1R - 427-17

Annual GW Mon. REPORTS

DATE:

2007

Whole Earth Environmental, Inc.
2103 Arbor Cove
Katy, Tx. 77494
281.394.2050
whearth@msn.com

January 22, 2008

NMOCD
1220 South St. Francis Drive
Sante Fe, NM 87505

Attn: Edward Hansen

Re: 2007 Monitor Well Report / Sampling Summary
Sarah Phillips EOL
Unit "K", Sec. 33, T-19-S, R-37 E
NMOCD Case # 1RP-427-17

Dear Mr. Hansen:

Enclosed, please find the 2007 Annual Ground Water Monitoring Report for the Rice Operating Company Sarah Phillips EOL site. The report includes the following information:

- Summary Tables of all laboratory results and depths to ground water
- Laboratory analytical reports
- CD version of the above

During the course of the year, the excavation and remediation of the surface impact site was completed with a report submitted to the NMOCD on July 10th. In 2008, we are planning to advance a second monitor well down gradient to delineate the lateral extent of the groundwater impact.

Thank you again for your interest in this project; if you've any questions or comments, please do not hesitate to get in touch with me or Kristin Pope at 505.393.9174

Warmest personal regards,

Mike Griffin
President
Whole Earth Environmental, Inc.

Executive Summary

Location
The site is located approximately one mile southeast of Monument, New Mexico on fee land in Unit K, Section 33, Township 19-S, Range 37-E.

Site History
The EME Sarah Phillips EOL (end of line) site is situated adjacent to an Amerada Hess battery that has been dismantled and removed prior to 2002.

Previous Site Investigations
The initial investigation occurred on November 3rd, 2003 by excavating to a depth of approximately 14' below ground surface (bgs). Upon discovery, the site was initially field tested for VOC's and chlorides and found to contain no detectable hydrocarbon involvement but elevated chlorides undiminished in concentration to the 14' excavation depth. The initial junction box disclosure report was submitted to the NMOCD on December 30, 2003.

Further vertical and lateral delineation of the site occurred on November 16, 2005 through a series of 18' vertical excavations which revealed that the contaminant plume within the soil was essentially vertical in profile covering an area of approximately 12' in diameter and presumably extending to the groundwater. A monitor well was advanced on October 6, 2006 at the center of the contaminant plume and found elevated chlorides and non-detectable BTEX concentrations within the groundwater at a depth of 28' bgs.

The attached boring log describes the soil profile as sandy with thin bands of sandy clay and unconsolidated caliche.

Soil Remediation
In accordance with the approved remediation plan, PR-77, the area of 120' X 100' was gridded on 20' centers and composite soil samples were collected to a depth at each grid point to a depth of 0-24" bgs. The soil samples were submitted to Cardinal Laboratories in Hobbs, New Mexico for electrical conductivity testing. The test results were incorporated into Surfer and a histograph developed to determine the true areal extent of contamination and the location of any "hot spots" within the tested grid.

Two such "hot spots" were discovered to the north and northeast of the monitor well and were excavated to depths between 6-10' bgs. with a total of 60 cubic yards of the material sent to commercial disposal at Sundance Services. The two areas were backfilled with fresh topsoils. The entire 120' X 100' area was excavated to a minimum depth of 4' bgs and a geosynthetic clay liner, (.75lb./sq. ft. Denefix EC) was set in place at the 4' depth.

The area was backfilled with the excavated soils mixed with four tons of organics and 108 cubic yards of fresh soils. The area was finally re-contoured, compacted, watered and seeded with native grasses. ROC continues to monitor for growth.

Groundwater

Rice Operating will advance a second monitor well by the end of the second quarter, 2008 in order to determine the lateral extent of chloride contamination within the groundwater. The well is to be situated approximately eight hundred feet southeast of the existing MW-1.

Rice Operating will continue to monitor the quality of the groundwater quarterly and will report the results annually to the NMOCD until final closure.

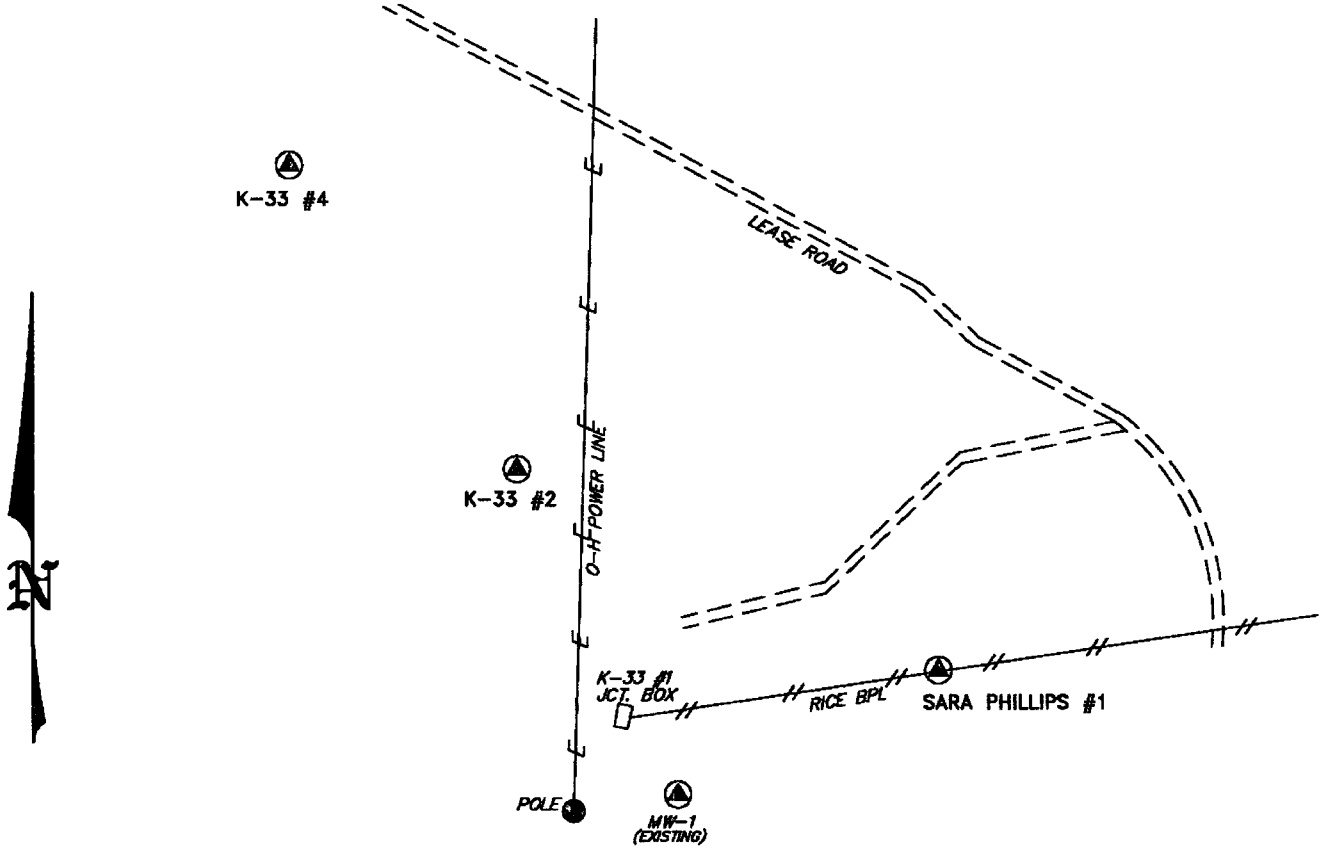
Exhibit Index

1. Satellite Zoom Out
2. Satellite Zoom In
3. Survey Map of Location
4. Gradient Survey
5. Satellite View of Location Showing Well Locations and Chloride Concentrations


Cr-42
S Cook
Cooper St
monument, NM
8
S Peacock Ln
EME Sarah Phillips EOL
Stone Rd
Image © 2007 DigitalGlobe
© 2007 Navteq
2100 ft
Pointer 32°37'01.65" N 103°15'23.35" W elev 3563 ft
Streaming 100%
Eye alt 10823 ft


K-33-1 Sarah
Phillips EOL
N
W
E
S
Image © 2005 DigitalGlobe
©2005 Google

SECTION 33, TOWNSHIP 19 SOUTH, RANGE 37 EAST, N.M.P.M.,
LEA COUNTY, **NEW MEXICO.**



NEW MEXICO STATE PLANE COORDINATES (NAD83)
TOP CASING

NOTE:
ELEVATIONS ARE ON BLACK MARK ON NORTH SIDE OF PVC CASING.

