

AP - 67

# ANNUAL MONITORING REPORT

YEAR(S):  
2007

CERTIFIED MAIL  
RETURN RECEIPT NO. 7099 3400 0017 1737 2534



March 19, 2008

Mr. Edward Hansen  
New Mexico Energy, Minerals, & Natural Resources  
Oil Conservation Division, Environmental Bureau  
1220 S. St. Francis Drive  
Santa Fe, New Mexico 87504

RECEIVED  
2008 MAR 28 PM 1 49

RE: **2007 ANNUAL GROUNDWATER MONITORING REPORT  
EME JCT. D-1 SITE (AP-67)  
T20S, R36E, SECTION 1, UNIT LETTER D  
LEA COUNTY, NEW MEXICO**

Mr. Hansen:

Trident Environmental takes this opportunity to submit the 2007 Annual Groundwater Monitoring Report for the EME Jct. D-1 Site located in the Eunice-Monument-Eumont (EME) Salt Water Disposal (SWD) System.

ROC is the service provider (agent) for the EME SWD System and has no ownership of any portion of pipeline, well, or facility. The EME SWD System is owned by a consortium of oil producers, System Partners, who provide all operating capital on a percentage ownership/usage basis.

Thank you for your consideration concerning this annual summary of groundwater monitoring information. If you have any questions, please contact me at (432) 638-8740 or Kristin Pope at (505) 393-9174.

Sincerely,

Gilbert J. Van Deventer, PG, REM

cc: KFP, JSC

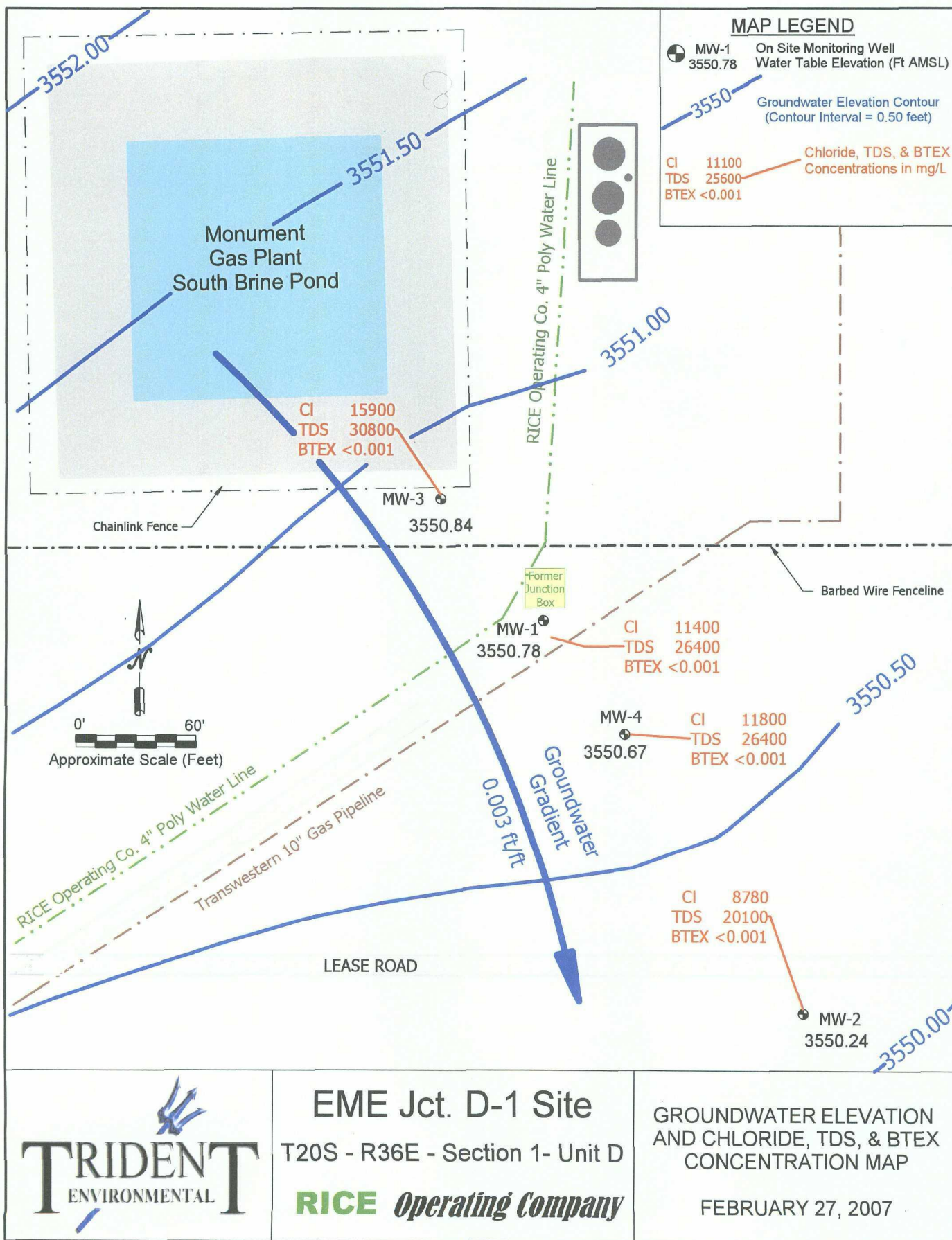
enclosures: maps, table, graphs, well sampling data forms, and laboratory analytical reports.

