AP - 60

ANNUAL MONITORING REPORT

YEAR(S): 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
Junction K-33-1, EME SWD System
Unit "K", Sec. 33, T-19-S, R-37 E
NMOCD Case # AP-60

Dear Mr. Hansen:

Enclosed, please find the 2007 Annual Ground Water Monitoring Report for the K-33-1 site within the EME Salt Water Disposal System. The report includes the following information:

- Summary Tables of all laboratory results and depths to ground water
- Laboratory analytical reports

At the direction of the NMOCD, an additional delineation well was advanced upgradient of the subject site and was found to contain initial chloride concentrations of 320 ppm. Our plans for this site are to advance yet another monitor well approximately eight hundred feet southeast of the K-33 / Sarah Phillips EOL locations to delineate the lateral extent of the impact area.

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 subject site is related to a junction box on the EME salt water disposal system, operated by Rice Operating Company (ROC). The site is located in the NE ¼ of the SW ¼ Section 33, Township 19 South, Range 37 East, south of the town of Monument, New Mexico. The disposal system transports produced water from oil and gas leases to a permitted well for disposal by subsurface injection.

Identification of soil impact occurred during line replacement performed as part of the approved Junction Box Upgrade Program. Soil investigation at the K-33-1 junction box was initiated in September, 2001with a backhoe by excavating a series of trenches around Junction Box K-33-1 to depths of up to 18' below ground surface (bgs) and soil borings to 22' bgs. A second soil investigation was conducted on February 14, 2005 to obtain background concentrations and delineate the areal extent of potential contamination.

A water monitor well was advanced at a location approximately 35' southeast of the K-33-1 junction box on November 3, 2001. Two additional delineation wells were advanced on October 6, 2006, developed and tested in accordance with NMOCD specifications. A fourth well was advanced on November 26, 2007 to the northeast of the location to measure the chloride concentrations up-gradient of the site. Water samples were obtained from the wells each quarter and consistently display elevated chloride concentrations and non-detectable concentrations of BTEX. The depth to water at the site is recorded to be 32' bgs. The soil investigation conducted on February 14, 2005 indicated minor lateral movement of chlorides away from the junction boxes; the impact area appears to be nearly vertical in geometry. The lack of any hydrocarbons within the water samples and the consistent chloride values measured both up and down-gradient from the junction box indicate that the constituents of concern have attenuated to background concentrations.

Chronology of Events
Initial delineation began in November, 2001 and was performed as part of the Junction Box Upgrade Program. Soil samples were collected and analyzed in the field for chlorides. A monitor well was advanced on January, 2002 to a depth of 42' bgs, and soil samples were collected and submitted for laboratory analysis for BTEX and chlorides. The monitor well has been sampled quarterly since installation and a Monitor Well Report has been submitted annually. On May 5, 2005, the site was designated as falling

under Rule 19 and was given a Case Number of 1R0427-93 and AP-60. A Stage I abatement plan was submitted to the NMOCD on March 23, 2005.

Geology and Hydrogeology

The subject site lies in south central Lea County southeast of the city of Monument, New Mexico within the Eunice Plain. The topography is unremarkable sloping gently at an average dip of 10' per mile. An estimated 80% of Southern Lea County is covered by sand. Shin oak, bear grass, and burr grass dominate the areas of sand cover. Elsewhere, the vegetation is gramma grass, burr grass and mesquite. The primary land use in the area is the grazing of cattle however extensive oil and gas exploration and productivities are found in abundance.

The Ogallala Formation is the principal source of groundwater in the subject area. Depth to groundwater in Lea County ranges from approximately 12 to approximately 300 feet bgs. The Ogallala consists of predominately course fluvial conglomerate and sandstone and fine-grained Eolian siltstone and clay. Where present in the subject area, the Ogallala unconformably overlies Triassic redbeds. The regional groundwater gradient is to the east / southeast. Depth to groundwater at the subject site is approximately 32' bgs. Subsurface geology in the subject area consists of seven feet of fine grained sand underlain by caliche to a depth of approximately 22 feet bgs.

Subsurface Soils

Three separate sub surface investigations have been conducted at the site. The first was conducted for Rice Operating by ETGI of Hobbs, New Mexico and consisted of a series of nine individual holes or trenches radiating from the original location of the K-33-1 junction box and extending to maximum depths of 14' bgs. The investigation revealed the presence of elevated chloride levels within the soil throughout the tested vertical horizon. Extensive excavation and disposal of the soils surrounding the junction box was undertaken concurrent with this initial investigation activity.

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 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.

Groundwater

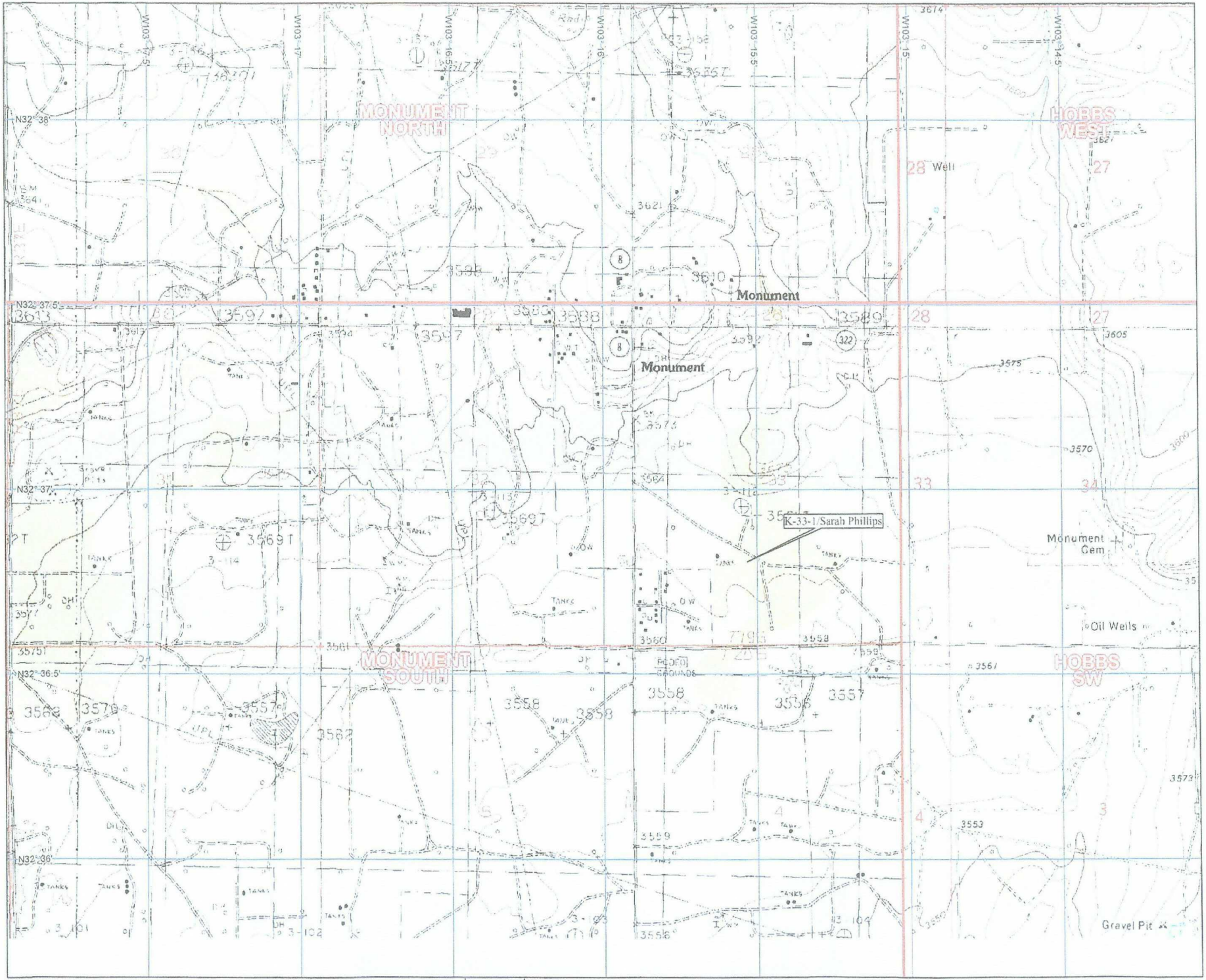
The recharge rate within the monitoring wells is less than one gallon per minute making any attempt at efficient recovery extremely problematic. As the chloride concentrations are slowly declining over time, we request that we be allowed to monitor the site over 2008.