WELL	NORTHING	EASTING	LATITUDE	LONGITUDE	TOP CASING	GROUND	CONCRETE
SARA PHILLIPS #1	588405.631	872331.319	N 32°36'46.7"	W 103°15'30.2"	3563.07'	3560.80'	
K-33 #1	588339.470	872191.720	N 32°36'46.1"	W 103°15'31.8"	3563.86'	3560.50'	
K-33 #2	588512.766	872105.535	N 32°36'47.8"	W 103°15'32.8"	3562.84'	3560.15'	
K-33 #3	588213.537	872201.136	N 32°36'44.8"	W 103°15'31.7"	3562.87'	3560.75'	
K-33 #4	588674.6	871983.8	N 32°36'49.4"	W 103°15'34.2"	3562.74'	3560.30'	3560.64'

I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY AND MEETS OR EXCEEDS THE REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED BY THIS STATE.

GARY L. JONES N.M.P.S. No. 7977
No. 5074

100 0 100 200 FEET

RICE OPERATING COMPANY

REF: MONITOR WELLS

MONITOR WELLS LOCATED IN
SECTION 33, TOWNSHIP 19 SOUTH, RANGE 37 EAST,
N.M.P.M., LEA COUNTY, NEW MEXICO.

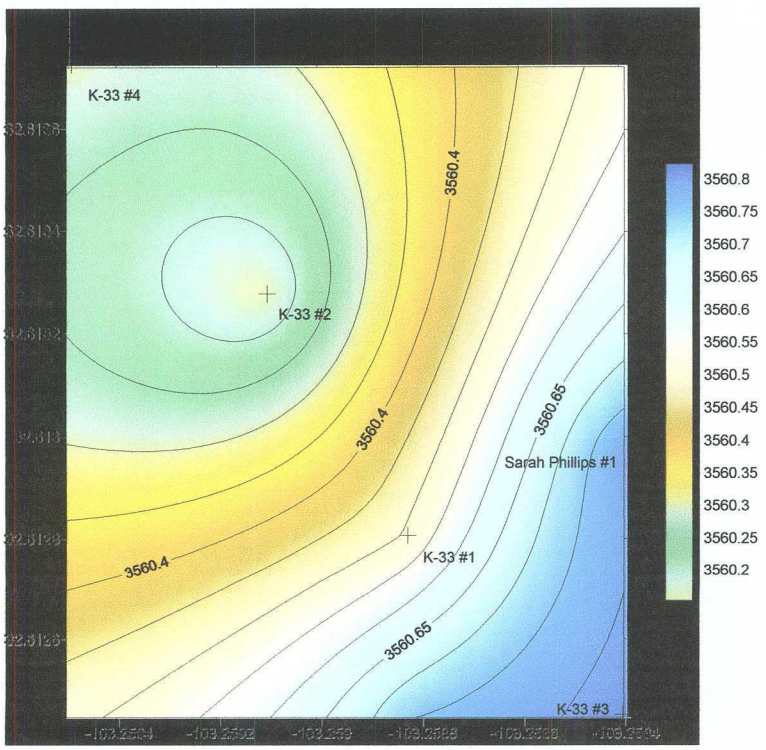
BASIN SURVEYS P.O. BOX 1786 – HOBBS, NEW MEXICO

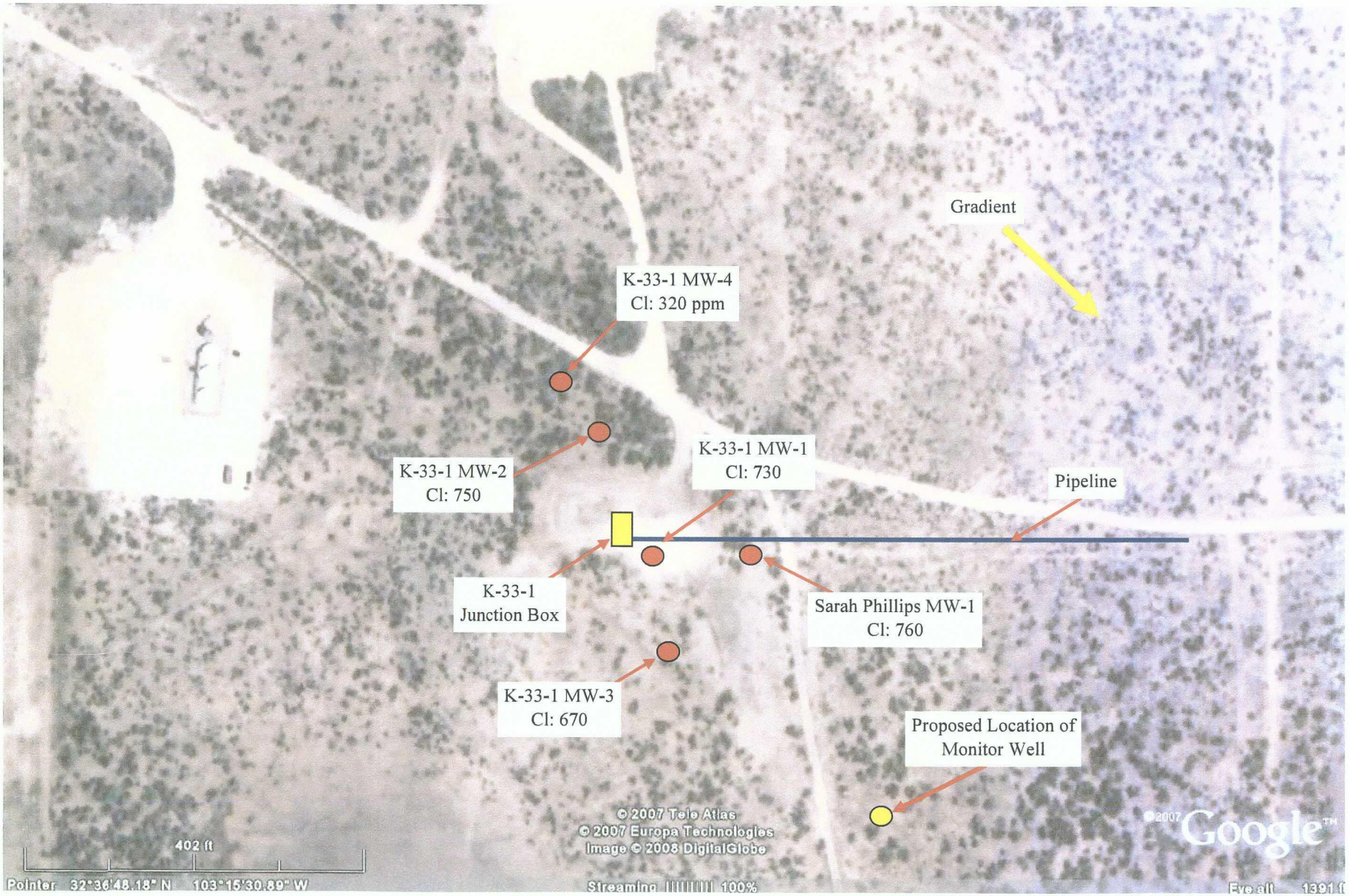
W.O. Number: 18910	Drawn By: K. GOAD		
Date: 12-11-2007	Disk: KJG – RC18910MW.DWG	Survey Date: 12-04-2007	Sheet 2 of 2 Sheets

Longitude, E	Latitude, N	Elevation,G
-103.258389	32.612972	3560.80
-103.258833	32.612806	3560.50
-103.259111	32.613278	3560.15
-103.258805	32.612444	3560.75
-103.259500	32.613722	3560.30

