of the upp In subsidiaries,	dicable				30 6	taya paul c		ale of 24%	per encurs	livers live o	counts more riginal data (
Sampler Relinqu	Ished:	Date:	Rece	evie	d By	:								Phone R Fax Res] No] No	Add'l	Phone						
		Time:												REMAR				JNO	174001							
Relinquished By Delivered By: Sampler - UPS	(Circle One)	Reprint 2007 Time: 50/13	Roce	elve J	M Sa	: (Li Inple ol I IYes No			A	Ľ			ed BY: als)													

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

ARDINAL LABORATORIES, INC.



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: KRISTIN FARRIS 122 W. TAYLOR HOBBS, NM 88240 FAX TO: (505) 397-1471

Receiving Date: 08/12/03 Reporting Date: 08/13/03 Project Number: NOT GIVEN Project Name: OXY FELTON A EOL Project Location: EME Sampling Date: 08/12/03 Sample Type: SOIL Sample Condition: COOL & INTACT Sample Received By: BC Analyzed By: BC/AH

LAB NUMBER SAMPLE ID	GRO (C ₆ -C ₁₀) (mg/Kg)	DRO (>C ₁₀ -C ₂₈) (mg/Kg)	CI* (mg/Kg)
ANALYSIS DATE	08/12/03	08/12/03	08/13/03
H7905-1 N. WALL	<10.0	<10.0	400
Quality Control	779	752	1000
True Value QC	800	800	1000
% Recovery	97.3	94.0	100
Relative Percent Difference	0.7	8.1	3.0

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

Coshe

Date

H7905.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 on event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profib is 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.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

3

ARDINAL LABORATORIES, INC. 2111 Beechwood, Abilene, TX 79603 101 East Marland, Hobbs, NM 88240 (915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

	(915) 673-7001 Fax	(915) 673-702	0	(50	5) 39	3-23	26	Fax	(5	D5) :	393	-24	76								Page_	0	1	•	
Company Name: RICE Operation Company												\mathcal{I}	14 10				 1	ANAL	YSIS	REC	QUES	эT			
Project Manager: Kristin Farrts). #:															
Address: 122 W. Taylor C												R	ICE												
City: Hobbs, State: NM Zip: 82240																									
Phone #: 393-9174 Fax #: 397-117										Address:															
Project #: Project Owner:									CH	<u>y:</u>															
Project Name:	Oxy felton AI	Eol							Sta	te:			Zip:												
Project Location	n: EME								Ph	one	#:														
Sampler Name:										c #:					\mathfrak{I}										
FOR LAB USE ONLY				1		MA	TRU	(T		PRE	ESEI	RV.	SAMPLI	NG	So										
Lab I.D.	Sample I.	D.	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER			SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	TPH S	d.									
N7905-	NWALL			1		_ ×			x 8-12-03			1100			 										
1 0 0-5 1	·····						 				_						 				 				
	·			Ŀ		·			_								 				 				
							┨				_						 				{				
	······································						┨──										 			 				j	
			-								-	-					 		·		 				
	·····			-	-+-		+			-							 								
			┢─								-1	-†					 						 		
analyses. All claims. Including	d Demogen, Cardnet's liability and chere g these for negligence and any other cau	ne whethoever shall be dear	med w	alved a	duce you	Se in wr	ing en	inaeri bu	hed by	/ Card	inal wi	9ên 30	days after comp	lation of the applic	abio		 	30 d	aya pact di	us at the re	nto of 24%		from the or	nghai data s	
affiliates or successors arisin	rdinal be lable for incidental or conseque up out of or related to the performance of	ontal desceptes, including will I services becounder by Can	dhal, r	-	es of wh	ther su	ptions, ch chi i	loss of mis ba	l ure, i ned y	or lose con an	of pro y ei th	fits inc a show	urred by cilent, 2 e stated reasons	er otherwise.			 		_		s, including s	ation of s	***		
Sampler Relinqu	uished:	Date:	Re	ceh	ed B	y:								Phone Rei Fax Resul		C Ye		Add'l Add'l	hone ax #:	# :					
		Time:	1											REMARKS	:		 								
Relinquished By: Delivered By: (Lab Staf Teme: Delivered By: (Circle One) Sample Condul Choi Intact Sample Condul Choi Intact Delivered By: (Dircle One) Sample Condul Choi Intact Delivered By: (Dircle One)										2(:D BY: Ils)												
						TNO	۶Ē	PNo																	

