AP - 46

STAGE 1 & 2 REPORTS

DATE:

Jan. 22, 2003

1R0427-88

DISCLOSURE REPORT

RICE OPERATING COMPANY JUNCTION BOX DISCLOSURE FORM

BOY LOCATION

OIAID OVOTELA	Luniorical	1 1804	Location	BOX LOC			001111707	I BOY	DIMENIOLO	FFFF	٦
SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RAN	GE	COUNTY	Length	DIMENSIONS -	Depth	┪
EME	K-6	K	6	20\$	371		Lea		las Not Been Bi		1
LAND TYPE:	BLM_XXX	STATE	FEE LA	NDOWNER				OTHE	₹		
Depth to Grou	ndwater	37	_feet	NMOCE	SITE	ASSE	SSMENT I	RANKING	SCORE:	20	
Date Started	1/22	/2002	Date Cor	mpleted	not con	nplete	OCD \	Nitness	N	0	<u>,,,</u>
Soil Excavated	36	cubic ya	rds Exc	cavation Le	ength	10	Width	10	Depth	10	_ feet
Soil Disposed	36	cubic ya	rds Off	fsite Facility		Sunda	ance	Location	Eun Eun	ice, NM	
FINAL ANALY	YTICAL F	RESULTS	S: Sampl	e Date		n/a		Sample D	epth	n/a	
	ocure 5-poi BTEX and 0	Chloride labo	•	results com	pleted l	by usi	ng an appi	•	walls. TPH, nd testing		
Sample	Benzene			hyl Benzene		Xylene		RO	DRO	Chloride	s
Location	mg/kg	Vadose Zor	g/kg	mg/kg		g/kg		kg Poport	mg/kg	mg/kg	
General Description with a backhoe. Chlo								CHLO	RIDE FIELD	TESTS	
The site was bored or	1/23/02 and o	chloride was fo	ound to impact	groundwater	with sign	s of	L	OCATION	DEPTH (f	t) ppn	n
TPH throughout the b	ore. A cased i	monitor well w	as installed an	d the ground	water has	been		Soil Bore	5	250)
sampled and analyze	d quarterly (se	e annual grou	ndwater report	for results).	ROC has	3			10	250)
contracted a hydrolog	ic consultant to	o assist ROC i	n developing	a remediation	plan for t	the	_		16	250)
vadose zone at groun	dwater-impact	ed sites with th	he ultimate ob	jective being t	final closu	ure.	L		20	275	5
									24	250)
									30	450)
									36	600)
									38	600)
	:	······································									
1											
IHEREB	Y CERTIFY	THAT THE		TION ABOV WLEDGE				PLETE TO	THE BEST C	F MY	
DATE	1/	22/2003		PR	RINTED N	NAME_		Kr	istin Farris		
SIGNATURE	nisin	darris				ritle_		Proj	ect Scientist	· · · · · · · · · · · · · · · · · · ·	

	,		_ _	_	_	->	MW#			EME Jct. K-6 K, 6, 20S, 37E
[mg/L] 35000 30000 15000 5000 0			38.65	37.52	37.30	37.20	LEVEL	WATER	(ft)	t K-6 S, 37E
			40.60	42.80	42.78	43.50	DEPTH	TOTAL	_	
	Chlorides	EME Jct. K-6	0.312	0.845	0.877	1.000	VOLUME	WELL	(gal)	
	— Total Dis	6 Monitor Well	1.00	2.50	2.75	3.10	BAILED	VOLUME		Rice Operat
	- Total Dissolved Solids (TDS)	or Well	111102	082802	051402	012502	DATE	SAMPLE		Rice Operating Co. Monitor Well Data Sheet
	(TDS)		1545	1435	1125	1315	TIME			nitor We
		* - *	12200	13796	12000	12096	CL-		All paramet	ll Data Sl
			26400	29180	26700	23370	TDS		er concentrati	ieet
			0.001	<0.002	0.00124	<0.002	BENZENE	,	All parameter concentrations are in mg/L.	
			0.001	<0.002	<.001	<0.002	TOLUENE			
			0.001	0.003	0.00336	0.002	BENZENE	ETHYL		
			<0.003	<0.006	0.00354	0.006	XYLENES	TOTAL		
			sitty	red & silty	sandy		101			

Sample Date



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

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

Receiving Date: 01/25/02 Reporting Date: 01/30/02 Project Number: EME-K-6 Project Name: EME-K-6 Project Location: 20S R37E Sampling Date: 01/25/02

Sample Type: GROUNDWATER Sample Condition: COOL & INTACT

Sample Received By: BC Analyzed By: HM/AH

LAB NUMBER SAMPLE ID

TDS (mg/L)

CI (mg/L)

ANALYSIS [DATE:	01/30/02	01/28/02
H6464-1	WROEMEK612502MW	23370	12096
Quality Cont	rol	NR	1039
True Value C	QC	NR	1000
% Recovery		NR	104
Relative Per	cent Difference	5.1	1.0

with and

METHODS: EPA 600/4-79-02 160.1 4500-CIB*

*Std. Methods

PICE OPERATING HOBBS, NM



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

ANALYTICAL RESULTS FOR RICE OPERATING CO.