Well	Easting	Northing	Elevation,C
Sarah Phillips #1	872331.319	588405.631	3563.07
K-33 #1	872191.720	588339.470	3563.86
K-33 #2	872105.535	588512.766	3562.84
K-33 #3	872301.136	588213.537	3562.87
K-33 #4	871983.800	588674.600	3562.74

Sarah Phillips Study Area
Latitude - Longitude Coordinates
Surface Elevations in Feet Above MSL




Gradient
K-33-1 MW-4
Cl: 320 ppm
K-33-1 MW-2
Cl: 750
K-33-1 MW-1
Cl: 730
Pipeline
K-33-1
Junction Box
Sarah Phillips MW-1
Cl: 760
K-33-1 MW-3
Cl: 670
Proposed Location of
Monitor Well
© 2007 Tele Atlas
© 2007 Europa Technologies
Image © 2008 DigitalGlobe
402 ft
Pointer 32°36'48.18" N 103°15'30.89" W
Streaming 100%
Eye alt 1391 f
2007 Google

Rice Operating Company
Sarah Phillips EOL
NMOCD Case 1RP 427-17
Unit 'K', Sec. 33, T19S, R37E

MW #	Depth to Water (Ft.)	Total Depth (Ft.)	Well Volume (Gal.)	Sample Date	Chlorides	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylene	Sulfate
1	30.21	45.28	2.40	01/29/07	871	2,060	<0.002	<0.002	<0.002	<0.002	167
1	30.10	45.28	2.40	04/13/07	748	2,250	<0.002	<0.002	<0.002	<0.002	99.6
1	30.10	45.28	2.40	07/17/07	725	2,260	<0.002	<0.002	<0.002	<0.002	74.3
1	30.73	45.28	2.30	10/02/07	760	1,881	<0.002	<0.002	<0.002	<0.002	67.2

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

A Xenco Laboratories Company

Analytical Report

Prepared for:

Kristin Farris-Pope

Rice Operating Co.

122 W. Taylor

Hobbs, NM 88240

Project: EME Sarah Phillips EOL

Project Number: None Given

Location: T19S R37E Sec33K Lea Co., NM

Lab Order Number: 7B01018

Report Date: 02/08/07

Rice Operating Co.	Project: EME Sarah Phillips EOL	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Monitor Well #1	7B01018-01	Water	01/29/07 13:05	02-01-2007 15:42

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

Rice Operating Co.	Project: EME Sarah Phillips EOL	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (7B01018-01) Water									
Benzene	ND	0.00100	mg/L	1	EB70501	02/05/07	02/07/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	**0.00268**	0.00100	"	"	"	"	"	"	
Xylene (p/m)	**ND**	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*94.2 %*		*80-120*		"	"	"	
Surrogate: 4-Bromofluorobenzene		*104 %*		*80-120*		"	"	"	

Rice Operating Co.	Project: EME Sarah Phillips EOL	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

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 (7B01018-01) Water									
Total Alkalinity	**410**	2.00	mg/L	1	EB70209	02/02/07	02/02/07	EPA 310.1M	
Chloride	**871**	12.5	"	25	EB70208	02/02/07	02/03/07	EPA 300.0	
Total Dissolved Solids	**2060**	10.0	"	1	EB70611	02/05/07	02/06/07	EPA 160.1	
Sulfate	**167**	12.5	"	25	EB70208	02/02/07	02/03/07	EPA 300.0	

Rice Operating Co.	Project: EME Sarah Phillips EOL	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Total Metals by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (7B01018-01) Water									
Calcium	**161**	4.05	mg/L	50	EB70612	02/06/07	02/06/07	EPA 6010B	
Magnesium	**131**	1.80	"	"	"	"	"	"	
Potassium	**11.8**	0.600	"	10	"	"	"	"	
Sodium	**278**	4.30	"	100	"	"	"	"	

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EB70501 - EPA 5030C (GC)										
Blank (EB70501-BLK1)				Prepared: 02/05/07 Analyzed: 02/06/07						
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	*47.2*		*ug/l*	*40.0*		*118*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*35.0*		*"*	*40.0*		*87.5*	*80-120*			
LCS (EB70501-BS1)				Prepared: 02/05/07 Analyzed: 02/06/07						
Benzene	0.0405	0.00100	mg/L	0.0500		81.0	80-120			
Toluene	0.0420	0.00100	"	0.0500		84.0	80-120			
Ethylbenzene	0.0425	0.00100	"	0.0500		85.0	80-120			
Xylene (p/m)	0.0857	0.00100	"	0.100		85.7	80-120			
Xylene (o)	0.0414	0.00100	"	0.0500		82.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	*45.3*		*ug/l*	*40.0*		*113*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*37.8*		*"*	*40.0*		*94.5*	*80-120*			
Calibration Check (EB70501-CCV1)				Prepared: 02/05/07 Analyzed: 02/07/07						
Benzene	42.8		ug/l	50.0		85.6	80-120			
Toluene	42.5		"	50.0		85.0	80-120			
Ethylbenzene	45.8		"	50.0		91.6	80-120			
Xylene (p/m)	81.2		"	100		81.2	80-120			
Xylene (o)	42.1		"	50.0		84.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	*47.8*		*"*	*40.0*		*120*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*39.7*		*"*	*40.0*		*99.2*	*80-120*			
Matrix Spike (EB70501-MS1)	**Source: 7B01002-01**			Prepared: 02/05/07 Analyzed: 02/07/07						
Benzene	0.0430	0.00100	mg/L	0.0500	ND	86.0	80-120			
Toluene	0.0447	0.00100	"	0.0500	ND	89.4	80-120			
Ethylbenzene	0.0474	0.00100	"	0.0500	ND	94.8	80-120			
Xylene (p/m)	0.0910	0.00100	"	0.100	ND	91.0	80-120			
Xylene (o)	0.0418	0.00100	"	0.0500	ND	83.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	*47.3*		*ug/l*	*40.0*		*118*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*47.2*		*"*	*40.0*		*118*	*80-120*			

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EB70501 - EPA 5030C (GC)										
Matrix Spike Dup (EB70501-MSD1)	**Source: 7B01002-01**			Prepared: 02/05/07 Analyzed: 02/07/07						
Benzene	*0.0401*	*0.00100*	mg/L	*0.0500*	ND	*80.2*	*80-120*	*6.98*	*20*	
Toluene	0.0403	0.00100	"	0.0500	ND	80.6	80-120	10.4	20	
Ethylbenzene	0.0490	0.00100	"	0.0500	ND	98.0	80-120	3.32	20	
Xylene (p/m)	0.0873	0.00100	"	0.100	ND	87.3	80-120	4.15	20	
Xylene (o)	0.0430	0.00100	"	0.0500	ND	86.0	80-120	2.83	20	
Surrogate: a,a,a-Trifluorotoluene	*36.6*		*ug/l*	*40.0*		*91.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*44.7*		*"*	*40.0*		*112*	*80-120*			

General 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 EB70208 - General Preparation (WetChem)										
Blank (EB70208-BLK1)				Prepared: 02/02/07 Analyzed: 02/03/07						
Chloride	ND	0.500	mg/L							
Sulfate	0.459	0.500	"							B, J
LCS (EB70208-BS1)				Prepared: 02/02/07 Analyzed: 02/03/07						
Sulfate	11.6	0.500	mg/L	10.0		116	80-120			
Chloride	10.7	0.500	"	10.0		107	80-120			
Calibration Check (EB70208-CCV1)				Prepared: 02/02/07 Analyzed: 02/03/07						
Sulfate	11.8		mg/L	10.0		118	80-120			
Chloride	10.5		"	10.0		105	80-120			
Duplicate (EB70208-DUP1)	**Source: 7B01017-01**			Prepared: 02/02/07 Analyzed: 02/03/07						
Sulfate	93.0	5.00	mg/L		96.4			3.59	20	
Chloride	127	5.00	"		132			3.86	20	
Duplicate (EB70208-DUP2)	**Source: 7B01020-02**			Prepared: 02/02/07 Analyzed: 02/03/07						
Sulfate	2410	50.0	mg/L		2400			0.416	20	
Chloride	2220	50.0	"		2240			0.897	20	
Matrix Spike (EB70208-MS1)	**Source: 7B01017-01**			Prepared: 02/02/07 Analyzed: 02/03/07						
Sulfate	204	5.00	mg/L	100	96.4	108	80-120			
Chloride	240	5.00	"	100	132	108	80-120			
Matrix Spike (EB70208-MS2)	**Source: 7B01020-02**			Prepared: 02/02/07 Analyzed: 02/03/07						
Sulfate	3500	50.0	mg/L	1000	2400	110	80-120			
Chloride	3330	50.0	"	1000	2240	109	80-120			

