AP - 65

ANNUAL MONITORING REPORT

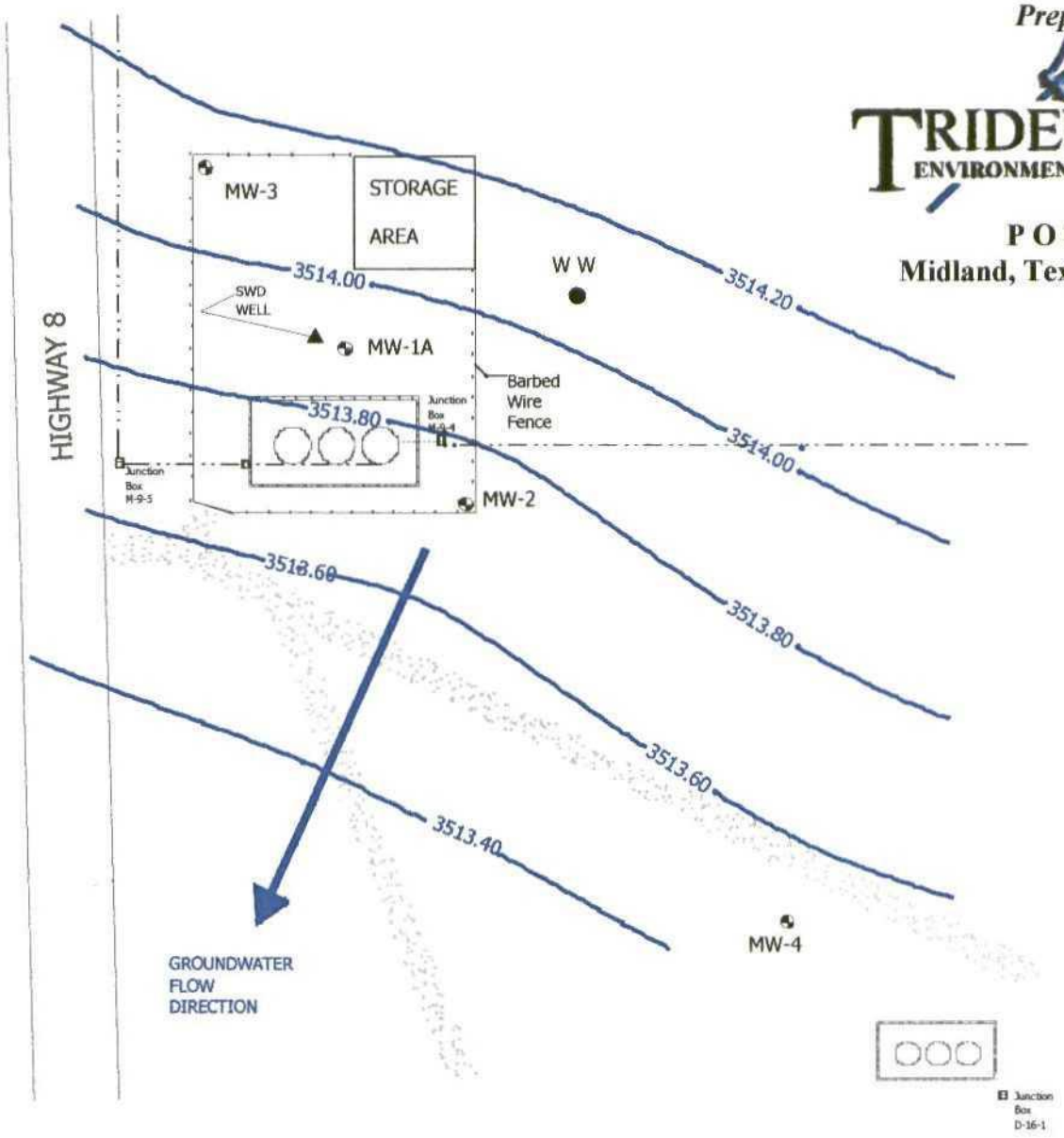
YEAR(S):
2004

2004 Annual Groundwater Monitoring Report
EME M-9 SWD Site
T20S, R37E, Section 9, Unit Letter M
Lea County, New Mexico

MARCH 23, 2005

Prepared For:
RICE *Operating Company*
122 West Taylor
Hobbs, New Mexico 88240

Prepared By:
TRIDENT ENVIRONMENTAL
P O Box 7624
Midland, Texas 79708



CERTIFIED MAIL
RETURN RECIEPT NO. 7099 3400 0017 1737 2497

March 23, 2005

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

RE: 2004 ANNUAL MONITORING WELL REPORT
EME M-9 SWD SITE
T20S-R37E-Section 9, Unit Letter M
NMOCD CASE # 1R0331

Mr. Price:

Trident Environmental takes this opportunity to submit the 2004 Annual Monitoring Well Report for the EME M-9 SWD site located in the Eunice Monument Eumont (EME) Salt Water Disposal (SWD) System. The four monitoring wells and one water well are sampled quarterly pursuant to NMOCD guidelines. Trident Environmental will continue the sampling of these wells in 2005 and Environmental Lab of Texas of Odessa will continue to conduct laboratory analysis of the water samples.

Trident Environmental will submit an Investigation and Characterization Plan by March 31, 2005.

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

Thank you for your consideration concerning this annual summary of groundwater monitoring information. If you have any questions, do not hesitate to contact me at (423) 638-3106 or Kristin Farris Pope at (505) 393-9174.