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

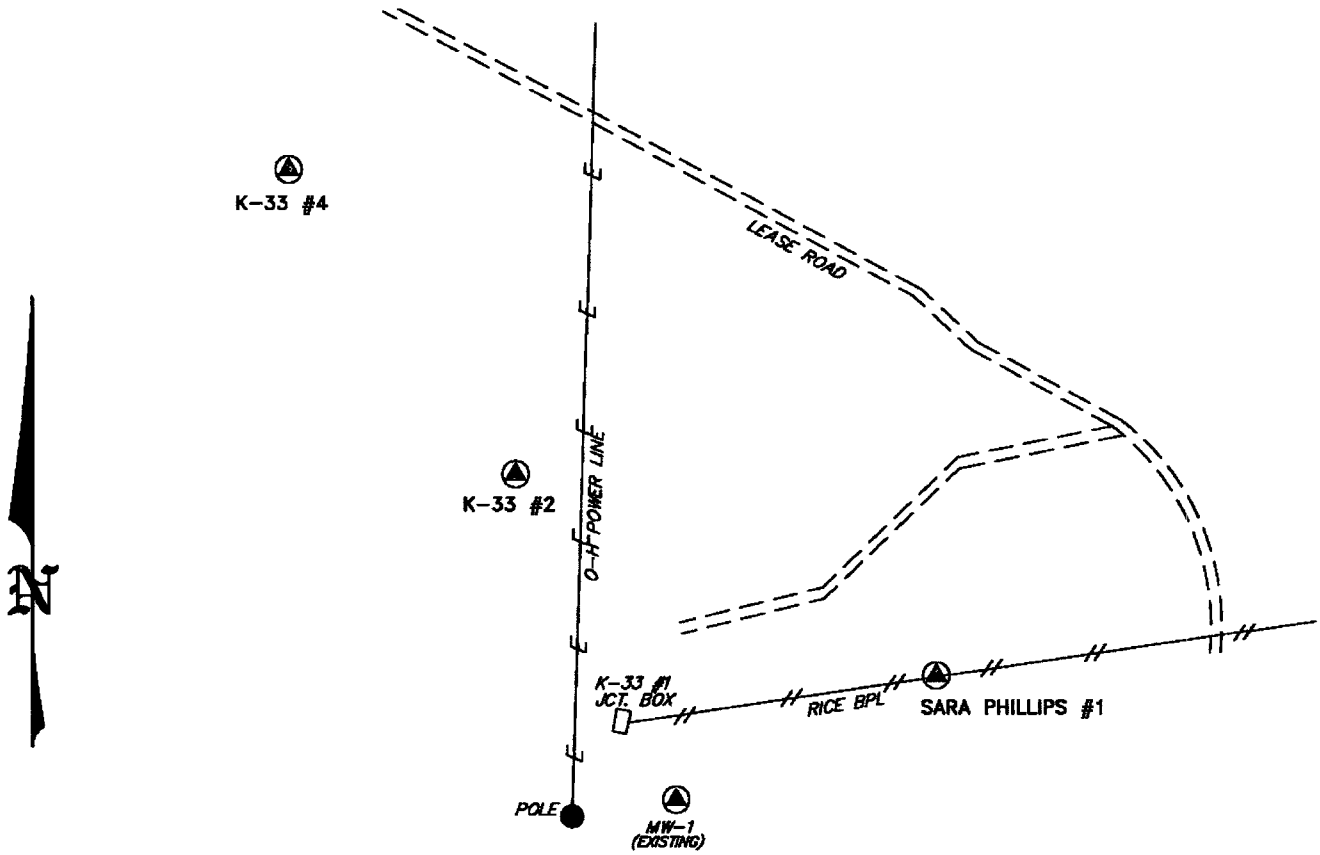
1. Satellite View of Location – Zoom out
2. UGS 7.5' Map
3. Geocoordinate Survey Map of Monitor Wells
4. Sarah Phillips / K-33-1 Concentrations
5. Gradient Chart


Cr-42
S Cook
Cooper St
monument, NM
8
S Peacock Ln
K-33-1 Impact Site
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



 1000 ft Scale: 1 : 25,000 Detail: 13-0 Datum: WGS84

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



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

NEW MEXICO STATE PLANE COORDINATES (NAD83)
TOP 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 ALL REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED BY THIS STATE.

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

100 0 100 200 FEET

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

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.

