AP - 46

ANNUAL MONITORING REPORT

YEAR(S): 2004

RICE Operating Company

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

CERTIFIED MAIL RETURN RECEIPT NO. 7002 2410 0000 4940 1787

January 21, 2005

Mr. Wayne Price New Mexico Energy, Minerals, & Natural Resources Dept. Oil Conservation Division, Environmental Bureau 1220 S. St. Francis Drive Santa Fe, New Mexico 87505

RE: 2004 MONITOR WELL REPORT/SAMPLING SUMMARY JUNCTION K-6, EME SWD SYSTEM UNIT 'K', SEC. 6, T20S, R37E NMOCD CASE #1R0427-88

Mr. Price:

Rice Operating Company (ROC) takes this opportunity to submit the 2004 Monitor Well Report for the <u>EME K-6 junction box site</u> located in the Eunice Monument Eumont (EME) Salt Water Disposal (SWD) System. One monitoring well was installed in 2002 during the delineation of a junction box. This well is sampled quarterly pursuant to NMOCD guidelines. In 2004, ROC and Basin Environmental Service Technologies of Lovington sampled the well. In 2005, Trident Environmental (Trident) of Midland, Texas will sample the well and Environmental Lab of Texas of Odessa will continue to conduct analytical tests of the water samples.

Trident has been contracted by ROC to address groundwater concerns at this. NMOCD may expect the submission of an Investigation & Characterization Plan (ICP) this year.

ROC is the service provider (operator) for the EME Salt Water Disposal System and has no ownership of any portion of pipeline, well, or facility. 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.

Thank you for your consideration concerning this annual summary of groundwater monitoring information. If you have any questions, do not hesitate to contact me.

RICE OPERATING COMAPANY

Knistin Farris Pope

Kristin Farris Pope Project Scientist

enclosures: Summary table & graph Analytical results map

cc: LBG, CDH, Trident, file, Rob Roy Industries,

Chris Williams NMOCD, District I Office 1625 N. French Drive Hobbs, NM 88240

Monitor Well Data Sheet RICE Operating Company

NMOCD Case #1R0427-88

COMMENTS red & silty bailer 0.01519 bailer sandy silty BENZENE XYLENES 0.000716 0.00317 TOTAL <0.006 <0.006 0.004 0.006 3.54 0.003 0.003 0.001 0.001 0.000601 0.00125 0.00476 ETHYL <0.002 <0.001 0.002 <1.00 0.002 0.003 0.001 0.001 0.001 All concentrations are in mg/L BENZENE TOLUENE 0.000377 0.000395 0.00425 <0.002 <0.001 <0.002 <0.002 0.001 0.001 0.001 0.001 3.36 0.00546 0.00297 0.00137 <0.002 0.003 <0.002 0.002 0.003 1.24 0.001 0.003 0.001 25700 26700 25900 27000 26400 26500 23900 23370 24600 29180 26400 26172 TDS 12000 12200 12800 12400 12000 11500 11796 11500 12096 13796 13800 10800 C. 02/27/03 11/19/03 09/07/04 SAMPLE 01/25/02 05/14/02 11/11/02 05/29/03 08/21/03 02/18/04 05/27/04 08/28/02 DATE VOLUME PURGED 3.10 2.50 1.30 1.50 2.75 1.00 1.40 3.00 1.00 00.1 2.28 2.70 (gal) VOLUME WELL 1.010 0.340 0.380 0.877 0.845 0.512 0.480 0.470 1.000 0.440 0.312 TOTAL DEPTH 42.78 43.50 42.80 40.60 40.55 41.00 40.90 44.52 40.55 40.55 40.34 (H) DEPTH TO WATER * 37.20 37.78 37.96 37.30 37.52 38.65 37.80 37.90 38.17 38.40 37.60 # MW



* Depth to water measured from top of the casing Casing is 2.938 ft

11/24/04

0.450

40.34

37.53

GPS coordinates: 13660187E 3608116N

unit 'K', Sec. 6, T20S, R37E EME jct. K-6





Analytical Report

Prepared for:

Kristin Pope Rice Operating Co. 122 W. Taylor Hobbs, NM 88240

Project: Jct. K-6 Project Number: None Given Location: EME

Lab Order Number: 4K30009

Report Date: 12/09/04

'Rice Operating Co.	Project: Jct. K-6	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	Reported:
Hobbs NM, 88240	Project Manager: Kristin Pope	12/09/04 15:40

ANALYTICAL REPORT FOR SAMPLES

i.

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	4K30009-01	Water	11/24/04 15:10	11/30/04 10:35

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

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Rice Operating Co.	Project: Jct. K-6	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	Reported:
Hobbs NM, 88240	Project Manager: Kristin Pope	12/09/04 15:40

Organics by GC **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (4K30009-01) Water									
Benzene	0.00546	0.00100	mg/L	1	EL40601	12/02/04	12/03/04	EPA 8021B	
Toluene	0.00425	0.00100	n	"	"	"	"	n	
Ethylbenzene	0.00476	0.00100	н	"	н	"	11		
Xylene (p/m)	0.00927	0.00100	п	u	"	"	11	U	
Xylene (0)	0.00592	0.00100	n	0	"	"	"	н	
Surrogate: a,a,a-Trifluorotoluene		166 %	80-12	20	11	"	"	11	S-04
Surrogate: 4-Bromofluorobenzene		121 %	80-12	20	"	"	"	"	S-04

Environmental Lab of Texas

Rice Operating Co.	Project: Jct. K-6	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	Reported:
Hobbs NM, 88240	Project Manager: Kristin Pope	12/09/04 15:40

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (4K30009-01) Water									
Total Alkalinity	542	2.00	mg/L	1	EL40313	12/03/04	12/03/04	EPA 310.2M	
Total Dissolved Solids	23900	5.00	**	11	EL40105	11/30/04	12/01/04	EPA 160.1	

Environmental Lab of Texas

	Rice Operating Co.	Project: Jct. K-6	Fax: (505) 397-1471
	122 W. Taylor	Project Number: None Given	Reported:
1	Hobbs NM, 88240	Project Manager: Kristin Pope	12/09/04 15:40

Total Metals by EPA / Standard Methods **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-1 (4K30009-01) Water									
Calcium	1370	10.0	mg/L	1000	EL40101	11/30/04	11/30/04	EPA 6010B	
Magnesium	438	0.100	91	100	"			*1	
Potassium	44.9	5.00	и	"	н	"	u	11	
Sodium	7400	10.0	"	1000	и	**	**	n	

Environmental Lab of Texas

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Rice Operating Co. 122 W. Taylor Hobbs NM, 88240		Pr Project Nur Project Mar		one Given				Fax: (505) 3 Repor 12/09/04	ted:
		Anions by Environm						······································	
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note