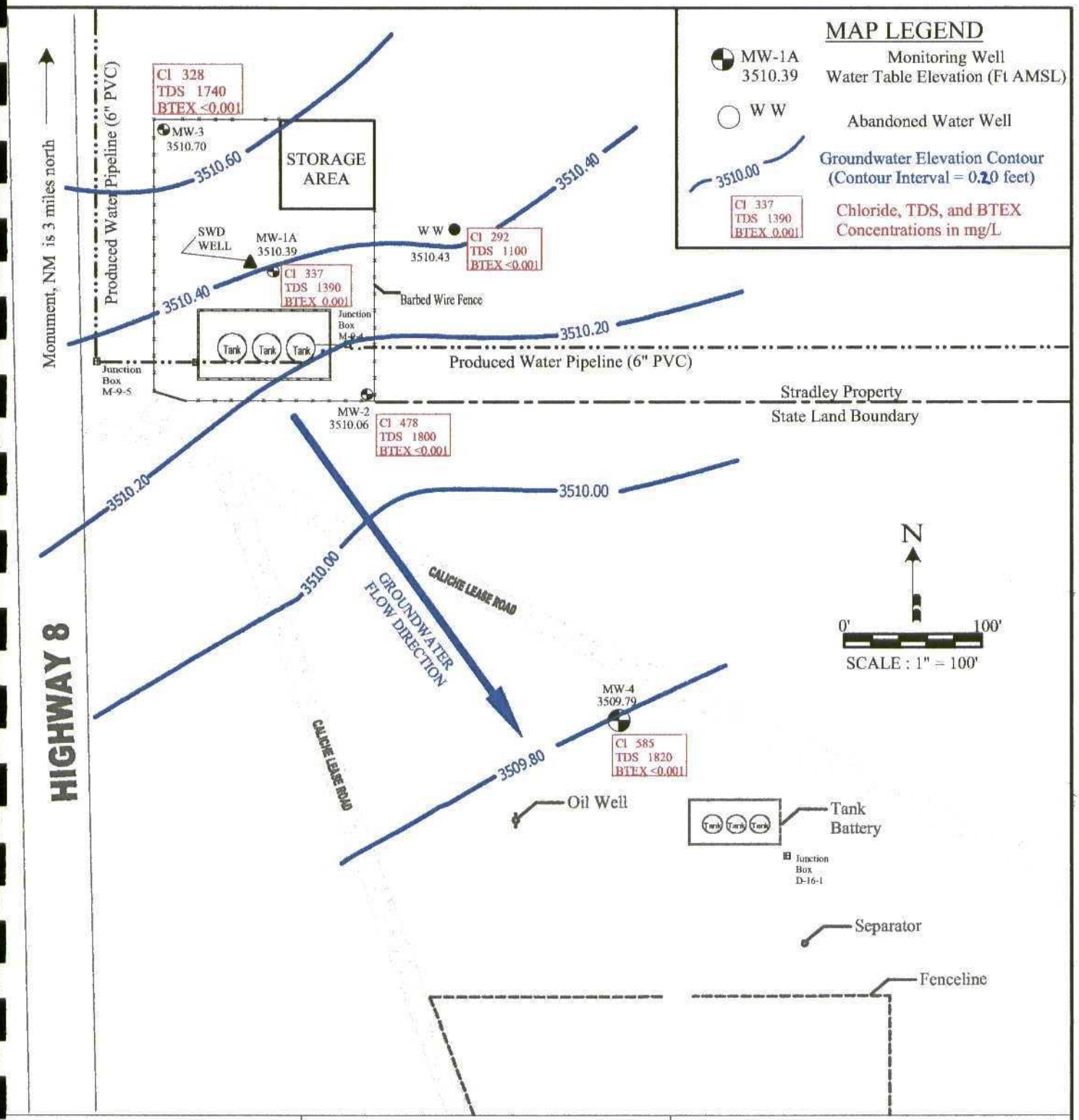
Sincerely,

Gilbert J. Van Deventer, REM, PG, NMCS
Trident Environmental - Project Manager

enclosures: Summary table & graph, analytical results, map

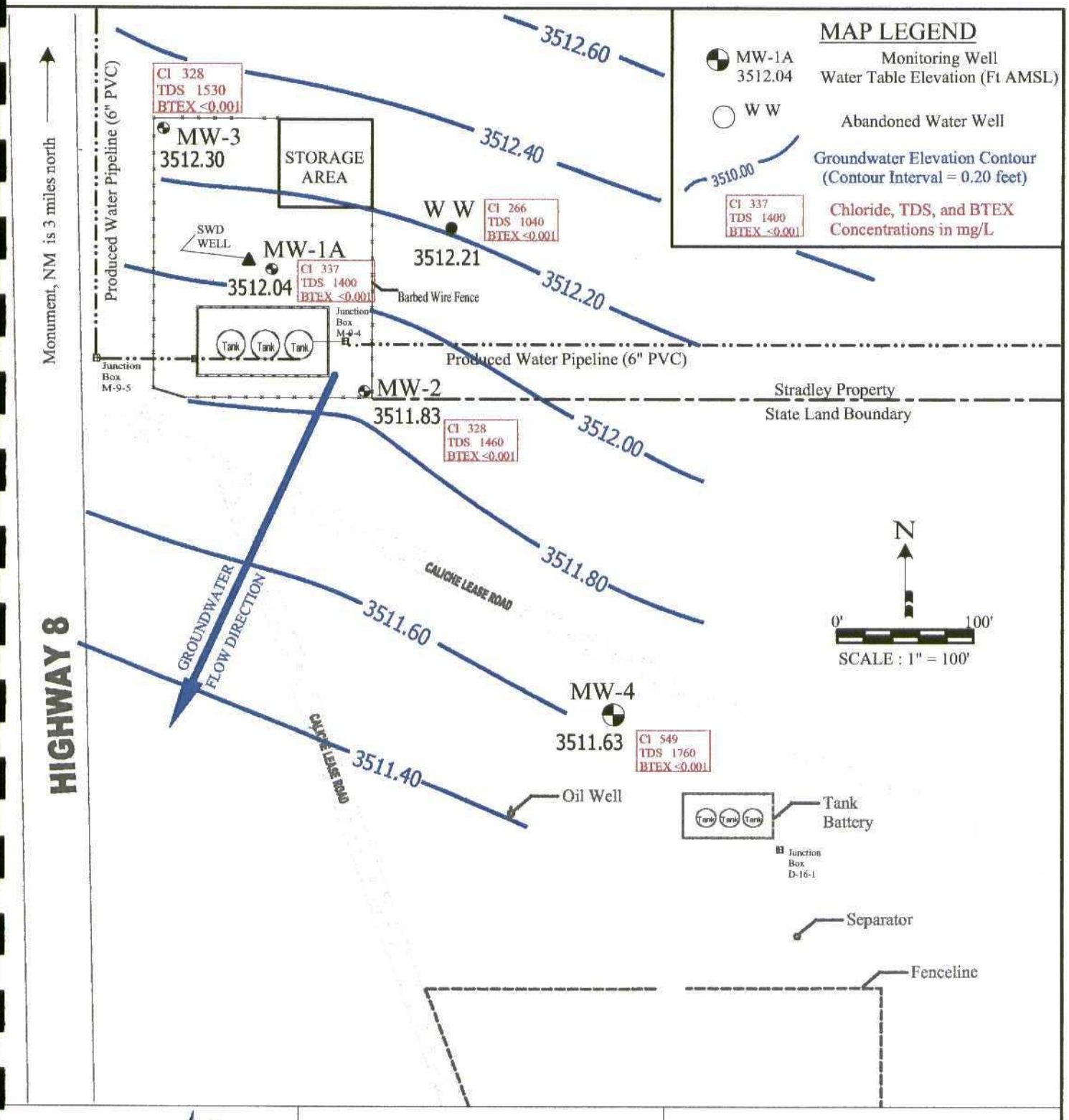
cc: LBG, CDH, KFP, file,
Chris Williams - NMOCD, District I Office (Hobbs)