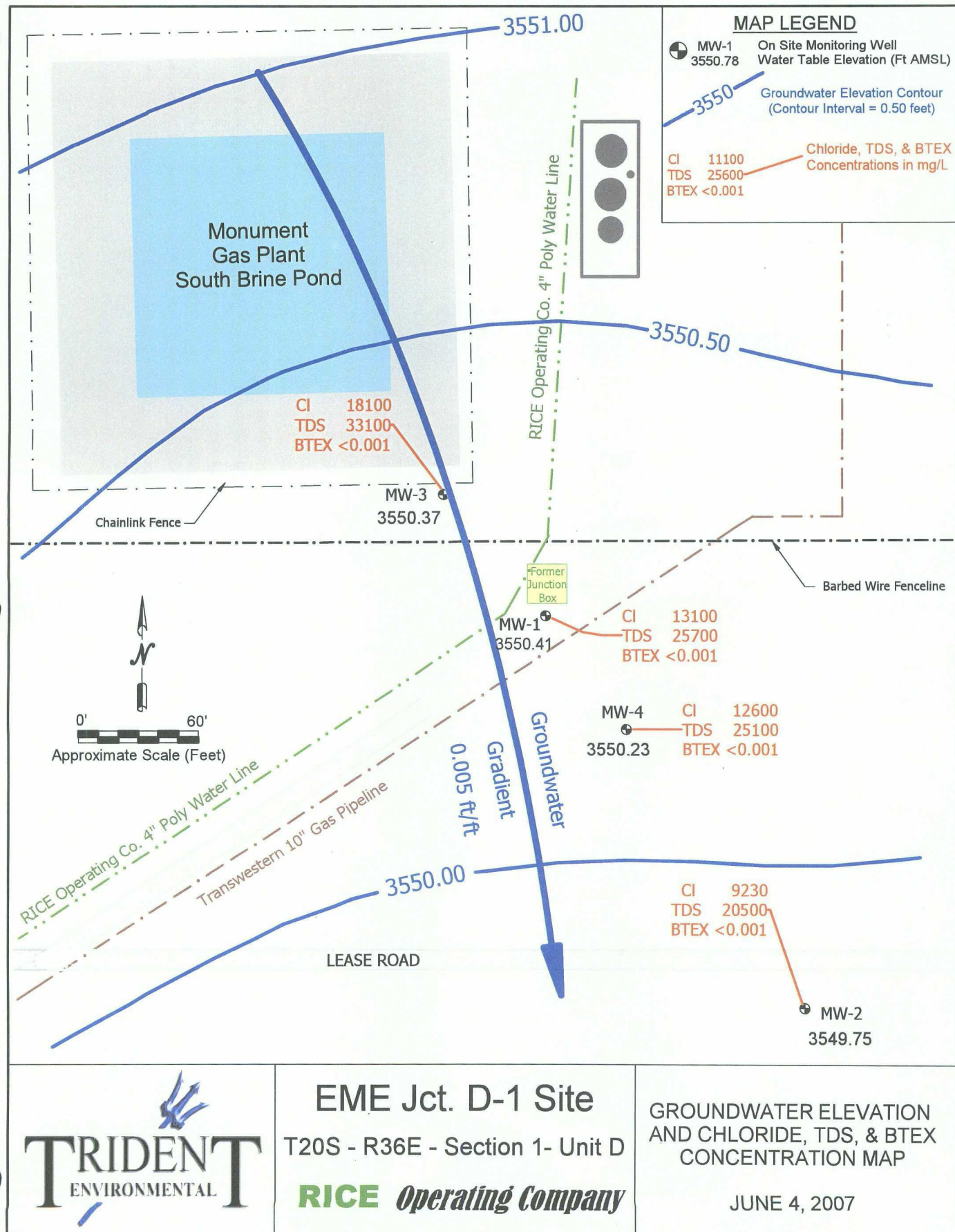
## ATTACHMENT A

Site Maps

Table

Graphs





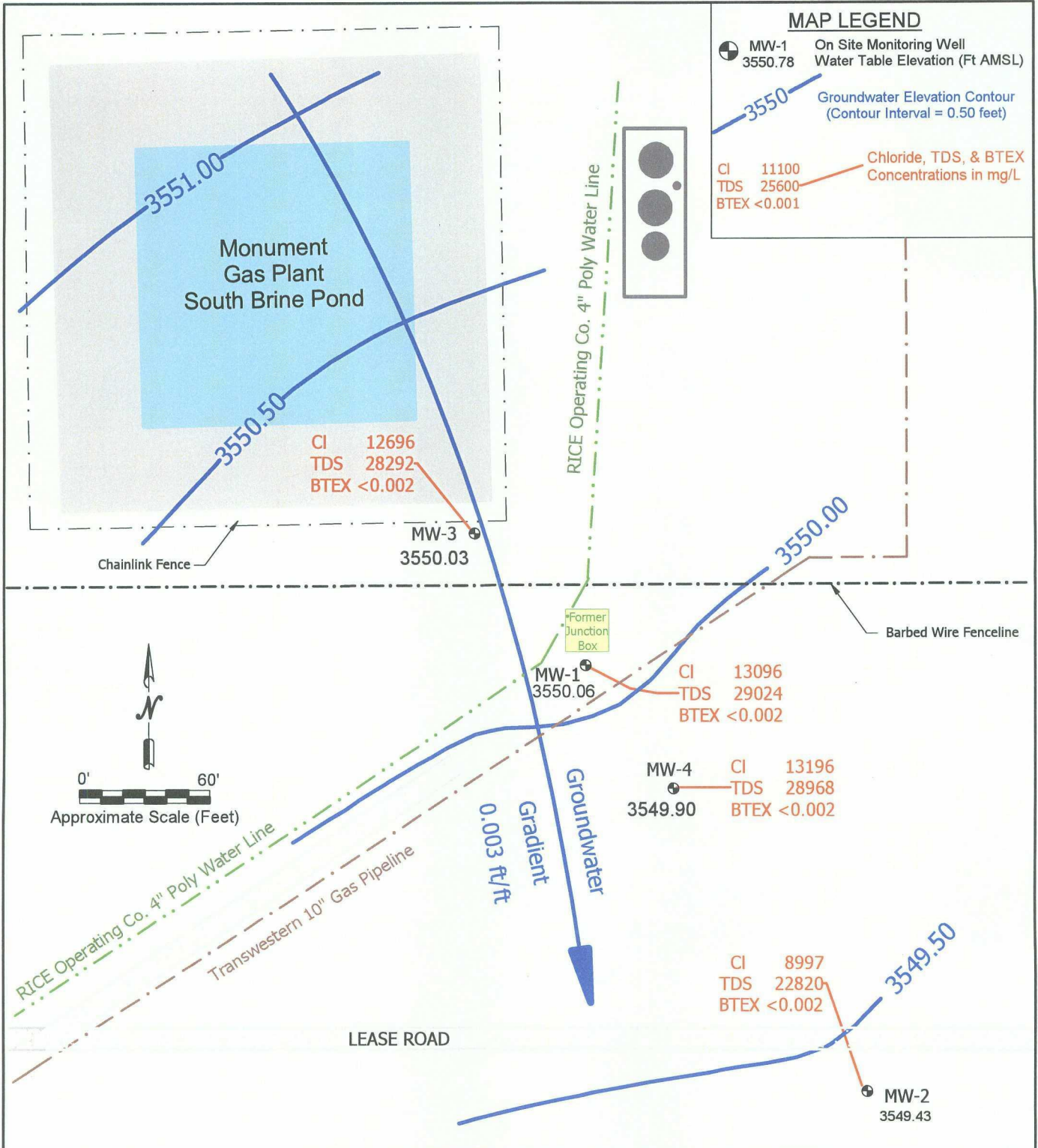


# MAP LEGEND

 MW-1  
 3550.78 On Site Monitoring Well  
 Water Table Elevation (Ft AMSL)

 3550  
 Groundwater Elevation Contour  
 (Contour Interval = 0.50 feet)

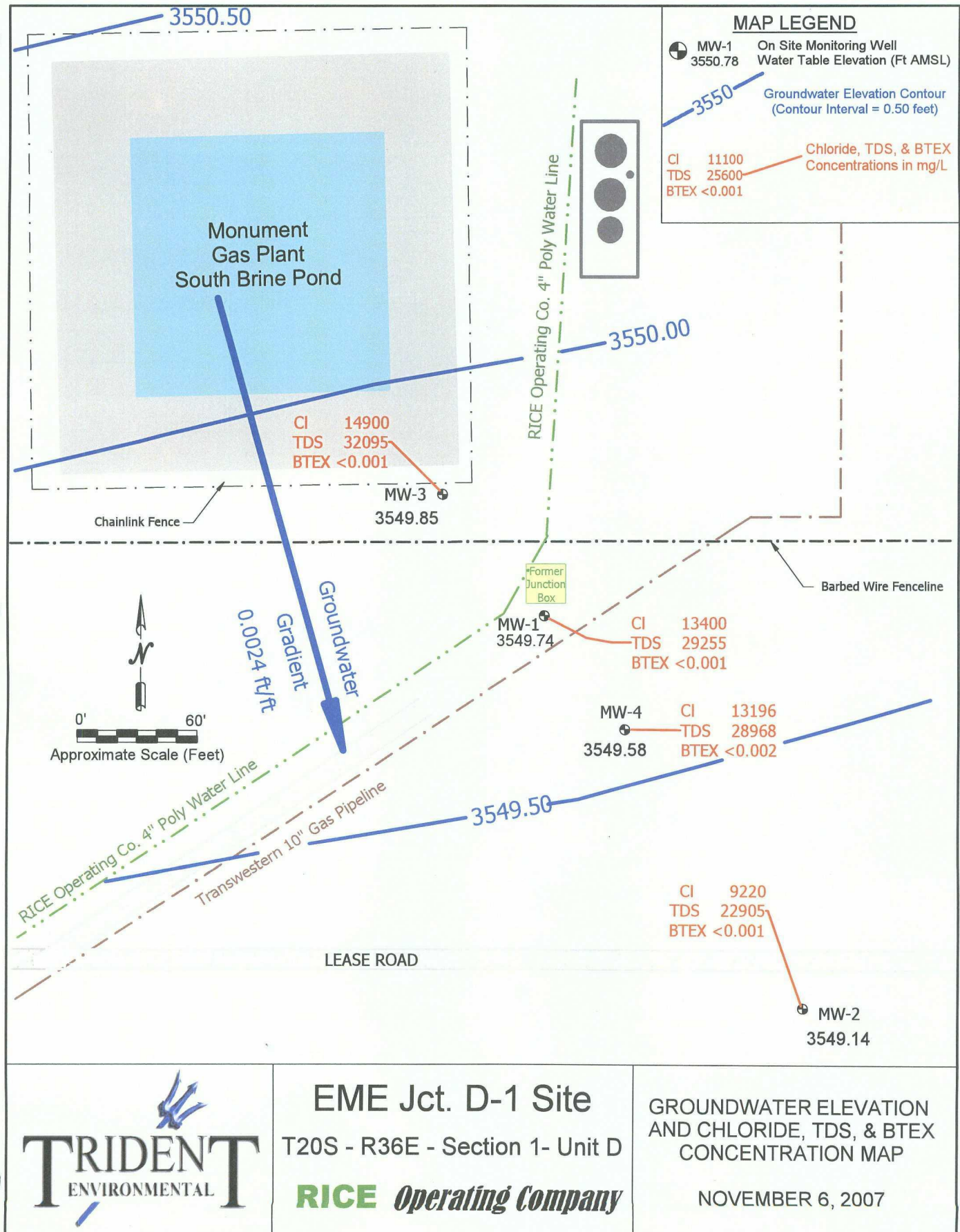
CI 11100  
 TDS 25600  
 BTEX <0.001  
 Chloride, TDS, & BTEX  
 Concentrations in mg/L



**EME Jct. D-1 Site**  
 T20S - R36E - Section 1- Unit D  
**RICE Operating Company**

GROUNDWATER ELEVATION  
 AND CHLORIDE, TDS, & BTEX  
 CONCENTRATION MAP

AUGUST 20, 2007



**Table 1**  
**Summary of Groundwater Sampling Results**

**EME Jct. D-1 Site (AP-67)**

<b>Monitoring Well</b>	<b>Sample Date</b>	<b>Depth to Groundwater (feet BTOC)</b>	<b>Groundwater Elevation (feet AMSL)</b>	<b>Chloride (mg/L)</b>	<b>TDS (mg/L)</b>	<b>Benzene (mg/L)</b>	<b>Toluene (mg/L)</b>	<b>Ethylbenzene (mg/L)</b>	<b>Xylene (mg/L)</b>
MW-1	12/21/04	37.20	3550.57	<b>29,400</b>	<b>56,800</b>	<0.001	<0.001	<0.001	<0.001
	02/09/05	36.20	3551.57	<b>29,200</b>	<b>54,200</b>	<0.001	<0.001	<0.001	<0.001
	05/03/05	35.27	3552.50	<b>22,900</b>	<b>43,600</b>	<0.001	<0.001	<0.001	<0.001
	08/13/05	37.74	3550.03	<b>18,600</b>	<b>34,800</b>	<0.001	<0.001	<0.001	<0.001
	10/19/05	34.70	3553.07	<b>15,600</b>	<b>31,900</b>	<0.001	<0.001	<0.001	<0.001
	01/18/06	34.95	3552.82	<b>13,000</b>	<b>28,000</b>	<0.001	<0.001	<0.001	<0.001
	04/19/06	35.54	3552.23	<b>10,700</b>	<b>26,800</b>	<0.001	<0.001	<0.001	<0.001
	07/18/06	36.24	3551.53	<b>12,900</b>	<b>24,400</b>	<0.001	<0.001	<0.001	<0.001
	10/10/06	36.57	3551.20	<b>10,200</b>	<b>20,200</b>	<0.001	<0.001	<0.001	<0.001
	02/27/07	36.99	3550.78	<b>11,400</b>	<b>26,400</b>	<0.001	<0.001	<0.001	<0.001
	06/04/07	37.36	3550.41	<b>13,100</b>	<b>25,700</b>	<0.001	<0.001	<0.001	<0.001
MW-2	08/20/07	37.71	3550.06	<b>13,096</b>	<b>29,024</b>	<0.002	<0.002	<0.002	<0.006
	11/06/07	38.03	3549.74	<b>13,400</b>	<b>29,255</b>	<0.001	<0.001	<0.001	<0.003
	04/19/06	33.89	3551.73	<b>8,730</b>	<b>19,200</b>	<0.001	<0.001	<0.001	<0.001
	07/18/06	34.65	3550.97	<b>9,390</b>	<b>19,950</b>	<0.001	<0.001	<0.001	<0.001
	10/10/06	34.87	3550.75	<b>7,910</b>	<b>18,000</b>	<0.001	<0.001	<0.001	<0.001
	02/27/07	35.38	3550.24	<b>8,780</b>	<b>20,100</b>	<0.001	<0.001	<0.001	<0.001
	06/04/07	35.87	3549.75	<b>9,230</b>	<b>20,500</b>	<0.001	<0.001	<0.001	<0.001
MW-3	08/20/07	36.19	3549.43	<b>8,997</b>	<b>22,820</b>	<0.002	<0.002	<0.002	<0.006
	11/06/07	36.48	3549.14	<b>9,200</b>	<b>22,905</b>	<0.001	<0.001	<0.001	<0.003
	04/19/06	37.55	3552.29	<b>11,100</b>	<b>25,600</b>	<0.001	<0.001	<0.001	<0.001
	07/18/06	38.24	3551.60	<b>15,400</b>	<b>25,900</b>	<0.001	<0.001	<0.001	<0.001
	10/10/06	38.59	3551.25	<b>13,100</b>	<b>24,000</b>	<0.001	<0.001	<0.001	<0.001
	02/27/07	39.00	3550.84	<b>15,900</b>	<b>30,800</b>	<0.001	<0.001	<0.001	<0.001
	06/04/07	39.47	3550.37	<b>18,100</b>	<b>33,100</b>	<0.001	<0.001	<0.001	<0.001
MW-4	08/20/07	39.81	3550.03	<b>12,696</b>	<b>28,292</b>	<0.002	<0.002	<0.002	<0.006
	11/06/07	39.99	3549.85	<b>14,900</b>	<b>32,095</b>	<0.001	<0.001	<0.001	<0.003
	12/22/06	35.97	3550.93	<b>12,900</b>	<b>22,700</b>	<0.001	<0.001	<0.001	<0.001
	02/27/07	36.23	3550.67	<b>11,800</b>	<b>26,400</b>	<0.001	<0.001	<0.001	<0.001
	06/04/07	36.67	3550.23	<b>12,600</b>	<b>25,100</b>	<0.001	<0.001	<0.001	<0.001
	08/20/07	37.00	3549.90	<b>13,196</b>	<b>28,968</b>	<0.002	<0.002	<0.002	<0.006
	11/06/07	37.32	3549.58	<b>11,900</b>	<b>26,419</b>	<0.001	<0.001	<0.001	<0.003