10800 Chloride 100 mg/L EPA 300.0 200 12/08/04 12/08/04 EL40916 v # 0 Sulfate 4140 100 11 11 "

Environmental Lab of Texas

MW-1 (4K30009-01) Water

Rice Operating Co.		Pro	oject: Jct	. K-6					Fax: (505)	397-1471	
122 W. Taylor	Project Number: None Given								Reported:		
Hobbs NM, 88240	Project Manager: Kristin Pope								12/09/04		
	Or	ganics by	GC - Q	Quality C	Control						
]	Environm	ental L	ab of T	exas						
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch EL40601 - EPA 5030C (GC)											
Blank (EL40601-BLK1)				Prepared	& Analyze	ed: 12/02/	04				
Benzene	ND	0.00100	mg/L								
Toluene	ND	0.00100	"								
Ethylbenzene	ND	0.00100	и								
Xylene (p/m)	ND	0.00100	и								
Xylene (o)	ND	0.00100	11								
Surrogate: a,a,a-Trifluorotoluene	0.0223		"	0.0200		112	80-120	~			
Surrogate: 4-Bromofluorobenzene	0.0183		"	0.0200		91.5	80-120				
LCS (EL40601-BS1)				Prepared	& Analyz	ed: 12/02/	04				
Benzene	99.2		ug/l	100		99.2	80-120				
Toluene	107		н	100		107	80-120				
Ethylbenzene	107		н	100		107	80-120				
Xylene (p/m)	219		11	200		110	80-120				
Xylene (o)	116		11	100		116	80-120				
Surrogate: a,a,a-Trifluorotoluene	0.0196		mg/L	0.0200		98.0	80-120				
Surrogate: 4-Bromofluorobenzene	0.0199		"	0.0200		99.5	80-120				
LCS Dup (EL40601-BSD1)				Prepared	& Analyz	ed: 12/02/	04				
Benzene	100		ug/l	100		100	80-120	0.803	20		
Toluene	110		11	100		110	80-120	2.76	20		
Ethylbenzene	111		"	100		111	80-120	3.67	20		
Xylene (p/m)	230		"	200		115	80-120	4.44	20		
Xylene (0)	119		"	100		119	80-120	2.55	20		
Surrogate: a,a,a-Trifluorotoluene	0.0199		mg/L	0.0200		99.5	80-120				
Surrogate: 4-Bromofluorobenzene	0.0202		"	0.0200		101	80-120				
Calibration Check (EL40601-CCV1)				Prepared:	12/02/04	Analyze	d: 12/03/04	L			
Benzene	98.7		ug/l	100		98.7	80-120				
Toluene	105		"	100		105	80-120				
Ethylbenzene	109		**	100		109	80-120				
Xylene (p/m)	221		"	200		110	80-120				
Xylene (o)	111		11	100		111	80-120				
Surrogate: a,a,a-Trifluorotoluene	0.0218		mg/L	0.0200		109	80-120				
Surrogate: 4-Bromofluorobenzene	0.0227		"	0.0200		114	80-120				

Environmental Lab of Texas

Rice Operating Co.	Project: Jct. K-6	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	Reported:
Hobbs NM, 88240	Project Manager: Kristin Pope	12/09/04 15:40

Organics by GC - Quality Control

Environmental Lab of Texas

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch EL40601 - EPA 5030C (GC)

Matrix Spike (EL40601-MS1)	Source:	4K30004-03	Prepared:	12/02/04	Analyzed:	12/03/04
Benzene	107	ug/l	100	ND	107	80-120
Toluene	108	R	100	ND	108	80-120
Ethylbenzene	114	"	100	ND	114	80-120
Xylene (p/m)	229	11	200	ND	114	80-120
Xylene (o)	111	"	100	ND	111	80-120
Surrogate: a,a,a-Trifluorotoluene	0.0206	mg/L	0.0200		103	80-120
Surrogate: 4-Bromofluorobenzene	0.0201	"	0.0200		100	80-120

Environmental Lab of Texas

Rice Operating Co. 122 W. Taylor Hobbs NM, 88240		Pro Project Nun Project Man		one Given					Fax: (505) Repo 12/09/04	rted:
· · · · · · · · · · · · · · · · · · ·	emistry Param		EPA /	Standar		ods - Q	Quality (Contro		4 15:40
		Reporting		Spike	Source	<u></u>	%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EL40105 - General Prepar	ation (WetChem)									
Blank (EL40105-BLK1)				Prepared:	11/30/04	Analyzed	: 12/01/04			
Fotal Dissolved Solids	ND	5.00	mg/L							
Duplicate (EL40105-DUP1)	Sour	·ce: 4K2400	9-01	Prepared:	11/30/04	Analyzed	: 12/01/04			
Total Dissolved Solids	1480	5.00	mg/L		1480			0.00	20	
Batch EL40313 - General Prepar	ation (WetChem)	1								
Blank (EL40313-BLK1)				Prepared	& Analyza	ed: 12/03/0	04	-		
Total Alkalinity	ND	2.00	mg/L							
Duplicate (EL40313-DUP1)	Sou	rce: 4K300(94-01	Prepared	& Analyze	ed: 12/03/	04			
Total Alkalinity	207	2.00	mg/L		208			0.482	20	
Reference (EL40313-SRM1)	-			Prepared	& Analyz	ed: 12/03/	04			
Carbonate Alkalinity	0.0501		mg/L	0.0500		100	80-120			

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas. Page 8 of 12

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Rice Operating Co.	Project: Jct. K-6	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	Reported:
Hobbs NM, 88240	Project Manager: Kristin Pope	12/09/04 15:40

Total Metals by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch EL40101 - 6010B/No Digestion

Blank (EL40101-BLK1)				Prepared & A	nalyzed: 11/30/	04			
Calcium	ND	0.0100	mg/L						
Magnesium	ND	0.00100	n						
Potassium	ND	0.0500	"						
Sodium	ND	0.0100	H						
Calibration Check (EL40101-CCV1)				Prepared & A	analyzed: .11/30/	'04			
Calcium	1.87		mg/L	2.00	93.5	85-115	~		
Magnesium	2.08		ti	2.00	104	85-115			
Potassium	1.83		*1	2.00	91.5	85-115			
Sodium	1.78		11	2.00	89.0	85-115			
Duplicate (EL40101-DUP1)	Soi	ırce: 4K240(09-01	Prepared & A	Analyzed: 11/30	/04			
Calcium	108	1.00	mg/L		122		12.2	20	
Magnesium	46.0	0.0100			51.6		11.5	20	
Potassium	11.1	0.500	н		13.2		17.3	20	
Sodium	222	1.00			235		5.69	20	