ATTN: DONNIE ANDERSON

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

Receiving Date: 01/25/02

Reporting Date: 01/30/02 Project Number: EME-K-6

Project Name: EME-K-6 Project Location: 20S R37E Sampling Date: 01/25/02

Sample Type: GROUNDWATER Sample Condition: COOL & INTACT

Sample Received By: BC

Analyzed By: BC

BENZENE TOLUENE BENZENE XYLENES
LAB NUMBER SAMPLE ID (mg/L) (mg/L) (mg/L) (mg/L)

ANALYSIS [DATE	01/25/02	01/25/02	01/25/02	01/25/02
H6464-1	WROEMEK612502MW	<0.002	<0.002	0.002	0.006
Quality Cont	rol	0.111	0.107	0.109	0.314
True Value 0	2C	0.100	0.100	0.100	0.300
% Recovery		111	107	109	105
Relative Per	cent Difference	8.2	3.8	5.6	4.2

METHOD: EPA SW-846 8260

FEB - 1 2002

RICE OPERATING
HOBBS, NM

Date

AT WAL LABORATORIES,

. MC.

101 East Marland, Hobbs, NM 85.40

Beechwood, Abilene, TX 79603

Sampler - UPS - Bus - Other: Sampler Relinquished: Filled 1071: Usany ord Bumps, Colack Elay od dark takin reasy to an data alog disast initig has senders. At the senders were the senders with the senders with the senders which senders with himself of the senders with himself of the senders with himself of the senders with the Project Name: ENEIL-6 Project 8: ENEK-10 Phone #: 505-393 -7174 Sampler Name: Project Location: 205 CITY: Hobbs Toject Manager: Address: Company Name: Delivered By: (Circle One) POR LIB UM OILY Lab I.D. -h7431 ↑ Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476 Idd WEST WRO EMEKGIOSODIU (915) 673-7001 Fax (915) 673-7020 WROSNSIKIASOZMW Rice Operating BUN, e THE PARTY IN Sample LD. 2378 Taylor Anderson! 13502 150M Fax #: 505.397.1471 Project Owner: 0.6 Date: Received By: Time: State W. M. Sip: 88240 \mathbb{O} (G)RAB OR (C)OMP. Received By: (Lab Start) (505) 393-2326 Fax (505) 393-2476 Ø # CONTAINERS GROUNDWATER No Parect WASTEWATER ample Condition MATRIX SOIL CRUDE OIL THE REAL PROPERTY. SLUDGE P.O. # OTHER Phone \$: 505-393-9/79 cay: Hobbs Address: (22 lubs Taylor FIRE SCOT SPINA State: N.N. Zip: 882 40 Aum: Bucie Ridersens company: Rice Cherozins ACID/BASE: PRESERV CHECKED BY: TO THE STATE OF STATE OF STATE OF ICE / COOL BILL TO (Frederica) OTHER: 2 dy de mater d' 2 de 12802 1-25-02 SMPLMG RIE Phone Result: Fax Result: REMARKS: 2.42 9.42 THE BTCX 8020 OND SOLD Add Phone F. ANALYSIS REQUEST Toron and Constitues: Named all by damped and it.
20 days part dos at his natural 2015 per proper ham he ;
and at made of exhaulture, building commany, ham. <u>.</u>



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: 08/29/02 Reporting Date: 08/30/02

Project Number: NOT GIVEN Project Name: K-6

Project Name: K-6
Project Location: EME

Sampling Date: 08/28/02

Sample Type: GROUNDWATER Sample Condition: COOL & INTACT

Sample Received By: AH

Analyzed By: BC

			ETHYL	TOTAL
LAB NUMBER SAMPLE ID	BENZENE	TOLUENE	BENZENE	XYLENES
	(mg/L)	(mg/L)	(mg/L)	(mg/L)

ANALYSIS DATE	08/29/02	08/29/02	08/29/02	08/29/02
H6991-1 K-6 MW1	<0.002	<0.002	0.003	<0.006
Quality Control	0.111	0.105	0.108	0.309
True Value QC	0.100	0.100	0.100	0.300
% Recovery	111	105	108	103
Relative Percent Difference	1.5	3.9	3.0	5.0

METHOD: EPA SW-846 8260

Date

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims including the property of the register of the applicable service. The property of the service of the property of the applicable service of the applicable service of the property of the service of the applicable of the applicable service of the applicable of the applic



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: 08/29/02 Reporting Date: 08/30/02 Project Number: NOT GIVEN