Total Dissolved Solids (TDS), chloride, and BTEX concentrations listed in milligrams per liter (mg/L)

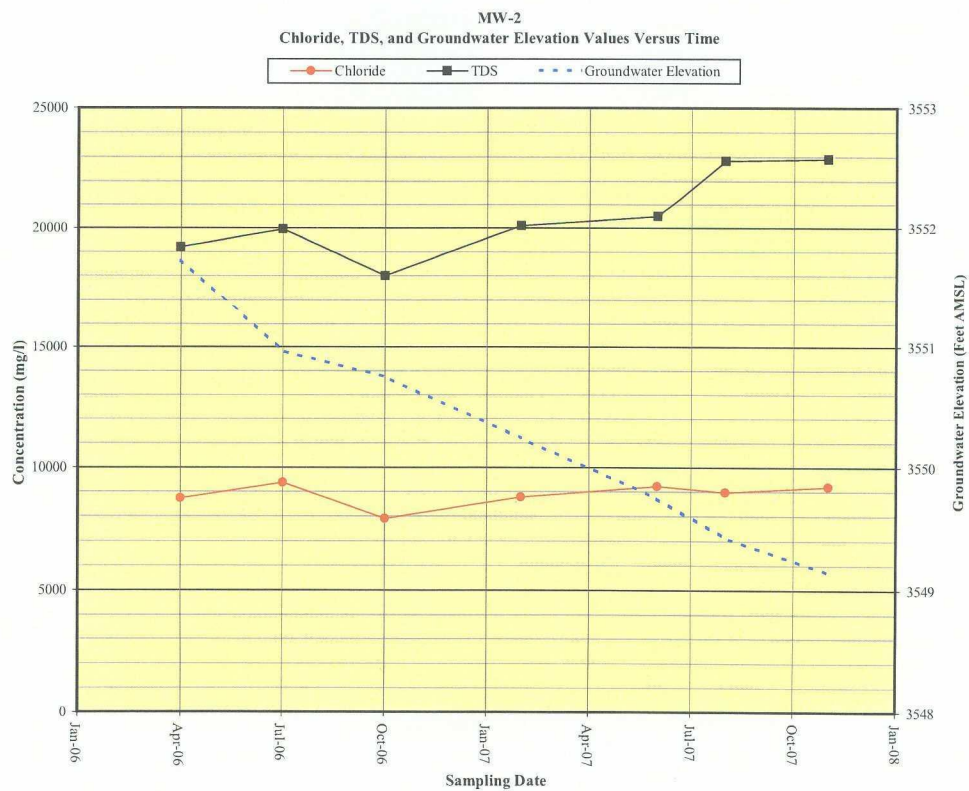
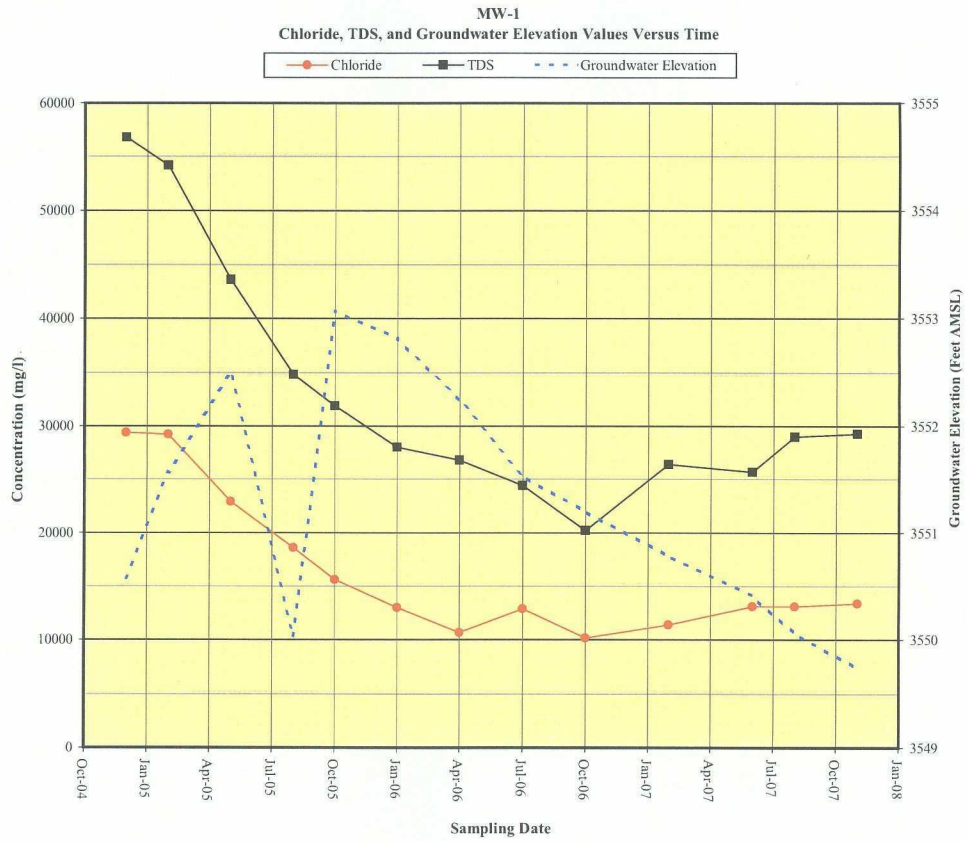
Analyses performed by Cardinal Labs, Hobbs, NM (1995-1998) and Environmental Lab of Texas, Odessa, TX (1999-2003).

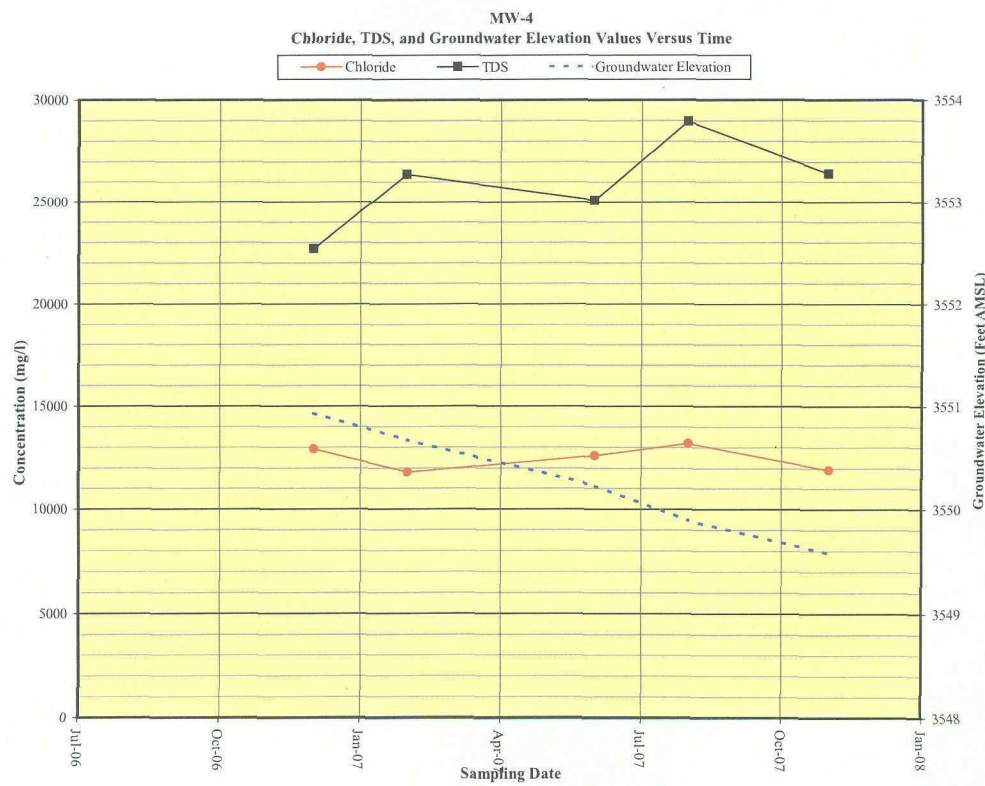
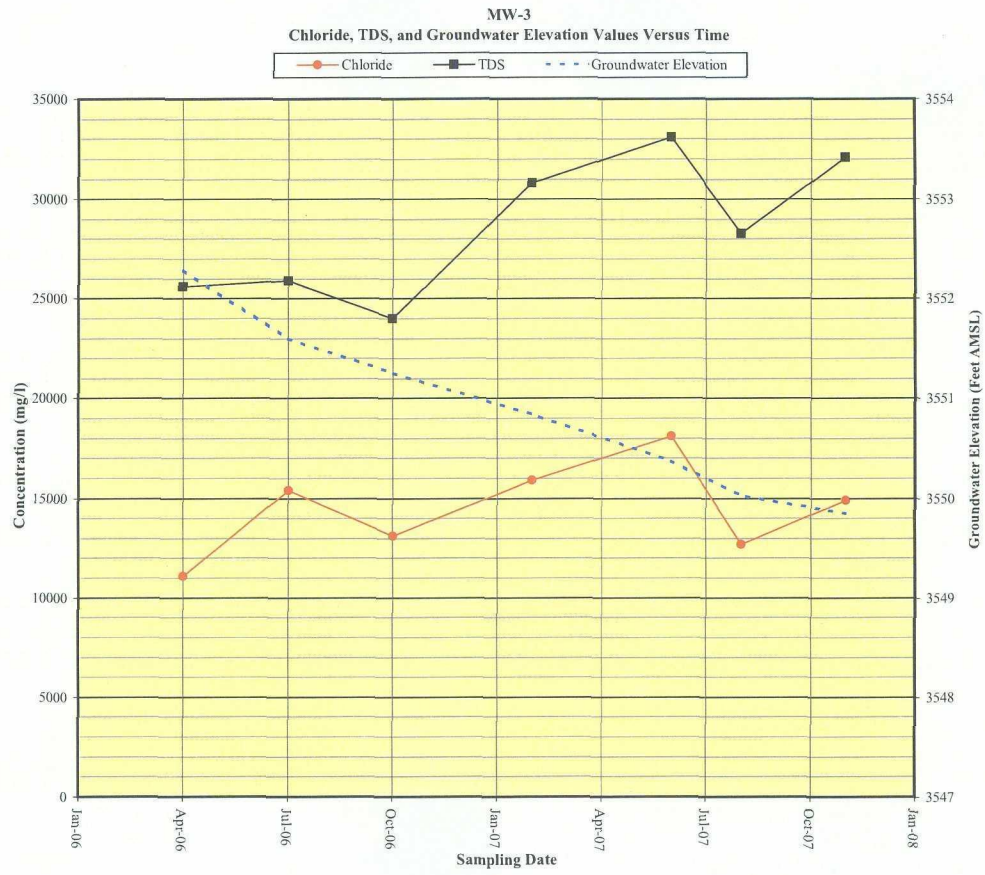
Values in boldface type indicate concentrations exceed New Mexico Water Quality Commission (WQCC) standards.