Environmental Lab of Texas

Rice Operating Co.		Pro	oject: Jc	t. K - 6					Fax: (505)	397-1471
122 W. Taylor		Project Nur	nber: No	one Given					Repo	rted:
Hobbs NM, 88240	Project Manager: Kristin Pope							12/09/04 15:40		
	Anions by	EPA Met	thod 3	00.0 - Qı	iality C	Control				
]	Environm	ental I	Lab of T	exas					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL40916 - General Preparati	ion (WetChen	n)								
Blank (EL40916-BLK1)				Prepared	& Analyze	ed: 12/08/	04			
Sulfate	0.00	0.500	mg/L							
Chloride	0.00	0.500								
Blank (EL40916-BLK2)				Prepared	& Analyze	ed: 12/08/	04			
Sulfate	0.00	0.500	mg/L							
Chloride	0.00	0.500	"							
LCS (EL40916-BS1)				Prepared	& Analyze	ed: 12/08/	04	<u>`</u>		
Sulfate	- 11.7	0.500	mg/L	10.0		117	80-120			
Chloride	9.75	0.500	"	10.0		97.5	80-120			
LCS (EL40916-BS2)				Prepared	& Analyze	ed: 12/08/	04			
Chloride	9.77	0.500	mg/L	10.0		97.7	80-120			
Sulfate	11.8	0.500	u	10.0		118	80-120			
LCS Dup (EL40916-BSD1)				Prepared	& Analyze	ed: 12/08/	04			
Chloride	9.83	0.500	mg/L	10.0		98.3	80-120	0.817	20	
Sulfate	11.8	0.500	11	10.0		118	80-120	0.851	20	
LCS Dup (EL40916-BSD2)				Prepared	& Analyze	ed: 12/08/	04			
Chloride	9.74	0.500	mg/L	10.0		97.4	80-120	0.308	20	
Sulfate	11.7	0.500	n	10.0		117	80-120	0.851	20	
Calibration Check (EL40916-CCV1)				Prepared	& Analyz	ed: 12/08/	04			
Sulfate	11.7		mg/L	10.0		117	80-120			
Chloride	9.79		н	10.0		97.9	80-120			
Calibration Check (EL40916-CCV2)				Prepared	& Analyz	ed: 12/08/	′04			
Chloride	9.80		mg/L	10.0		98.0	80-120			
Sulfate	11.7		11	10.0		117	80-120			

Environmental Lab of Texas

Rice Operating Co.	Project: Jct. K-6	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	Reported:
Hobbs NM, 88240	Project Manager: Kristin Pope	12/09/04 15:40

Anions by EPA Method 300.0 - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL40916 - General Prepar	ation (WetChem)	·								
Duplicate (EL40916-DUP1)	Sour	rce: 4L0300)1-01	Prepared	& Analyze	ed: 12/08/0)4			
Chloride	1570	20.0	mg/L		1330			16.6	20	
Sulfate	809	20.0	н		682			17.0	20	
Duplicate (EL40916-DUP2)	Sour	rce: 4L0600)3-02	Prepared	& Analyze	ed: 12/08/0)4			
Chloride	731	20.0	mg/L		725			0.824	20	
Sulfate	1210	20.0	11		1200			0.830	20	
								-		

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Rice Operating Co.	Project: Jct. K-6	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	Reported:
Hobbs NM, 88240	Project Manager: Kristin Pope	12/09/04 15:40

Notes and Definitions

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matri	x effect.
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- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- Not Reported NR
- Sample results reported on a dry weight basis dry
- RPD Relative Percent Difference
- LCS Laboratory Control Spike
- MS Matrix Spike

Dup Duplicate

alandk hull 12-10-04 Report Approved By: Date:

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

Jeanne Mc Murrey, Inorg. Tech Director James L. Hawkins, Chemist/Geologist Sandra Sanchez, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas



Environmental Lab of Texas Variance / Corrective Action Report – Sample Log-In

Client:	Rice Operating	(.0.
	`	

Date/Time: 11-30-64 @, 1200

JMM

Order #: 4K 3000 9

Initials:

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	O,S C
Shipping container/cooler in good condition?	(Yes)	No	
Custody Seals intact on shipping container/cooler?	Yes	No	Not present
Custody Seals intact on sample bottles?	Yes	No	Not present>
Chain of custody present?	(Yes)	No	
Sample Instructions complete on Chain of Custody?	(Tes)	No	
Chain of Custody signed when relinguished and received?	(Yes)	No	
Chain of custody agrees with sample label(s)	(Yes)	No	
Container labels legible and intact?	(res)	No	
Sample Matrix and properties same as on chain of custody?	(Tes)	No	
Samples in proper container/bottle?	(res)	No	
Samples properly preserved?	res	No	· · ·
Sample bottles intact?	(es)	No	
Preservations documented on Chain of Custody?	(Ces)	No	
Containers documented on Chain of Custody?	(Yes)	No	
Sufficient sample amount for indicated test?	Res	No	
All samples received within sufficient hold time?	(Tes	No	
VOC samples have zero headspace?	(Yes)	No	Not Applicable

Other observations:

Contact Person: Regarding:	Variance Documentation: Date/Time:	_ Contacted by:
Corrective Action Taken:		
	······	
		<u>.</u>



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Analytical Report

Prepared for:

Kristin Pope Rice Operating Co. 122 W. Taylor Hobbs, NM 88240

Project: Jct. K-6 Project Number: None Given Location: EME

Lab Order Number: 4I10010

Report Date: 09/17/04

Rice Operating Co.	Project: Jct. K-6	Fax: (505) 397-1471
122 W. Taylor	Project Number: None G	ven Reported:
Hobbs NM, 88240	Project Manager: Kristin	Pope 09/17/04 10:54

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	4110010-01	Water	09/07/04 13:40	09/09/04 19:20

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

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Rice Operating Co.	Project: Jct. K-6	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	Reported:
Hobbs NM, 88240	Project Manager: Kristin Pope	09/17/04 10:54

Organics by GC

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (4110010-01) Water									
Benzene	0.00297	0.00100	mg/L	1	EI41604	09/14/04	09/14/04	EPA 8021B	
Toluene	J [0.000395]	0.00100	11	n	"	"	11	n	J
Ethylbenzene	0.00125	0.00100	11	*1	n	11	"		
Xylene (p/m)	0.00212	0.00100	Ħ		"	н	11	"	
Xylene (0)	0.00105	0.00100	"	*1	"	11	"	W	
Surrogate: a,a,a-Trifluorotoluene		117 %	80-12	0	"	"	"	",	
Surrogate: 4-Bromofluorobenzene		83.0 %	80-12	0	"	"	" `	11	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

- Rice Operating Co.	Project: Jct. K-6	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	Reported:
Hobbs NM, 88240	Project Manager: Kristin Pope	09/17/04 10:54

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte MW-1 (4110010-01) Water	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	11500	5.00	mg/L	1	EI41612	09/12/04	09/12/04	EPA 325.3M	
Total Dissolved Solids	24600	20.0	11	4	EI41702	09/13/04	09/13/04	EPA 160.1	
Sulfate	3640	25.0	"	50	EI41701	09/10/04	09/10/04	EPA 375.4	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas. Page 3 of 11

Rice Operating Co.	Project: Jct. K-6	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	Reported:
Hobbs NM, 88240	Project Manager: Kristin Pope	09/17/04 10:54