MAPS



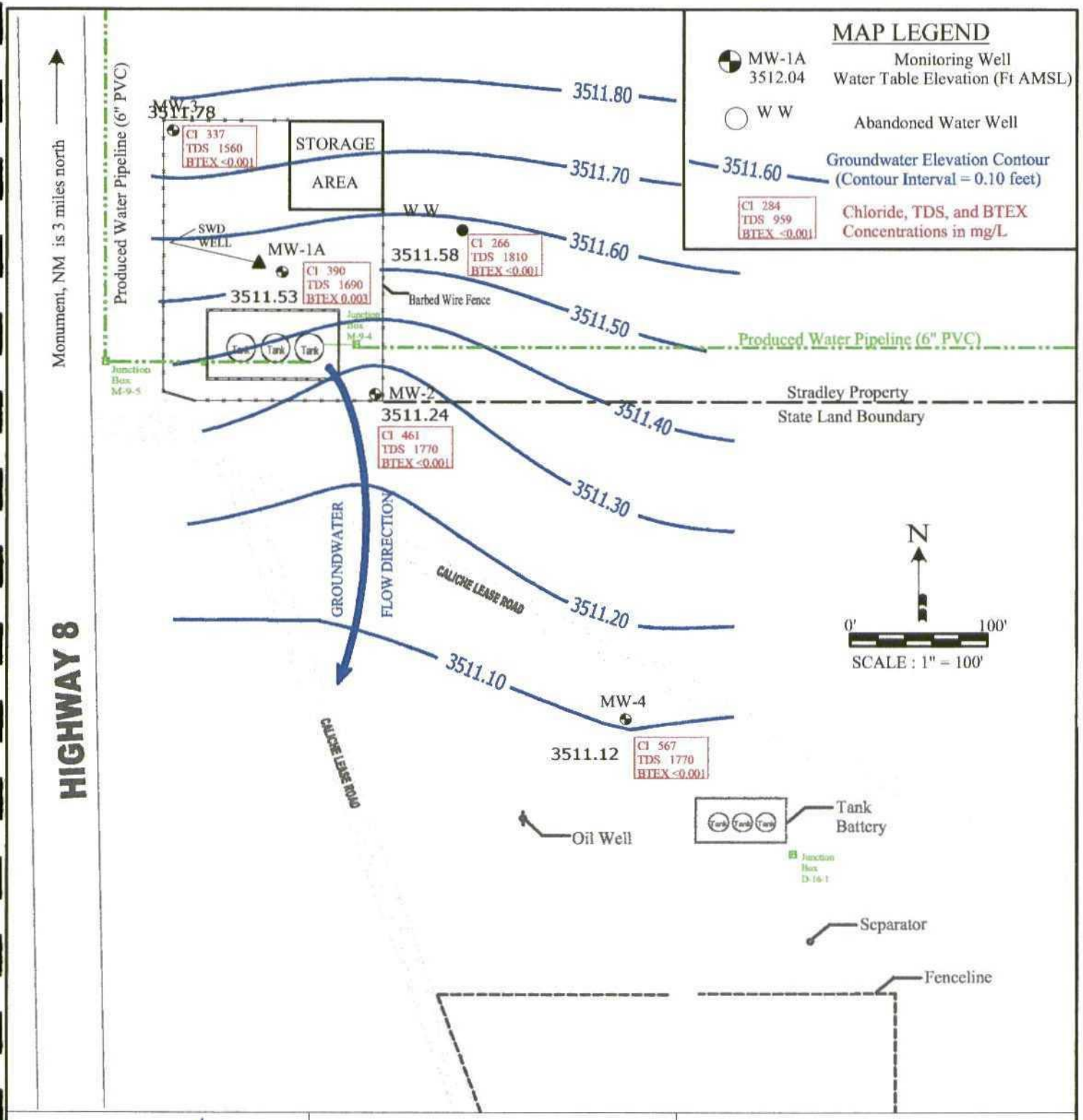
TRIDENT ENVIRONMENTAL

Client: Rice Operating Company	FIGURE 1A
Sampling Date: February 20, 2004	EME SYSTEM M-9 SWD STATION
Author: GJV Checked By: DTL	
File: Projects/Rice/EME/M-9/Proposed	



TRIDENT ENVIRONMENTAL

Client: Rice Operating Company	FIGURE 1B
Sampling Date: May 5, 2004	
Author: GJV Checked By: DTL	EME SYSTEM M-9 SWD SITE
File: Projects/Rice/EME/M-9/Proposed	



TRIDENT ENVIRONMENTAL

Client: Rice Operating Company

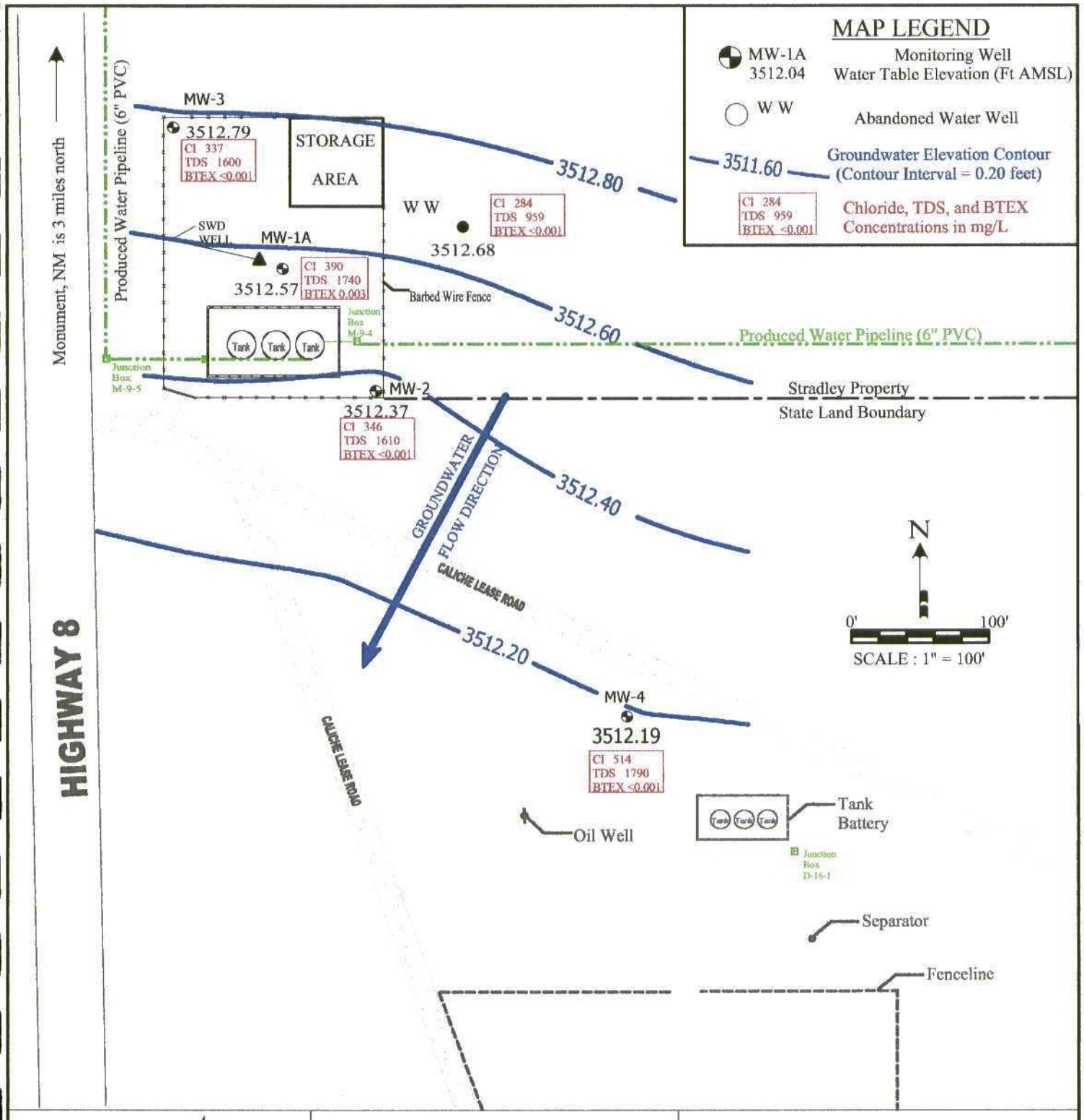
Sampling Date: August 11, 2004

Author: GJV

File: Projects/Rice/EME/M-9/020805M9

FIGURE 1C

EME SYSTEM M-9 SWD STATION



TRIDENT ENVIRONMENTAL

Client: Rice Operating Company
Sampling Date: November 10, 2004
Author: GJV
File: Projects/Rice/EME/M-9/020805M9