AMSL - Above Mean Sea Level; BTOC - Below Top of Casing

Elevations and state plane coordinates surveyed by Basin Surveys, Hobbs, NM.





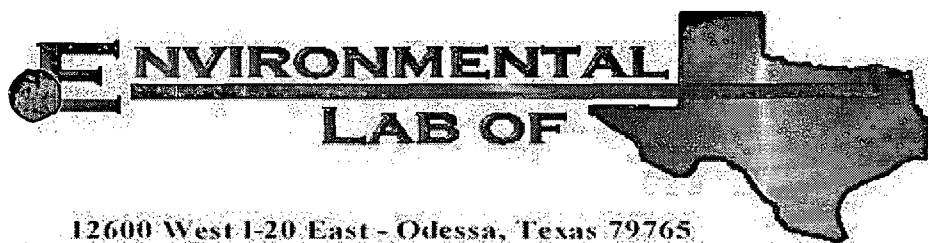


ATTACHMENT B

Laboratory Analytical Reports

And

Chain of Custody Documentation



12600 West 1-20 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. D-1 Leak

Project Number: None Given

Location: T20S-R36E-Sec D-1 Lea Co., NM

Lab Order Number: 7C01014

Report Date: 03/09/07



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

Project: EME Jct. D-1 Leak  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Monitor Well #1	7C01014-01	Water	02/27/07 14:45	03-01-2007 15:00
Monitor Well #2	7C01014-02	Water	02/27/07 13:20	03-01-2007 15:00
Monitor Well #3	7C01014-03	Water	02/27/07 15:15	03-01-2007 15:00
Monitor Well #4	7C01014-04	Water	02/27/07 14:00	03-01-2007 15:00

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

Project: EME Jct. D-1 Leak  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Monitor Well #1 (7C01014-01) Water**

Benzene	ND	0.00100	mg/L	1	EC70201	03/02/07	03/07/07	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		111 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		109 %	80-120		"	"	"	"	

**Monitor Well #2 (7C01014-02) Water**

Benzene	ND	0.00100	mg/L	1	EC70201	03/02/07	03/07/07	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		102 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		105 %	80-120		"	"	"	"	

**Monitor Well #3 (7C01014-03) Water**

Benzene	ND	0.00100	mg/L	1	EC70201	03/02/07	03/07/07	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		96.4 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		103 %	80-120		"	"	"	"	

**Monitor Well #4 (7C01014-04) Water**

Benzene	ND	0.00100	mg/L	1	EC70201	03/02/07	03/07/07	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		114 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		107 %	80-120		"	"	"	"	

Environmental Lab of Texas

A Xenco Laboratories Company

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

Page 2 of 10

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

Project: EME Jct. D-1 Leak  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

**General Chemistry Parameters by EPA / Standard Methods**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Monitor Well #1 (7C01014-01) Water</b>									
Total Alkalinity	490	2.00	mg/L	1	EC70704	03/09/07	03/09/07	EPA 310.1M	
Chloride	11400	250	"	500	EC70717	03/07/07	03/08/07	EPA 300.0	
Total Dissolved Solids	26400	10.0	"	1	EC70715	03/05/07	03/08/07	EPA 160.1	
Sulfate	4360	250	"	500	EC70717	03/07/07	03/08/07	EPA 300.0	
<b>Monitor Well #2 (7C01014-02) Water</b>									
Total Alkalinity	520	2.00	mg/L	1	EC70704	03/09/07	03/09/07	EPA 310.1M	
Chloride	8780	250	"	500	EC70717	03/07/07	03/08/07	EPA 300.0	
Total Dissolved Solids	20100	10.0	"	1	EC70715	03/05/07	03/08/07	EPA 160.1	
Sulfate	4780	250	"	500	EC70717	03/07/07	03/08/07	EPA 300.0	
<b>Monitor Well #3 (7C01014-03) Water</b>									
Total Alkalinity	520	2.00	mg/L	1	EC70704	03/09/07	03/09/07	EPA 310.1M	
Chloride	15900	250	"	500	EC70717	03/07/07	03/08/07	EPA 300.0	
Total Dissolved Solids	30800	10.0	"	1	EC70715	03/05/07	03/08/07	EPA 160.1	
Sulfate	4570	250	"	500	EC70717	03/07/07	03/08/07	EPA 300.0	
<b>Monitor Well #4 (7C01014-04) Water</b>									
Total Alkalinity	470	2.00	mg/L	1	EC70704	03/09/07	03/09/07	EPA 310.1M	
Chloride	11800	250	"	500	EC70717	03/07/07	03/08/07	EPA 300.0	
Total Dissolved Solids	26400	10.0	"	1	EC70715	03/05/07	03/08/07	EPA 160.1	
Sulfate	4540	250	"	500	EC70717	03/07/07	03/08/07	EPA 300.0	

Environmental Lab of Texas

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Page 3 of 10

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

Project: EME Jct. D-1 Leak  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Monitor Well #1 (7C01014-01) Water**

Calcium	551	0.200	mg/L	1	EC70707	03/07/07	03/07/07	EPA 6010B	
Magnesium	271	0.0200	"	"	"	"	"	"	
Potassium	171	1.00	"	"	"	"	"	"	
Sodium	7490	1.00	"	"	"	"	"	"	

**Monitor Well #2 (7C01014-02) Water**

Calcium	396	0.200	mg/L	1	EC70707	03/07/07	03/07/07	EPA 6010B	
Magnesium	208	0.0200	"	"	"	"	"	"	
Potassium	145	1.00	"	"	"	"	"	"	
Sodium	6130	1.00	"	"	"	"	"	"	

**Monitor Well #3 (7C01014-03) Water**

Calcium	597	0.200	mg/L	1	EC70707	03/07/07	03/07/07	EPA 6010B	
Magnesium	390	0.0200	"	"	"	"	"	"	
Potassium	183	1.00	"	"	"	"	"	"	
Sodium	9280	1.00	"	"	"	"	"	"	

**Monitor Well #4 (7C01014-04) Water**

Calcium	4840	0.200	mg/L	1	EC70707	03/07/07	03/07/07	EPA 6010B	
Magnesium	260	0.0200	"	"	"	"	"	"	
Potassium	156	1.00	"	"	"	"	"	"	
Sodium	7480	1.00	"	"	"	"	"	"	

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

Project: EME Jct. D-1 Leak  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD Limit	Notes
<b>Batch EC70201 - EPA 5030C (GC)</b>								
<b>Blank (EC70201-BLK1)</b>								
Prepared: 03/02/07 Analyzed: 03/07/07								
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	55.3		ug/l	50.0		111	80-120	
Surrogate: 4-Bromofluorobenzene	51.6		"	50.0		103	80-120	
<b>LCS (EC70201-BS1)</b>								
Prepared: 03/02/07 Analyzed: 03/07/07								
Benzene	0.0566	0.00100	mg/L	0.0500		113	80-120	
Toluene	0.0512	0.00100	"	0.0500		102	80-120	
Ethylbenzene	0.0484	0.00100	"	0.0500		96.8	80-120	
Xylene (p/m)	0.0955	0.00100	"	0.100		95.5	80-120	
Xylene (o)	0.0444	0.00100	"	0.0500		88.8	80-120	
Surrogate: a,a,a-Trifluorotoluene	57.7		ug/l	50.0		115	80-120	
Surrogate: 4-Bromofluorobenzene	54.5		"	50.0		109	80-120	
<b>Calibration Check (EC70201-CCV1)</b>								
Prepared: 03/02/07 Analyzed: 03/07/07								
Benzene	59.0		ug/l	50.0		118	80-120	
Toluene	53.4		"	50.0		107	80-120	
Ethylbenzene	51.9		"	50.0		104	80-120	
Xylene (p/m)	98.7		"	100		98.7	80-120	
Xylene (o)	46.6		"	50.0		93.2	80-120	
Surrogate: a,a,a-Trifluorotoluene	58.5		"	50.0		117	80-120	
Surrogate: 4-Bromofluorobenzene	59.0		"	50.0		118	80-120	
<b>Matrix Spike (EC70201-MS1)</b>								
Source: 7C02009-01 Prepared: 03/02/07 Analyzed: 03/07/07								
Benzene	0.0588	0.00100	mg/L	0.0500	ND	118	80-120	
Toluene	0.0535	0.00100	"	0.0500	ND	107	80-120	
Ethylbenzene	0.0537	0.00100	"	0.0500	ND	107	80-120	
Xylene (p/m)	0.101	0.00100	"	0.100	ND	101	80-120	
Xylene (o)	0.0474	0.00100	"	0.0500	ND	94.8	80-120	
Surrogate: a,a,a-Trifluorotoluene	61.8		ug/l	50.0		124	80-120	S-04
Surrogate: 4-Bromofluorobenzene	62.8		"	50.0		126	80-120	S-04

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Hobbs NM, 88240

Project: EME Jct. D-1 Leak  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

**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
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**Batch EC70201 - EPA 5030C (GC)**

**Matrix Spike Dup (EC70201-MSD1)**

Source: 7C02009-01

Prepared: 03/02/07 Analyzed: 03/07/07

Benzene	0.0564	0.00100	mg/L	0.0500	ND	113	80-120	4.33	20	
Toluene	0.0521	0.00100	"	0.0500	ND	104	80-120	2.84	20	
Ethylbenzene	0.0533	0.00100	"	0.0500	ND	107	80-120	0.00	20	
Xylene (p/m)	0.0999	0.00100	"	0.100	ND	99.9	80-120	1.10	20	
Xylene (o)	0.0468	0.00100	"	0.0500	ND	93.6	80-120	1.27	20	
Surrogate: a,a,a-Trifluorotoluene	61.4		ug/l	50.0		123	80-120			S-04
Surrogate: 4-Bromofluorobenzene	63.4		"	50.0		127	80-120			S-04

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

Project: EME Jct. D-1 Leak  
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 Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	----------------	-----	--------------	-------

**Batch EC70704 - General Preparation (WetChem)**

**Blank (EC70704-BLK1)**

Prepared & Analyzed: 03/09/07

Total Alkalinity	ND	2.00	mg/L						
Carbonate Alkalinity	ND	0.100	"						
Bicarbonate Alkalinity	ND	2.00	"						
Hydroxide Alkalinity	ND	0.100	"						

**LCS (EC70704-BS1)**

Prepared & Analyzed: 03/09/07

Total Alkalinity	170	2.00	mg/L			85-115			
Bicarbonate Alkalinity	170	2.00	"	200	85.0	85-115			

**Duplicate (EC70704-DUP1)**

Source: 7C01005-01

Prepared & Analyzed: 03/09/07

Total Alkalinity	100	2.00	mg/L		110		9.52	20	
Carbonate Alkalinity	0.00	0.100	"		0.00			20	
Bicarbonate Alkalinity	0.00	2.00	"		0.00			20	
Hydroxide Alkalinity	0.00	0.100	"		0.00			20	