General 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 EB70209 - General Preparation (WetChem)										
Blank (EB70209-BLK1)				Prepared & Analyzed: 02/02/07						
Total Alkalinity	ND	2.00	mg/L							
Duplicate (EB70209-DUP1)	**Source: 7B01016-01**			Prepared & Analyzed: 02/02/07						
Total Alkalinity	310	2.00	mg/L		314			1.28	20	
Reference (EB70209-SRM1)				Prepared & Analyzed: 02/02/07						
Total Alkalinity	246		mg/L	250		98.4	90-110			
Batch EB70611 - Filtration Preparation										
Blank (EB70611-BLK1)				Prepared: 02/05/07 Analyzed: 02/06/07						
Total Dissolved Solids	ND	10.0	mg/L							
Duplicate (EB70611-DUP1)	**Source: 7B01016-03**			Prepared: 02/05/07 Analyzed: 02/06/07						
Total Dissolved Solids	1920	10.0	mg/L		1870			2.64	20	

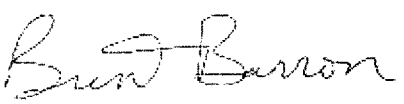
Total Metals by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EB70612 - 6010B/No Digestion										
Blank (EB70612-BLK1)				Prepared & Analyzed: 02/06/07						
Calcium	ND	0.0810	mg/L							
Magnesium	ND	0.0360	"							
Potassium	ND	0.0600	"							
Sodium	ND	0.0430	"							
Calibration Check (EB70612-CCV1)				Prepared & Analyzed: 02/06/07						
Calcium	1.79		mg/L	2.00		89.5	85-115			
Magnesium	1.98		"	2.00		99.0	85-115			
Potassium	1.80		"	2.00		90.0	85-115			
Sodium	1.74		"	2.00		87.0	85-115			
Duplicate (EB70612-DUP1)	**Source: 7B01016-01**			Prepared & Analyzed: 02/06/07						
Calcium	172	4.05	mg/L		176			2.30	20	
Magnesium	111	1.80	"		109			1.82	20	
Potassium	17.0	0.600	"		16.8			1.18	20	
Sodium	306	4.30	"		305			0.327	20	

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
B	Analyte is found in the associated blank as well as in the sample (CLP B-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

Report Approved By:  Date: 2/8/2007

Brent Barron, Laboratory Director/Corp. Technical Director
Celey D. Keene, Org. Tech Director
Raland K. Tuttle, Laboratory Consultant

James Mathis, QA/QC Officer
Jeanne Mc Murrey, Inorg. Tech Director

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Kristin Farris Pope kpope@riceswd.com

Company Name: RICE Operating Company

Company Address: 122 W. Taylor Street

City/State/Zip: Hobbs, New Mexico 88240

Telephone No: (505) 393-9174 Fax No: (505) 397-1471

Sampler Signature: Rozanne Johnson (505)631-9310 e-mail: rozanne@valornet.com

Project Name: EME Sarah Phillips

Project #:

Project Loc: T19S R37E Sec33 K ~ Lea County New Mexico

PO #:

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 7B01018

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl (2) 40 ml glass vials	H_2SO_4	NaOH	$Na_2S_2O_3$	None (1) 1 Liter HDPE	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles (BTEX-N 8260)	Semivolatiles	TOTAL: BTEX 8021B/5030 X	RCI	N.O.R.M.	Total Dissolved Solids	RUSH TAT [Pre-Schedule] 24, 48, 72hrs	Standard TAT
-01	Monitor Well #1			1/29/2007	13:05		3	X		2				1		GW			X	X					X			X		X

Special Instructions:
Please email to : kpope@riceswd.com mfranks@riceswd.com rozanne@valornet.com

Relinquished by:	Date	Time	Received by:	Date	Time
Rozanne Johnson	2-1-07	12:00	James Johnson	2-1-07	12:01
James Johnson	2-1-07	1542	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
				02-01-07	1542

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 4.0 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Rice Op.

Date/ Time: 2-1-07 15:42

Lab ID # : 070101B

Initials: CK

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	4.0 °C	
#2	Shipping container in good condition?	Yes	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
#5	Chain of Custody present?	Yes	No		
#6	Sample instructions complete of Chain of Custody?	Yes	No		
#7	Chain of Custody signed when relinquished/ received?	Yes	No		
#8	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	Yes	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	Yes	No		
#11	Containers supplied by ELOT?	Yes	No		
#12	Samples in proper container/ bottle?	Yes	No	See Below	
#13	Samples properly preserved?	Yes	No	See Below	
#14	Sample bottles intact?	Yes	No		
#15	Preservations documented on Chain of Custody?	Yes	No		
#16	Containers documented on Chain of Custody?	Yes	No		
#17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
#18	All samples received within sufficient hold time?	Yes	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	Not Applicable	
#20	VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken:

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

WELL SAMPLING DATA FORM

CLIENT: **RICE** *Operating Company* WELL ID: Monitor Well #1

SYSTEM: EME DATE: January 29, 2007

SITE LOCATION: Sarah Phillips SAMPLER: Rozanne Johnson

PURGING METHOD: ☐ Hand Bailed ☑ Pump, Typ Purge Pump

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other:

Following Well Recovery

DISPOSAL METHOD OF PURGE WATER: ☐ On-site Drum ☐ Drums ☑ SWD Disposal Facility

TOTAL DEPTH OF WELL: 45.28 Feet

DEPTH TO WATER: 30.21 Feet

HEIGHT OF WATER COLUMN: 15.07 Feet

WELL VOLUME: 2.4 Gal.

2 In. Well Diameter

10 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
13:05	19.8	3.44	6.97	Pumping Silt to Clear with a Strong Septic Odor.
				Samples Collected
				BTEX (2-40ml VOA)
				Major Ions/TDS (1-1000ml Plastic)

COMMENTS:

Myron Model 6P instrument used to obtain pH, conductivity, and temperature measurements.

Delivered samples to Environmental Lab of Texas for BTEX, Major Ions, and TDS analysis.

ENVIRONMENTAL LAB OF
12600 West I-20 East - Odessa, Texas 79765
A Xenco Laboratories Company

Analytical Report

Prepared for:

Kristin Farris-Pope

Rice Operating Co.