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

Rice Operating Company
EME Junction K-33-1
NMOCD Case 1RO 427-92 AP-60
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	36.90	41.00	0.70	01/10/02	872	2,635	<0.002	<0.002	<0.002	<0.006	344
1	36.88	40.78	0.62	05/13/02	860	2,680	<1.00	<1.00	<1.00	<2.00	346
1	37.20	40.79	0.57	08/12/02	913	2,510	<0.001	<0.001	<0.001	<0.002	292
1	37.11	40.77	0.59	10/31/02	842	2,530	<0.001	<0.001	<0.001	<0.002	310
1	37.10	40.77	0.58	02/27/03	877	2,070	<0.001	<0.001	<0.001	0.001	305
1	31.10	41.20	1.62	05/22/03	904	2,350	<0.001	<0.001	<0.001	<0.002	264
1	37.29	40.04	0.44	08/21/03	975	2,550	<0.001	<0.001	<0.001	<0.002	274
1	37.40	40.78	0.54	11/19/03	869	2,470	<0.001	<0.001	<0.001	<0.002	282
1	37.40	40.75	0.54	02/18/04	844	2,192	<0.002	<0.002	<0.002	<0.006	43
1	37.30	40.75	0.55	05/26/04	840	2,008	<0.002	<0.002	<0.002	<0.006	113
1	37.12	41.00		09/02/04	904	2,510	<0.001	<0.001	<0.001	<0.001	304
1	32.91	41.00		12/21/04	550	2,640	<0.001	<0.001	<0.001	<0.001	216
1				02/11/05	582						
1				05/01/05	1,030						
1				08/30/05	1,180	2,790	<0.001	<0.001	<0.001	<0.001	
1	32.15	41.00	1.40	10/19/05	961	2,670	<0.001	<0.001	<0.001	<0.001	276
1	31.10	41.00	1.60	01/18/06	1,000	2,480	<0.001	<0.001	<0.001	<0.001	264
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1	31.73	41.00	1.50	07/17/06	988	2,085	<0.001	<0.001	<0.001	<0.001	298
1				10/24/06	686	1,910	<0.001	<0.001	<0.001	<0.001	283
1				12/19/06			<0.001	<0.001	<0.001	<0.001	
1				01/29/07	880	1,840	<0.001	<0.001	<0.001	<0.001	313
1	30.81	40.94	1.60	05/14/07	653	1,860	<0.001	<0.001	<0.001	<0.001	233
1				07/17/07	661	2,090	<0.001	<0.001	<0.001	<0.001	238
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2				10/24/06	692	1,900	<0.001	<0.001	<0.001	<0.001	237
2	29.96	44.28	2.30	01/29/07	805	1,830	<0.001	<0.001	<0.001	<0.001	255
2	29.82	44.28	2.30	05/14/07	675	2,220	<0.001	<0.001	<0.001	<0.001	215
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4	30.39	47.53	2.70	10/10/07	320	1,048	<0.001	<0.001	<0.001	<0.001	131

All concentrations are in mg/L

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
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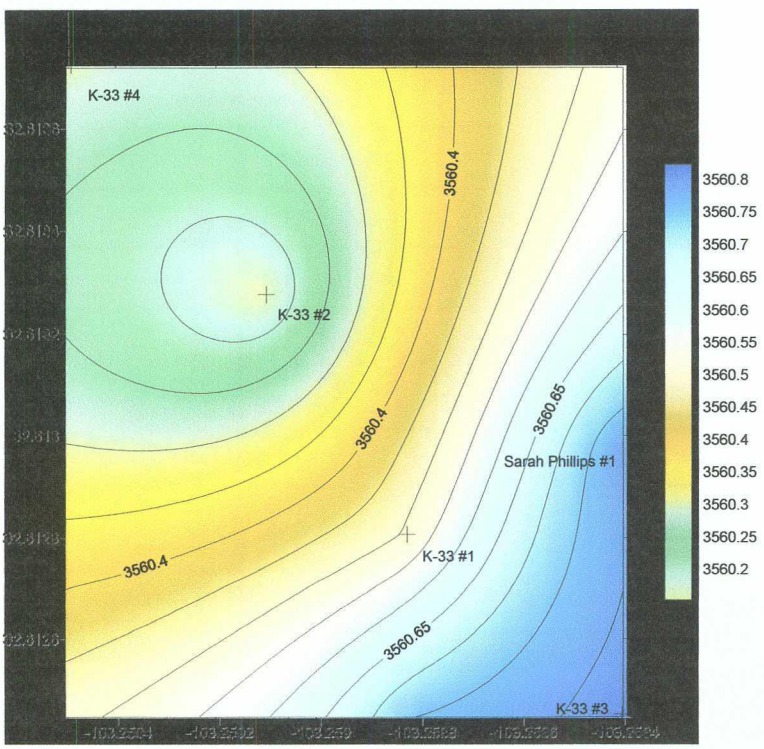
K-33 #4	871983.800	588674.600	3562.74

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



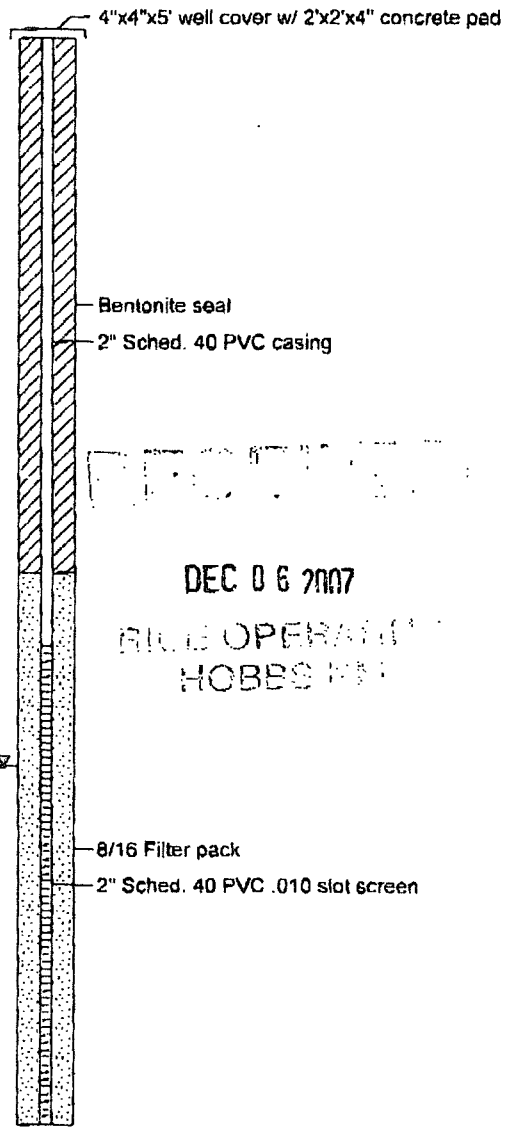
ATKINS ENGINEERING ASSOCIATES, INC.
Professional Engineering / Land Surveying
Water Resources / Environmental Science