FIGURE 1D

EME SYSTEM
M-9 SWD STATION

TABLES AND GRAPHS

Table 1
Summary of Groundwater Sampling Results
EME M-9 SWD Site

Monitoring Well	Sample Date	Chloride (mg/L)	TDS (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylene (mg/L)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet AMSL)
MW-1	04/08/02	**348**	**1512**	< 0.002	< 0.002	< 0.002	< 0.006	---	---
	05/13/02	**354**	**1540**	< 0.001	< 0.001	< 0.001	< 0.001	21.02	---
	08/20/02	**376**	**1517**	< 0.002	< 0.002	< 0.002	< 0.006	22.45	---
MW-1A	10/28/02	**372**	**1470**	< 0.001	< 0.001	< 0.001	< 0.001	19.10	3510.70
	02/28/03	**372**	**1500**	0.002	0.002	0.002	0.003	18.48	3511.32
	05/16/03	**390**	**1470**	0.001	< 0.001	< 0.001	0.001	19.00	3510.80
	08/22/03	**372**	**1470**	0.002	< 0.001	< 0.001	< 0.001	19.38	3510.42
	10/30/03	**346**	**1530**	< 0.001	< 0.001	< 0.001	< 0.001	19.57	3510.23
	02/20/04	**337**	**1390**	0.001	< 0.001	< 0.001	< 0.001	19.41	3510.39
	05/05/04	**337**	**1400**	0.001	< 0.001	< 0.001	< 0.001	17.76	3512.04
	08/11/04	**390**	**1690**	0.003	< 0.001	< 0.001	< 0.001	18.27	3511.53
	11/10/04	**390**	**1740**	0.003	< 0.001	< 0.001	< 0.001	17.23	3512.57
MW-2	08/22/03	**603**	**2060**	< 0.001	< 0.001	< 0.001	< 0.001	21.45	3510.05
	10/30/03	**709**	**2300**	< 0.001	< 0.001	< 0.001	< 0.001	21.61	3509.89
	02/20/04	**478**	**1800**	< 0.001	< 0.001	< 0.001	< 0.001	21.44	3510.06
	05/05/04	**328**	**1460**	< 0.001	< 0.001	< 0.001	< 0.001	19.67	3511.83
	08/11/04	**461**	**1770**	< 0.001	< 0.001	< 0.001	< 0.001	20.26	3511.24
	11/10/04	**346**	**1610**	< 0.001	< 0.001	< 0.001	< 0.001	19.13	3512.37
MW-3	08/22/03	**319**	**1590**	< 0.001	< 0.001	< 0.001	< 0.001	21.68	3510.72
	10/30/03	**328**	**1740**	< 0.001	< 0.001	< 0.001	< 0.001	21.86	3510.54
	02/20/04	**337**	**1550**	< 0.001	< 0.001	< 0.001	< 0.001	21.70	3510.70
	05/05/04	**328**	**1530**	< 0.001	< 0.001	< 0.001	< 0.001	20.10	3512.30
	08/11/04	**337**	**1560**	< 0.001	< 0.001	< 0.001	< 0.001	20.62	3511.78
	11/10/04	**337**	**1600**	< 0.001	< 0.001	< 0.001	< 0.001	19.61	3512.79
MW-4	02/20/04	**585**	**1820**	< 0.001	< 0.001	< 0.001	< 0.001	22.61	3509.79
	05/05/04	**549**	**1760**	< 0.001	< 0.001	< 0.001	< 0.001	20.77	3511.63
	08/11/04	**567**	**1770**	< 0.001	< 0.001	< 0.001	< 0.001	21.28	3511.12
	11/10/04	**514**	**1790**	< 0.001	< 0.001	< 0.001	< 0.001	20.21	3512.19
WW	08/22/03	---	---	---	---	---	---	21.09	3509.41
	10/30/03	**284**	**1150**	< 0.001	< 0.001	< 0.001	0.002	20.25	3510.25
	02/20/04	**292**	**1100**	< 0.001	< 0.001	< 0.001	0.002	20.07	3510.43
	05/14/04	**266**	**1040**	< 0.001	< 0.001	< 0.001	< 0.001	18.29	3512.21
	08/11/04	**266**	**1810**	< 0.001	< 0.001	< 0.001	< 0.001	18.92	3511.58
	11/10/04	**284**	**959**	< 0.001	< 0.001	< 0.001	< 0.001	17.82	3512.68
WQCC Standards		250	1000	0.01	0.75	0.75	0.62		

Total Dissolved Soilds (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
Groundwater flow direction is to the southeast with a gradient of approx. 0.003 ft/ft.
Elevations and state plane coordinates surveyed by Basin Surveys, Hobbs, NM.

Figure 2
Chloride, TDS, and Groundwater Elevation Values Versus Time (MW-1A)

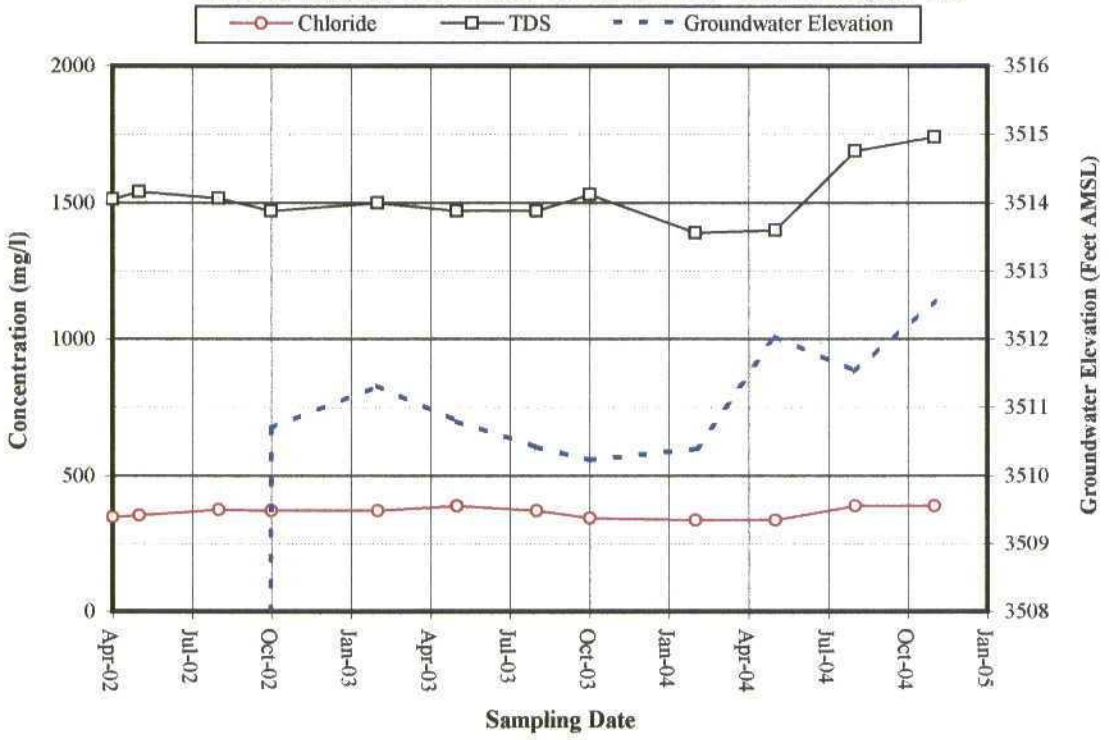


Figure 3
Chloride, TDS, and Groundwater Elevation Values Versus Time (MW-2)

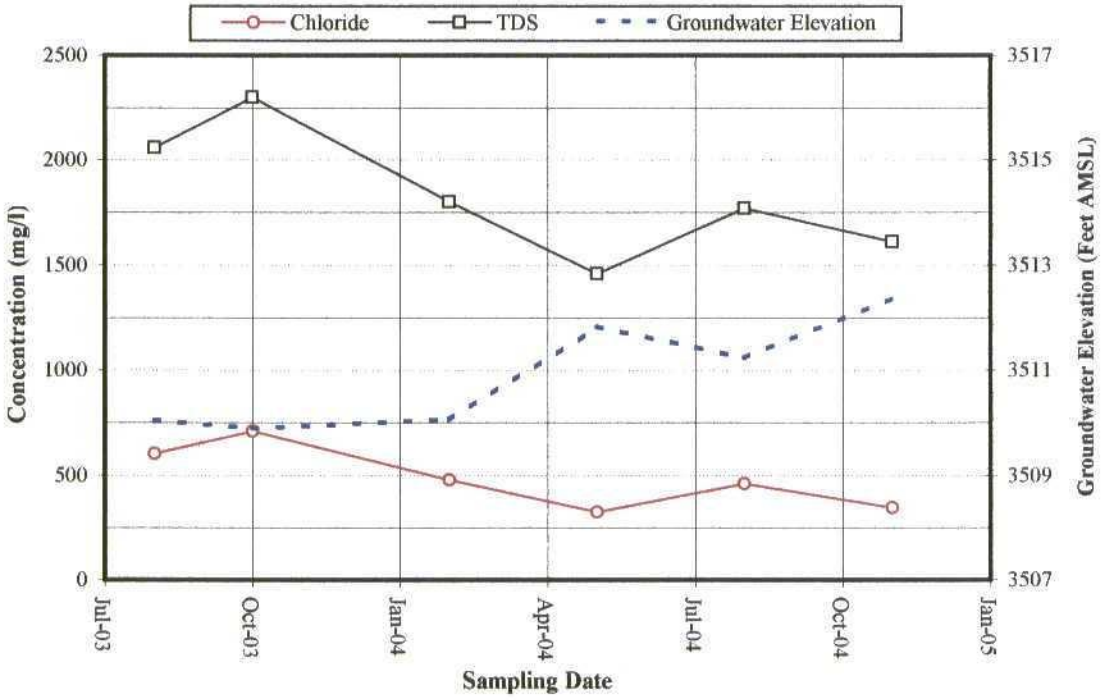


Figure 4
Chloride, TDS, and Groundwater Elevation Values Versus Time (MW-3)