122 W. Taylor

Hobbs, NM 88240

Project: EME Sarah Phillips

Project Number: None Given

Location: T19S R37 Sec33 K ~ Lea County New Mexico

Lab Order Number: 7D18016

Report Date: 04/30/07

Rice Operating Co.	Project: EME Sarah Phillips	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Monitor Well # 1	7D18016-01	Water	04/13/07 11:15	04-18-2007 14:55

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

Rice Operating Co.	Project: EME Sarah Phillips	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well # 1 (7D18016-01) Water									
Benzene	**0.00148**	0.00100	mg/L	1	ED71904	04/19/07	04/20/07	EPA 8021B	
Toluene	**0.00197**	0.00100	"	"	"	"	"	"	
Ethylbenzene	**0.00758**	0.00100	"	"	"	"	"	"	
Xylene (p/m)	**0.00422**	0.00100	"	"	"	"	"	"	
Xylene (o)	**0.00194**	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*116 %*		*80-120*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*105 %*		*80-120*	"	"	"	"	

Rice Operating Co.	Project: EME Sarah Phillips	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

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 (7D18016-01) Water									
Total Alkalinity	**452**	2.00	mg/L	1	ED71912	04/19/07	04/19/07	EPA 310.1M	
Chloride	**748**	12.5	"	25	ED72411	04/24/07	04/27/07	EPA 300.0	
Total Dissolved Solids	**2250**	10.0	"	1	ED71911	04/19/07	04/20/07	EPA 160.1	
Sulfate	**99.6**	12.5	"	25	ED72411	04/24/07	04/27/07	EPA 300.0	

Rice Operating Co.	Project: EME Sarah Phillips	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Total Metals by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well # 1 (7D18016-01) Water									
Calcium	**185**	4.05	mg/L	50	ED72703	04/27/07	04/27/07	EPA 6010B	
Magnesium	**138**	1.80	"	"	"	"	"	"	
Potassium	**10.8**	0.600	"	10	"	"	"	"	
Sodium	**312**	4.30	"	100	"	"	"	"	

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED71904 - EPA 5030C (GC)										
Blank (ED71904-BLK1)				Prepared: 04/19/07 Analyzed: 04/20/07						
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	*53.3*		*ug/l*	*50.0*		*107*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*46.6*		*"*	*50.0*		*93.2*	*80-120*			
LCS (ED71904-BS1)				Prepared: 04/19/07 Analyzed: 04/20/07						
Benzene	0.0535	0.00100	mg/L	0.0500		107	80-120			
Toluene	0.0536	0.00100	"	0.0500		107	80-120			
Ethylbenzene	0.0564	0.00100	"	0.0500		113	80-120			
Xylene (p/m)	0.104	0.00100	"	0.100		104	80-120			
Xylene (o)	0.0575	0.00100	"	0.0500		115	80-120			
Surrogate: a,a,a-Trifluorotoluene	*55.0*		*ug/l*	*50.0*		*110*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*52.2*		*"*	*50.0*		*104*	*80-120*			
Calibration Check (ED71904-CCV1)				Prepared: 04/19/07 Analyzed: 04/20/07						
Benzene	59.7		ug/l	50.0		119	80-120			
Toluene	58.1		"	50.0		116	80-120			
Ethylbenzene	59.8		"	50.0		120	80-120			
Xylene (p/m)	109		"	100		109	80-120			
Xylene (o)	58.6		"	50.0		117	80-120			
Surrogate: a,a,a-Trifluorotoluene	*56.8*		*"*	*50.0*		*114*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*54.3*		*"*	*50.0*		*109*	*80-120*			
Matrix Spike (ED71904-MS1)	**Source: 7D17009-07**			Prepared: 04/19/07 Analyzed: 04/23/07						
Benzene	0.0540	0.00100	mg/L	0.0500	ND	108	80-120			
Toluene	0.0546	0.00100	"	0.0500	ND	109	80-120			
Ethylbenzene	0.0597	0.00100	"	0.0500	ND	119	80-120			
Xylene (p/m)	0.108	0.00100	"	0.100	ND	108	80-120			
Xylene (o)	0.0594	0.00100	"	0.0500	ND	119	80-120			
Surrogate: a,a,a-Trifluorotoluene	*53.4*		*ug/l*	*50.0*		*107*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*54.4*		*"*	*50.0*		*109*	*80-120*			

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED71904 - EPA 5030C (GC)										
Matrix Spike Dup (ED71904-MSD1)	**Source: 7D17009-07**			Prepared: 04/19/07 Analyzed: 04/23/07						
Benzene	0.0531	0.00100	mg/L	0.0500	ND	106	80-120	1.87	20	
Toluene	0.0540	0.00100	"	0.0500	ND	108	80-120	0.922	20	
Ethylbenzene	0.0576	0.00100	"	0.0500	ND	115	80-120	3.42	20	
Xylene (p/m)	0.107	0.00100	"	0.100	ND	107	80-120	0.930	20	
Xylene (o)	0.0584	0.00100	"	0.0500	ND	117	80-120	1.69	20	
Surrogate: a,a,a-Trifluorotoluene	*52.9*		*ug/l*	*50.0*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*53.8*		*"*	*50.0*		*108*	*80-120*			

General 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 ED71911 - Filtration Preparation										
Blank (ED71911-BLK1)				Prepared: 04/19/07 Analyzed: 04/20/07						
Total Dissolved Solids	ND	10.0	mg/L							
Duplicate (ED71911-DUP1)	**Source: 7D18006-01**			Prepared: 04/19/07 Analyzed: 04/20/07						
Total Dissolved Solids	614	10.0	mg/L		674			9.32	20	
Duplicate (ED71911-DUP2)	**Source: 7D18015-03**			Prepared: 04/19/07 Analyzed: 04/20/07						
Total Dissolved Solids	1660	10.0	mg/L		1820			9.20	20	
Batch ED71912 - General Preparation (WetChem)										
Blank (ED71912-BLK1)				Prepared & Analyzed: 04/19/07						
Total Alkalinity	ND	2.00	mg/L							
LCS (ED71912-BS1)				Prepared & Analyzed: 04/19/07						
Bicarbonate Alkalinity	172	2.00	mg/L	200		86.0	85-115			
Duplicate (ED71912-DUP1)	**Source: 7D16033-01**			Prepared & Analyzed: 04/19/07						
Total Alkalinity	950	2.00	mg/L		1050			10.0	20	
Reference (ED71912-SRM1)				Prepared & Analyzed: 04/19/07						
Total Alkalinity	246		mg/L	250		98.4	90-110			
Batch ED72411 - General Preparation (WetChem)										
Blank (ED72411-BLK1)				Prepared: 04/24/07 Analyzed: 04/27/07						
Sulfate	ND	0.500	mg/L							
Chloride	ND	0.500	"							

General 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 ED72411 - General Preparation (WetChem)										
Blank (ED72411-BLK2)				Prepared: 04/24/07 Analyzed: 04/27/07						
Sulfate	ND	0.500	mg/L							
Chloride	ND	0.500	"							
LCS (ED72411-BS1)				Prepared & Analyzed: 04/24/07						
Chloride	9.02	0.500	mg/L	10.0		90.2	80-120			
Sulfate	9.66	0.500	"	10.0		96.6	80-120			
Calibration Check (ED72411-CCV1)				Prepared & Analyzed: 04/24/07						
Chloride	8.05		mg/L	10.0		80.5	80-120			
Sulfate	11.0		"	10.0		110	80-120			
Duplicate (ED72411-DUP1)	**Source: 7D23008-01**			Prepared & Analyzed: 04/24/07						
Chloride	187	5.00	mg/L		187			0.00	20	
Sulfate	74.3	5.00	"		74.0			0.405	20	
Duplicate (ED72411-DUP2)	**Source: 7D18018-06**			Prepared: 04/24/07 Analyzed: 04/27/07						
Sulfate	492	12.5	mg/L		490			0.407	20	
Chloride	361	12.5	"		367			1.65	20	
Matrix Spike (ED72411-MS1)	**Source: 7D23008-01**			Prepared & Analyzed: 04/24/07						
Chloride	291	5.00	mg/L	100	187	104	80-120			
Sulfate	166	5.00	"	100	74.0	92.0	80-120			
Matrix Spike (ED72411-MS2)	**Source: 7D18018-06**			Prepared: 04/24/07 Analyzed: 04/27/07						
Chloride	631	12.5	mg/L	250	367	106	80-120			
Sulfate	774	12.5	"	250	490	114	80-120			

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 ED72703 - 6010B/No Digestion										
Blank (ED72703-BLK1)				Prepared & Analyzed: 04/27/07						
Calcium	ND	0.0810	mg/L							
Magnesium	ND	0.0360	"							
Potassium	ND	0.0600	"							
Sodium	ND	0.0430	"							
Calibration Check (ED72703-CCV1)				Prepared & Analyzed: 04/27/07						
Calcium	1.90		mg/L	2.00		95.0	85-115			
Magnesium	2.07		"	2.00		104	85-115			
Potassium	1.98		"	2.00		99.0	85-115			
Sodium	2.29		"	2.00		114	85-115			
Duplicate (ED72703-DUP1)	**Source: 7D18014-01**			Prepared & Analyzed: 04/27/07						
Calcium	140	4.05	mg/L		133			5.13	20	
Magnesium	76.4	1.80	"		76.8			0.522	20	
Potassium	15.7	0.600	"		15.6			0.639	20	
Sodium	350	4.30	"		358			2.26	20	