Log of Boring EME jct. K-33-1

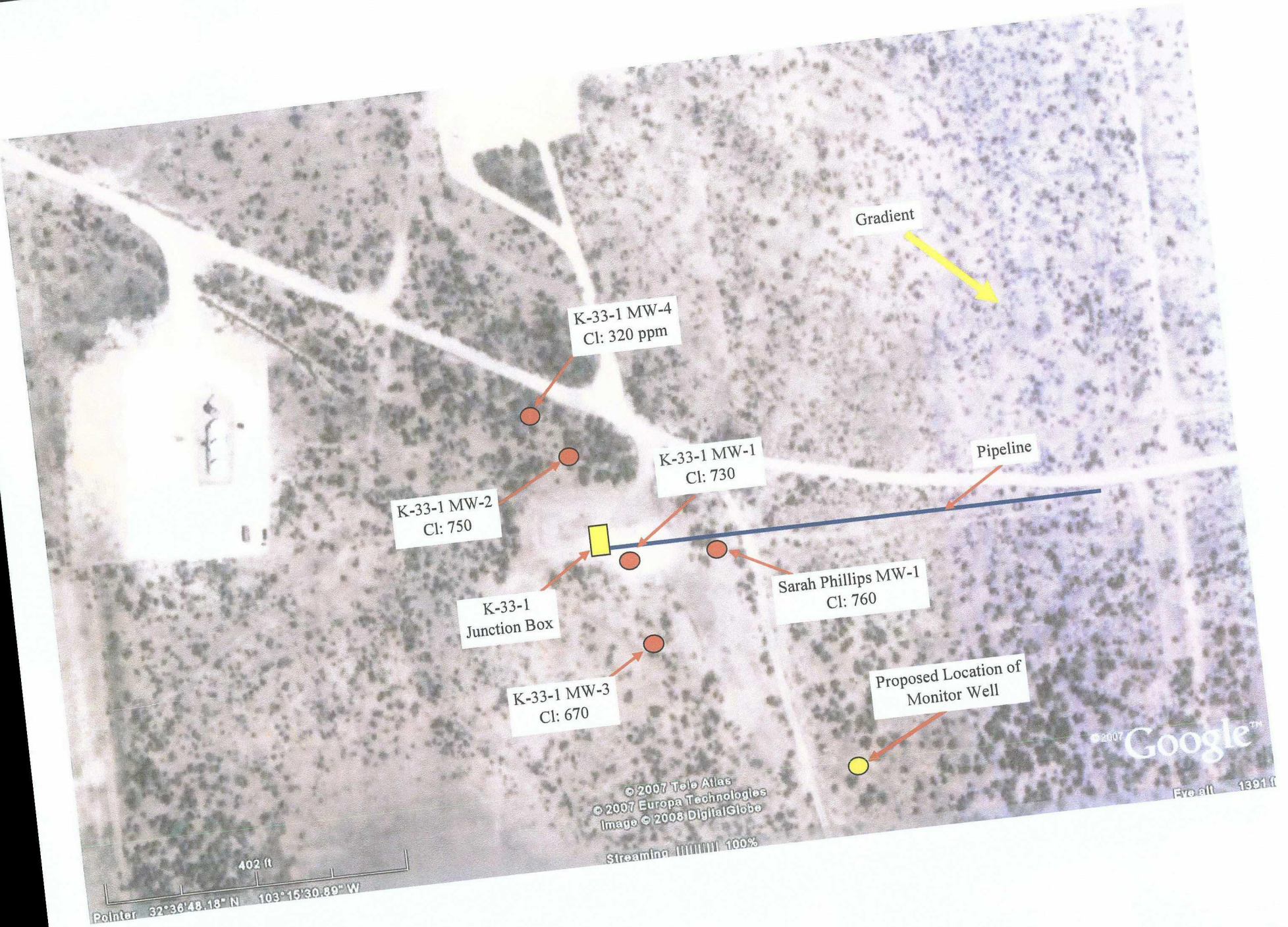
Rice Operating Co.
122 West Taylor
Hobbs, NM 88240
Contact: Kristen Pope
Job: MONMNT1.RIC.07

Date	: 11/28/2007	Auger Type	: 4¼ Hollow Stem
Drill Start	: 08:30	Logged By	: Mort Bates
Drill End	: 12:30		
Boring Location	: W. side of pipe line		
Site Location	: Unit K, Sec. 33, T19S, R37E		

Depth in Feet	GRAPHIC	USCS	Sample	DESCRIPTION
0		SM		Silty sand, loose, brown, dry
5		SC	1	Clayey sand, loose, tan, dry
10		SP	2	Poorly graded sand w/ caliche, loose, tan
15			3	Caliche rock, hard, white, dry
20		SP	4	Poorly graded sand w/ caliche, tan, dry
25			5	
30		CL	6	Sandy clay, loose, reddish tan, wet
35				
40		SS		Broken sandstone, loose, tan, wet
45		CL		Clay, stiff, reddish tan, moist
50				Total Depth 45' Water Level 30'



12-04-2007 C:\Documents and Settings\Compaq_Owner\My Documents\Rice Operating\K-33-1.bor


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
Streaming 100%
© 2007 Google
402 ft
Pointer 32°36'48.18" N 103°15'30.89" W

Rice Operating Company
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All concentrations are in mg/L

WELL DEVELOPMENT LOG

Company	RICE Operating Company		
Well ID	EME K-33-1 MW#4	Date Well Drilled	Nov ~ 2007
Date Started	12/7/2007		
Date Completed	12/7/2007		
Field Personnel	Rozanne Johnson		

Development Method: Over pumping with alternate pumping rates to minimize the creation of sediment bridging.

WELL INFORMATION

Description of Measuring Point (MP): The casing lip, indicated by a black mark.

Depth of Well Below MP, ft:	47.53
Depth to Water Below MP, ft:	30.39
Water Column in Well, ft:	17.14
Gallons in Well Column	2.74

FIELD PARAMETERS

Time	Casing Volume	Conductivity/ms	Temperature/C	pH	TDS/ppm	ORP/MV	Drawdown/ft
12:12	Start Pumping						0.00
12:14	2 Gallons	Clay and Silt					2.23
12:16	4 Gallons	Clay and Silt					2.45
12:18	6 Gallons	1.84	19.0	7.25	1318	369	2.55
INCREASED RATE							
12:20	9 Gallons	1.85	18.7	7.20	1320	355	6.23
12:22	12 Gallons	1.84	18.6	7.18	1319	321	8.95
12:24	15 Gallons	1.84	18.6	7.18	1318	325	11.67
12:26	18 Gallons	Well Pumped Off					
		Let Well Recover					
DECREASE RATE							
12:30	Start Pumping	Clay and Silt					2.68
12:32	20 Gallons	1.85	18.6	7.18	1322	320	2.83
12:34	22 Gallons	1.84	18.6	7.18	1318	315	2.92
12:36	24 Gallons						3.01
12:38	26 Gallons						3.09
12:40	28 Gallons						
12:42	30 Gallons	1.84	18.5	7.18	1318	312	3.10
12:44	32 Gallons						
12:50	38 Gallons	1.84	18.6	7.18	1317	311	3.09
LET WELL RECOVER							
12:50							3.09
12:51							2.21
12:52							1.09
12:55							0.19

Comments: The well did not respond to the increased and decreased pumping rates with the pump set approximately 1.5 ft from bottom. 38 gallons of water was displaced from the well bore which would be approximately 14 well column volumes. The well pumped a clear, odorless stream of water with the exception of when the pump was started or the rate was increased, the water then turned turbid with sand, but cleared. Well pumped off when the rate was increased to 1.5 GPM. The well will be sampled at a latter date for Major cations, anions, TDS and BTEX.