Total Metals by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (4110010-01) Water		· · · · · · · · · · · ·							
Calcium	972	10.0	mg/L	1000	EI41506	09/15/04	09/15/04	EPA 6010B	
Magnesium	353	0.100	n	100	"	н			
Potassium	51.6	0.500	*	10	"	11	"	11	
Sodium	7570	10.0	9	1000	"	n	н	11	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas. Page 4 of 11

Rice Operating Co.			oject: Jct						Fax: (505)	397-1471
122 W. Taylor	•							Repo	rted:	
Hobbs NM, 88240								09/17/0	4 10:54	
	Or	ganics by	GC - Q	Quality (Control					
]	Environm	ental L	ab of T	exas					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EI41604 - EPA 5030C (GC)										
Blank (EI41604-BLK1)				Prepared	& Analyze	ed: 09/14/	04			
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	W							
Ethylbenzene	ND	0.00100								
Xylene (p/m)	ND	0.00100								
Xylene (o)	ND	0.00100	н							
Surrogate: a,a,a-Trifluorotoluene	20.0		ug/l	20.0		100	80-120	~		
Surrogate: 4-Bromofluorobenzene	17.4		"	20.0		87.0	80-120			
LCS (EI41604-BS1)				Prepared	& Analyze	ed: 09/14/	04			
Benzene	95.7		ug/l	100		95.7	80-120			
Toluene	110			100		110	80-120			
Ethylbenzene	108		91	100		108	80-120			
Xylene (p/m)	228		9	200		114	80-120			
Xylene (0)	103		91	100		103	80-120			
Surrogate: a,a,a-Trifluorotoluene	21.5			20.0		108	80-120			
Surrogate: 4-Bromofluorobenzene	23.5		"	20.0		118	80-120			
LCS Dup (EI41604-BSD1)				Prepared	& Analyze	ed: 09/14/	04			
Benzene	92.0		ug/l	100		92.0	80-120	3.94	20	
Toluene	104		19	100		104	80-120	5.61	20	
Ethylbenzene	103		*	100		103	80-120	4.74	20	
Xylene (p/m)	215		"	200		108	80-120	5.41	20	
Xylene (o)	99.5		н	100		99.5	80-120	3.46	20	
Surrogate: a,a,a-Trifluorotoluene	20.6		"	20.0		103	80-120			
Surrogate: 4-Bromofluorobenzene	21.2		"	20.0		106	80-120			
Calibration Check (EI41604-CCV1)				Prepared	& Analyz					
Benzene	82.8		ug/l	100		82.8	80-120	•		
Toluene	94.0		"	100		94.0	80-120			
Ethylbenzene	91.4		"	100		91.4	80-120			
Xylene (p/m)	196		u	200		98.0	80-120			
Xylene (o)	89.9		H	100		89.9	80-120			
Surrogate: a,a,a-Trifluorotoluene	18.1		n	20.0		90.5	80-120			
Surrogate: 4-Bromofluorobenzene	17.1		"	20.0		85.5	80-120			

Environmental Lab of Texas

- Rice Operating Co.	Project: Jct. K-6	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	Reported:
Hobbs NM, 88240	Project Manager: Kristin Pope	09/17/04 10:54

Organics by GC - Quality Control

Environmental Lab of Texas

											1
		Reporting		Spike	Source		%REC		RPD		
Analyte H	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes	

Batch EI41604 - EPA 5030C (GC)

Matrix Spike (EI41604-MS1)	Source: 4	4110005-02	Prepared:	09/14/04	Analyzed	1: 09/16/04
Benzene	81.1	ug/l	100	ND	81.1	80-120
Toluene	83.7		100	ND	83.7	80-120
Ethylbenzene	81.6	11	100	ND	81.6	80-120
Xylene (p/m)	174	н	200	ND	87.0	80-120
Xylene (o)	80.6	n	100	ND	80.6	80-120
Surrogate: a,a,a-Trifluorotoluene	17.0	"	20.0		85.0	80-120
Surrogate: 4-Bromofluorobenzene	16.5	"	20.0		82.5	80-120

Environmental Lab of Texas

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·Rice Operating Co.	Project: Jct. K-6									397-1471
122 W. Taylor	Project Number: None Given							Reported: 09/17/04 10:54		
Hobbs NM, 88240	Project Manager: Kristin Pope									
General Chemi	•	eters by nvironm				ods - (Quality	Contro	1	
	ادير 						A/DEC			
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EI41612 - General Preparation	n (WetChem)									
Blank (EI41612-BLK1)				Prepared	& Analyz	ed: 09/12/	04			
Chloride	ND	5.00	mg/L							
Matrix Spike (EI41612-MS1)	Sour	·ce: 410900	7-03	Prepared & Analyzed: 09/12/04						
Chloride	1280	5.00	mg/L	500	780	100	90-110			
Matrix Spike Dup (EI41612-MSD1)	Sour	·ce: 410900	7-03	Prepared & Analyzed: 09/12/04						
Chloride	1280	5.00	mg/L	• 500	780	100	90-110	0.00	20	
Reference (EI41612-SRM1)				Prepared	& Analyz	ed: 09/12/	04			
Chloride	4960		mg/L	5000		99.2	80-120			
Batch EI41701 - General Preparation	n (WetChem)									
Blank (EI41701-BLK1)				Prepared	& Analyz	ed: 09/10/	04		<u> </u>	
Sulfate	ND	0.500	mg/L							
Calibration Check (EI41701-CCV1)				Prepared	& Analyz	ed: 09/10/	04			
Sulfate	48.6		mg/L	50.0		97.2	80-120			
Duplicate (EI41701-DUP1)	Source: 4I10005-01		Prepared & Analyzed: 09/10/04							
Sulfate	128	1.00	mg/L		129	·		0.778	20	
Batch EI41702 - Filtration Preparati	on									
Blank (EI41702-BLK1)				Prepared	& Analyz	ed: 09/13/	04			
Total Dissolved Solids	ND	5.00	mg/L			<u> </u>				

Environmental Lab of Texas

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	emistry Parameters by EPA / Standard Methods -	
Hobbs NM, 88240	Project Manager: Kristin Pope	09/17/04 10:54
122 W. Taylor	Project Number: None Given	Reported:
Rice Operating Co.	Project: Jct. K-6	Fax: (505) 397-1471

eneral Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EI41702 - Filtration Prepa	ration									
Duplicate (EI41702-DUP1)	Sou	rce: 4I1000	5-02	Prepared & Analyzed: 09/13/04						
Total Dissolved Solids	797	5.00	mg/L		937			16.1	20	