**Reference (EC70704-SRM1)**

Prepared & Analyzed: 03/09/07

Total Alkalinity	246		mg/L	250	98.4	90-110			
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**Batch EC70715 - General Preparation (WetChem)**

**Blank (EC70715-BLK1)**

Prepared: 03/05/07 Analyzed: 03/08/07

Total Dissolved Solids	ND	10.0	mg/L						
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**Duplicate (EC70715-DUP1)**

Source: 7C01013-01

Prepared: 03/05/07 Analyzed: 03/08/07

Total Dissolved Solids	4630	10.0	mg/L		4520		2.40	20	
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**Duplicate (EC70715-DUP2)**

Source: 7C01015-04

Prepared: 03/05/07 Analyzed: 03/08/07

Total Dissolved Solids	12500	10.0	mg/L		12100		3.25	20	
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Rice Operating Co.  
122 W. Taylor  
Hobbs NM, 88240

Project: EME Jct. D-1 Leak  
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
<b>Batch EC70717 - General Preparation (WetChem)</b>										
<b>Blank (EC70717-BLK1)</b>				Prepared: 03/07/07 Analyzed: 03/08/07						
Chloride	ND	0.500	mg/L							
Sulfate	ND	0.500	"							
<b>LCS (EC70717-BS1)</b>				Prepared: 03/07/07 Analyzed: 03/08/07						
Chloride	9.11	0.500	mg/L	10.0		91.1	80-120			
Sulfate	9.86	0.500	"	10.0		98.6	80-120			
<b>Calibration Check (EC70717-CCV1)</b>				Prepared: 03/07/07 Analyzed: 03/08/07						
Chloride	8.24		mg/L	10.0		82.4	80-120			
Sulfate	11.7		"	10.0		117	80-120			
<b>Duplicate (EC70717-DUP1)</b>		<b>Source: 7B28002-05</b>		Prepared: 03/07/07 Analyzed: 03/08/07						
Sulfate	0.766	0.500	mg/L		0.755			1.45	20	
Chloride	0.823	0.500	"		0.811			1.47	20	
<b>Duplicate (EC70717-DUP2)</b>		<b>Source: 7C01014-01</b>		Prepared: 03/07/07 Analyzed: 03/08/07						
Sulfate	4410	250	mg/L		4360			1.14	20	
Chloride	11300	250	"		11400			0.881	20	
<b>Matrix Spike (EC70717-MS1)</b>		<b>Source: 7B28002-05</b>		Prepared: 03/07/07 Analyzed: 03/08/07						
Sulfate	9.35	0.500	mg/L	10.0	0.755	86.0	80-120			
Chloride	9.17	0.500	"	10.0	0.811	83.6	80-120			
<b>Matrix Spike (EC70717-MS2)</b>		<b>Source: 7C01014-01</b>		Prepared: 03/07/07 Analyzed: 03/08/07						
Chloride	17500	250	mg/L	5000	11400	122	80-120			M1
Sulfate	9950	250	"	5000	4360	112	80-120			

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

Project: EME Jet. D-1 Leak  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

**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
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**Batch EC70707 - 6010B/No Digestion**

**Blank (EC70707-BLK1)**

Prepared & Analyzed: 03/07/07

Calcium	ND	0.0810	mg/L							
Magnesium	ND	0.0360	"							
Potassium	ND	0.0600	"							
Sodium	ND	0.0430	"							

**LCS (EC70707-BS1)**

Prepared & Analyzed: 03/07/07

Calcium	1.00		mg/L	1.00		100	85-115			
Magnesium	1.04		"	1.00		104	85-115			
Potassium	9.88		"	10.0		98.8	85-115			
Sodium	9.92		"	11.0		90.2	85-115			

**LCS Dup (EC70707-BSD1)**

Prepared & Analyzed: 03/07/07

Calcium	1.01		mg/L	1.00		101	85-115	0.995	20	
Magnesium	1.05		"	1.00		105	85-115	0.957	20	
Potassium	9.97		"	10.0		99.7	85-115	0.907	20	
Sodium	10.0		"	11.0		90.9	85-115	0.803	20	

**Matrix Spike (EC70707-MS1)**

Source: 7C01014-01RE1

Prepared & Analyzed: 03/07/07

Calcium	118		mg/L	2.00	116	100	75-125			
Magnesium	50.7		"	2.00	47.1	180	75-125			M1
Potassium	42.8		"	20.0	14.3	142	75-125			M1
Sodium	317		"	22.0	235	373	75-125			M1

**Matrix Spike Dup (EC70707-MSD1)**

Source: 7C01014-01RE1

Prepared & Analyzed: 03/07/07

Calcium	123		mg/L	2.00	116	350	75-125	4.15	20	M1
Magnesium	51.9		"	2.00	47.1	240	75-125	2.34	20	M1
Potassium	42.9		"	20.0	14.3	143	75-125	0.233	20	M1
Sodium	322		"	22.0	235	395	75-125	1.56	20	M1

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

Project: EME Jct. D-1 Léak  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

### Notes and Definitions

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

M1 The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).

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:

3/9/2007

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

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

Environmental Lab of Texas

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# Environmental Lab of Texas

## Variance/ Corrective Action Report- Sample Log-In

Client: Ride Op.  
 Date/ Time: 2/1/07 3:30  
 Lab ID #: TC01014  
 Initials: OK

### Sample Receipt Checklist

Client Initials

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

### Variance Documentation

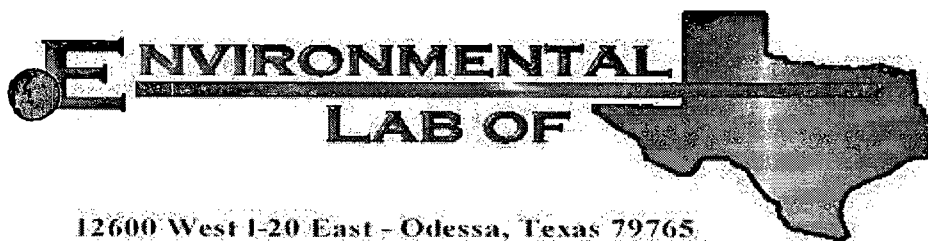
Contact: \_\_\_\_\_ Contacted by: \_\_\_\_\_ Date/ Time: \_\_\_\_\_

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



12600 West I-20 East - Odessa, Texas 79765

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## Analytical Report

**Prepared for:**

Kristin Farris-Pope

Rice Operating Co.

122 W. Taylor

Hobbs, NM 88240

Project: EME Jct. D-1 Leak

Project Number: None Given

Location: T20S-R36E-SecD 1 ~ Lea County New Mexico

Lab Order Number: 7F06020

Report Date: 06/27/07

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

Project: EME Jct. D-1 Leak  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Monitor Well #1	7F06020-01	Water	06/04/07 10:15	06-06-2007 12:51
Monitor Well #2	7F06020-02	Water	06/04/07 08:40	06-06-2007 12:51
Monitor Well #3	7F06020-03	Water	06/04/07 11:20	06-06-2007 12:51
Monitor Well #4	7F06020-04	Water	06/04/07 09:30	06-06-2007 12:51



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

Project: EME Jct. D-1 Leak  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

**Organics by GC**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Monitor Well #1 (7F06020-01) Water</b>									
Benzene	ND	0.00100	mg/L	1	EF70804	06/08/07	06/11/07	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		103 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89.4 %	80-120		"	"	"	"	

**Monitor Well #2 (7F06020-02) Water**

Benzene	ND	0.00100	mg/L	1	EF70804	06/08/07	06/11/07	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		111 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.4 %	80-120		"	"	"	"	

**Monitor Well #3 (7F06020-03) Water**

Benzene	ND	0.00100	mg/L	1	EF70804	06/08/07	06/11/07	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		106 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.2 %	80-120		"	"	"	"	

**Monitor Well #4 (7F06020-04) Water**

Benzene	ND	0.00100	mg/L	1	EF70804	06/08/07	06/11/07	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		108 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.2 %	80-120		"	"	"	"	

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

Project: EME Jct. D-1 Leak  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

**General Chemistry Parameters by EPA / Standard Methods**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Monitor Well #1 (7F06020-01) Water</b>									
Total Alkalinity	440	2.00	mg/L	1	EF71309	06/13/07	06/13/07	EPA 310.1M	
Chloride	13100	250	"	500	EF71204	06/12/07	06/12/07	EPA 300.0	
Total Dissolved Solids	25700	10.0	"	1	EF71110	06/07/07	06/11/07	EPA 160.1	
Sulfate	4650	250	"	500	EF71204	06/12/07	06/12/07	EPA 300.0	
<b>Monitor Well #2 (7F06020-02) Water</b>									
Total Alkalinity	560	2.00	mg/L	1	EF71309	06/13/07	06/13/07	EPA 310.1M	
Chloride	9230	100	"	200	EF71204	06/12/07	06/12/07	EPA 300.0	
Total Dissolved Solids	20500	10.0	"	1	EF71110	06/07/07	06/11/07	EPA 160.1	
Sulfate	4910	100	"	200	EF71204	06/12/07	06/12/07	EPA 300.0	
<b>Monitor Well #3 (7F06020-03) Water</b>									
Total Alkalinity	510	2.00	mg/L	1	EF71309	06/13/07	06/13/07	EPA 310.1M	
Chloride	18100	250	"	500	EF71204	06/12/07	06/12/07	EPA 300.0	
Total Dissolved Solids	33100	10.0	"	1	EF71110	06/07/07	06/11/07	EPA 160.1	
Sulfate	4670	250	"	500	EF71204	06/12/07	06/12/07	EPA 300.0	
<b>Monitor Well #4 (7F06020-04) Water</b>									
Total Alkalinity	510	2.00	mg/L	1	EF71309	06/13/07	06/13/07	EPA 310.1M	
Chloride	12600	250	"	500	EF71204	06/12/07	06/12/07	EPA 300.0	
Total Dissolved Solids	25100	10.0	"	1	EF71110	06/07/07	06/11/07	EPA 160.1	
Sulfate	4530	250	"	500	EF71204	06/12/07	06/12/07	EPA 300.0	

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122 W. Taylor  
Hobbs NM, 88240

Project: EME Jct. D-1 Leak  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Monitor Well #1 (7F06020-01) Water</b>									
Calcium	489	20.2	mg/L	250	EF70807	06/08/07	06/08/07	EPA 6010B	
Magnesium	230	1.80	"	50	"	"	"	"	
Potassium	172	3.00	"	"	"	"	"	"	
Sodium	9120	215	"	5000	"	"	"	"	
<b>Monitor Well #2 (7F06020-02) Water</b>									
Calcium	343	20.2	mg/L	250	EF70807	06/08/07	06/08/07	EPA 6010B	
Magnesium	166	1.80	"	50	"	"	"	"	
Potassium	111	3.00	"	"	"	"	"	"	
Sodium	7840	43.0	"	1000	"	"	"	"	
<b>Monitor Well #3 (7F06020-03) Water</b>									
Calcium	499	20.2	mg/L	250	EF70807	06/08/07	06/08/07	EPA 6010B	
Magnesium	303	1.80	"	50	"	"	"	"	
Potassium	244	3.00	"	"	"	"	"	"	
Sodium	10200	215	"	5000	"	"	"	"	
<b>Monitor Well #4 (7F06020-04) Water</b>									
Calcium	394	20.2	mg/L	250	EF70807	06/08/07	06/08/07	EPA 6010B	
Magnesium	204	1.80	"	50	"	"	"	"	
Potassium	132	3.00	"	"	"	"	"	"	
Sodium	11400	215	"	5000	"	"	"	"	