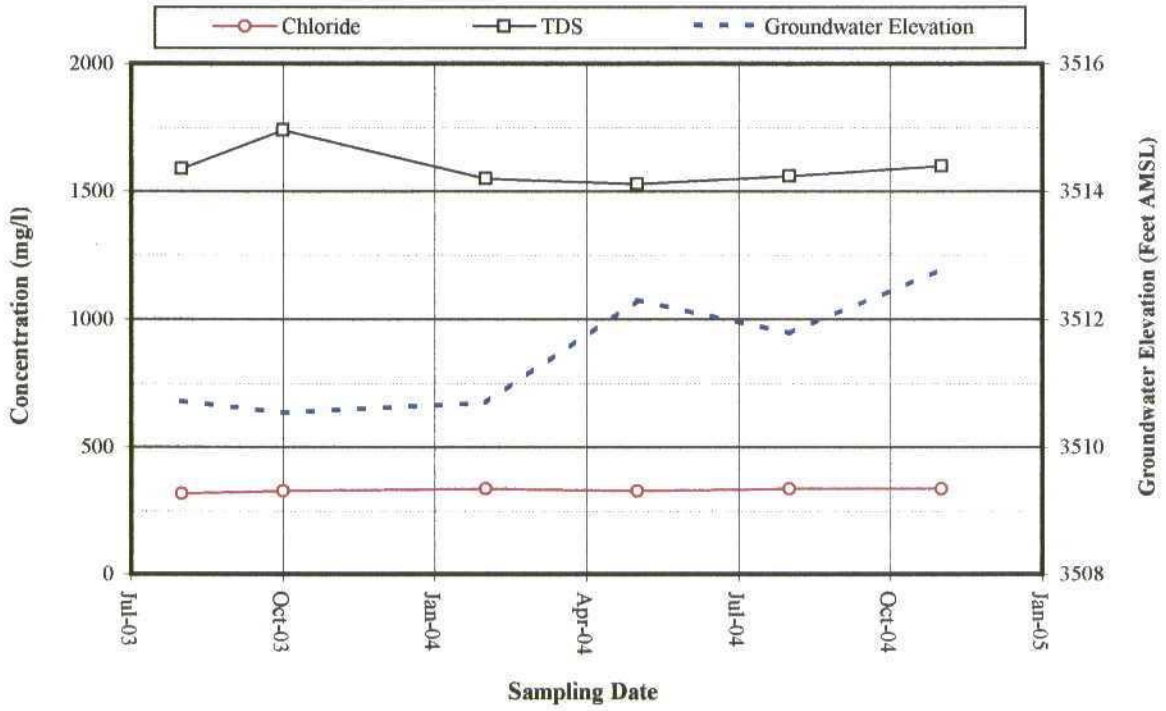


Figure 5
Chloride, TDS, and Groundwater Elevation Values Versus Time (MW-4)

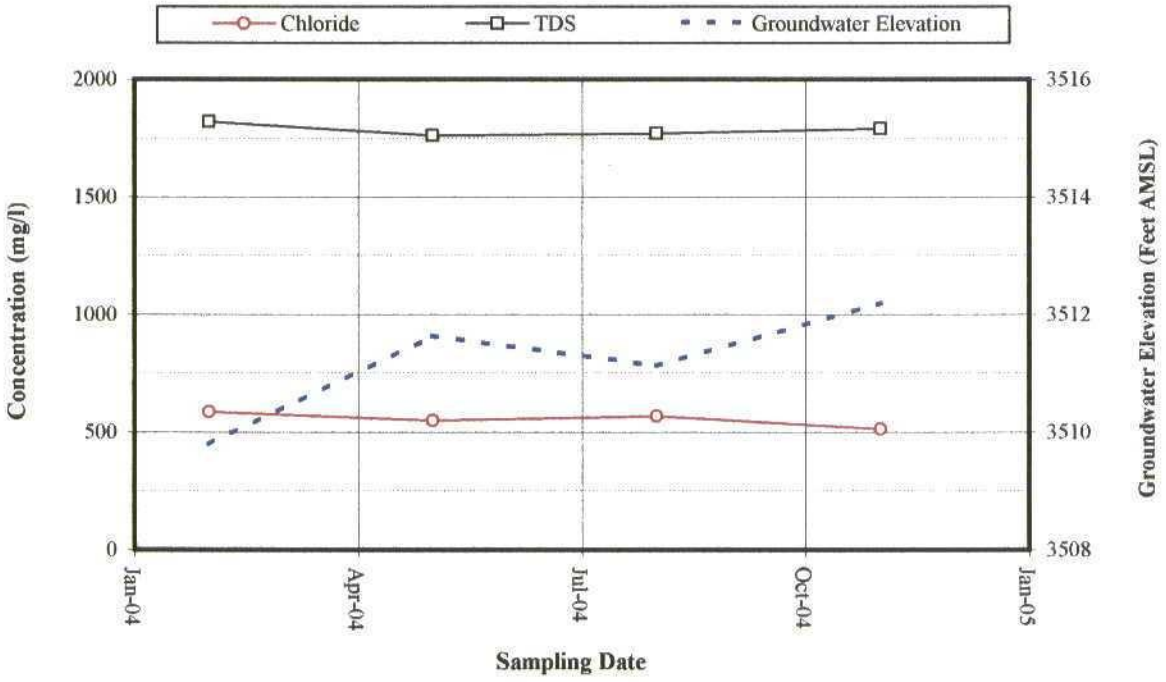
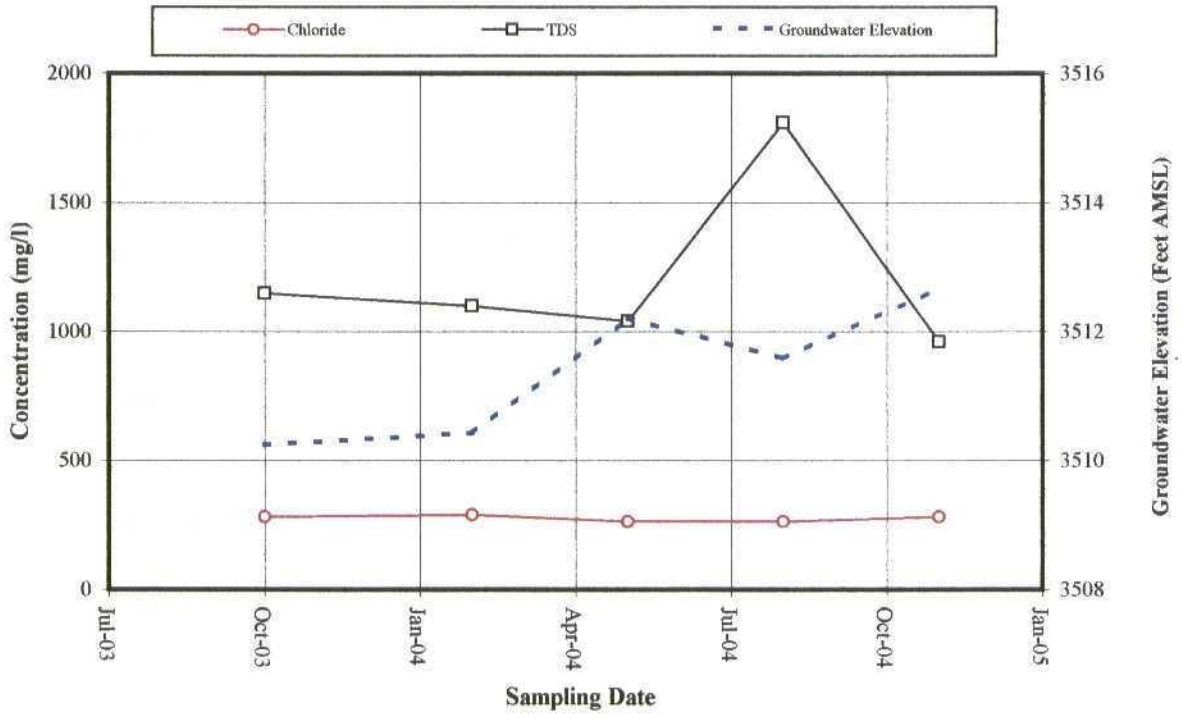