Environmental Lab of Texas

Rice Operating Co.		Pro	oject: Jci	t. K-6					Fax: (505)	397-1471	
122 W. Taylor	Project Number: None Given							Reported:			
Hobbs NM, 88240		Project Man	ager: Kr	istin Pope					09/17/04 10:5		
Total	Metals by	EPA / Sta	andard	Method	ls - Qu	ality Co	ontrol				
]	Environm	ental I	Lab of T	exas						
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch EI41506 - General Preparation	n (Metals)										
Blank (EI41506-BLK1)				Prepared	& Analyz	ed: 09/15/	04				
Calcium	ND	0.0100	mg/L								
Magnesium	ND	0.00100	N								
Potassium	ND	0.0500	"								
Sodium	ND	0.0100	n								
Blank (EI41506-BLK2)											
Calcium	ND	0.0100	mg/L					-			
Magnesium	ND	0.00100	11								
Potassium	ND	0.0500	"								
Sodium	ND	0.0100	"								
Calibration Check (EI41506-CCV1)				Prepared	& Analyz	ed: 09/15/	04				
Calcium	2.03		mg/L	2.00		102	85-115				
Magnesium	2.04		"	2.00		102	85-115				
Potassium	1.75		**	2.00		87.5	85-115				
Sodium	1.79		"	2.00		89.5	85-115				
Calibration Check (EI41506-CCV2)				Prepared	& Analyz	ed: 09/15/	04				
Calcium	1.93		mg/L	2.00		96.5	85-115				
Magnesium	2.02		**	2.00		101	85-115				
Potassium	1.76		*	2.00		88.0	85-115				
Sodium	1.77		"	2.00		88.5	85-115				
Duplicate (EI41506-DUP1)	So	urce: 410300	9-01	Prepared	& Analyz	ed: 09/15/	04				
Calcium	281	1.00	mg/L		280			0.357	20		
Magnesium	110	0.100	"		111			0.905	20		
Potassium	8.18	0.500	N		8.31			1.58	20		
Sodium	359	1.00	n		365			1.66	20		

Environmental Lab of Texas

Rice Operating Co.	Project: Jct. K-6	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	Reported:
Hobbs NM, 88240	Project Manager: Kristin Pope	09/17/04 10:54

Total Metals by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch E141506 - General Prepar	ation (Metals)									
Duplicate (EI41506-DUP2)	Sou	rce: 4I1001	5-01	Prepared	& Analyze	ed: 09/15/0)4			
Calcium	20.2	0.100	mg/L		20.2			0.00	20	
Magnesium	28.4	0.0100	91		28.6			0.702	20	
Potassium	16.4	0.500	H		16.6			1.21	20	
Sodium	103	0.100	n		103			0.00	20	

Environmental Lab of Texas

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Fax: (505) 397-1471
Reported:
09/17/04 10:54

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate
	· · ·

Kalandk Juli Report Approved By: Date: 9-18-04

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

Jeanne Mc Murrey, Inorg. Tech Director James L. Hawkins, Chemist/Geologist Sandra Biezugbe, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas



Jeanne McMurrey

From:"Kristin Farris" <enviro@leaco.net>To:"Jeanne McMurrey" <jeanne@elabtexas.com>Sent:Friday, September 10, 2004 9:33 AMSubject:MW samples

Please do not analyze the water samples that were collected on 9/7/2004 for HCO3 since the hold time of 48 hrs. has expired.

Also, for the COC for the site F-35 SWD, the corresponding samples were mistakenly labeled as H-35 SWD.

Thank you. Kristin Farris Pope · RICE Operating Company Hobbs, NM 88240 (505) 393-9174

--

This message has been scanned for viruses and dangerous content by MailScanner at <u>BasinBroadBand.com</u>, and is believed to be clean.

Environmental Lab of Texas Variance / Corrective Action Report – Sample Log-In

Client:	Rice Operating Co.
Date/Time	= 09 - 10 - 04 @ 0900,
Order #:	4 I 10010

JMM

Initials:

Sample Receipt Checklist

	L OHCCH	131		
Temperature of container/cooler?	(Yes)	No	1 4.0 C]
Shipping container/cooler in good condition?	Yes	No		7
Custody Seals intact on shipping container/cooler?	Yes	No	Not present "	1
Custody Seals intact on sample bottles?	Yes	No	Not present.	1
Chain of custody present?	Yes-	No		1
Sample Instructions complete on Chain of Custody?	(es)	No		1
Chain of Custody signed when relinquished and received?	(es)	No]
Chain of custody agrees with sample label(s)	Yes	No]
Container labels legible and intact?	Ves	No	1	7
Sample Matrix and properties same as on chain of custody?	(Yes)	No		1
Samples in proper container/bottle?	Ves.	No		1
Samples properly preserved?	Yes	No		1
Sample bottles intact?	(Yes'	No]
Preservations documented on Chain of Custody?	Ves	No		1
Containers documented on Chain of Custody?	(Yes)	No		1
Sufficient sample amount for indicated test?	Yes-	No		1
All samples received within sufficient hold time?	Yes	No	C03/H(0200	+
VOC samples have zero headspace?	(Yes	No	Not Applicable	1

+ of YE hr. hold time

Other observations:

Variance Documentation:

Contact Person: - Kristin Famis Date/Time: 09-10-04@ 0930 Contacted by: Jeanne Regarding:

hold time - (D3/HCD3

Corrective Action Taken:

client doesn't want to run (Cz/HCCz on 9/7/4 samples. see attached e-mail



Analytical Report

Prepared for:

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

Project: K-6 Project Number: None Given Location: EME

Lab Order Number: 4E29002

Report Date: 06/04/04
1	Rice Operating Co.	Project: K-6	Fax: (505) 397-1471
	122 W. Taylor	Project Number: None Given	Reported:
	Hobbs NM, 88240	Project Manager: Kristin Farris	06/04/04 16:49

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Monitor Well 1	4E29002-01	Water	05/27/04 10:00	05/28/04 16:30

Rice Operating Co.	Project: K-6	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	Reported:
Hobbs NM, 88240	Project Manager: Kristin Farris	06/07/04 15:46

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well 1 (4E29002-01) Wa	ter							<u> </u>	
Benzene	0.00137	0.00100	mg/L	1	EF40313	06/02/04	06/02/04	EPA 8021B	
Toluene	J [0.000377]	0.00100	"	н	"	n	μ	**	J
Ethylbenzene	J [0.000601]	0.00100	"	**	и	- 11	ų	"	J
Xylene (p/m)	J [0.000383]	0.00100	"	"	•	и		17	J
Xylene (0)	J [0.000333]	0.00100	"	"	U	11	**	11	J
Surrogate: a,a,a-Trifluorotoluene		83.0 %	80-12	0	"	"	"		
Surrogate: 4-Bromofluorobenzene		84.0 %	80-12	20	"	"	,, ``	"	

Environmental Lab of Texas

Quality Assurance Review

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Page 2 of 10

Rice Operating Co. 122 W. Taylor Hobbs NM, 88240

Project: K-6 Project Number: None Given Project Manager: Kristin Farris

Fax: (505) 397-1471 Reported: 06/04/04 16:49

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well 1 (4E29002-01) Water									
Carbonate Alkalinity	ND	0.100	mg/L	1	EF40408	05/29/04	05/29/04	EPA 310.2M	
Bicarbonate Alkalinity	490	2.00	11	и	W	"	"	U	
Hydroxide Alkalinity	ND	0.100	n	11	"	"		"	
Chloride	13800	5.00	11		EF40407	06/03/04	06/03/04	EPA 325.3M	
Total Dissolved Solids	25700	5.00	1)	"	EF40310	06/01/04	06/02/04	EPA 160.1	
Sulfate	6020	125	11	250	EF40418	06/04/04	06/04/04	EPA 375.4	