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



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: KRISTIN FARRIS 122 W. TAYLOR HOBBS, NM 88240 FAX TO: (505) 397-1471

Receiving Date: 08/12/03 Reporting Date: 08/13/03 Project Number: NOT GIVEN Project Name: NOT GIVEN Project Location: NOT GIVEN Sampling Date: 08/12/03 Sample Type: SOIL Sample Condition: COOL & INTACT Sample Received By: BC Analyzed By: BC/AH

LAB NUMBER SAMPLE ID	GRO (C ₆ -C ₁₀) (mg/Kg)	DRO (>C ₁₀ -C ₂₈) (mg/Kg)	Cl* (mg/Kg)
ANALYSIS DATE	08/12/03	08/12/03	08/13/03
H7906-1 E. WALL	<10.0	<10.0	272
Quality Control	779	752	1000
True Value QC	800	800	1000
% Recovery	97.3	94.0	100
Relative Percent Difference	0.7	8.1	3.0

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

Date

H7906.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.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ARDINAL LABORATORIES, INC. 2111 Beechwood, Abilene, TX 79603 101 East Marland, Hobbs, NM 88240

_	(915) 673-7001 Fax	(915) 673-702	0	(50	5) 39	93-23	26	Fax	(5)5)	393	-24	76									Page	0	of to	-	
(915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (915) 673-7020 (505) 672-7020 (505) 672-7020 (505) 672-7020 (505) 672-7020 (505) 672-7000 (505) 672-7000 (505) 672-7000 (505) 672-7000 (505) 672-7000 (505) 672-7000 (505) 672-7000 (505) 672-7000 (505) 672-7000 (505) (505) 672-7000 (505) (5]]	11 10						ANA	LYSI	S RE	QUE	ST			
Project Manage	Kristin Far	ins.	1	1					Р.С). #								[Ι				[[
Address: 122	W. Taylor								Co	mpa	iny:	F	RICE										1			
City: Hobbs, State: NM Zip: 87240										<u>n:</u>																
Phone #: 393-9174 Fax #: 397-1471									Ad	dree	38:		·							1	1		1			
Project #:		Project Owner	:						Cit	y:			·													1
Project Name:			· · ·						Ste	te:			Zip:					Į		1		1		 	1	
Project Location	:								Ph	one	#:							[
Sampler Name:						-			Fax	c#:					5			Į –				}	[Í -	
FOR LAB USE ONLY					- 1	MA	TRU	(_	PRE	SEI	RV.	SAMPLI	NG	0								[
Lab I.D.	Sample I.	D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	CRUDE OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	TPH SL	C1.	- - -									
H7906-1	5 EWALZ			L		X					x		87233	1100						1	<u> </u>					
							\downarrow	-											 	 	_	ļ			 	
	·			·		· -						_							ļ	 	-		 	 		
							-		-					·										 		
	ddd	<u> </u>						┼				-									-					;
							╋														1	 				
											-1	-							<u> </u>	1	-[<u> </u>				
							1												1	1	1	[
analyses, All claims. Including	Demograf, Cardinel's liability and electric those for negligence and any other cause	e whetercever shell be dea	med we	dand a	dees m	ede in wr	ling an	eoer b	hed by	/ Card	inal wit	hin 30	days after compl	ation of the applic	atie				30 4	deys past (chao ni iliyo ra	nte of 24 M	per errun	i from Eve o	ceunts more rightsi date	
similatos or successors arisin	clinel be linkie for incidental or consequent g out of or related to the performance of	services hereunder by Cer	dinal, re	(and	es of a	helling su								er otherwise.							of collection	, holiding	ndorwy's	hat.		
Sampler Relinqu	lished:	Date:	Re	COIV	ed E	sy:								Phone Rei Fax Resul	t:	C Yes		No No		Phone Fax#:						
		Time:]											REMARKS	3:											
/	Clifcle One) Bus - Other:	Date: 7/2/02 1997	Re (3	N	by: (L	LA Cor Inte			Ģ) CKI Initia	D BY: ala)													

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



PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603 PHONE (505) 393-2326 • 101 E, MARLAND • HOBBS. NM 88240

FROME (303) 333-2320 . TOT E, MARLAND . TOODS. NW S

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

Receiving Date: 08/12/03 Reporting Date: 08/13/03 Project Number: NOT GIVEN Project Name: OXY FELTON A EOL Project Location: EME Sampling Date: 08/12/03 Sample Type: SOIL Sample Condition: COOL & INTACT Sample Received By: BC Analyzed By: BC/AH