Project Name: K-6 Project Location: EME Sampling Date: 08/28/02

Sample Type: GROUNDWATER Sample Condition: COOL & INTACT

Sample Received By: AH

Analyzed By: AH

LAB NUMBER SAMPLE ID (mg/L) (mg/L) (mg/L) (mg/L) (mg/L) (mg/L) (mg/L) (mg/L) (mg/L) (mg/CaC ANALYSIS DATE: 08/29/02 0		Na	Ca	Mg	к	Conductivity	T-Alkalinity
H6991-1 K-6 MW 1 9684 798 268 22.5 30729	LAB NUMBER SAMPLE ID			-		•	(mgCaCO ₃ /L)
H6991-1 K-6 MW 1 9684 798 268 22.5 30729	ANALYSIS DATE:	08/29/02	08/29/02	08/29/02	08/29/02	08/29/02	08/29/02
True Value QC NR 50.0 50.0 5.00 1413 % Recovery NR 84.9 96.1 92.4 103 Relative Percent Difference NR 11.8 4.4 9.0 0.1 METHODS: SM3500-Ca-D3500-Mg E 8049 120.1 3 CIT SO4 CO3 HCO3 pH (mg/L) (mg/L) (mg/L) (mg/L) (s.u.) (n ANALYSIS DATE: 08/29/02	I						493
True Value QC NR 50.0 50.0 5.00 1413 % Recovery NR 84.9 96.1 92.4 103 Relative Percent Difference NR 11.8 4.4 9.0 0.1 METHODS: SM3500-Ca-D 3500-Mg E 8049 120.1 3 CIT SO4 CO3 HCO3 pH (mg/L) (mg/L) (mg/L) (mg/L) (s.u.) (n ANALYSIS DATE: 08/29/02							
% Recovery NR 84.9 96.1 92.4 103 Relative Percent Difference NR 11.8 4.4 9.0 0.1 METHODS: SM3500-Ca-D 3500-Mg E 8049 120.1 3 CI	Quality Control	NR	42.4	48.0	4.62	1451	NR
Relative Percent Difference NR 11.8 4.4 9.0 0.1	True Value QC	· NR	50.0	50.0	5.00	1413	NR
METHODS: SM3500-Ca-D 3500-Mg E 8049 120.1 3 CIT SO ₄ CO ₃ HCO ₃ pH (mg/L) (mg/L) (mg/L) (mg/L) (s.u.) (n ANALYSIS DATE: 08/29/02	% Recovery	NR	84.9	96.1	92.4	103	NR
CIT SO ₄ CO ₃ HCO ₃ pH (mg/L) (mg/L) (mg/L) (s.u.) (ndg/L) (mg/L) (mg/L) (s.u.) (ndg/L) (mg/L) (mg/L) (s.u.) (ndg/L) (mg/L) (mg/L) (mg/L) (s.u.) (ndg/L) (mg/L)	Relative Percent Difference	NR	11.8	4.4	9.0	0.1	NR
ANALYSIS DATE: 08/29/02	METHODS:	SM3	3500-Ca-D	3500-Mg E	8049	120.1	310.1
ANALYSIS DATE: 08/29/02 08/29/02 08/29/02 08/29/02 08/29/02 08/30/29/02 08/39/02 08/		CI ⁻	SO₄	CO ₃	HCO₃	pН	TDS
H6991-1 K-6 MW 1 13796 4086 0 601 6.73 2 Quality Control 1000 49.34 NR 975 7.04 True Value QC 1000 50.00 NR 1000 7.00 % Recovery 100 98.7 NR 97.5 101 Relative Percent Difference 3.0 0.2 NR 2.5 0.1		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(s.u.)	(mg/L)
Quality Control 1000 49.34 NR 975 7.04 True Value QC 1000 50.00 NR 1000 7.00 % Recovery 100 98.7 NR 97.5 101 Relative Percent Difference 3.0 0.2 NR 2.5 0.1	ANALYSIS DATE:	08/29/02	08/29/02	08/29/02	08/29/02	08/29/02	08/30/02
True Value QC 1000 50.00 NR 1000 7.00 % Recovery 100 98.7 NR 97.5 101 Relative Percent Difference 3.0 0.2 NR 2.5 0.1	H6991-1 K-6 MW 1	13796	4086	0	601	6.73	29180
True Value QC 1000 50.00 NR 1000 7.00 % Recovery 100 98.7 NR 97.5 101 Relative Percent Difference 3.0 0.2 NR 2.5 0.1							
True Value QC 1000 50.00 NR 1000 7.00 % Recovery 100 98.7 NR 97.5 101 Relative Percent Difference 3.0 0.2 NR 2.5 0.1	Quality Control	1000	49.34	NR	975	7.04	NR
% Recovery 100 98.7 NR 97.5 101 Relative Percent Difference 3.0 0.2 NR 2.5 0.1		1000	50.00	NR			NR
	% Recovery	100		NR	97.5	101	NR
METHODS: SM4500-CLB 375.4 310.1 310.1 150.1 1		3.0	0.2	NR		0.1	8.8
	METHODS:	SM4500-CI-B	375.4	310.1	310.1	150.1	160.1