Environmental Lab of Texas

Quality Assurance Review

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Page 3 of 10

Rice Operating Co.	Project: K-6	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	Reported:
Hobbs NM, 88240	Project Manager: Kristin Farris	06/04/04 16:49

Total Metals by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well 1 (4E29002-01) Water									
Calcium	956	1.00	mg/L	100	EF40416	06/02/04	06/02/04	EPA 6010B	
Magnesium	385	0.100	11	"	**	n	11	**	
Potassium	63.3	0.500	11	10	"	**	06/02/04		
Sodium	7900	10.0		1000	"		06/02/04	H	

Environmental Lab of Texas

Quality Assurance Review

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Rice Operating Co.			oject: K						Fax: (505)	397-147
122 W. Taylor		Project Nur							Repo	rted:
Hobbs NM, 88240		Project Mar	ager: Ki	ristin Farris					06/04/0	4 16:49
	Or	ganics by	GC - (Quality (Control	· · · · · · · · · · · · · · · · · · ·				·
]	Environm	ental I	Lab of T	exas					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EF40313 - EPA 5030C (GC)										
Blank (EF40313-BLK1)	••••••			Prepared	& Analyz	ed: 06/02/	04			
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100								
Ethylbenzene	ND	0.00100	и							
Xylene (p/m)	ND	0.00100	μ							
Xylene (o)	ND	0.00100	н							
Surrogate: a,a,a-Trifluorotoluene			ug/l	20.0		113	80-120			
Surrogate: 4-Bromofluorobenzene	18.7		"	20.0		93.5	80-120			
LCS (EF40313-BS1)				Prepared	& Analyz	ed: 06/02/	04			
Benzene	87.9		ug/l	100		87.9	80-120			
Toluene	94.6		"	100		94.6	80-120			
Ethylbenzene	91.2		II.	100		91.2	80-120			
Xylene (p/m)	196		n	200		98 .0	80-120			
Xylene (0)	94.9		n	100		94.9	80-120			
Surrogate: a,a,a-Trifluorotoluene	21.2		n	20.0		106	80-120			
Surrogate: 4-Bromofluorobenzene	22.0		"	20.0		110	80-120			
Calibration Check (EF40313-CCV1)				Prepared	& Analyz	ed: 06/02/	04			
Benzene	83.3		ug/l	100		83.3	80-120			
Toluene	92.4		п	100		92.4	80-120			
Ethylbenzene	92.3		"	100		92.3	80-120			
Xylene (p/m)	196		n	200		98.0	80-120			
Xylene (o)	92.0		n	100		92.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	17.6		<i>n</i>	20.0		88.0	80-120	··· ·		
Surrogate: 4-Bromofluorobenzene	20.7		"	20.0		104	80-120			
Matrix Spike (EF40313-MS1)		urce: 4E2900		•	•	ed: 06/02/				
Benzene	92.3		ug/l	100	ND	92.3	80-120			
Toluene	103		17	100	ND	103	80-120			
Ethylbenzene	99.5		17	100	ND	99.5	80-120			
Xylene (p/m)	214		11	200	ND	107	80-120			
Xylene (o)	102			100	ND	102	80-120			
Surrogate: a,a,a-Trifluorotoluene	22.2		<i>n</i>	20.0		\overline{m}	80-120			
Surrogate: 4-Bromofluorobenzene	23.0		"	20.0		115	80-120			

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Quality Assurance Review

Page 5 of 10

1	Rice Operating Co.	Project: K-6	Fax: (505) 397-1471
	122 W. Taylor	Project Number: None Given	Reported:
	Hobbs NM, 88240	Project Manager: Kristin Farris	06/04/04 16:49

Organics by GC - Quality Control

Environmental Lab of Texas

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch EF40313 - EPA 5030C (GC)

Matrix Spike Dup (EF40313-MSD1)	Source:	4E29001-01	Prepared a	& Analyz	ed: 06/02/	′04		
Benzene	83.2	ug/l	100	ND	83.2	80-120	10.4	20
Toluene	92.2	н	100	ND	92.2	80-120	11.1	20
Ethylbenzene	89.4	H	100	ND	89.4	80-120	10.7	20
Xylene (p/m)	192	н	200	ND	96.0	80-120	10.8	20
Xylene (0)	92.6	*1	100	ND	92.6	80-120	9.66	20
Surrogate: a,a,a-Trifluorotoluene	20.5	<i>,,</i> — —	20.0		102	80-120	<u> </u>	
Surrogate: 4-Bromofluorobenzene	22.8	"	20.0		114	80-120		