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Page 4 of 10

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

Project: EME Jct. D-1 Leak  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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**Batch EF70804 - EPA 5030C (GC)**

**Blank (EF70804-BLK1)**

Prepared: 06/08/07 Analyzed: 06/11/07

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	48.0		ug/l	50.0		96.0	80-120		
Surrogate: 4-Bromofluorobenzene	45.7		"	50.0		91.4	80-120		

**LCS (EF70804-BS1)**

Prepared: 06/08/07 Analyzed: 06/11/07

Benzene	0.0508	0.00100	mg/L	0.0500		102	80-120		
Toluene	0.0518	0.00100	"	0.0500		104	80-120		
Ethylbenzene	0.0505	0.00100	"	0.0500		101	80-120		
Xylene (p/m)	0.0995	0.00100	"	0.100		99.5	80-120		
Xylene (o)	0.0526	0.00100	"	0.0500		105	80-120		
Surrogate: a, a, a-Trifluorotoluene	49.7		ug/l	50.0		99.4	80-120		
Surrogate: 4-Bromofluorobenzene	48.0		"	50.0		96.0	80-120		

**Calibration Check (EF70804-CCV1)**

Prepared: 06/08/07 Analyzed: 06/12/07

Benzene	0.0577		mg/L	0.0500		115	80-120		
Toluene	0.0576		"	0.0500		115	80-120		
Ethylbenzene	0.0548		"	0.0500		110	80-120		
Xylene (p/m)	0.104		"	0.100		104	80-120		
Xylene (o)	0.0579		"	0.0500		116	80-120		
Surrogate: a, a, a-Trifluorotoluene	57.6		ug/l	50.0		115	80-120		
Surrogate: 4-Bromofluorobenzene	50.8		"	50.0		102	80-120		

**Matrix Spike (EF70804-MS1)**

Source: 7F06020-01

Prepared: 06/08/07 Analyzed: 06/11/07

Benzene	0.0547	0.00100	mg/L	0.0500	ND	109	80-120		
Toluene	0.0556	0.00100	"	0.0500	ND	111	80-120		
Ethylbenzene	0.0531	0.00100	"	0.0500	ND	106	80-120		
Xylene (p/m)	0.105	0.00100	"	0.100	ND	105	80-120		
Xylene (o)	0.0578	0.00100	"	0.0500	ND	116	80-120		
Surrogate: a, a, a-Trifluorotoluene	56.5		ug/l	50.0		113	80-120		
Surrogate: 4-Bromofluorobenzene	53.6		"	50.0		107	80-120		

Environmental Lab of Texas

A Xenco Laboratories Company

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

Project: EME Jct. D-1 Leak  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

**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
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**Batch EF70804 - EPA 5030C (GC)**

**Matrix Spike Dup (EF70804-MSD1)**

**Source: 7F06020-01**

**Prepared: 06/08/07 Analyzed: 06/12/07**

Benzene	0.0562	0.00100	mg/L	0.0500	ND	112	80-120	2.71	20	
Toluene	0.0569	0.00100	"	0.0500	ND	114	80-120	2.67	20	
Ethylbenzene	0.0558	0.00100	"	0.0500	ND	112	80-120	5.50	20	
Xylene (p/m)	0.107	0.00100	"	0.100	ND	107	80-120	1.89	20	
Xylene (o)	0.0589	0.00100	"	0.0500	ND	118	80-120	1.71	20	
Surrogate: a,a,a-Trifluorotoluene	59.3		ug/l	50.0		119	80-120			
Surrogate: 4-Bromofluorobenzene	55.2		"	50.0		110	80-120			

Environmental Lab of Texas

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

Project: EME Jct. D-1 Leak  
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
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**Batch EF71110 - General Preparation (WetChem)**

**Blank (EF71110-BLK1)**

Prepared: 06/07/07 Analyzed: 06/11/07

Total Dissolved Solids ND 10.0 mg/L

**Duplicate (EF71110-DUP1)**

Source: 7F06016-01

Prepared: 06/07/07 Analyzed: 06/11/07

Total Dissolved Solids 1270 10.0 mg/L 1210 4.84 20

**Duplicate (EF71110-DUP2)**

Source: 7F06019-03

Prepared: 06/07/07 Analyzed: 06/11/07

Total Dissolved Solids 7020 10.0 mg/L 6900 1.72 20

**Batch EF71204 - General Preparation (WetChem)**

**Blank (EF71204-BLK1)**

Prepared & Analyzed: 06/12/07

Sulfate ND 0.500 mg/L

Chloride ND 0.500 "

**LCS (EF71204-BS1)**

Prepared & Analyzed: 06/12/07

Sulfate 10.0 0.500 mg/L 10.0 100 80-120

Chloride 10.8 0.500 " 10.0 108 80-120

**Calibration Check (EF71204-CCV1)**

Prepared & Analyzed: 06/12/07

Sulfate 10.0 mg/L 10.0 100 80-120

Chloride 10.8 " 10.0 108 80-120

**Duplicate (EF71204-DUP1)**

Source: 7F06020-03

Prepared & Analyzed: 06/12/07

Sulfate 4550 250 mg/L 4670 2.60 20

Chloride 17500 250 " 18100 3.37 20

**Matrix Spike (EF71204-MS1)**

Source: 7F06020-03

Prepared & Analyzed: 06/12/07

Chloride 21100 250 mg/L 5000 18100 60.0 80-120 QM-10

Sulfate 7770 250 " 5000 4670 62.0 80-120 QM-10

Environmental Lab of Texas

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

Project: EME Jct. D-1 Leak  
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
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**Batch EF71309 - General Preparation (WetChem)**

**Blank (EF71309-BLK1)**

Prepared & Analyzed: 06/13/07

Total Alkalinity	ND	2.00	mg/L							
Carbonate Alkalinity	ND	0.100	"							
Bicarbonate Alkalinity	ND	2.00	"							
Hydroxide Alkalinity	ND	0.100	"							

**LCS (EF71309-BS1)**

Prepared & Analyzed: 06/13/07

Bicarbonate Alkalinity	174	2.00	mg/L	200		87.0	85-115			
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**Duplicate (EF71309-DUP1)**

Source: 7F06017-02

Prepared & Analyzed: 06/13/07

Total Alkalinity	348	2.00	mg/L		348			0.00	20	
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**Reference (EF71309-SRM1)**

Prepared & Analyzed: 06/13/07

Total Alkalinity	250		mg/L	250		100	90-110			
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Page 8 of 10



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

Project: EME Jct. D-1 Leak  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

**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
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**Batch EF70807 - 6010B/No Digestion**

**Blank (EF70807-BLK1)**

Prepared & Analyzed: 06/08/07

Calcium	ND	0.0810	mg/L							
Magnesium	ND	0.0360	"							
Potassium	ND	0.0600	"							
Sodium	ND	0.0430	"							

**Calibration Check (EF70807-CCV1)**

Prepared & Analyzed: 06/08/07

Calcium	1.78		mg/L	2.00		89.0	85-115			
Magnesium	1.83		"	2.00		91.5	85-115			
Potassium	2.28		"	2.00		114	85-115			
Sodium	1.82		"	2.00		91.0	85-115			

**Duplicate (EF70807-DUP1)**

Source: 7F05011-03

Prepared & Analyzed: 06/08/07

Calcium	139	4.05	mg/L		139			0.00	20	
Magnesium	29.5	0.360	"		29.8			1.01	20	
Potassium	6.37	0.600	"		6.57			3.09	20	
Sodium	121	2.15	"		124			2.45	20	

Environmental Lab of Texas

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

Project: EME Jct. D-1 Leak  
Project Number: None Given  
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

### Notes and Definitions

QM-10    LCS/LCSD were analyzed in place of MS/MSD.  
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:

6/27/2007

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

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Environmental Lab of Texas

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Page 10 of 10

# 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@iceswd.com

Company Name: RICE Operating Company

Company Address: 122 W. Taylor Street

City/State/Zip: Hobbs, New Mexico 88240

Telephone No: (505) 393-9174

Sampler Signature: Rozanne Johnson (505) 831-9310

Fax No: (505) 397-1471

e-mail: rozanne@valornet.com

Project Name: EME Junction D-1 Leak

Project #:

Project Loc: T20S-R36E-SecD.1 ~ Lea County New Mexico

PO #:

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only)

ORDER #: 7106070

283839

Lab # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filled	Total # of Containers	Preservation & # of Containers										Matrix										Analyze For:									
								HNO <sub>3</sub>	HCl (2) 40 ml glass vials	H <sub>2</sub> SO <sub>4</sub>	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub>	Other (1) 1 Liter HDPE	SV - Groundwater S. Soil/Solid	SV - Non-Ferrous Spec. Other	TPH	TX 1006	Ca, Mg, Na, K	Anions (Cl, SO <sub>4</sub> , Alkalinity)	SAR / ESP / CEC	Metals: As, Ag, Ba, Cd, Cr, Pb, Hg, Se	Volatiles	Semivolatiles	STEX 8021R/5030	RCI	N.O.R.M.	Total Dissolved Solids	RUSH TAT (Pre-Schedule) 24 hr, 72 hr									
01	Monitor Well #1			6/4/2007	10:15		3	X	2			1	1	GW	GW			X	X				X				X										
02	Monitor Well #2			6/4/2007	8:40		3	X	2			1	1	GW	GW			X	X				X				X										
03	Monitor Well #3			6/4/2007	11:20		3	X	2			1	1	GW	GW			X	X				X				X										
04	Monitor Well #4			6/4/2007	9:30		3	X	2			1	1	GW	GW			X	X				X				X										

### Special Instructions:

Please email to: kpope@iceswd.com  
jpurvis@iceswd.com

matt@iceswd.com

rozanne@valornet.com

### Laboratory Comments:

Sample Containers Intact?  
VOCs Free of Headspace?