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 or 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 servit 60 Delevent 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

A A	AKDINAL LABORATORIES, INC. 2111 Beechwood, Abilene, TX 79603 101 E (915) 673-7020 (505)	S, <i>INC</i> . 3 101 East Marland, Hobbs, NM 882 0 (505) 393-2326 Fax (505) 393-2476	INC. 101 East Marland, Hobbs, NM 88240 (505) 393-2326 Fax (505) 393-2476	Page of (2
Company Name:		1	811.10	ANALYSIS REQUEST	
Project Manager:	Kinsti				
Address: える	W. Taylor		Company:		
city: Hobbs		VIPERE : diz	Attn:	77/	
Phone #: (505))393-9174 Fax #(505)	37-1471	Address:	3.j.	
Project #:			City:	000	
Project Name:	大-6		State: Zip:		
Project Location:	EME		Phone #:		
Sampler Name:	K. Farris		Fax #:	0.5	
FOR LAB USE ONLY		MATRIX	PRESERV SAMPLING		
		RS TER ER		Cati	
Lab I.D.	Sample I.D.	(G)RAB OR (G)RAB OR (G) # CONTAINE GROUNDWA WASTEWATI SOIL CRUDE OIL SLUDGE	OTHER: ACID/BASE: ICE / COOL OTHER:	Major BTEX	
HWYYH	K-6 MWI	X	082362	W35 X	
	K-6 MWI	2 X		N35 X	
malyses. All claims including service. In no event shall Car	Indicate the second of the sec	med wakes diseas made in willing and re- truct similation, business interruptions, loss that remarks of whether such false is	colved by Cardinal within 30 days after completion of the approximate, or loss of profits incurred by client, he subsidiarites, heard tono may of the about the completion of the form of the colors of the form of the colors of	i with a spitiable in the second of the spitiable in the	crained on all accurate more than remum from the original date of twelce, array's feat.
Sampler Relinquished:		Date: Received By: アタターリュー		Phone Result: 🗆 Yes 🗀 No Add'l Phone #: Fax Result: 🗀 Yes 🗇 No Add'l Fax #:	
An 13 110 Relinquished By:	darrio	Received By: (Lab Staff)	,)		<i>(</i> ,)
Mr Stand	1 7	I TIMEN A			
		75 3	(initials)		
Sampler - GPS -	bus - other:			,	

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

ANALYTICAL REPORT

Prepared for:

Kristin Farris Rice Operating 122 W. Taylor Hobbs, NM 88240

Project:

Jct. K-6

PO#:

510

Order#:

G0205001

Report Date: 11/19/2002

Certificates

US EPA Laboratory Code TX00158

SAMPLE WORK LIST

Rice Operating

122 W. Taylor

Hobbs, NM 88240

505-397-1471

Order#:

G0205001

Project:

Project Name: Jct. K-6

Location:

EME

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: 0205001-01 Sample:

Matrix: WATER

Collected

Received

Preservative Container

11/11/02 15:45

11/12/02 19:15

See COC

See COC

Lab Testing:

Rejected: No

Temp:

4 C

8021B/5030 BTEX

Anions

MW 1

Cations

Total Dissolved Solids (TDS)

ANALYTICAL REPORT

Kristin Farris
Rice Operating

122 W. Taylor Hobbs, NM 88240 Order#:

G0205001

Project:

Project Name:

Jct. K-6

Location:

EME

Lab ID:

0205001-01

Sample ID:

MW 1

8021B/5030 BTEX

Method Blank Date Prepared Date
<u>Analyzed</u>
11/19/02

12:02

Sample
Amount

Dilution <u>Factor</u> 1

Analyst CK

Method 8021B

0003799-02

Parameter	Result mg/L	RL
Benzene	0.001	0.001
Ethylbenzene	0.001	0.001
Toluene	0.001	0.001
p/m-Xylene	0.002	0.001
o-Xylene	<0.001	0.001

Surrogates	% Recovered	QC Li	mits (%)
aaa-Toluene	98%	80	120
Bromofluorobenzene	110%	80	120

Approval: Track Microbia of Mi

Date

ANALYTICAL REPORT

Kristin Farris

Rice Operating

122 W. Taylor Hobbs, NM 88240 Order#:

G0205001

Project:

Project Name: Jct. K-6

Location:

EME

Lab ID:

0205001-01

Sample ID:

MW 1

Cations			Dilution			Date	Date	
Parameter	Result	<u>Units</u>	Factor	<u>RL</u>	Method	Prepared	Analyzed	Analyst
Calcium	993	mg/L	1000	10.0	6010B	11/15/2002	11/15/02	SM
Magnesium	40.9	mg/L	100	0.10	6010B	11/15/2002	11/15/02	SM
Potassium	57.8	mg/L	10	0.50	6010B	11/15/2002	11/15/02	SM
Sodium	6290	mg/L	1000	10.0	6010B	11/15/2002	11/15/02	SM

Approval: <u>Cane Mining</u> 11-20-62 Raland K. Tuttle, Lab Director, QA Officer Date

Celey D. Keene, Org. Tech. Director Jeanne McMurrey, Inorg. Tech. Director Sandra Biezugbe, Lab Tech. Sara Molina, Lab Tech.