Figure 6
Chloride, TDS, and Groundwater Elevation Values Versus Time (WW)



LABORATORY REPORTS

AND

CHAIN OF CUSTODY DOCUMENTATION

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Gilbert Vandeventer

Trident Environmental

P.O. Box 7624

Midland, TX 79708

Project: Rice Operating Company

Project Number: V-117

Location: EME M-9 SWD

Lab Order Number: 4B20014

Report Date: 02/26/04

Trident Environmental	Project: Rice Operating Company	Fax: 682-0727
P.O. Box 7624	Project Number: V-117	**Reported:**
Midland TX, 79708	Project Manager: Gilbert Vandeventer	02/26/04 11:27

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	4B20014-01	Water	02/20/04 13:40	02/20/04 17:55
MW-2	4B20014-02	Water	02/20/04 14:40	02/20/04 17:55
MW-3	4B20014-03	Water	02/20/04 14:10	02/20/04 17:55
MW-4	4B20014-04	Water	02/20/04 13:00	02/20/04 17:55
WW	4B20014-05	Water	02/20/04 12:30	02/20/04 17:55

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Trident Environmental	Project: Rice Operating Company	Fax: 682-0727
P.O. Box 7624	Project Number: V-117	**Reported:**
Midland TX, 79708	Project Manager: Gilbert Vandeventer	02/26/04 11:27

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (4B20014-01)									
Benzene	J [0.000778]	0.00100	mg/L	1	EB42507	02/24/04	02/24/04	EPA 8021B	J
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		*104 %*	*80-120*		"	"	"	"	
MW-2 (4B20014-02)									
Benzene	ND	0.00100	mg/L	1	EB42507	02/24/04	02/24/04	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		*93.0 %*	*80-120*		"	"	"	"	
MW-3 (4B20014-03)									
Benzene	ND	0.00100	mg/L	1	EB42507	02/24/04	02/24/04	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		*120 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.0 %*	*80-120*		"	"	"	"	
MW-4 (4B20014-04)									
Benzene	ND	0.00100	mg/L	1	EB42507	02/24/04	02/24/04	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		*116 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*80.5 %*	*80-120*		"	"	"	"	

Environmental Lab of Texas

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

Quality Assurance Review

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

Trident Environmental	Project: Rice Operating Company	Fax: 682-0727
P.O. Box 7624	Project Number: V-117	**Reported:**
Midland TX, 79708	Project Manager: Gilbert Vandeventer	02/26/04 11:27

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WW (4B20014-05)									
Benzene	ND	0.00100	mg/L	1	EB42507	02/24/04	02/24/04	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		*116 %*		*80-120*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.5 %*		*80-120*	"	"	"	"	

Raland K Tuttle

Quality Assurance Review

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

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (4B20014-01)									
Carbonate Alkalinity	ND	0.100	mg/L	1	EB42104	02/20/04	02/20/04	EPA 310.2M	
Bicarbonate Alkalinity	**277**	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	**337**	5.00	"	"	EB42102	02/21/04	02/21/04	EPA 325.3	
Nitrate as N	ND	0.100	"	"	EB42309	02/21/04	02/23/04	EPA 353.3	
Total Dissolved Solids	**1390**	5.00	"	"	EB42404	02/24/04	02/24/04	EPA 160.1	
Sulfate	**468**	6.25	"	12.5	EB42103	02/21/04	02/21/04	EPA 375.4	
MW-2 (4B20014-02)									
Carbonate Alkalinity	ND	0.100	mg/L	1	EB42104	02/20/04	02/20/04	EPA 310.2M	
Bicarbonate Alkalinity	**338**	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	**478**	5.00	"	"	EB42102	02/21/04	02/21/04	EPA 325.3	
Nitrate as N	ND	0.100	"	"	EB42309	02/21/04	02/23/04	EPA 353.3	
Total Dissolved Solids	**1800**	5.00	"	"	EB42404	02/24/04	02/24/04	EPA 160.1	
Sulfate	**514**	6.25	"	12.5	EB42103	02/21/04	02/21/04	EPA 375.4	
MW-3 (4B20014-03)									
Carbonate Alkalinity	ND	0.100	mg/L	1	EB42104	02/20/04	02/20/04	EPA 310.2M	
Bicarbonate Alkalinity	**242**	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	**337**	5.00	"	"	EB42102	02/21/04	02/21/04	EPA 325.3	
Nitrate as N	ND	0.100	"	"	EB42309	02/21/04	02/23/04	EPA 353.3	
Total Dissolved Solids	**1550**	5.00	"	"	EB42404	02/24/04	02/24/04	EPA 160.1	
Sulfate	**591**	6.25	"	12.5	EB42103	02/21/04	02/21/04	EPA 375.4	
MW-4 (4B20014-04)									
Carbonate Alkalinity	ND	0.100	mg/L	1	EB42104	02/20/04	02/20/04	EPA 310.2M	
Bicarbonate Alkalinity	**256**	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	**585**	5.00	"	"	EB42102	02/21/04	02/21/04	EPA 325.3	
Nitrate as N	ND	0.100	"	"	EB42309	02/21/04	02/23/04	EPA 353.3	
Total Dissolved Solids	**1820**	5.00	"	"	EB42404	02/24/04	02/24/04	EPA 160.1	
Sulfate	**505**	6.25	"	12.5	EB42103	02/21/04	02/21/04	EPA 375.4	

Environmental Lab of Texas

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

Quality Assurance Review

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

Trident Environmental	Project: Rice Operating Company	Fax: 682-0727
P.O. Box 7624	Project Number: V-117	**Reported:**
Midland TX, 79708	Project Manager: Gilbert Vandeventer	02/26/04 11:27

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WW (4B20014-05)									
Carbonate Alkalinity	**4.00**	0.100	mg/L	1	EB42104	02/20/04	02/20/04	EPA 310.2M	
Bicarbonate Alkalinity	**264**	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	**292**	5.00	"	"	EB42102	02/21/04	02/21/04	EPA 325.3	
Nitrate as N	ND	0.100	"	"	EB42309	02/21/04	02/23/04	EPA 353.3	
Total Dissolved Solids	**1100**	5.00	"	"	EB42404	02/24/04	02/24/04	EPA 160.1	
Sulfate	**668**	6.25	"	12.5	EB42103	02/21/04	02/21/04	EPA 375.4	

Quality Assurance Review

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

Trident Environmental	Project: Rice Operating Company	Fax: 682-0727
P.O. Box 7624	Project Number: V-117	**Reported:**
Midland TX, 79708	Project Manager: Gilbert Vandeventer	02/26/04 11:27