Arc Environmental, LLC ~ P. O. Box 1772 ~ Lovington, New Mexico 88260 (575) 631-9310 rozanne@valornet.com

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 Jct. K-33-1

Project Number: None Given

Location: T19S R37E Sec33K Lea Co, NM

Lab Order Number: 7B01016

Report Date: 02/08/07

Rice Operating Co.	Project: EME Jct. K-33-1	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	7B01016-01	Water	01/29/07 09:15	02-01-2007 15:42
Monitor Well #2	7B01016-02	Water	01/29/07 11:00	02-01-2007 15:42
Monitor Well #3	7B01016-03	Water	01/29/07 10:05	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 Jct. K-33-1	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 (7B01016-01) Water									
Benzene	ND	0.00100	mg/L	1	EB70501	02/05/07	02/07/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*82.2 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*89.2 %*	*80-120*		"	"	"	"	
Monitor Well #2 (7B01016-02) Water									
Benzene	ND	0.00100	mg/L	1	EB70501	02/05/07	02/07/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*107 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*	*80-120*		"	"	"	"	
Monitor Well #3 (7B01016-03) Water									
Benzene	ND	0.00100	mg/L	1	EB70501	02/05/07	02/07/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*80.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*80.8 %*	*80-120*		"	"	"	"	

Rice Operating Co.	Project: EME Jct. K-33-1	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 (7B01016-01) Water									
Total Alkalinity	**314**	2.00	mg/L	1	EB70209	02/02/07	02/02/07	EPA 310.1M	
Chloride	**880**	12.5	"	25	EB70208	02/02/07	02/03/07	EPA 300.0	
Total Dissolved Solids	**1840**	10.0	"	1	EB70302	02/02/07	02/03/07	EPA 160.1	
Sulfate	**313**	12.5	"	25	EB70208	02/02/07	02/03/07	EPA 300.0	
Monitor Well #2 (7B01016-02) Water									
Total Alkalinity	**280**	2.00	mg/L	1	EB70209	02/02/07	02/02/07	EPA 310.1M	
Chloride	**805**	12.5	"	25	EB70208	02/02/07	02/03/07	EPA 300.0	
Total Dissolved Solids	**1830**	10.0	"	1	EB70302	02/02/07	02/03/07	EPA 160.1	
Sulfate	**255**	12.5	"	25	EB70208	02/02/07	02/03/07	EPA 300.0	
Monitor Well #3 (7B01016-03) Water									
Total Alkalinity	**320**	2.00	mg/L	1	EB70209	02/02/07	02/02/07	EPA 310.1M	
Chloride	**743**	12.5	"	25	EB70208	02/02/07	02/03/07	EPA 300.0	
Total Dissolved Solids	**1870**	10.0	"	1	EB70611	02/05/07	02/06/07	EPA 160.1	
Sulfate	**314**	12.5	"	25	EB70208	02/02/07	02/03/07	EPA 300.0	

Rice Operating Co.	Project: EME Jct. K-33-1	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 (7B01016-01) Water									
Calcium	**176**	4.05	mg/L	50	EB70612	02/06/07	02/06/07	EPA 6010B	
Magnesium	**109**	1.80	"	"	"	"	"	"	
Potassium	**16.8**	0.600	"	10	"	"	"	"	
Sodium	**305**	4.30	"	100	"	"	"	"	
Monitor Well #2 (7B01016-02) Water									
Calcium	**164**	4.05	mg/L	50	EB70612	02/06/07	02/06/07	EPA 6010B	
Magnesium	**104**	1.80	"	"	"	"	"	"	
Potassium	***15.4***	*0.600*	"	*10*	"	"	"	"	
Sodium	**294**	2.15	"	50	"	"	"	"	
Monitor Well #3 (7B01016-03) Water									
Calcium	**154**	4.05	mg/L	50	EB70612	02/06/07	02/06/07	EPA 6010B	
Magnesium	**107**	1.80	"	"	"	"	"	"	
Potassium	**18.4**	0.600	"	10	"	"	"	"	
Sodium	**319**	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*			

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

Project: EME Jct. K-33-1
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

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						
Sulfate	0.459	0.500	mg/L							B, J
Chloride	ND	0.500	"							
LCS (EB70208-BS1)				Prepared: 02/02/07 Analyzed: 02/03/07						
Chloride	10.7	0.500	mg/L	10.0		107	80-120			
Sulfate	11.6	0.500	"	10.0		116	80-120			
Calibration Check (EB70208-CCV1)				Prepared: 02/02/07 Analyzed: 02/03/07						
Chloride	10.5		mg/L	10.0		105	80-120			
Sulfate	11.8		"	10.0		118	80-120			
Duplicate (EB70208-DUP1)	**Source: 7B01017-01**			Prepared: 02/02/07 Analyzed: 02/03/07						
Chloride	127	5.00	mg/L		132			3.86	20	
Sulfate	93.0	5.00	"		96.4			3.59	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 EB70302 - Filtration Preparation										
Blank (EB70302-BLK1)				Prepared: 02/02/07 Analyzed: 02/03/07						
Total Dissolved Solids	ND	10.0	mg/L							
Duplicate (EB70302-DUP1)	**Source: 7B01016-01**			Prepared: 02/02/07 Analyzed: 02/03/07						
Total Dissolved Solids	1920	10.0	mg/L		1840			4.26	20	
Duplicate (EB70302-DUP2)	**Source: 7B01020-01**			Prepared: 02/02/07 Analyzed: 02/03/07						
Total Dissolved Solids	6280	10.0	mg/L		5700			9.68	20	
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	

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122 W. Taylor	Project Number: None Given	
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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: Brent Barron 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 Junction K-33-1

Project #:

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

PO #:

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

(lab use only) ORDER #: TB 01016

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: TPH: 418.1 8015M TX 1005	TPH: TX 1005	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se (TCLP)	Volatiles (BTEX-N 8260)	Semivolatiles	BTEX 8021B/5030 (TOTAL: X)	RCI	N.O.R.M.	Total Dissolved Solids			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
-01	Monitor Well #1			1/29/2007	9:15		3	X		2				1		GW					X	X					X			X				X
-02	Monitor Well #2			1/29/2007	11:00		3	X		2				1		GW					X	X					X			X				X
-03	Monitor Well #3			1/29/2007	10:05		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
Relinquished by: 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?

VOCs Free of Headspace?

Labels on container(s)

Custody seals on container(

Custody seals on cooler(s)

Sample Hand Delivered by Sampler/Client Rep by Courier? UPS

Temperature Upon Rr

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Rice Dp.

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

Lab ID # : 91B010 16

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 #2

SYSTEM: EME DATE: January 29, 2007

SITE LOCATION: Jct. K-33-1 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: 44.28 Feet

DEPTH TO WATER: 29.96 Feet

HEIGHT OF WATER COLUMN: 14.32 Feet

WELL VOLUME: 2.3 Gal.

2 In. Well Diameter

8 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
11:00	18.1	3.28	7.02	Silt to Clear with Slight 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 #3

SYSTEM: EME DATE: January 29, 2007

SITE LOCATION: Jct. K-33-1 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: 45.68 Feet
DEPTH TO WATER: 30.14 Feet
HEIGHT OF WATER COLUMN: 15.54 Feet
WELL VOLUME: 2.5 Gal.