Environmental Lab of Texas

les 1 li Quality Assurance Review

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Rice Operating Co.		Pro	oject: K-	.6					Fax: (505)	397-1471
122 W. Taylor	2	Project Nur	nber: No	one Given					Repo	rted:
Hobbs NM, 88240	F	roject Man	ager: Ki	istin Farris					06/04/04	4 16:49
General Chemi	•	•				ods - Q	uality (Contro	1	
	Er	ivironm	ental l	Lab of T	exas					
**************************************		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EF40310 - Filtration Preparati	ion									
Blank (EF40310-BLK1)				Prepared:	06/01/04	Analyzed	: 06/02/04			
Total Dissolved Solids	ND	5.00	mg/L							
Duplicate (EF40310-DUP1)	Sour	ce: 4E2900	1-01	Prepared:	06/01/04	Analyzed	: 06/02/04			
Total Dissolved Solids	831	5.00	mg/L		830			0.120	20	
Batch EF40407 - General Preparatio	n (WetChem)									
	n (WetChem)			Prepared	& Analyze	ed: 06/03/0)4	-		
Biank (EF40407-BLK1)	n (WetChem)	5.00	mg/L	Prepared	& Analyze	ed: 06/03/0)4	~		
Blank (EF40407-BLK1) Chloride	ND	5.00 ce: 4E2900	e	•	& Analyze & Analyze)4 	~		
Blank (EF40407-BLK1) Chloride Matrix Spike (EF40407-MS1)	ND		e	•)4 	-		
Blank (EF40407-BLK1) Chloride Matrix Spike (EF40407-MS1) Chloride	ND Sour 709	ce: 4E2900	01-01 mg/L	Prepared 500	& Analyze 213	ed: 06/03/0 99.2)4 80-120	~		
Blank (EF40407-BLK1) Chloride Matrix Spike (EF40407-MS1) Chloride Matrix Spike Dup (EF40407-MSD1)	ND Sour 709	ce: 4E290 0	01-01 mg/L	Prepared 500	& Analyze	ed: 06/03/0 99.2)4 80-120	1.28	20	
Blank (EF40407-BLK1) Chloride Matrix Spike (EF40407-MS1) Chloride Matrix Spike Dup (EF40407-MSD1) Chloride	ND Sour 709 Sour	ce: 4E2900 5.00 ce: 4E2900)1-01 mg/L)1-01	Prepared 500 Prepared 500	& Analyze 213 & Analyze 213	ed: 06/03/0 99.2 ed: 06/03/0 97.4)4 80-120)4 80-120		20	
Blank (EF40407-BLK1) Chloride Matrix Spike (EF40407-MS1) Chloride Matrix Spike Dup (EF40407-MSD1) Chloride Reference (EF40407-SRM1)	ND Sour 709 Sour	ce: 4E2900 5.00 ce: 4E2900)1-01 mg/L)1-01	Prepared 500 Prepared 500	& Analyze 213 & Analyze	ed: 06/03/0 99.2 ed: 06/03/0 97.4)4 80-120)4 80-120		20	
Blank (EF40407-BLK1) Chloride Matrix Spike (EF40407-MS1) Chloride Matrix Spike Dup (EF40407-MSD1) Chloride Reference (EF40407-SRM1) Chloride	ND Sour 709 Sour 700 4960	ce: 4E2900 5.00 ce: 4E2900	01-01 mg/L 01-01 mg/L	Prepared of 500 Prepared of 500 Prepared of 700	& Analyze 213 & Analyze 213	ed: 06/03/0 99.2 ed: 06/03/0 97.4 ed: 06/03/0)4 80-120)4 80-120)4		20	
Blank (EF40407-BLK1) Chloride Matrix Spike (EF40407-MS1) Chloride Matrix Spike Dup (EF40407-MSD1) Chloride Reference (EF40407-SRM1) Chloride Batch EF40408 - General Preparatio	ND Sour 709 Sour 700 4960	ce: 4E2900 5.00 ce: 4E2900	01-01 mg/L 01-01 mg/L	Prepared of 500 Prepared of 500 Prepared of 500 Prepared of 5000	& Analyze 213 & Analyze 213 & Analyze	ed: 06/03/0 99.2 ed: 06/03/0 97.4 ed: 06/03/0 99.2)4 80-120)4 80-120)4 80-120		20	
Batch EF40407 - General Preparatio Blank (EF40407-BLK1) Chloride Matrix Spike (EF40407-MS1) Chloride Matrix Spike Dup (EF40407-MSD1) Chloride Reference (EF40407-SRM1) Chloride Batch EF40408 - General Preparatio Blank (EF40408-BLK1) Carbonate Alkalinity	ND Sour 709 Sour 700 4960	ce: 4E2900 5.00 ce: 4E2900	01-01 mg/L 01-01 mg/L	Prepared of 500 Prepared of 500 Prepared of 500 Prepared of 5000	& Analyze 213 & Analyze 213	ed: 06/03/0 99.2 ed: 06/03/0 97.4 ed: 06/03/0 99.2)4 80-120)4 80-120)4 80-120		20	

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0.100

Environmental Lab of Texas

Hydroxide Alkalinity

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory.. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Quality Assurance Review

Page 7 of 10

Rice Operating Co.		Pro	oject: K	-6					Fax: (505)	397-147	
122 W. Taylor		Project Nur							Repo	rted:	
Hobbs NM, 88240		Project Man							06/04/04 16:49		
General Chemi	•	eters by nvironm				ods - Q	Juality (Contro	bl		
······································	E										
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch EF40408 - General Preparatio	n (WetChem))									
Duplicate (EF40408-DUP1)	Source: 4E29001-01 Prepared & Analyzed: 05/29/04										
Carbonate Alkalinity	0.00	0.100	mg/L		0.00				20		
Bicarbonate Alkalinity	214	2.00	n		214			0.00	20		
Hydroxide Alkalinity	0.00	0.100	"		0.00				20		
Reference (EF40408-SRM1)				Prepared	& Analyze	ed: 05/29/	04				
Carbonate Alkalinity	0.0496		mg/L	0.0500		99.2 .	80-120				
Batch EF40418 - General Preparatio	n (WetChem))						-			
Blank (EF40418-BLK1)				Prepared	& Analyz	ed: 06/04/	04				
Sulfate	ND	0.500	mg/L							······	
Calibration Check (EF40418-CCV1)				Prepared	& Analyz	ed: 06/04/	04				
Sulfate	49.2		mg/L	50.0		98.4	80-120				
Duplicate (EF40418-DUP1)	Sou	rce: 4E2900	01-01	Prepared	& Analyze	ed: 06/04/	04				
Sulfate	140	1.00	mg/L		138			1.44	20		

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Quality Assurance Review

Page 8 of 10

Rice Operating Co.	Project:	K-6			Fax: (505) 397-1471			
122 W. Taylor	Reported:							
Hobbs NM, 88240	Project Manager:	Kristin Farris			06/07/04 15:46			
Total Metals by EPA / Standard Methods - Quality Control								
Environmental Lab of Texas								
	Reporting	Spike	Source	%REC	RPD			

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EF40416 - General Preparation	n (Metals)									
Blank (EF40416-BLK1)		Prepared & Analyzed: 06/02/04								
Calcium	ND	0.0100	mg/L							
Magnesium	ND	0.00100	"							
Potassium	ND	0.0500	"							
Sodium	ND	0.0100	*1							
Calibration Check (EF40416-CCV1)				Prepared	& Analyz	ed: 06/02/	04			
Calcium	2.08		mg/L	2.00		104	85-115	-		
Magnesium	2.29		11	2.00		114	85-115			
Potassium	1.97		м	2.00		98.5	85-115			
Sodium	1.93		11	2.00		96.5	85-115			
Duplicate (EF40416-DUP1)	Sou	arce: 4E2900	1-01	Prepared	& Analyz	ed: 06/02/	04			
Calcium	165	1.00	mg/L		170			2.99	20	
Magnesium	29.9	0.0100	"		29.3			2.03	20	
Potassium	4.76	0.0500	11		4.82			1.25	20	
Sodium	96.5	0.100	и		96.8			0.310	20	

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Quality Assurance Review)

Page 9 of 10

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

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Rice Operating Co.	Project: K-6	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	Reported:
Hobbs NM, 88240	Project Manager: Kristin Farris	06/04/04 16:49
···		