Total Metals by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (4B20014-01)									
Calcium	**137**	1.00	mg/L	100	EB42311	02/23/04	02/23/04	EPA 6010B	
Magnesium	**51.7**	0.0100	"	10	"	"	02/23/04	"	
Potassium	**26.3**	0.500	"	"	"	"	"	"	
Sodium	**390**	1.00	"	100	"	"	02/23/04	"	
MW-2 (4B20014-02)									
Calcium	**178**	1.00	mg/L	100	EB42311	02/23/04	02/23/04	EPA 6010B	
Magnesium	**65.9**	0.0100	"	10	"	"	02/23/04	"	
Potassium	**39.0**	0.500	"	"	"	"	"	"	
Sodium	**538**	1.00	"	100	"	"	02/23/04	"	
MW-3 (4B20014-03)									
Calcium	**169**	1.00	mg/L	100	EB42311	02/23/04	02/23/04	EPA 6010B	
Magnesium	**57.9**	0.0100	"	10	"	"	02/23/04	"	
Potassium	**26.6**	0.500	"	"	"	"	"	"	
Sodium	**451**	1.00	"	100	"	"	02/23/04	"	
MW-4 (4B20014-04)									
Calcium	**182**	1.00	mg/L	100	EB42311	02/23/04	02/23/04	EPA 6010B	
Magnesium	**70.2**	0.0100	"	10	"	"	02/23/04	"	
Potassium	**31.7**	0.500	"	"	"	"	"	"	
Sodium	**611**	1.00	"	100	"	"	02/23/04	"	
WW (4B20014-05)									
Calcium	**135**	1.00	mg/L	100	EB42311	02/23/04	02/23/04	EPA 6010B	
Magnesium	**48.9**	0.0100	"	10	"	"	02/23/04	"	
Potassium	**27.2**	0.500	"	"	"	"	"	"	
Sodium	**427**	1.00	"	100	"	"	02/23/04	"	

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Quality Assurance Review

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

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 EB42507 - EPA 5030C (GC)										
Blank (EB42507-BLK1)				Prepared & Analyzed: 02/24/04						
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	*23.3*		*ug/l*	*20.0*		*116*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*23.9*		*"*	*20.0*		*120*	*80-120*			
LCS (EB42507-BS1)				Prepared & Analyzed: 02/24/04						
Benzene	87.3		ug/l	100		87.3	80-120			
Toluene	90.1		"	100		90.1	80-120			
Ethylbenzene	94.1		"	100		94.1	80-120			
Xylene (p/m)	203		"	200		102	80-120			
Xylene (o)	97.8		"	100		97.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	*19.8*		*"*	*20.0*		*99.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*22.9*		*"*	*20.0*		*114*	*80-120*			
Calibration Check (EB42507-CCV1)				Prepared: 02/24/04 Analyzed: 02/25/04						
Benzene	92.7		ug/l	100		92.7	80-120			
Toluene	94.7		"	100		94.7	80-120			
Ethylbenzene	94.2		"	100		94.2	80-120			
Xylene (p/m)	194		"	200		97.0	80-120			
Xylene (o)	98.5		"	100		98.5	80-120			
Surrogate: a,a,a-Trifluorotoluene	*19.1*		*"*	*20.0*		*95.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*20.1*		*"*	*20.0*		*100*	*80-120*			
Duplicate (EB42507-DUP1)		**Source: 4B20007-09**		Prepared: 02/24/04 Analyzed: 02/25/04						
Benzene	ND	0.00100	mg/L		ND				20	
Toluene	ND	0.00100	"		ND				20	
Ethylbenzene	ND	0.00100	"		ND				20	
Xylene (p/m)	ND	0.00100	"		ND				20	
Xylene (o)	ND	0.00100	"		ND				20	
Surrogate: a,a,a-Trifluorotoluene	*16.9*		*ug/l*	*20.0*		*84.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*19.7*		*"*	*20.0*		*98.5*	*80-120*			

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Quality Assurance Review

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

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 EB42102 - General Preparation (WetChem)										
Blank (EB42102-BLK1)				Prepared & Analyzed: 02/21/04						
Chloride	ND	5.00	mg/L							
Blank (EB42102-BLK2)				Prepared & Analyzed: 02/21/04						
Chloride	ND	5.00	mg/L							
Calibration Check (EB42102-CCV1)				Prepared & Analyzed: 02/21/04						
Chloride	4960		mg/L	5000		99.2	80-120			
Calibration Check (EB42102-CCV2)				Prepared & Analyzed: 02/21/04						
Chloride	4960		mg/L	5000		99.2	80-120			
Matrix Spike (EB42102-MS1)		**Source: 4B18015-01**		Prepared & Analyzed: 02/21/04						
Chloride	134	5.00	mg/L	100	35.4	98.6	80-120			
Matrix Spike (EB42102-MS2)		**Source: 4B20014-01**		Prepared & Analyzed: 02/21/04						
Chloride	833	5.00	mg/L	500	337	99.2	80-120			
Matrix Spike Dup (EB42102-MSD1)		**Source: 4B18015-01**		Prepared & Analyzed: 02/21/04						
Chloride	133	5.00	mg/L	100	35.4	97.6	80-120	0.749	20	
Matrix Spike Dup (EB42102-MSD2)		**Source: 4B20014-01**		Prepared & Analyzed: 02/21/04						
Chloride	842	5.00	mg/L	500	337	101	80-120	1.07	20	
Batch EB42103 - General Preparation (WetChem)										
Blank (EB42103-BLK1)				Prepared & Analyzed: 02/21/04						
Sulfate	ND	0.500	mg/L							

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Quality Assurance Review

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 EB42103 - General Preparation (WetChem)										
Blank (EB42103-BLK2)				Prepared & Analyzed: 02/21/04						
Sulfate	ND	0.500	mg/L							
Calibration Check (EB42103-CCV1)				Prepared & Analyzed: 02/21/04						
Sulfate	49.2		mg/L	50.0		98.4	80-120			
Calibration Check (EB42103-CCV2)				Prepared & Analyzed: 02/21/04						
Sulfate	48.5		mg/L	50.0		97.0	80-120			
Duplicate (EB42103-DUP1)		**Source: 4B18015-01**		Prepared & Analyzed: 02/21/04						
Sulfate	195	0.500	mg/L		195			0.00	20	
Duplicate (EB42103-DUP2)		**Source: 4B20014-01**		Prepared & Analyzed: 02/21/04						
Sulfate	476	0.500	mg/L		468			1.69	20	
Batch EB42104 - General Preparation (WetChem)										
Blank (EB42104-BLK1)				Prepared & Analyzed: 02/20/04						
Carbonate Alkalinity	ND	0.100	mg/L							
Bicarbonate Alkalinity	ND	2.00	"							
Hydroxide Alkalinity	ND	0.100	"							
Calibration Check (EB42104-CCV1)				Prepared & Analyzed: 02/20/04						
Carbonate Alkalinity	0.0496		mg/L	0.0500		99.2	80-120			
Duplicate (EB42104-DUP1)		**Source: 4B20001-01**		Prepared & Analyzed: 02/20/04						
Carbonate Alkalinity	6.00	0.100	mg/L		6.00			0.00	20	
Bicarbonate Alkalinity	284	2.00	"		280			1.42	20	
Hydroxide Alkalinity	0.00	0.100	"		0.00				20	

Quality Assurance Review

Trident Environmental	Project: Rice Operating Company	Fax: 682-0727
P.O. Box 7624	Project Number: V-117	**Reported:**
Midland TX, 79708	Project Manager: Gilbert Vandeventer	02/26/04 11:27

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 EB42309 - General Preparation (WetChem)										
Blank (EB42309-BLK1)				Prepared: 02/21/04 Analyzed: 02/23/04						
Nitrate as N	ND	0.100	mg/L							
Calibration Check (EB42309-CCV1)				Prepared: 02/21/04 Analyzed: 02/23/04						
Nitrate as N	1.80		mg/L	2.00		90.0	80-120			
Duplicate (EB42309-DUP1)		**Source: 4B18015-01**		Prepared: 02/21/04 Analyzed: 02/23/04						
Nitrate as N	1.90	0.100	mg/L		1.80			5.41	20	
Batch EB42404 - General Preparation (WetChem)										
Blank (EB42404-BLK1)				Prepared & Analyzed: 02/24/04						
Total Dissolved Solids	ND	5.00	mg/L							
Duplicate (EB42404-DUP1)		**Source: 4B20001-01**		Prepared & Analyzed: 02/24/04						
Total Dissolved Solids	1680	5.00	mg/L		1630			3.02	20	