ENVIRONMENTAL LAB OF TEXAS I, LTD.

ANALYTICAL REPORT

Kristin Farris Rice Operating 122 W. Taylor Hobbs, NM 88240 Order#:

G0205001

Project:

Project Name: Location: Jet. K-6 EME

Lab ID:

0205001-01

Sample ID:

MW 1

Anions Parameter	Result	<u>Units</u>	Dilution <u>Factor</u>	ρī	Method	Date Analyzed	Analyst
1 at atheter			<u>Factor</u>	RL			<u>Analyst</u>
Bicarbonate Alkalinity	460	mg/L	1	2.00	310.1	11/13/02	SB
Carbonate Alkalinity	< 0.10	mg/L	1	0.10	310.1	11/13/02	SB
Chloride	12200	mg/L	1	5.00	9253	11/13/02	SB
Hydroxide Alkalinity	< 0.10	mg/L	1	0.10	310.1	11/13/02	SB
SULFATE, 375.4	3780	mg/L	50	25.0	375.4	11/14/02	SB
Test Parameters			Dilution			Date	
Parameter	Result	Units	Factor	$\underline{\mathbf{RL}}$	Method	Analyzed	Analyst
Total Dissolved Solids (TDS)	26400	mg/L	1	5.0	160.1	11/13/02	TAL

Approval: Canal Mcthudia 11-20-072
Raland K. Tuttle, Lab Director, QA Officer Date
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

QUALITY CONTROL REPORT 8021B/5030 BTEX

BLANK WATER	LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L	0003799-02	· · · · · · · · · · · · · · · · · · ·		<0.001		
Ethylbenzene-mg/L	0003799-02			<0.001		
Toluene-mg/L	0003799-02			<0.001		
p/m-Xylene-mg/L	0003799-02			<0.001		
o-Xylene-mg/L	0003799-02			<0.001	,	· · · · · · · · · · · · · · · · · · ·
CONTROL WATER	LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L	0003799-03		0.1	0.099	99.%	
Ethylbenzene-mg/L	0003799-03		0.1	0.103	103.%	
Toluene-mg/L	0003799-03		0.1	0.102	102.%	
p/m-Xylene-mg/L	0003799-03		0.2	0.218	109.%	
o-Xylene-mg/L	0003799-03		0.1	0.105	105.%	
CONTROL DUP WATER	LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L	0003799-04		0.1	0.098	98.%	1.%
Ethylbenzene-mg/L	0003799-04		0.1	0.102	102.%	1.%
Toluene-mg/L	0003799-04		0.1	0.101	101.%	1.%
p/m-Xylene-mg/L	0003799-04		0.2	0.215	107.5%	1.4%
o-Xylene-mg/L	0003799-04		0.1	0.104	104.%	1.%
SRM WATER	LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L	0003799-05		0.1	0.101	101.%	
Ethylbenzene-mg/L	0003799-05		0.1	0.104	104.%	
Toluene-mg/L	0003799-05		0.1	0.103	103.%	
p/m-Xylene-mg/L	0003799-05	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0.2	0.219	109.5%	
o-Xylene-mg/L	0003799-05		0.1	0.106	106.%	

QUALITY CONTROL REPORT

Anions

BLANK WATER	LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Bicarbonate Alkalinity-mg/L	0003746-01			<2.00		
Carbonate Alkalinity-mg/L	0003747-01			<0.10		
Chloride-mg/L	0003750-01			<5.00		
Hydroxide Alkalinity-mg/L	0003748-01	· · · · · · · · · · · · · · · · · · ·		<0.10		
SULFATE, 375.4-mg/L	0003767-01			<0.50		
DUPLICATE WATER	LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Bicarbonate Alkalinity-mg/L	0204999-01	512		510		0.4%
Carbonate Alkalinity-mg/L	0204999-01	0		<0.10		0.%
Hydroxide Alkalinity-mg/L	0204999-01	0		<0.10		0.%
SULFATE, 375.4-mg/L	0204999-01	2.8		2.9		3.5%
MS WATER	LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/L	0204999-01	3720	5000	8680	99.2%	
MSD WATER	LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/L	0204999-01	3720	5000	8600	97.6%	0.9%
SRM WATER	LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Bicarbonate Alkalinity-mg/L	0003746-04		0.05	0.0496	99.2%	
Carbonate Alkalinity-mg/L	0003747-04		0.05	0.0496	99.2%	
Chloride-mg/L	0003750-04	· · · · · · · · · · · · · · · · · · ·	5000	4960	99.2%	
Hydroxide Alkalinity-mg/L	0003748-04		0.05	0.0496	99.2%	
SULFATE, 375.4-mg/L	0003767-04		50	53.2	106.4%	<u> </u>