Labels on container(s)  
Custody seals on container(s)  
Custody seals on cooler(s)

Sample Hand Delivered  
by Sampler/Client/Rep?

by Courier? ☐ UPS ☐ DHL ☐ FedEx ☐ Lone Star

Temperature Upon Receipt: 20 °C

Received by:

Mary Morton

Received by:

Received by ELOT

Andrea Lom

Date

Time

Date

Time

Date

Time

Date

Time

Date

Time

Date

Time

Date

Time

Date

Time

Date

Time



# Environmental Lab of Texas

## Variance/ Corrective Action Report- Sample Log-In

Client: Rice  
 Date/ Time: 6-6-07 12:51  
 Lab ID #: 7F06020  
 Initials: AL

### Sample Receipt Checklist

				Client Initials
#1 Temperature of container/ cooler?	<u>Yes</u>	No	<u>2.0</u> °C	
#2 Shipping container in good condition?	<u>Yes</u>	No		
#3 Custody Seals intact on shipping container/ cooler?	<u>Yes</u>	No	Not Present	
#4 Custody Seals intact on sample bottles/ container?	<u>Yes</u>	No	Not Present	
#5 Chain of Custody present?	<u>Yes</u>	No		
#6 Sample instructions complete of Chain of Custody?	<u>Yes</u>	No		
#7 Chain of Custody signed when relinquished/ received?	<u>Yes</u>	No		
#8 Chain of Custody agrees with sample label(s)?	<u>Yes</u>	No	ID written on Cont./ Lid	
#9 Container label(s) legible and intact?	<u>Yes</u>	No	Not Applicable	
#10 Sample matrix/ properties agree with Chain of Custody?	<u>Yes</u>	No		
#11 Containers supplied by EL0T?	<u>Yes</u>	No		
#12 Samples in proper container/ bottle?	<u>Yes</u>	No	See Below	
#13 Samples properly preserved?	<u>Yes</u>	No	See Below	
#14 Sample bottles intact?	<u>Yes</u>	No		
#15 Preservations documented on Chain of Custody?	<u>Yes</u>	No		
#16 Containers documented on Chain of Custody?	<u>Yes</u>	No		
#17 Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No	See Below	
#18 All samples received within sufficient hold time?	<u>Yes</u>	No	See Below	
#19 Subcontract of sample(s)?	<u>Yes</u>	No	<del>Not Applicable</del>	
#20 VOC samples have zero headspace?	<u>Yes</u>	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



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: 08/21/07  
Reporting Date: 08/27/07  
Project Number: NOT GIVEN  
Project Name: EME JUNCTION D-1 LEAK  
Project Location: T20S-R36E-SEC1 D ~ LEA COUNTY - NEW MEXICO

Sampling Date: 08/20/07  
Sample Type: GROUNDWATER  
Sample Condition: COOL & INTACT  
Sample Received By: BC  
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 <sub>3</sub> /L)
ANALYSIS DATE:		08/21/07	08/23/07	08/23/07	08/23/07	08/22/07	08/23/07
H13142-1	MONITOR WELL #1	9,570	592	331	145	40100	408
H13142-2	MONITOR WELL #2	7,400	446	383	98.5	31300	388
H13142-3	MONITOR WELL #3	9,633	605	286	150	39300	420
H13142-4	MONITOR WELL #4	10,114	579	270	105	40300	416
Quality Control		NR	51.9	49.2	1.94	1423	NR
True Value QC		NR	50.0	50.0	2.00	1413	NR
Recovery		NR	104	98.4	97.0	101	NR
Relative Percent Difference		NR	8.0	6.3	2.1	0.3	NR

METHODS:	SM3500-Ca-D	3500-Mg E	8049	120.1	310.1
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		Cl <sup>-</sup> (mg/L)	SO <sub>4</sub> (mg/L)	CO <sub>3</sub> (mg/L)	HCO <sub>3</sub> (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:		08/22/07	08/22/07	08/23/07	08/23/07	08/22/07	08/22/07
H13142-1	MONITOR WELL #1	13,096	4,780	0	498	6.89	29,024
H13142-2	MONITOR WELL #2	8,997	5,610	0	473	7.11	22,820
H13142-3	MONITOR WELL #3	12,696	5,300	0	512	6.92	28,292
H13142-4	MONITOR WELL #4	13,196	5,450	0	508	6.98	28,968
Quality Control		500	25.6	NR	939	6.95	NR
True Value QC		500	25.0	NR	1000	7.00	NR
% Recovery		100	103	NR	93.9	99.3	NR
Relative Percent Difference		< 0.1	1.0	NR	1.4	< 0.1	NR

METHODS:	SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1
----------	-------------	-------	-------	-------	-------	-------

Chemist

Date

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# ARDINAL LABORATORIES

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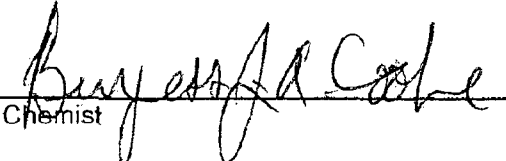
ANALYTICAL RESULTS FOR  
RICE OPERATING CO.  
ATTN: KRISTIN FARRIS-POPE  
122 W. TAYLOR  
HOBBS, NM 88240  
FAX TO: (505) 397-1471

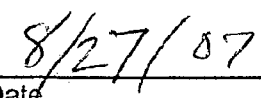
Receiving Date: 08/21/07  
Reporting Date: 08/23/07  
Project Number: NOT GIVEN  
Project Name: EME JUNCTION D-1 LEAK  
Project Location: T20S-R36E-SEC1 D ~ LEA COUNTY, NM

Sampling Date: 08/20/07  
Sample Type: GROUNDWATER  
Sample Condition: COOL & INTACT  
Sample Received By: BC  
Analyzed By: BC

LAB NUMBER	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		08/22/07	08/22/07	08/22/07	08/22/07
H13142-1	MONITOR WELL #1	<0.002	<0.002	<0.002	<0.006
H13142-2	MONITOR WELL #2	<0.002	<0.002	<0.002	<0.006
H13142-3	MONITOR WELL #3	<0.002	<0.002	<0.002	<0.006
H13142-4	MONITOR WELL #4	<0.002	<0.002	<0.002	<0.006
Quality Control		0.093	0.091	0.093	0.264
True Value QC		0.100	0.100	0.100	0.300
% Recovery		92.8	91.2	93.4	88.0
Relative Percent Difference		2.8	2.6	1.6	1.2

METHOD: EPA SW-846 8260

  
Chemist

  
Date

[illegible]





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: (575) 397-1471

Receiving Date: 11/08/07  
Reporting Date: 11/19/07  
Project Number: NOT GIVEN  
Project Name: EME JUNCTION D-1 LEAK  
Project Location: T20S R36E SEC1 D - LEA COUNTY, NM

Sampling Date: 11/06/07  
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		11/08/07	11/08/07	11/08/07	11/08/07
H13667-1	MONITOR WELL # 1	<0.001	<0.001	<0.001	<0.003
H13667-2	MONITOR WELL # 2	<0.001	<0.001	<0.001	<0.003
H13667-3	MONITOR WELL # 3	<0.001	<0.001	<0.001	<0.003
H13667-4	MONITOR WELL # 4	<0.001	<0.001	<0.001	<0.003
Quality Control		0.111	0.109	0.110	0.331
True Value QC		0.100	0.100	0.100	0.300
% Recovery		111	109	110	110
Relative Percent Difference		10.6	3.9	2.9	3.8

METHOD: EPA SW-846 8021B

  
Chemist

  
Date

H13667b Rice

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ANALYTICAL RESULTS FOR  
RICE OPERATING COMPANY  
ATTN: KRISTIN FARRIS-POPE  
122 W. TAYLOR STREET  
HOBBS, NM 88240  
FAX TO: (575) 397-1471

Receiving Date: 11/08/07  
Reporting Date: 11/15/07  
Project Number: NOT GIVEN  
Project Name: EME JUNCTION D-1 LEAK  
Project Location: T20S-R36E-SEC1 D-LEA COUNTY, NM

Sampling Date: 11/06/07  
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 ( $\mu$ S/cm)	T-Alkalinity (mgCaCO <sub>3</sub> /L)
ANALYSIS DATE:		11/14/07	11/14/07	11/14/07	11/14/07	11/09/07	11/09/07
H13667-1	MONITOR WELL #1	9,608	506	339	135	41,300	492
H13667-2	MONITOR WELL #2	7,893	323	222	90.0	31,500	464
H13667-3	MONITOR WELL #3	10,997	432	363	190	44,900	528
H13667-4	MONITOR WELL #4	9,271	419	274	84.3	37,800	468
Quality Control		NR	49.2	52.4	3.10	1,389	NR
True Value QC		NR	50.0	50.0	3.00	1,404	NR
% Recovery		NR	98.4	105	103	98.9	NR
Relative Percent Difference		NR	< 0.1	1.5	12.7	0.5	NR

METHODS:	SM3500-Ca-D	3500-Mg E	8049	120.1	310.1
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		Cl <sup>-</sup> (mg/L)	SO <sub>4</sub> (mg/L)	CO <sub>3</sub> (mg/L)	HCO <sub>3</sub> (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:		11/09/07	11/12/07	11/09/07	11/09/07	11/09/07	11/13/07
H13667-1	MONITOR WELL #1	13,400	4,180	0	600	6.87	29,255
H13667-2	MONITOR WELL #2	9,200	5,350	0	566	7.10	22,905
H13667-3	MONITOR WELL #3	14,900	5,001	0	644	6.96	32,095
H13667-4	MONITOR WELL #4	11,900	5,001	0	571	7.04	26,419
Quality Control		500	24.3	NR	1000	6.99	NR
True Value QC		500	25.0	NR	1000	7.00	NR
% Recovery		100	97.0	NR	100	99.9	NR
Relative Percent Difference		< 0.1	3.5	NR	< 0.1	< 0.1	NR

METHODS:	SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1
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*Kristin Suprioko*  
Chemist

11/15/07  
Date



ATTACHMENT C

Field Data Forms

# WELL SAMPLING DATA FORM

CLIENT: RICE Operating Company WELL ID: Monitor Well #1  
 SYSTEM: EME DATE: February 27, 2007  
 SITE LOCATION: Jct. D-1 Leak SAMPLER: Rozanne Johnson

PURGING METHOD: ☐ Hand Bailed ☒ Pump, Type: Purge Pump  
 SAMPLING METHOD: ☒ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: \_\_\_\_\_

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

TOTAL DEPTH OF WELL: 42.59 Feet  
 DEPTH TO WATER: 36.99 Feet  
 HEIGHT OF WATER COLUMN: 5.60 Feet  
 WELL VOLUME: 0.9 Gal. 2 In. Well Diameter  
5 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
14:45	20.2	35.83	6.93	Silt 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 #1  
 SYSTEM: EME DATE: June 4, 2007  
 SITE LOCATION: Jct. D-1 Leak SAMPLER: Rozanne Johnson

PURGING METHOD: ☐ Hand Bailed ☒ Pump, Type: Purge Pump  
 SAMPLING METHOD: ☒ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: \_\_\_\_\_

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

TOTAL DEPTH OF WELL: 42.59 Feet  
 DEPTH TO WATER: 37.36 Feet  
 HEIGHT OF WATER COLUMN: 5.23 Feet  
 WELL VOLUME: 0.8 Gal. 2 In. Well Diameter  
5 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
10:15	20.7	38.1	6.90	Silt 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 #1  
 SYSTEM: EME DATE: August 20, 2007  
 SITE LOCATION: Jct. D-1 Leak SAMPLER: Rozanne Johnson

PURGING METHOD: ☐ Hand Bailed ☒ Pump, Type: Purge Pump  
 SAMPLING METHOD: ☒ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: \_\_\_\_\_

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

TOTAL DEPTH OF WELL: 42.59 Feet  
 DEPTH TO WATER: 37.71 Feet  
 HEIGHT OF WATER COLUMN: 4.88 Feet  
 WELL VOLUME: 0.8 Gal. 2 In. Well Diameter  
4 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
14:30	21.2	38.53	6.94	Silt 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 Cardinal Laboratories in Hobbs, New Mexico for BTEX, Major Ions, and TDS analysis.