2 In. Well Diameter
8 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
10:05	18.1	3.3	7.15	Silt to Clear with no 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 Jct. K-33-1

Project Number: None Given

Location: T19S R37E Sec33 K ~ Lea County New Mexico

Lab Order Number: 7E17004

Report Date: 05/24/07

Rice Operating Co.	Project: EME Jct. K-33-1	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	7E17004-01	Water	05/14/07 10:15	05-17-2007 14:30
Monitor Well # 2	7E17004-02	Water	05/14/07 11:00	05-17-2007 14:30
Monitor Well # 3	7E17004-03	Water	05/14/07 09:40	05-17-2007 14:30

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

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well # 1 (7E17004-01) Water									
Benzene	ND	0.00100	mg/L	1	EE72206	05/22/07	05/23/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*96.8 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.4 %*	*80-120*		"	"	"	"	
Monitor Well # 2 (7E17004-02) Water									
Benzene	ND	0.00100	mg/L	1	EE72206	05/22/07	05/23/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*97.8 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.6 %*	*80-120*		"	"	"	"	
Monitor Well # 3 (7E17004-03) Water									
Benzene	ND	0.00100	mg/L	1	EE72206	05/22/07	05/23/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*105 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*	*80-120*		"	"	"	"	

Rice Operating Co.	Project: EME Jct. K-33-1	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 (7E17004-01) Water									
Total Alkalinity	**320**	2.00	mg/L	1	EE71808	05/18/07	06/22/07	EPA 310.1M	
Chloride	**653**	12.5	"	25	EE72203	05/22/07	05/22/07	EPA 300.0	
Total Dissolved Solids	**1860**	10.0	"	1	EE72202	05/18/07	05/22/07	EPA 160.1	
Sulfate	**233**	12.5	"	25	EE72203	05/22/07	05/22/07	EPA 300.0	
Monitor Well # 2 (7E17004-02) Water									
Total Alkalinity	**284**	2.00	mg/L	1	EE71808	05/18/07	06/22/07	EPA 310.1M	
Chloride	**675**	12.5	"	25	EE72203	05/22/07	05/22/07	EPA 300.0	
Total Dissolved Solids	**2220**	10.0	"	1	EE72202	05/18/07	05/22/07	EPA 160.1	
Sulfate	**215**	12.5	"	25	EE72203	05/22/07	05/22/07	EPA 300.0	
Monitor Well # 3 (7E17004-03) Water									
Total Alkalinity	**312**	2.00	mg/L	1	EE71808	05/18/07	06/22/07	EPA 310.1M	
Chloride	**642**	12.5	"	25	EE72203	05/22/07	05/22/07	EPA 300.0	
Total Dissolved Solids	**1900**	10.0	"	1	EE72202	05/18/07	05/22/07	EPA 160.1	
Sulfate	**255**	12.5	"	25	EE72203	05/22/07	05/22/07	EPA 300.0	

Rice Operating Co.	Project: EME Jct. K-33-1	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 (7E17004-01) Water									
Calcium	**213**	4.05	mg/L	50	EE72205	05/22/07	05/22/07	EPA 6010B	
Magnesium	**98.0**	1.80	"	"	"	"	"	"	
Potassium	**13.8**	0.600	"	10	"	"	"	"	
Sodium	**268**	2.15	"	50	"	"	"	"	
Monitor Well # 2 (7E17004-02) Water									
Calcium	**229**	4.05	mg/L	50	EE72205	05/22/07	05/22/07	EPA 6010B	
Magnesium	**95.8**	1.80	"	"	"	"	"	"	
Potassium	**14.0**	0.600	"	10	"	"	"	"	
Sodium	**224**	2.15	"	50	"	"	"	"	
Monitor Well # 3 (7E17004-03) Water									
Calcium	**208**	4.05	mg/L	50	EE72205	05/22/07	05/22/07	EPA 6010B	
Magnesium	**92.8**	1.80	"	"	"	"	"	"	
Potassium	**14.7**	0.600	"	10	"	"	"	"	
Sodium	**265**	2.15	"	50	"	"	"	"	