Notes and Definitions

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

Report Approved By: Celey D. Keene Date: 04/30/07

Brent Barron, Laboratory Director/Corp. Technical Director
Celey D. Keene, Org. Tech Director
Raland K. Tuttle, Laboratory Consultant

James Mathis, QA/QC Officer
Jeanne Mc Murrey, Inorg. Tech Director

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Kristin Farris Pope kpope@riceswd.com

Company Name: RICE Operating Company

Company Address: 122 W. Taylor Street

City/State/Zip: Hobbs, New Mexico 88240

Telephone No: (505) 393-9174 Fax No: (505) 397-1471

Sampler Signature: Rozanne Johnson (505)631-9310 e-mail: rozanne@valornet.com

Project Name: EME Sarah Phillips

Project #:

Project Loc: T19S R37E Sec33 K ~ Lea County New Mexico

PO #:

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)

ORDER #: 7018016

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl (2) 40 ml glass vials	H_2SO_4	NaOH	$Na_2S_2O_3$	None (1) 1 Liter HDPE	Other (Specify)	Matrix: DW=Drinking Water SL= Sludge	GW = Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	Analyze For: TCLP:	TOTAL: TPH: 418.1	8015M	TPH: TX 1005	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles (BTEX-N 8260)	Semivolatiles	BTEX 8021B/5030	RCI	N.O.R.M.	Total Dissolved Solids			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	Monitor Well #1			4/13/2007	11:15		3	X		2				1		GW								X	X					X				X			X

Special Instructions:

Please email to : kpope@riceswd.com matt@riceswd.com rozanne@valornet.com jpurvis@riceswd.com

	Date	Time		Date	Time
Relinquished by: Rozanne Johnson	4-18-07	12:10	Received by: Mary Morton	4-18-07	12:11
Relinquished by: Mary Morton	4-18-07	2:55	Received by:		
Relinquished by:			Received by ELOT: Andrea Lerma	4-18-07	2:55

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?		N

by Courier? UPS DHL FedEx Lone Star

1 L Poly

Temperature Upon Receipt: -1.0 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Rice

Date/ Time: 4-18-07 2:55

Lab ID # : 7D18016

Initials: AL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	-1.0 °C	
#2	Shipping container in good condition?	(Yes)	No		
#3	Custody Seals intact on shipping container/ cooler?	(Yes)	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	(Yes)	No	Not Present	
#5	Chain of Custody present?	(Yes)	No		
#6	Sample instructions complete of Chain of Custody?	(Yes)	No		
#7	Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8	Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11	Containers supplied by ELOT?	(Yes)	No		
#12	Samples in proper container/ bottle?	(Yes)	No	See Below	
#13	Samples properly preserved?	(Yes)	No	See Below	
#14	Sample bottles intact?	(Yes)	No		
#15	Preservations documented on Chain of Custody?	(Yes)	No		
#16	Containers documented on Chain of Custody?	(Yes)	No		
#17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18	All samples received within sufficient hold time?	(Yes)	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	(Not Applicable)	
#20	VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken:

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

WELL SAMPLING DATA FORM

CLIENT: **RICE** *Operating Company* WELL ID: Monitor Well #1

SYSTEM: EME DATE: April 13, 2007

SITE LOCATION: Sarah Phillips SAMPLER: Rozanne Johnson

PURGING METHOD: ☐ Hand Bailed ☑ Pump, Type: Purge Pump

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other:

Following Well Recovery

DISPOSAL METHOD OF PURGE WATER: ☐ On-site Drum ☐ Drums ☑ SWD Disposal Facility

TOTAL DEPTH OF WELL: 45.28 Feet

DEPTH TO WATER: 30.10 Feet

HEIGHT OF WATER COLUMN: 15.18 Feet

WELL VOLUME: 2.4 Gal.

2 In. Well Diameter

10 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
11:15	19.8	3.39	6.71	Pumping Silt to Clear with a Strong Septic Odor.
				Samples Collected
				BTEX (2-40ml VOA)
				Major Ions/TDS (1-1000ml Plastic)

COMMENTS:

Myron Model 6P instrument used to obtain pH, conductivity, and temperature measurements.

Delivered samples to Environmental Lab of Texas for BTEX, Major Ions, and TDS analysis.

WELL SAMPLING DATA FORM

CLIENT: **RICE** *Operating Company* WELL ID: Monitor Well #1

SYSTEM: EME DATE: July 17, 2007

SITE LOCATION: Sarah Phillips SAMPLER: Rozanne Johnson

PURGING METHOD: ☐ Hand Bailed ☑ Pump, Typ Purge Pump

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other:

Following Well Recovery

DISPOSAL METHOD OF PURGE WATER: ☐ On-site Drum ☐ Drums ☑ SWD Disposal Facility

TOTAL DEPTH OF WELL: 45.28 Feet

DEPTH TO WATER: 30.10 Feet

HEIGHT OF WATER COLUMN: 15.18 Feet

WELL VOLUME: 2.4 Gal.

2 In. Well Diameter

10 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
11:15	19.8	3.39	6.71	Pumping Silt to Clear with a Strong Septic Odor.
				Samples Collected
				BTEX (2-40ml VOA)
				Major Ions/TDS (1-1000ml Plastic)

COMMENTS:

Myron Model 6P instrument used to obtain pH, conductivity, and temperature measurements.

Delivered samples to Environmental Lab of Texas for BTEX, Major Ions, and TDS analysis.

Analytical Report 286344

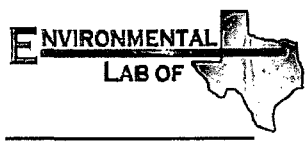
for

Rice Operating Co.

Project Manager: Kristin Pope

EME Sarah Phillips

01-AUG-07



12600 West I-20 East Odessa, Texas 79765

A Xenco Laboratories Company

NELAC certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America

01-AUG-07

Project Manager: **Kristin Pope**
Rice Operating Co.
122 West Taylor
Hobbs, NM 88240

Reference: XENCO Report No: **286344**
EME Sarah Phillips
Project Address: T19S R37E Sec 33 K ~ Lea County New Mexico

Kristin Pope:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 286344. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 286344 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 286344

Rice Operating Co., Hobbs, NM

Project Name: EME Sarah Phillips

Project Id:

Contact: Kristin Pope

Project Location: T19S R37E Sec 33 K ~ Lea County New M

Date Received in Lab: Fri Jul-20-07 01:45 pm

Report Date: 01-AUG-07

Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	286344-001					
	Field Id:	Monitor Well # 1					
	Depth:						
	Matrix:	WATER					
	Sampled:	Jul-17-07 11:05					
Alkalinity by EPA 310.1	***Extracted:***						
	Analyzed:	Jul-26-07 11:50					
	Units/RL:	mg/L	RL				
Alkalinity, Total (as CaCO3)		1820	4.00				
BTEX by EPA 8021B	***Extracted:***	Jul-24-07 10:00					
	Analyzed:	Jul-24-07 23:22					
	Units/RL:	mg/L	RL				
Benzene		ND	0.0050				
Toluene		ND	0.0050				
Ethylbenzene		0.0051	0.0050				
m,p-Xylene		ND	0.0100				
o-Xylene		ND	0.0050				
Total Xylenes		ND					
Total BTEX		0.0051					
Inorganic Anions by EPA 300	***Extracted:***						
	Analyzed:	Jul-21-07 23:31					
	Units/RL:	mg/L	RL				
Chloride		725	12.5				
Sulfate		74.3	12.5				
Metals per ICP by SW846 6010B	***Extracted:***	Jul-31-07 07:57					
	Analyzed:	Jul-31-07 14:17					
	Units/RL:	mg/L	RL				
Calcium		249	1.00				
Magnesium		103	0.100				
Potassium		7.92	2.00				
Sodium		250	5.00				