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# WELL SAMPLING DATA FORM

CLIENT: RICE Operating Company WELL ID: Monitor Well #1  
 SYSTEM: EME DATE: November 6, 2007  
 SITE LOCATION: Jct. D-1 Leak SAMPLER: Rozanne Johnson

PURGING METHOD: ☐ Hand Bailed ☒ Pump, Type: Purge Pump  
 SAMPLING METHOD: ☒ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: \_\_\_\_\_

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

TOTAL DEPTH OF WELL: 42.59 Feet  
 DEPTH TO WATER: 38.03 Feet  
 HEIGHT OF WATER COLUMN: 4.56 Feet  
 WELL VOLUME: 0.7 Gal. 2 In. Well Diameter  
4 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
11:15	19.7	40.21	6.92	Silt 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 Cardinal Laboratories in Hobbs, New Mexico for BTEX, Major Ions, and TDS analysis.  
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# WELL SAMPLING DATA FORM

CLIENT: RICE Operating Company WELL ID: Monitor Well #2  
 SYSTEM: EME DATE: February 27, 2007  
 SITE LOCATION: Jct. D-1 Leak SAMPLER: Rozanne Johnson

PURGING METHOD: ☐ Hand Bailed ☒ Pump, Type: Purge Pump  
 SAMPLING METHOD: ☒ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: \_\_\_\_\_

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

TOTAL DEPTH OF WELL: 47.18 Feet  
 DEPTH TO WATER: 35.38 Feet  
 HEIGHT OF WATER COLUMN: 11.80 Feet 2 In. Well Diameter  
 WELL VOLUME: 1.9 Gal. 8 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
13:20	20.5	29.97	6.98	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.

# WELL SAMPLING DATA FORM

CLIENT: RICE Operating Company WELL ID: Monitor Well #2  
 SYSTEM: EME DATE: June 4, 2007  
 SITE LOCATION: Jct. D-1 Leak SAMPLER: Rozanne Johnson

PURGING METHOD: ☐ Hand Bailed ☒ Pump, Type: Purge Pump  
 SAMPLING METHOD: ☒ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: \_\_\_\_\_

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

TOTAL DEPTH OF WELL: 47.18 Feet  
 DEPTH TO WATER: 35.87 Feet  
 HEIGHT OF WATER COLUMN: 11.31 Feet  
 WELL VOLUME: 1.8 Gal. 2 In. Well Diameter  
8 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
8:40	20.0	30.31	6.97	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.  
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# WELL SAMPLING DATA FORM

CLIENT: RICE Operating Company WELL ID: Monitor Well #2  
 SYSTEM: EME DATE: August 20, 2007  
 SITE LOCATION: Jct. D-1 Leak SAMPLER: Rozanne Johnson

PURGING METHOD: ☐ Hand Bailed ☒ Pump, Type: Purge Pump  
 SAMPLING METHOD: ☒ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: \_\_\_\_\_

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

TOTAL DEPTH OF WELL: 47.18 Feet  
 DEPTH TO WATER: 36.19 Feet  
 HEIGHT OF WATER COLUMN: 10.99 Feet  
 WELL VOLUME: 1.8 Gal. 2 In. Well Diameter  
8 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
12:50	20.9	30.9	7.01	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 Laboratories 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: November 6, 2007  
 SITE LOCATION: Jct. D-1 Leak SAMPLER: Rozanne Johnson

PURGING METHOD: ☐ Hand Bailed ☒ Pump, Type: Purge Pump  
 SAMPLING METHOD: ☒ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: \_\_\_\_\_

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

TOTAL DEPTH OF WELL: 47.18 Feet  
 DEPTH TO WATER: 36.48 Feet  
 HEIGHT OF WATER COLUMN: 10.70 Feet  
 WELL VOLUME: 1.7 Gal. 2 In. Well Diameter  
8 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
9:40	19.7	30.64	6.85	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 Laboratories in Hobbs, New Mexico for BTEX, Major Ions, and TDS analysis.  
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# WELL SAMPLING DATA FORM

CLIENT: RICE Operating Company WELL ID: Monitor Well #3  
 SYSTEM: EME DATE: February 27, 2007  
 SITE LOCATION: Jct. D-1 Leak SAMPLER: Rozanne Johnson

PURGING METHOD: ☐ Hand Bailed ☒ Pump, Type: Purge Pump  
 SAMPLING METHOD: ☒ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: \_\_\_\_\_

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

TOTAL DEPTH OF WELL: 47.93 Feet  
 DEPTH TO WATER: 39.00 Feet  
 HEIGHT OF WATER COLUMN: 8.93 Feet  
 WELL VOLUME: 1.4 Gal. 2 In. Well Diameter  
6 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
15:15	20.9	43.99	6.83	Silt 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.

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# WELL SAMPLING DATA FORM

CLIENT: RICE Operating Company WELL ID: Monitor Well #3  
 SYSTEM: EME DATE: June 4, 2007  
 SITE LOCATION: Jct. D-1 Leak SAMPLER: Rozanne Johnson

PURGING METHOD: ☐ Hand Bailed ☒ Pump, Type: Purge Pump  
 SAMPLING METHOD: ☒ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: \_\_\_\_\_

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

TOTAL DEPTH OF WELL: 47.93 Feet  
 DEPTH TO WATER: 39.47 Feet  
 HEIGHT OF WATER COLUMN: 8.46 Feet 2 In. Well Diameter  
 WELL VOLUME: 1.4 Gal. 6 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
11:20	20.9	40.36	6.85	Silt 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.  
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# WELL SAMPLING DATA FORM

CLIENT: RICE Operating Company WELL ID: Monitor Well #3  
 SYSTEM: EME DATE: August 20, 2007  
 SITE LOCATION: Jct. D-1 Leak SAMPLER: Rozanne Johnson

PURGING METHOD: ☐ Hand Bailed ☒ Pump, Type: Purge Pump  
 SAMPLING METHOD: ☒ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: \_\_\_\_\_

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

TOTAL DEPTH OF WELL: 47.93 Feet  
 DEPTH TO WATER: 39.81 Feet  
 HEIGHT OF WATER COLUMN: 8.12 Feet  
 WELL VOLUME: 1.3 Gal. 2 In. Well Diameter  
6 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
15:50	21.3	39.77	6.87	Silt 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 Cardinal Laboratories 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: November 6, 2007  
 SITE LOCATION: Jct. D-1 Leak SAMPLER: Rozanne Johnson

PURGING METHOD: ☐ Hand Bailed ☒ Pump, Type: Purge Pump  
 SAMPLING METHOD: ☒ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: \_\_\_\_\_

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

TOTAL DEPTH OF WELL: 47.93 Feet  
 DEPTH TO WATER: 39.99 Feet  
 HEIGHT OF WATER COLUMN: 7.94 Feet  
 WELL VOLUME: 1.3 Gal. 2 In. Well Diameter  
6 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
12:45	19.6	43.76	6.98	Silt 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 Cardinal Laboratories in Hobbs, New Mexico for BTEX, Major Ions, and TDS analysis.  
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# WELL SAMPLING DATA FORM

CLIENT: RICE Operating Company WELL ID: Monitor Well #4  
 SYSTEM: EME DATE: December 22, 2006  
 SITE LOCATION: Jct. D-1 Leak SAMPLER: Rozanne Johnson

PURGING METHOD: ☐ Hand Bailed ☒ Pump, Type: Purge Pump  
 SAMPLING METHOD: ☒ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: \_\_\_\_\_

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

TOTAL DEPTH OF WELL: 47.33 Feet  
 DEPTH TO WATER: 35.97 Feet  
 HEIGHT OF WATER COLUMN: 11.36 Feet  
 WELL VOLUME: 1.8 Gal. 2 In. Well Diameter  
6 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
				Well is weak and will pump off.
9:10	16.8	36.97	7.28	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.

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# WELL SAMPLING DATA FORM

CLIENT: RICE Operating Company WELL ID: Monitor Well #4  
 SYSTEM: EME DATE: June 4, 2007  
 SITE LOCATION: Jct. D-1 Leak SAMPLER: Rozanne Johnson

PURGING METHOD: ☐ Hand Bailed ☒ Pump, Type: Purge Pump  
 SAMPLING METHOD: ☒ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: \_\_\_\_\_

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

TOTAL DEPTH OF WELL: 47.33 Feet  
 DEPTH TO WATER: 36.67 Feet  
 HEIGHT OF WATER COLUMN: 10.66 Feet  
 WELL VOLUME: 1.7 Gal. 2 In. Well Diameter  
6 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
9:30	20.2	37.72	7.00	Silt to Clear with slight odor. Well pumps dry.
				Samples Collected
				BTEX (2-40ml VOA)
				Major Ions/TDS (1-1000ml Plastic)
				Well Pumps off

## 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: August 20, 2007  
 SITE LOCATION: Jct. D-1 Leak SAMPLER: Rozanne Johnson

PURGING METHOD: ☐ Hand Bailed ☒ Pump, Type: Purge Pump  
 SAMPLING METHOD: ☒ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: \_\_\_\_\_

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

TOTAL DEPTH OF WELL: 47.33 Feet  
 DEPTH TO WATER: 37.00 Feet  
 HEIGHT OF WATER COLUMN: 10.33 Feet  
 WELL VOLUME: 1.7 Gal. 2 In. Well Diameter  
6 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
13:40	21.0	34.46	7.02	Silt to Clear with slight odor. Well pumps dry.
				Samples Collected
				BTEX (2-40ml VOA)
				Major Ions/TDS (1-1000ml Plastic)
				Well Pumps off

## COMMENTS:

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

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

# WELL SAMPLING DATA FORM

CLIENT: RICE Operating Company WELL ID: Monitor Well #4  
 SYSTEM: EME DATE: November 6, 2007  
 SITE LOCATION: Jct. D-1 Leak SAMPLER: Rozanne Johnson

PURGING METHOD: ☐ Hand Bailed ☒ Pump, Type: Purge Pump  
 SAMPLING METHOD: ☒ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: \_\_\_\_\_

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

TOTAL DEPTH OF WELL: 47.33 Feet  
 DEPTH TO WATER: 37.32 Feet  
 HEIGHT OF WATER COLUMN: 10.01 Feet  
 WELL VOLUME: 1.6 Gal. 2 In. Well Diameter  
6 Gallons purged prior to sampling

TIME	TEMP. °C	COND. mS/cm	pH	PHYSICAL APPEARANCE AND REMARKS
10:20	19.9	36.85	7.00	Silt to Clear with slight odor. Well pumps dry.
				Samples Collected
				BTEX (2-40ml VOA)
				Major Ions/TDS (1-1000ml Plastic)
				Well Pumps off

## COMMENTS:

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

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

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