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 EE72206 - EPA 5030C (GC)										
Blank (EE72206-BLK1)				Prepared: 05/22/07 Analyzed: 05/23/07						
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	*49.3*		*ug/l*	*50.0*		*98.6*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*51.9*		*"*	*50.0*		*104*	*80-120*			
LCS (EE72206-BS1)				Prepared: 05/22/07 Analyzed: 05/23/07						
Benzene	0.0507	0.00100	mg/L	0.0500		101	80-120			
Toluene	0.0533	0.00100	"	0.0500		107	80-120			
Ethylbenzene	0.0534	0.00100	"	0.0500		107	80-120			
Xylene (p/m)	0.109	0.00100	"	0.100		109	80-120			
Xylene (o)	0.0554	0.00100	"	0.0500		111	80-120			
Surrogate: a,a,a-Trifluorotoluene	*48.3*		*ug/l*	*50.0*		*96.6*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*52.9*		*"*	*50.0*		*106*	*80-120*			
Calibration Check (EE72206-CCV1)				Prepared: 05/22/07 Analyzed: 05/24/07						
Benzene	0.0530		mg/L	0.0500		106	80-120			
Toluene	0.0557		"	0.0500		111	80-120			
Ethylbenzene	0.0552		"	0.0500		110	80-120			
Xylene (p/m)	0.110		"	0.100		110	80-120			
Xylene (o)	0.0585		"	0.0500		117	80-120			
Surrogate: a,a,a-Trifluorotoluene	*51.5*		*ug/l*	*50.0*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*53.9*		*"*	*50.0*		*108*	*80-120*			
Matrix Spike (EE72206-MS1)	**Source: 7E15010-07**			Prepared: 05/22/07 Analyzed: 05/24/07						
Benzene	0.0515	0.00100	mg/L	0.0500	ND	103	80-120			
Toluene	0.0544	0.00100	"	0.0500	ND	109	80-120			
Ethylbenzene	0.0513	0.00100	"	0.0500	ND	103	80-120			
Xylene (p/m)	0.108	0.00100	"	0.100	ND	108	80-120			
Xylene (o)	0.0566	0.00100	"	0.0500	ND	113	80-120			
Surrogate: a,a,a-Trifluorotoluene	*50.5*		*ug/l*	*50.0*		*101*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*50.5*		*"*	*50.0*		*101*	*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 EE72206 - EPA 5030C (GC)										
Matrix Spike Dup (EE72206-MSD1)	**Source: 7E15010-07**			Prepared: 05/22/07 Analyzed: 05/24/07						
Benzene	0.0512	0.00100	mg/L	0.0500	ND	102	80-120	0.976	20	
Toluene	0.0542	0.00100	"	0.0500	ND	108	80-120	0.922	20	
Ethylbenzene	0.0551	0.00100	"	0.0500	ND	110	80-120	6.57	20	
Xylene (p/m)	0.111	0.00100	"	0.100	ND	111	80-120	2.74	20	
Xylene (o)	0.0581	0.00100	"	0.0500	ND	116	80-120	2.62	20	
Surrogate: a,a,a-Trifluorotoluene	*48.3*		*ug/l*	*50.0*		*96.6*	*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 EE71808 - General Preparation (WetChem)										
Blank (EE71808-BLK1)				Prepared: 05/18/07 Analyzed: 06/22/07						
Total Alkalinity	ND	2.00	mg/L							
LCS (EE71808-BS1)				Prepared: 05/18/07 Analyzed: 06/22/07						
Total Alkalinity	0.00	2.00	mg/L				85-115			
Bicarbonate Alkalinity	174	2.00	"	200		87.0	85-115			
Duplicate (EE71808-DUP1)	**Source: 7E17003-01**			Prepared: 05/18/07 Analyzed: 06/22/07						
Total Alkalinity	220	2.00	mg/L		222			0.905	20	
Reference (EE71808-SRM1)				Prepared: 05/18/07 Analyzed: 06/22/07						
Total Alkalinity	254		mg/L	250		102	90-110			
Batch EE72202 - General Preparation (WetChem)										
Blank (EE72202-BLK1)				Prepared: 05/18/07 Analyzed: 05/22/07						
Total Dissolved Solids	ND	10.0	mg/L							
Duplicate (EE72202-DUP1)	**Source: 7E17003-01**			Prepared: 05/18/07 Analyzed: 05/22/07						
Total Dissolved Solids	516	10.0	mg/L		498			3.55	20	
Duplicate (EE72202-DUP2)	**Source: 7E17007-03**			Prepared: 05/18/07 Analyzed: 05/22/07						
Total Dissolved Solids	530	10.0	mg/L		538			1.50	20	
Batch EE72203 - General Preparation (WetChem)										
Blank (EE72203-BLK1)				Prepared & Analyzed: 05/22/07						
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 EE72203 - General Preparation (WetChem)										
LCS (EE72203-BS1)				Prepared & Analyzed: 05/22/07						
Chloride	*9.56*	*0.500*	*mg/L*	*10.0*		*95.6*	*80-120*			
Sulfate	9.69	0.500	"	10.0		96.9	80-120			
Calibration Check (EE72203-CCV1)				Prepared & Analyzed: 05/22/07						
Chloride	9.88		mg/L	10.0		98.8	80-120			
Sulfate	9.23		"	10.0		92.3	80-120			
Duplicate (EE72203-DUP1)	**Source: 7E17003-01**			Prepared & Analyzed: 05/22/07						
Chloride	64.2	12.5	mg/L		62.4			2.84	20	
Sulfate	104	12.5	"		101			2.93	20	
Duplicate (EE72203-DUP2)	**Source: 7E17007-03**			Prepared & Analyzed: 05/22/07						
Chloride	128	5.00	mg/L		128			0.00	20	
Sulfate	107	5.00	"		108			0.930	20	
Matrix Spike (EE72203-MS1)	**Source: 7E17003-01**			Prepared & Analyzed: 05/22/07						
Sulfate	334	12.5	mg/L	250	101	93.2	80-120			
Chloride	314	12.5	"	250	62.4	101	80-120			
Matrix Spike (EE72203-MS2)	**Source: 7E17007-03**			Prepared & Analyzed: 05/22/07						
Sulfate	207	5.00	mg/L	100	108	99.0	80-120			
Chloride	228	5.00	"	100	128	100	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 EE72205 - 6010B/No Digestion										
Blank (EE72205-BLK1)				Prepared & Analyzed: 05/22/07						
Calcium	ND	0.0810	mg/L							
Magnesium	ND	0.0360	"							
Potassium	ND	0.0600	"							
Sodium	ND	0.0430	"							
Calibration Check (EE72205-CCV1)				Prepared & Analyzed: 05/22/07						
Calcium	2.01		mg/L	2.00		100	85-115			
Magnesium	2.07		"	2.00		104	85-115			
Potassium	1.76		"	2.00		88.0	85-115			
Sodium	2.14		"	2.00		107	85-115			
Duplicate (EE72205-DUP1)	**Source: 7E17003-01**			Prepared & Analyzed: 05/22/07						
Calcium	27.2	0.810	mg/L		27.6			1.46	20	
Magnesium	18.1	0.360	"		18.9			4.32	20	
Potassium	14.3	0.600	"		9.42			41.1	20	R
Sodium	85.3	2.15	"		80.7			5.54	20	

Notes and Definitions

R	The RPD exceeded the method control limit. The individual analyte QA/QC recoveries, however, were within acceptance limits.
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: Brent Barron Date: 5/24/2007

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 Junction K-33-1
Project #:
Project Loc: T19S R37E Sec33 K ~ Lea County New Mexico
PO #:
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 7E17004

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: 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	BTEX 8021B/5030	RCI	N.O.R.M.	Total Dissolved Solids	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
																			TCLP:													
	282732																		TOTAL:								X				
01	Monitor Well #1			5/14/2007	10:15		3	X		2				1			GW				X	X					X			X		X
02	Monitor Well #2			5/14/2007	11:00		3	X		2				1			GW				X	X					X			X		
03	Monitor Well #3			5/14/2007	9:40		3	X		2				1			GW				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	5-17-07	7:00	Received by:	James Johnson	5-17-07	7:01
Relinquished by:	James Johnson	5-17-07	2:30	Received by:		Date	Time
Relinquished by:		Date	Time	Received by ELOT:	Andrea Lam	5-17-07	2:30

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: 0.0 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Rice

Date/ Time: 5-17-07 2:30

Lab ID # : 7E17004

Initials: AL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	0.6 °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: May 14, 2007

SITE LOCATION: Jct. K-33-1 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: 40.94 Feet

DEPTH TO WATER: 30.81 Feet

HEIGHT OF WATER COLUMN: 10.13 Feet

WELL VOLUME: 1.6 Gal.

2 In. Well Diameter

8 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
10:15	20.1	3.17	7.16	Pumping Sand to Clear with Slight 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 #2

SYSTEM: EME DATE: May 14, 2007

SITE LOCATION: Jct. K-33-1 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: 44.28 Feet

DEPTH TO WATER: 29.82 Feet

HEIGHT OF WATER COLUMN: 14.46 Feet

WELL VOLUME: 2.3 Gal.

2 In. Well Diameter

8 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
11:00	20.3	3.17	7.04	Silt to Clear with Slight 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 #4

SYSTEM: EME DATE: December 10, 2007

SITE LOCATION: Jct. K-33-1 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: 47.53 Feet

DEPTH TO WATER: 30.39 Feet

HEIGHT OF WATER COLUMN: 17.14 Feet

WELL VOLUME: 2.7 Gal.

2 In. Well Diameter

10 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
14:25	18.6	1.84	7.68	Silt with no 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.