Since 1990 Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 286344

Rice Operating Co., Hobbs, NM

Project Name: EME Sarah Phillips

Project Id:

Contact: Kristin Pope

Project Location: T19S R37E Sec 33 K ~ Lea County New M

Date Received in Lab: Fri Jul-20-07 01:45 pm

Report Date: 01-AUG-07

Project Manager: Brent Barron, II

Analysis Requested							
	Lab Id:	286344-001					
	Field Id:	Monitor Well # 1					
	Depth:						
	Matrix:	WATER					
	Sampled:	Jul-17-07 11:05					
Residue, Filterable (TDS) by EPA 160.1	***Extracted:***						
	Analyzed:	Jul-25-07 16:30					
	Units/RL:	mg/L RL					
Total dissolved solids		2260 5.00					

Brent Barron
Odessa Laboratory Director

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

Form 2 - Surrogate Recoveries

Project Name: EME Sarah Phillips

Work Order #: 286344 **Project ID:**

Lab Batch #: 701046 **Sample:** 286343-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0476	0.0500	95	80-120	

Lab Batch #: 701046 **Sample:** 286343-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0472	0.0500	94	80-120	

Lab Batch #: 701046 **Sample:** 286344-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0464	0.0500	93	80-120	

Lab Batch #: 701046 **Sample:** 497453-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0413	0.0500	83	80-120	

Lab Batch #: 701046 **Sample:** 497453-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0411	0.0500	82	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Blank Spike Recovery

Project Name: EME Sarah Phillips

Work Order #: 286344 **Project ID:**

Lab Batch #: 701209 **Sample:** 701209-1-BKS **Matrix:** Water
Date Analyzed: 07/26/2007 **Date Prepared:** 07/26/2007 **Analyst:** WRU
Reporting Units: mg/L **Batch #:** 1

Alkalinity by EPA 310.1 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
		BLANK /BLANK SPIKE RECOVERY STUDY				
Alkalinity, Total (as CaCO3)	ND	400	352	88	80-120	

Lab Batch #: 701046 **Sample:** 497453-1-BKS **Matrix:** Water
Date Analyzed: 07/24/2007 **Date Prepared:** 07/24/2007 **Analyst:** CELKEE
Reporting Units: mg/L **Batch #:** 1

BTEX by EPA 8021B Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
		BLANK /BLANK SPIKE RECOVERY STUDY				
Benzene	ND	0.0500	0.0426	85	70-125	
Toluene	ND	0.0500	0.0431	86	70-125	
Ethylbenzene	ND	0.0500	0.0458	92	71-129	
m,p-Xylene	ND	0.1000	0.0818	82	70-131	
o-Xylene	ND	0.0500	0.0431	86	71-133	

Lab Batch #: 700978 **Sample:** 700978-1-BKS **Matrix:** Water
Date Analyzed: 07/21/2007 **Date Prepared:** 07/21/2007 **Analyst:** IRO
Reporting Units: mg/L **Batch #:** 1

Inorganic Anions by EPA 300 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
		BLANK /BLANK SPIKE RECOVERY STUDY				
Chloride	ND	10.0	10.3	103	90-110	
Sulfate	ND	10.0	9.36	94	90-110	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

BS / BSD Recoveries

Project Name: EME Sarah Phillips

Work Order #: 286344

Analyst: DAT

Date Prepared: 07/31/2007

Project ID:

Date Analyzed: 07/31/2007

Lab Batch ID: 701348

Sample: 497757-1-BKS

Batch #: 1

Matrix: Water

Units: mg/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Metals per ICP by SW846 6010B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Calcium	ND	1.00	1.06	106	1.0	1.03	103	3	75-125	25	
Magnesium	ND	1.00	1.08	108	1.0	1.09	109	1	75-125	25	
Potassium	ND	10.0	10.3	103	10.0	10.3	103	0	75-125	25	
Sodium	ND	11.0	10.8	98	11.0	11.0	100	2	75-125	25	

Relative Percent Difference RPD = 200*|(D-F)/(D+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: EME Sarah Phillips

Work Order #: 286344
Lab Batch #: 700978
Date Analyzed: 07/21/2007
QC- Sample ID: 286343-001 S
Reporting Units: mg/L

Date Prepared: 07/21/2007
Batch #: 1

Project ID:
Analyst: IRO
Matrix: Water

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	661	250	907	98	90-110	
Sulfate	238	250	464	90	90-110	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

Form 3 - MS / MSD Recoveries

Project Name: EME Sarah Phillips

Work Order # : 286344 **Project ID:**

Lab Batch ID: 701046 **QC- Sample ID:** 286343-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 07/25/2007 **Date Prepared:** 07/24/2007 **Analyst:** CELKEE

Reporting Units: mg/L

BTEX by EPA 8021B	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.0500	0.0494	99	0.0500	0.0496	99	0	70-125	25	
Toluene	ND	0.0500	0.0493	99	0.0500	0.0492	98	1	70-125	25	
Ethylbenzene	ND	0.0500	0.0519	104	0.0500	0.0523	105	1	71-129	25	
m,p-Xylene	ND	0.1000	0.0915	92	0.1000	0.0927	93	1	70-131	25	
o-Xylene	ND	0.0500	0.0497	99	0.0500	0.0501	100	1	71-133	25	

Lab Batch ID: 701348 **QC- Sample ID:** 286713-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 07/31/2007 **Date Prepared:** 07/31/2007 **Analyst:** DAT

Reporting Units: mg/L

Metals per ICP by SW846 6010B	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Calcium	86.7	1.00	89.9	320	1.00	89.8	310	3	75-125	20	X
Magnesium	9.03	1.00	10.1	107	1.00	9.84	81	28	75-125	20	F
Potassium	34.0	10.0	45.8	118	10.0	45.7	117	1	75-125	20	
Sodium	150	11.0	166	145	11.0	165	136	6	75-125	20	X

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*(D-G)/(D+G)

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Sample Duplicate Recovery

Project Name: EME Sarah Phillips

Work Order #: 286344

Lab Batch #: 701209 **Project ID:**
Date Analyzed: 07/26/2007 **Date Prepared:** 07/26/2007 **Analyst:** WRU
QC- Sample ID: 286342-001 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

Alkalinity by EPA 310.1	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Alkalinity, Total (as CaCO3)	8900	8900	0	20	

Lab Batch #: 700978
Date Analyzed: 07/21/2007 **Date Prepared:** 07/21/2007 **Analyst:** IRO
QC- Sample ID: 286343-001 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

Inorganic Anions by EPA 300	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	661	663	0	20	
Sulfate	238	240	1	20	

Lab Batch #: 701044
Date Analyzed: 07/25/2007 **Date Prepared:** 07/25/2007 **Analyst:** IRO
QC- Sample ID: 286343-001 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

Residue, Filterable (TDS) by EPA 160.1	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	2090	2160	3	30	

Lab Batch #: 701044
Date Analyzed: 07/25/2007 **Date Prepared:** 07/25/2007 **Analyst:** IRO
QC- Sample ID: 286396-001 D **Batch #:** 1 **Matrix:** Water
Reporting Units: mg/L

Residue, Filterable (TDS) by EPA 160.1	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	2560	2580	1	30	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765
Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Kristin Farris Pope kpope@riceswd.com
Company Name: RICE Operating Company
Company Address: 122 W. Taylor Street
City/State/Zip: Hobbs, New Mexico 88240
Telephone No: (505) 393-9174 Fax No: (505) 397-1471
Sampler Signature: Rozanne Johnson (505)631-9310 e-mail: rozanne@valornet.com

Project Name: EME Sarah Phillips
Project #:
Project Loc: T19S R37E Sec33 K ~ Lea County New Mexico
PO #:
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 286344