QUALITY CONTROL REPORT

Cations

BLANK	WATER	LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L		0003781-02	1 .1.4.4		<0.010		
Magnesium-mg/L		0003781-02			<0.001		
Potassium-mg/L		0003781-02			<0.050		
Sodium-mg/L		0003781-02			<0.010		
DUPLICATE	WATER	LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L		0204999-01	171		172		0.6%
Magnesium-mg/L		0204999-01	6.77		7.47		9.8%
Potassium-mg/L		0204999-01	11		11.6		5.3%
Sodium-mg/L		0204999-01	1940		1900		2.1%
SRM	WATER	LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L		0003781-05		2	2.09	104.5%	
Magnesium-mg/L		0003781-05		2	1.89	94.5%	
Potassium-mg/L		0003781-05		2	1.75	87.5%	
Sodium-mg/L		0003781-05		2	1.88	94.%	

QUALITY CONTROL REPORT

Test Parameters

BLANK	WATER	LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids	(TDS)-mg/L	0003753-01			<5.0		
DUPLICATE	WATER	LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids	(TDS)-mg/L	0204999-01	6020		6070		0.8%

Environmental Lab of Texas, Inc.

12600 West I-20 East Odessa, Texas 79763

Phone: 915-563-1800 Fax: 915-563-1713

Kristin Facris Project Manager:

Company Name AICE Operating Company Address: / 22 N. Taylor City/State/Zip: Habbs, NM 88240 Telephone No(505)393-9174

Project Name:

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project #:

Project Lac:

PO #:

Sampler Signature: X012110 20112

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	Time Sampled S 4 S Time Sampled No. of Containers HOJ. HOJ. AM. Of Containers P. HOLL Glass P. HOLL Glas

ANALYTICAL REPORT

Prepared for:

DONNIE ANDERSON RICE OPERATING COMPANY 122 W. TAYLOR **HOBBS, NM 88242**

Project:

K-6

Order#:

G0203359

Report Date: 05/17/2002

Certificates

US EPA Laboratory Code TX00158

SAMPLE WORK LIST

RICE OPERATING COMPANY

122 W. TAYLOR

HOBBS, NM 88242

505-397-1471

Order#:

G0203359

Project:

Project Name: K-6

Location:

EME SWD

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.

				Date / Time	Date / Time		
Lab ID:	Sample:	Matrix:		Collected	Received	Container	Preservative
0203359-0	1 MW 1	WATER		5/14/02	5/15/02	See COC	See COC
	· -			11:20	10:00		
	Lab Testing:	Rejected:	No	Tem	ip: See COC		
	8021B/5030 BTEX						
	Anions						
	Cations						
	Total Dissolved Solids	(TDS)					

ANALYTICAL REPORT

DONNIE ANDERSON RICE OPERATING COMPANY

122 W. TAYLOR HOBBS, NM 88242 Order#:

G0203359

Project:

Project Name: K-6

Location:

EME SWD

Lab ID:

0203359-01

Sample ID:

MW 1

8021B/5030 BTEX

				_		
Method	Date	Date	Sample	Dilution		
Blank	Prepared	Analyzed	<u>Amount</u>	<u>Factor</u>	<u>Analyst</u>	Method
0001724-02		5/15/02	1	1	CK	8021B
		11:56				

Parameter	Result μg/L	RL
Benzene	1.24	1.00
Ethylbenzene	3.36	1.00
Toluene	<1.00	1.00
p/m-Xylene	3.54	1.00
o-Xylene	<1.00	1.00

Approval:

Raland K. Tuttle, Lab Director, QA Officer Celey D. Keene, Org. Tech. Director

Jeanne McMurrey, Inorga Pech. Director

Sandra Biezugbe, Lab Tech. Sara Molina, Lab Tech.

ANALYTICAL REPORT

DONNIE ANDERSON

RICE OPERATING COMPANY

122 W. TAYLOR

HOBBS, NM 88242

Test Parameters

Total Dissolved Solids (TDS)

Parameter

Order#:

G0203359

Project:

Location:

K-6

Project Name:

EME SWD

Lab ID:

0203359-01

Sample ID:

MW 1

Anions Parameter	<u>Result</u>	Units	Dilution <u>Factor</u>	RL	Method	Date Analyzed	<u>Analyst</u>
Bicarbonate Alkalinity	522	mg/L	1	2.0	310.1	5/15/02	SB
Carbonate Alkalinity	< 0.10	mg/L	1	0.1	310.1	5/15/02	SB
Chloride	12000	mg/L	1	5.00	9253	5/16/02	SB
Hydroxide Alkalinity	< 0.10	mg/L	1	0.1	310.1	5/15/02	SB
SULFATE, 375.4	3960	mg/L	50	25.0	375.4	5/17/02	SB
Cations		·	Dilution			Date	
Parameter	Result	Units	<u>Factor</u>	$\underline{\mathbf{RL}}$	Method	<u>Analyzed</u>	<u>Analyst</u>
Calcium	1010	mg/L	250	2.50	6010B	5/16/02	SM
Magnesium	368	mg/L	250	0.250	6010B	5/16/02	SM
Potassium	46.0	mg/L	50	2.50	6010B	5/16/02	SM
Sodium	7310	mg/L	1250	12.5	6010B	5/16/02	SM

Units

mg/L

Result

26700

Dilution

Factor

1

Method

160.1

Analyst

SB

Date

Analyzed

5/15/02

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.

<u>RL</u>

5.0

QUALITY CONTROL REPORT

8021B/5030 BTEX

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()rder#:	G0203359

BLANK WATER	LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-μg/L	0001724-02			<1.00		
Ethylbenzene-µg/L	0001724-02			<1.00		
Toluene-μg/L	0001724-02			<1.00		
p/m-Xylene-µg/L	0001724-02			<1.00		
o-Xylene-µg/L	0001724-02			<1.00		······································
CONTROL WATER	LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-μg/L	0001724-03	***	100	115	115.%	
Ethylbenzene-μg/L	0001724-03		100	114	114.%	
Toluene-μg/L	0001724-03		100	112	112.%	
p/m-Xylene-µg/L	0001724-03		200	225	112.5%	
o-Xylene-μg/L	0001724-03		100	113	113.%	
CONTROL DUP WATER	LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-μg/L	0001724-04		100	114	114.%	0.9%
Ethylbenzene-µg/L	0001724-04		100	110	110.%	3.6%
Toluene-μg/L	0001724-04		100	109	109.%	2.7%
p/m-Xylene-µg/L	0001724-04		200	225	112.5%	0.%
o-Xylene-µg/L	0001724-04		100	112	112.%	0.9%
SRM WATER	LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/L	0001724-05		100	115	115.%	
Ethylbenzene-µg/L	0001724-05		100	112	112.%	
Toluene-μg/L	0001724-05		100	109	109.%	
p/m-Xylene-µg/L	0001724-05		200	226	113.%	
o-Xylene-μg/L	0001724-05		100	111	111.%	

QUALITY CONTROL REPORT

Anions

BLANK	WATER	LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Bicarbonate Alkalin	nity-mg/L	0001737-01			<2.00		
Carbonate Alkalinit	y-mg/L	0001738-01			<0.10		
Chloride-mg/L		0001733-01			<5.00		
Hydroxide Alkalini	ty-mg/L	0001739-01			<0.10		
SULFATE, 375.4-n	ng/L	0001741-01			<0.50		
DUPLICA	TE WATER	LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Bicarbonate Alkalin	nity-mg/L	0203354-01	292		293		0.3%
Carbonate Alkalinit	y-mg/L	0203354-01	0		<0.10		0.%
Hydroxide Alkalinity-mg/L		0203354-01	0		<0.10		0.%
SULFATE, 375.4-n	ng/L	0203355-01	610		610		0.%
MS	WATER	LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/L	,	0203354-01	860	500	1360	100.%	
MSD	WATER	LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/L		0203354-01	860	500	1360	100.%	0.%
SRM	WATER	LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Bicarbonate Alkalin	nity-mg/L	0001737-04		0.05	0.0496	99.2%	
Carbonate Alkalinit	y-mg/L	0001738-04		0.05	0.0496	99.2%	
Chloride-mg/L		0001733-04		5000	5050	101.%	
Hydroxide Alkalini	ty-mg/L	0001739-04		0.05	0.0496	99.2%	
SULFATE, 375.4-n	ng/L	0001741-04		50	49.9	99.8%	

QUALITY CONTROL REPORT

Cations

BLANK WATER		LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L		0001725-02			<0.010		
Magnesium-mg/L		0001725-02			<0.001		
Potassium-mg/L		0001725-02			<0.050		
Sodium-mg/L		0001725-02			<0.010		·
DUPLICATE WATER		LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L		0203354-01	266		264		0.8%
Magnesium-mg/L		0203354-01	106		106		0.%
Potassium-mg/L		0203354-01	15.4		14.8		4.%
Sodium-mg/L		0203354-01	303		308		1.6%
SRM WATER		LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L		0001725-05		2	1.99	99.5%	
Magnesium-mg/L		0001725-05		2	2.06	103.%	
Potassium-mg/L	_	0001725-05		2	1.77	88.5%	
Sodium-mg/L		0001725-05		2	1.91	95.5%	

QUALITY CONTROL REPORT

Test Parameters

BLANK WATER	LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L	0001731-01			<5.00		
DUPLICATE WATER	LAB-ID#	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L	0203354-01	2680		2760		2.9%

LININGINIERITAL LAD OF FEXAS, Inc.