GRO	DRO	
(C ₆ -C ₁₀)	(>C ₁₀ -C ₂₈)	Cl*
(mg/Kg)	(mg/Kg)	(mg/Kg)

LAB NUMBER SAMPLE ID

ANALYSIS DATE		08/12/03	08/12/03	08/13/03
H7904-1 I	BOTT. COMPOSITE /2'	<10.0	<10.0	368
Quality Control		779	752	1000
True Value QC		800	800	1000
% Recovery	· · · · · · · · · · · · · · · · · · ·	97.3	94.0	100
Relative Percent	Difference	0.7	8.1	3.0

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

looh

Date

H7904.XLS

PLEASE NOTE: Llability 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. ARDINAL LABORATORIES, INC.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page____ of ____

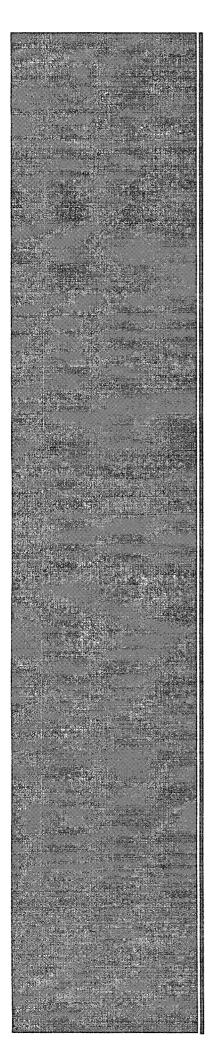
2111 Beechwood, Abilene, TX 79603	101 East Marland, Hobbs, NM 88240

(915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

Company Name: RICE Operating Company												BĬ	ll to						ANAL	YSIS	RE	QUES	ST			
Project Manager. Kristin Farrts											k															
Address: 122 W. Taylor C										omp	any	: F	RICE								i					
city: Hobbs	\ •	State: NM	Zlp	: 8	22	4)		At	tn:																
Phone #: 393-9174 Fax #: 397-1171										idre	85:							ŀ			ļ					
Project #:		Project Owner	:						Ċŀ	ty:					1											
Project Name:	Oxy felton #	A Eal							St	ato:			Zlp:								[
Project Location									Ph	юпи	∋ # :										l					
Sampler Name:	J. Gatts		معيدهم						Fa	x #	_				8015											
FOR LAB USE ONLY			<u>.</u>			M_	ATRI		1-	PR	ESE	RY.	SAMPLI	NG	2				ł			1				
Lab I.D.	Tap I'D' Samble I'D' Partition Participation Partition						SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME	TPH S	C/.											
612904	1 Bott. Comp			1			ĸ				x		8-12-03	1100												
	ا										<u> </u>											<u> </u>				
																					<u> </u>	<u> </u>				
								_	_			 										ļ				
									_	-	-											<u> </u>				
	······										-	$\left - \right $							 							·
										-																
						+																				
						+		+-	+	-																
malyses, All claims including service, In no event shell Car	Damagon, Cardina's lability and client trass for negligence and any other caus denii be lable for incidental or conseque out of or related to the performance of	se wisstsoever shall be deer rital damegee, including wit	ned we hout Rm	ived m Rotine,	idees me busines	ide in v s interi	willing a ruptiona	end (190 8, loss i	ohed t of use,	by Caa , or lor	rolinel w na of pr	vittin 34 rollta in	D days after comp curred by client, il	letion of the applic a subsidiaries,			L	ł	30 d	ays past d	ue at the r		per nerum	from the p	acris trove riginal data	
Sampler Relinqu		Date:			ed B						-			Phone Rei Fax Result		C Ye		No No		Phone Fax #:	ŧ:					
Time:														REMARKS					Indu I	0A 17.						
Relinquished By: Delivered By: (Circle One) Delivered By: (Circle One) Delivered By: (Circle One) Delivered By: (Circle One)													e ED BY: als)													
Sampler - UPS - Bus - Other:												•····	,													

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

:



Current Photodocumentation

RICE *Operating Company* (ROC) 112 West Taylor Hobbs, NM 88240 Phone: (575) 393-9174 Fax: (575) 397-1471 EME Felton 'A' EOL (1R427-38) Unit Letter F, Section 28, T21S, R36E



Facing East

12/17/2012



Facing South

12/17/2012