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO3	HCl (2) 40 ml glass vials	H2SO4	NaOH	Na2S2O3	None (1) 1 Liter HDPE	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non Potable Specify Other	Analyze For: TCLP: TOTAL: 8015B	8015M 418.1	TX 1005 TPH	TX 1005 TPH	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles (BTEX-N 8260)	Semivolatiles	BTEX 8021B/5030	RCI	N.O.R.M.	Total Dissolved Solids		RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	Monitor Well #1			7/17/2007	11:05		3	X		2				1		GW					X	X					X			X			X

Special Instructions:
Please email to: kpope@riceswd.com jpurvis@riceswd.com matt@riceswd.com rozanne@valornet.com

Relinquished by:	Date	Time	Received by:	Date	Time
Rozanne Johnson	7-20-07	9:00	James Johnson	7-20-07	9:01
Relinquished by: James Johnson	7-20-07	1:45	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Andrea Fann	7-20-07	1:45

Laboratory Comments:
Sample Containers Intact? N
VOCs Free of Headspace? N
Labels on container(s) N
Custody seals on container(s) N
Custody seals on cooler(s) N
Sample Hand Delivered N
by Sampler/Client Rep. ?
by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: -2.0 °C
Not Frozen

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Rice

Date/ Time: 7.20.07 1:45

Lab ID #: 28163441

Initials: AL

Sample Receipt Checklist

				Client Initials
#1 Temperature of container/ cooler?	Yes	No	-2.0 °C	Not Frozen
#2 Shipping container in good condition?	Yes	No		
#3 Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4 Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
#5 Chain of Custody present?	Yes	No		
#6 Sample instructions complete of Chain of Custody?	Yes	No		
#7 Chain of Custody signed when relinquished/ received?	Yes	No		
#8 Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
#9 Container label(s) legible and intact?	Yes	No	Not Applicable	
#10 Sample matrix/ properties agree with Chain of Custody?	Yes	No		
#11 Containers supplied by ELOT?	Yes	No		
#12 Samples in proper container/ bottle?	Yes	No	See Below	
#13 Samples properly preserved?	Yes	No	See Below	
#14 Sample bottles intact?	Yes	No		
#15 Preservations documented on Chain of Custody?	Yes	No		
#16 Containers documented on Chain of Custody?	Yes	No		
#17 Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
#18 All samples received within sufficient hold time?	Yes	No	See Below	
#19 Subcontract of sample(s)?	Yes	No	Not Applicable	
#20 VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

CARDINAL LABORATORIES

PHONE (325) 673-7001 · 2111 BEECHWOOD · ABILENE, TX 79603
PHONE (505) 393-2326 · 101 E. MARLAND · HOBBS, NM 88240

ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: KRISTIN FARRIS-POPE
122 WEST TAYLOR
HOBBS, NM 88240
FAX TO: (505) 397-1471

Receiving Date: 10/03/07
Reporting Date: 10/05/07
Project Number: NOT GIVEN
Project Name: EME SARAH PHILLIPS
Project Location: T19S R37E SEC33 K - LEA COUNTY, NM

Sampling Date: 10/02/07
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: SB
Analyzed By: CK

LAB NUMBER	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		10/04/07	10/04/07	10/04/07	10/04/07
H13434-1	MONITOR WELL #1	<0.001	<0.001	0.004	<0.003
Quality Control		0.105	0.102	0.101	0.103
True Value QC		0.100	0.100	0.100	0.300
% Recovery		105	102	101	103
Relative Percent Difference		1.7	<0.1	0.9	<0.1

METHOD: EPA SW-846 8021B

Chemist

10/10/07
Date

H13434b Rice

CARDINAL LABORATORIES

PHONE (325) 673-7001 · 2111 BEECHWOOD · ABILENE, TX 79603
PHONE (505) 393-2326 · 101 E. MARLAND · HOBBS, NM 88240

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

Receiving Date: 10/03/07
Reporting Date: 10/09/07
Project Owner: NOT GIVEN
Project Name: EME SARAH PHILLIPS
Project Location: T19S R37E SEC33 K~LEA COUNTY, NM

Sampling Date: 10/02/07
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: SB
Analyzed By: HM/KS

LAB NUMBER SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (uS/cm)	T-Alkalinity ($mgCaCO_3/L$)
ANALYSIS DATE:	10/09/07	10/06/07	10/06/07	10/08/07	10/04/07	10/04/07
H13434-1 MONITOR WELL #1	308	210	86.7	9.95	3,140	424
Quality Control	NR	50.6	50.8	1.98	9,770	NR
True Value QC	NR	50.0	50.0	2.00	10,000	NR
% Recovery	NR	101	102	99.1	97.7	NR
Relative Percent Difference	NR	2.5	3.2	3.6	< 0.1	NR
METHODS:		SM3500-Ca-D	3500-Mg E	8049	120.1	310.1

LAB NUMBER SAMPLE ID	Cl^- (mg/L)	SO_4 (mg/L)	CO_3 (mg/L)	HCO_3 (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:	10/04/07	10/09/07	10/04/07	10/04/07	10/04/07	10/06/07
H13434-1 MONITOR WELL #1	760	67.2	0	517	6.94	1,881
Quality Control	500	45.6	NR	988	7.01	NR
True Value QC	500	50.0	NR	1000	7.00	NR
% Recovery	100	91.3	NR	98.8	100	NR
Relative Percent Difference	< 0.1	9.2	NR	1.2	< 0.1	NR
METHODS:	SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1

Chemist

10/09/07
Date

H13434-RICE

101 East Marland - Hobbs, New Mexico 88240
Tel (505) 393-2326
Fax (505) 393-2476

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # _____

Company Name: RICE Operating Company	BILL TO Company: RICE Operating Company PO#
Project Manager: Kristin Farris-Pope, Project Scientist	Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240
Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240	Phone#: (505) 393-9174 Fax#: (505)397-1471
Phone #: (505) 393-9174	Fax #: (505)397-1471
Project #:	Project Name: EME Sarah Phillips
Project Location: T19S R37E Sec33 K ~ Lea County New Mexico	Sampler Signature: Rozanne Johnson (505)631-9310 rozanne@valornet.com

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE		PRESERVATIVE METHOD: HCL (2 40ml VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1-1Liter HDPE)	NONE	SAMPLING: DATE (2007)	TIME
H 13434-1	Monitor Well #1	G	3	X					2				1		10-2	10:40

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005 / TX1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content		Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours
	X																X	X	X		

ANALYSIS REQUEST
(Circle or Specify Method No.)

Relinquished by: Rozanne Johnson	Date: 10-3-07	Time: 1:14pm	Received by: Date: Time:
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff) Date: Time:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition: Cool: Yes [X] No [ ] Intact: Yes [X] No [ ]		CHECKED BY: (Initials)

Received by: Bruce Baumer 10/3/07 1:14pm

Phone Results	[ ] Yes	[ ] No		
Fax Results	[ ] Yes	[ ] No	Additional Fax Number:	

REMARKS:

Email Results to: kpope@riceswd.com
lweinheimer@riceswd.com
rozanne@valornet.com

WELL SAMPLING DATA FORM

CLIENT: **RICE** *Operating Company* WELL ID: Monitor Well #1

SYSTEM: EME DATE: October 2, 2007

SITE LOCATION: Sarah Phillips SAMPLER: Rozanne Johnson

PURGING METHOD: ☐ Hand Bailed ☑ Pump, Type: Purge Pump

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other:_____

Following Well Recovery

DISPOSAL METHOD OF PURGE WATER: ☐ On-site Drum ☐ Drums ☑ SWD Disposal Facility

TOTAL DEPTH OF WELL: 45.28 Feet

DEPTH TO WATER: 30.73 Feet

HEIGHT OF WATER COLUMN: 14.55 Feet

WELL VOLUME: 2.3 Gal.

2 In. Well Diameter

10 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
10:40	20.3	3.13	6.75	Pumping Silt to Clear with a Strong Septic Odor.
				Samples Collected
				BTEX (2-40ml VOA)
				Major Ions/TDS (1-1000ml Plastic)

COMMENTS:

Myron Model 6P instrument used to obtain pH, conductivity, and temperature measurements.

Delivered samples to Cardinal Lab in Hobbs, New Mexico for BTEX, Major Ions, and TDS analysis.