Notes and Definitions

J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

Environmental Lab of Texas

lin Quality Assurance Review

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Page 10 of 10

	CHAIN OF CUSTODY RECORD AND AHALYSIS REQUEST	Project Name: K - G	Ptojeci #:	Project Lac: EmE	Po #: 5/0		Analyze For:	101P.		с бн q _с л	248 / EC 260 200 260 200 260 20 260 20 20 20 20 20 20 20 20 20 20 20 20 20 2	Metals: As sellisto Sellisto Solarza S						Sample Gavan eis Inaci? (y) N Tairperature Upon Receipt Lator aloriv Commender	•	у А	100
	CHAIN						-		Matrix		(Aug	Other (Spe Strage Soil	×	X	 		 		Date		5.28 UY
						Fax No: (5725)397-147	والمحتمد والمحتم والمحتمد والمحتم والمحتم والمحتم والمحتم والمحتمد والمحتمد والمحتم والمحتم والمحتمد والمحتم والمحتمد		Prescivalive	22	אדער אפי. שר אפים האדער אפים האדערים	7 ешол 'ОS'Н Н ⁻ 2С'		12:00m 2 K K							e N ZO
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ו נטמטי וו	13-1840 13-1713	Kristin Farris		ilar J	8834													Enviro@heac	Time	5-100	K- 30
יימיז כו זי	Phone: 915-563-1800 Fax: 915-563-1713	stin ,	E ODE	V. Tav	M/M	176-666						FIELD CODE	eu 1	e 11 1				TO ENVI	Dale	725	1/20/
			Company Name_RTCE_ODE CatLOA	Company Address: /23 W. Tavlar	CityIstatelZin: FAAAA, A/M 883 W	Telephone No (505) 393 - 9174						E	monites weil					E-mail			and
}	12600 West I-20 East Ddessa, Texas 79763	Project Manager:	Company	Company Ad	City/Sta	Telepho	Jampulfic lardune	2			2000	HET AR & MAY	10					Special Instructions:	Relinguished by:		the of the

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Environmental Lab of Texas Variance / Corrective Action Report – Sample Log-In

Client:	<u>Rice</u>	Oper	ating	<u>Co.</u>
		•		

Date/Time: 05-29-04@1030

Order #: _____4E29002

Initials: JMM

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	6.5 0	57
Shipping container/cooler in good condition?	Ves	No		
Custody Seals intact on shipping container/cooler?	Yes	No	Not present	
Custody Seals intact on sample bottles?	Yes	No	(Not present)	7
Chain of custody present?	(Tes)	No		
Sample Instructions complete on Chain of Custody?	Yes	No		
Chain of Custody signed when relinquished and received?	Yes	No	missing 1st rec.	Sigi
Chain of custody agrees with sample label(s)	(es)	No	J	
Container labels legible and intact?	Ves	No		
Sample Matrix and properties same as on chain of custody?	(es)	No		7
Samples in proper container/bottle?	Yes	No		1
Samples properly preserved?	Yes	No	should be 4°C	= ±z
Sample bottles intact?	Kes	No		_
Preservations documented on Chain of Custody?	Tes	No		7
Containers documented on Chain of Custody?	(es)	No		7
Sufficient sample amount for indicated test?	Tes	No		
All samples received within sufficient hold time?	Yes	No		
VOC samples have zero headspace?	(res)	No	Not Applicable	

Other observations:

	Variance Documentation:	
Contact Person:	Date/Time:	_ Contacted by:
Regarding:		
Corrective Action Taken:	······································	

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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: 02/18/04 Reporting Date: 02/20/04 Project Number: NOT GIVEN Project Name: NOT GIVEN Project Location: EME K-6 Sampling Date: 02/18/04 Sample Type: GROUNDWATER Sample Condition: COOL & INTACT Sample Received By: AH Analyzed By: AH

	Na	Са	Mg	к	Conductivity	T-Alkalinity
LAB NUMBER SAMPLE ID	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(<i>u</i> S/cm)	(mgCaCO ₃ /L)
ANALYSIS DATE:	02/19/04	02/19/04	02/19/04	02/19/04	02/19/04	02/19/04
H8468-1 EME K-6 MW 1	7171	886	300	66.8	39094	528
			, 	#*****		
Quality Control	NR	59	42	5.17		NR
True Value QC	NR	50	50	5.00		NR
% Recovery	NR	118	85)	103		NR
Relative Percent Difference	NR	1.7	2.3	1.0	0.7	NR
METHODS:	SM3	500-Ca-D	3500-Mg E	8049	120.1	310.1
	CI	SO₄	CO3	HCO₃	pН	TDS
	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(s.u.)	(mg/L)
ANALYSIS DATE:	02/19/04	02/19/04	02/19/04	02/19/04	02/19/04	02/20/04
H8468-1 EME K-6 MW 1	11796	1903	0	644	7.01	26172
Quality Control	1010	53.65	NR	1007	7.04	NR
True Value QC	1000	50.00	NR	1000	7.00	NR
% Recovery	101	107	NR	101	101	NR
Relative Percent Difference	2.0	1.5	NR	1.1	0.3	1.4
METHODS:	SM4500-CI-B	375.4	310.1	310.1	150.1	160.1

Chemist Hill

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 **1946** restricted by client in the service of profiles 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.



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

Receiving Date: 02/18/04 Reporting Date: 02/20/04 Project Number: NOT GIVEN Project Name: NOT GIVEN Project Location:EME K-6 Sampling Date: 02/18/04 Sample Type: GROUNDWATER Sample Condition: COOL & INTACT Sample Received By: AH Analyzed By: BC

LAB NUMBER SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE	02/18/04	02/18/04	02/18/04	02/18/04
H8468-1 EME K-6 MW 1	0.003	< 0.002	<0.002	<0.006
Quality Control	0.094	0.096	0.099	0.304
True Value QC	0.100	0.100	0.100	0.300
% Recovery	94.1	96.0	99.0	101
Relative Percent Difference	1.9	5.1	2.5	0.4

METHOD: EPA SW-846 8260

Jus An Cook

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 limired 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. H846685 MLS diama be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profils 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-ORIES, INC. CHAIN-ORIES, INC. The Beckword, Abliene, TX 79603 TO Fax (516) 673-7020 Sinte, INT. Project Commer:	Sampler Relinquis Belinquished by: Delivered By: Sampler - UPS - E	Project Manager: Address: /22 Phone #: 505 Project Name: Project Name: Sampler Name: FOR LAB I.D. Lab I.D. HTS 465 HTS 465	Company Name
Hobbs, NN 88240 x (505) 393-2476 P.O. #: Company: Address: Stale: PRESERV DATE TIME CHAIN-OF: TIME CAT CHAIN-OF: CHAIN-OF: CHAIN-OF: CHAIN-OF: CHECKED BY: Innitialis CHECKED BY: CHAIN-OF: CHAIN-OF: CHAIN-OF: <t< td=""><td>Ished: T dd 1 1 4 Time: T dd 1 1 4 Time: Date: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time:</td><td>Em E K-b- Multi Em E K-b- Multi Emmer Constant and a read damaged interest in the former of the former of the</td><td>RDINAL LABORA TORIE 111 Beechwood, Abilene, TX 796 [915] 673-7001 Fax (915) 673-70 RICE On (atomotics)</td></t<>	Ished: T dd 1 1 4 Time: T dd 1 1 4 Time: Date: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time: Date: Time:	Em E K-b- Multi Em E K-b- Multi Emmer Constant and a read damaged interest in the former of the	RDINAL LABORA TORIE 111 Beechwood, Abilene, TX 796 [915] 673-7001 Fax (915) 673-70 RICE On (atomotics)
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