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 JUNCTION K-33-1
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
H13432-1	MONITOR WELL #1	<0.001	<0.001	<0.001	<0.003
H13432-2	MONITOR WELL #2	<0.001	<0.001	<0.001	<0.003
H13432-3	MONITOR WELL #3	<0.001	<0.001	<0.001	<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

H13432b 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 JUNCTION K-33-1
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 (u S/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
H13432-1	MONITOR WELL #1	317	196	98.8	10.9	3,200	292
H13432-2	MONITOR WELL #2	365	208	82.3	12.2	3,200	296
H13432-3	MONITOR WELL #3	316	190	88.7	14.9	3,050	296
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
H13432-1	MONITOR WELL #1	730	269	0	356	7.06	2,084
H13432-2	MONITOR WELL #2	750	302	0	361	7.14	2,012
H13432-3	MONITOR WELL #3	670	295	0	361	7.15	1,909
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

Kristin Farris-Pope
Chemist

10/09/07
Date

H13432-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 Junction K-33-1
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	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
H13432-1	Monitor Well #1	G	3	X				2				1		10-2	9:15		X															X	X	X		
-2	Monitor Well #2	G	3	X				2				1		10-2	8:45		X															X	X	X		
-3	Monitor Well #3	G	3	X				2				1		10-2	8:00		X															X	X	X		

Relinquished by: Rozanne Johnson	Date: 10-3-07	Time: 1:14pm	Received by: Date: 10/3/07 Time: 1:14 pm
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff) Date: Time:

Phone Results ☐ Yes ☐ No

Fax Results ☐ Yes ☐ No Additional Fax Number:

REMARKS:

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

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

Sample Condition: Cool: Yes ☒ No ☐ Intact: Yes ☒ No ☐

CHECKED BY: (Initials) SB

WELL SAMPLING DATA FORM

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

SYSTEM: EME DATE: October 2, 2007

SITE LOCATION: Jct. K-33-1 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: 40.94 Feet

DEPTH TO WATER: 31.53 Feet

HEIGHT OF WATER COLUMN: 9.41 Feet

WELL VOLUME: 1.5 Gal.

2 In. Well Diameter

6 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
9:45	19.0	3.18	7.08	Silt to Clear with no 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.

WELL SAMPLING DATA FORM

CLIENT: **RICE** *Operating Company* WELL ID: Monitor Well #2

SYSTEM: EME DATE: October 2, 2007

SITE LOCATION: Jct. K-33-1 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: 44.28 Feet

DEPTH TO WATER: 30.52 Feet

HEIGHT OF WATER COLUMN: 13.76 Feet

WELL VOLUME: 2.2 Gal.

2 In. Well Diameter

8 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
8:50	19.2	3.19	7.09	Silt to Clear with Slight 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.

WELL SAMPLING DATA FORM

CLIENT: **RICE** *Operating Company* WELL ID: Monitor Well #3

SYSTEM: EME DATE: October 2, 2007

SITE LOCATION: Jct. K-33-1 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: 45.68 Feet

DEPTH TO WATER: 30.66 Feet

HEIGHT OF WATER COLUMN: 15.02 Feet 2 In. Well Diameter

WELL VOLUME: 2.4 Gal. 8 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
8:00	19.0	3.04	7.11	Silt to Clear with no 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.

CARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
WHOLE EARTH ENVIRONMENTAL
ATTN: MIKE GRIFFIN
2103 ARBOR COVE
KATY, TX 77494
FAX TO: (281) 394-2051

Receiving Date: 11/26/07
Reporting Date: 12/03/07
Project Number: NOT GIVEN
Project Name: SARAH PHILLIPS
Project Location: NOT GIVEN

Analysis Date: 11/29/07
Sampling Date: 11/26/07
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: AB
Analyzed By: HM

LAB NUMBER	SAMPLE ID	TDS (mg/L)
H13768-1	SARAH PHILLIPS MW #4	1,048
Quality Control		NR
True Value QC		NR
% Recovery		NR
Relative Percent Difference		NR

METHOD: EPA 600/4-79-020, 160.1

Chemist

12/03/07
Date

H13768 WEE

CARDINAL LABORATORIES

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

Company Name: Whole Earth Environmental
Project Manager: Mike Griffin
Address: 2103 Arbor Cove
City: Katy State: TX Zip: 77494
Phone #: Fax #: 281-394-2051
Project #: Sarah Phillips Project Owner:
Project Name:
Project Location:
Sampler Name: MG

BILL TO

P.O. #:
Company:
Attn:
Address:
City:
State: Zip:
Phone #:
Fax #:

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	BTEX	EC	Chlorides	T-PH	added on 11/30/07 TDS									
H13768-1	Sarah Phillips MW#4			✓							✓		11/26/07	1:30	✓	✓	✓	✓	✓									

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 the client for the 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 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Date: 11/26/07 Time: 3:20 Received By:
Relinquished By: Date: Time: Received By:
Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

Sample Condition: Cool: Yes / No; Intact: Yes / No
CHECKED BY: (Initials)

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS:

email results to wheearth@MSN.com
lcok 11/29/07

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

CARDINAL LABORATORIES

PHONE (575) 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: 12/14/07
Reporting Date: 12/17/07
Project Number: NOT GIVEN
Project Name: EME JUNCTION K-33-1
Project Location: T19S R37E SEC33 K ~ LEA CO., NM

Sampling Date: 12/10/07
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: CK
Analyzed By: AB

LAB NUMBER	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		12/17/07	12/17/07	12/17/07	12/17/07
H13924-1	MONITOR WELL #4	<0.001	<0.001	<0.001	<0.003
Quality Control		0.105	0.096	0.096	0.302
True Value QC		0.100	0.100	0.100	0.300
% Recovery		105	96	96	101
Relative Percent Difference		1.4	2.8	3.1	3.8

METHOD: EPA SW-846 8021B

Chemist

12/18/07
Date

H13924b Rice

CARDINAL LABORATORIES

PHONE (575) 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: (575) 397-1471

Receiving Date: 12/14/07
Reporting Date: 12/20/07
Project Number: NOT GIVEN
Project Name: EME JUNCTION K-33-1
Project Location: T19S R37E SEC33 K~LEA COUNTY, NM

Sampling Date: 12/10/07
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: CK
Analyzed By: AB/HM/KS

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (u S/cm)	T-Alkalinity ($mgCaCO_3/L$)
ANALYSIS DATE:		12/19/07	12/18/07	12/18/07	12/19/07	12/18/07	12/18/07
H13924-1	MONITOR WELL #4	203	94.5	39.5	8.73	1,707	264
Quality Control		NR	49.2	54.0	3.19	1,411	NR
True Value QC		NR	50.0	50.0	3.00	1,413	NR
% Recovery		NR	98.5	108	106	99.9	NR
Relative Percent Difference		NR	< 0.1	6.1	10.2	0.7	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:		12/18/07	12/19/07	12/18/07	12/18/07	12/18/07	12/14/07
H13924-1	MONITOR WELL #4	320	131	0	322	7.69	1,048
Quality Control		490	23.4	NR	1000	7.06	NR
True Value QC		500	25.0	NR	1000	7.00	NR
% Recovery		98.0	93.5	NR	100	101	NR
Relative Percent Difference		2.0	18.0	NR	< 0.1	0.3	NR
METHODS:		SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1

Chemist

12-21-07
Date

H13924 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 Junction K-33-1
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
H13924-1	Monitor Well #4	G	3	X				2				1		12-10	14:25

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	Benzene (Cl 12/19/07)	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: 12-14-2007	Time: 14:40	Received by:
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff) Date: 12-14-07 Time: 14:40
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition: Cool: Yes [X] No [ ] Intact: Yes [X] No [ ]		CHECKED BY: (Initials) Cole

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

REMARKS:

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