12600 West I-20 East Odessa, Texas 79763

Phone: 915-563-1800 Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Le -015°C - 40m gles TAT brebnet2 PUSH TAT (Pre-Schedule) 18.5°C - L HDPE Temperature Upon Recept Laboratory Comments: Sample Containers Intail Analyze For 9TEX 8021B/5030 Project Loc: EME Metals: As Ag Ba Cd Cr Pb Hg Se TCLP: TOTAL: ORD/ORD METOR HAT PS ₹ Project Name: Project #: 3001/2001 XT H9T 1.814 H9T 300 Time 1021 CL 1501 Other (specify): Matrix egbul2 Date Other (Specify) enoM Fax No: (505) 397-1471 os'H HOEN Relinguished by: Anions/Cations | Fax (18 wilts to K. Faccis) НСІ HNO 90) No. of Containers 5-14 -02 111. 20am 5-14-02/11: 25 am Time Sampled Date Sampled City/State/Zip: HOBBS, NEW MEXICO, 88240 5-14-62 4:30 pm 5-15-02 10: 22 Company Name_RICE_OPERATING_COMPANY Sampler Signature: 4012 110 Stanna Project Manager: DONNIE ANDERSON Telephone No: (505) 393-9174 Company Address: 122 W. TAYLOR FIELD CODE MM M Kristin Faccis Special Instructions: 0-1351-0

NTAL

January 25, 2002

Mr. Donnie Anderson Rice Operating Company 122 West Taylor Hobbs, New Mexico 88240

Subject: Monument EME K-6 Monitor Well Sampling



Dear Mr. Anderson,

Included below is the information for the Monument EME K-6 monitor well sampled by Environmental Plus, Inc. on 1-24-02.

RICE OPERATING T20S R37E MONUMENT EME K-6								
MONITOR WELL ID	DATE	WELL CASING INSIDE DIAMETER	WATER LEVEL FROM TOP OF CASING	TOTAL DEPTH FROM TOP OF CASING	BORE WATER VOLUME	Purge Volume		
		INCHES	FEET	FEET	GALLONS	GALLONS		
MWI	1/25/2002	2	37.2	43.5	1.0	3.1		

If you have any questions or require more information please call Mr. Ben Miller or myself at the office or at 505.390.0288 or 505.390.7864, respectively.

Sincerely,

Pat McCasland

EPI Technical Services Manager

Ben Miller, EPI Vice President and General Manager cc:

Sherry Miller, EPI President

file

RICE Operating Company

122 West Taylor • Hobbs, New Mexico 88240 Phone: (505)393-9174 • Fax: (505) 397-1471

CERTIFIED MAIL RETURN RECEIPT NO. 7000 1530 0005 9895 4503

February 4, 2002

Mr. Roger Anderson NM Energy, Minerals, and Natural Resources Oil Conservation Division, Environmental Bureau 1220 S. St. Francis Drive Santa Fe, NM 87505

RE: NOTIFICATION OF GROUNDWATER IMPACT

EUNICE MONUMENT EUMONT (EME) SWD SYSTEM, JCT K-6

Unit Letter K, Sec. 6, T20S, R37E, Lea County, NM

Mr. Anderson:

Rice Operating Company (ROC) takes this opportunity to notify the Director of the NMOCD, Environmental Bureau of groundwater impact in accordance with NM Rule 116. The Jct. K-6 site qualifies for this notification. The remediation of this site may fall under NM Rule 19 procedures.

Jct. K-6 is part of the Junction Box Upgrade Project scheduled for 2001. Impact of the vadose zone was delineated by trenching and soil boring at this site. Vadose zone impact was discovered to groundwater. A monitor well was installed and developed pursuant to NMOCD guidelines. A water sample was taken to a certified lab for analyses. The analyses results are listed in the following table. All results are in mg/L.

S	ITE	UNIT	SEC	T	R	CHLORIDES	TDS	BENZENE
K	ζ-6	K	6	20S	37E	12,096	23,370	< 0.002

The results demonstrate chlorides and TDS are in excess of the WQCC standards. Groundwater in this area is 23' bgs. A remediation plan will be developed for this site and submitted to the NMOCD for approval.

ROC is the service provider (operator) for the EME Salt Water Disposal System and has no ownership of any portion of the pipelines, wells or facilities. The EME SWD System is owned by a consortium of oil producers, System Partners, who provide all operating capital on a percentage ownership/usage basis.

Please accept this notification for Jct. K-6.

RICE OPERATING COMPANY

Donnie Anderson

Project Leader-Environmental

Cc: LBG, CDH, SC, file

Mr. Chris Williams

NMOCD, District 1 Office 1625 N. French Drive Hobbs, NM 88240