Quality Assurance Review

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

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 EB42311 - General Preparation (Metals)										
Blank (EB42311-BLK1)				Prepared & Analyzed: 02/23/04						
Calcium	ND	0.0100	mg/L							
Magnesium	ND	0.00100	"							
Potassium	ND	0.0500	"							
Sodium	ND	0.0100	"							
Calibration Check (EB42311-CCV1)				Prepared & Analyzed: 02/23/04						
Calcium	2.10		mg/L	2.00		105	85-115			
Magnesium	2.00		"	2.00		100	85-115			
Potassium	1.74		"	2.00		87.0	85-115			
Sodium	1.89		"	2.00		94.5	85-115			
Duplicate (EB42311-DUP1)	**Source: 4B20001-01**			Prepared & Analyzed: 02/23/04						
Calcium	23.3	0.100	mg/L		23.5			0.855	20	
Magnesium	4.58	0.00100	"		4.60			0.436	20	
Potassium	16.3	0.500	"		15.8			3.12	20	
Sodium	451	1.00	"		450			0.222	20	

Environmental Lab of Texas

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Quality Assurance Review

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Notes and Definitions

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

Environmental Lab of Texas

Quality Assurance Review

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

TRIDENT ENVIRONMENTAL

Trident Environmental
P.O. Box 7624
Midland, Texas 79708
(915) 682-0808
(915) 682-0727 (Fax)
(505) 397-1471 (Fax)

4B20014

V-117-0104-1

Chain of Custody

Date 02-20-04 Page 1 of 1

Lab Name: Environmental Lab of Texas
Address: 12600 W I-20 East
Odessa, Texas 79765
Telephone: (915) 563-1800

Samplers (SIGNATURES): Gilbert Van Deventer

Sample Identification		Matrix	Date	Time	Sample Type: G - Grab, C- Composite	BTEX (EPA 8021B)	MTBE (EPA 8021B)	SVOC (EPA 8270)	PAH (EPA 8270)	VOC (EPA 8260)	TPH (EPA 418.1)	TPH (TX-1005)	TPH (TX-1006)	GRO (EPA 8015G)	DRO (EPA 8015D)	TDS (EPA 160.1)	Anions: SO_4, Cl & HCO_3	Cations: Ca, Mg, K & Na	TDS	NO_3						Number of Containers
MW-1	-01	Water	2-20-04	1340	G	✓											✓	✓	✓	↓						3
MW-2	-02	Water	2-20-04	1440	G	✓											✓	✓	✓	↓						3
MW-3	-03	Water	2-20-04	1410	G	✓											✓	✓	✓	↓						3
MW-4	-04	Water	2-20-04	1300	G	✓											✓	✓	✓	↓						3
WW	-05	Water	2-20-04	1230	G	✓											✓	✓	✓	↓						3

Analysis Request

Project Information		Sample Receipt	
Project Name:	Rice Operating Company	Total Containers:	
Project Location:	EME M-9 SWD	COC Seals:	
Project Manager:	Gil Van Deventer	Rec'd Good Cond/Cold:	-1.5°
Cost Center No.:	V-117	Conforms to Records:	
Shipping ID No.:		Lab No.:	
Bill to (see below):	Rice Operating Co.		
Special Instructions:	Attn: Carolyn Haynes 122 W. Taylor, Hobbs NM 88240 (Fax: 505-397-1471)		

Relinquished By: (1) (Company)	Relinquished By: (2) (Company)	Relinquished By: (3) (Company)
Trident Environmental	(Printed Name)	(Printed Name)
(Printed Name) Gil Van Deventer	(Signature)	(Signature)
(Signature) Gil Van Deventer	(Date) (Time)	(Date) (Time)
(Date) 02-20-04 (Time) 5:55pm		
Received By: (1) (Company)	**Received By: (2) (Company)**	**Received By: (3) (Company)**
(Printed Name)	(Printed Name)	(Printed Name)
(Signature)	(Signature)	(Signature)
(Date) (Time)	(Date) (Time)	(Date) (Time)

Please email pdf report to gil@trident-environmental.com

(1) L HDPE
(2) 40mL w/HCl glass

Copy signed original form for Trident Environmental records

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

Client: Trident Env.

Date/Time: 02-20-04 @ 1800

Order #: 4B20014

Initials: JMM

Sample Receipt Checklist

Temperature of container/cooler?	(Yes)	No	-1.5 C
Shipping container/cooler in good condition?	(Yes)	No	
Custody Seals intact on shipping container/cooler?	Yes	No	(Not present)
Custody Seals intact on sample bottles?	Yes	No	(Not present)
Chain of custody present?	(Yes)	No	
Sample Instructions complete on Chain of Custody?	(Yes)	No	
Chain of Custody signed when relinquished and received?	(Yes)	No	
Chain of custody agrees with sample label(s)	(Yes)	No	
Container labels legible and intact?	(Yes)	No	
Sample Matrix and properties same as on chain of custody?	(Yes)	No	
Samples in proper container/bottle?	(Yes)	No	
Samples properly preserved?	(Yes)	No	
Sample bottles intact?	(Yes)	No	
Preservations documented on Chain of Custody?	(Yes)	No	
Containers documented on Chain of Custody?	(Yes)	No	
Sufficient sample amount for indicated test?	(Yes)	No	
All samples received within sufficient hold time?	(Yes)	No	
VOC samples have zero headspace?	(Yes)	No	Not Applicable

Other observations:

Variance Documentation:

Contact Person: - Date/Time: Contacted by:

Regarding:

Corrective Action Taken:

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Kristin Farris

Rice Operating Co.

122 W. Taylor

Hobbs, NM 88240

Project: EME System M-9 SWD Site

Project Number: None Given

Location: T20S, R37E, Sec 9, Unit Letter M

Lab Order Number: 4E07002

Report Date: 05/13/04

Rice Operating Co.	Project: EME System M-9 SWD Site	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris	05/13/04 15:11

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	4E07002-01	Water	05/05/04 15:00	05/07/04 08:05
MW-2	4E07002-02	Water	05/05/04 13:07	05/07/04 08:05
MW-3	4E07002-03	Water	05/05/04 12:15	05/07/04 08:05
MW-4	4E07002-04	Water	05/05/04 12:40	05/07/04 08:05
WW	4E07002-05	Water	05/05/04 14:20	05/07/04 08:05

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Rice Operating Co.	Project: EME System M-9 SWD Site	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris	05/13/04 15:11

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (4E07002-01) Water									
Benzene	**J [0.000356]**	0.00100	mg/L	1	EE41103	05/07/04	05/07/04	EPA 8021B	J
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*119 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*113 %*	*80-120*		"	"	"	"	
MW-2 (4E07002-02) Water									
Benzene	ND	0.00100	mg/L	1	EE41103	05/07/04	05/07/04	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		*118 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*115 %*	*80-120*		"	"	"	"	
MW-3 (4E07002-03) Water									
Benzene	ND	0.00100	mg/L	1	EE41103	05/07/04	05/07/04	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		*120 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*102 %*	*80-120*		"	"	"	"	

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Quality Assurance Review

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Rice Operating Co.	Project: EME System M-9 SWD Site	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris	05/13/04 15:11

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 (4E07002-04) Water									
Benzene	ND	0.00100	mg/L	1	EE41103	05/07/04	05/07/04	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		*97.5 %*		*80-120*	"	"	"	"	
WW (4E07002-05) Water									
Benzene	ND	0.00100	mg/L	1	EE41103	05/07/04	05/07/04	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		*118 %*		*80-120*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*110 %*		*80-120*	"	"	"	"	

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Quality Assurance Review

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Rice Operating Co.	Project: EME System M-9 SWD Site	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris	05/13/04 15:11

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (4E07002-01) Water									
Carbonate Alkalinity	ND	0.100	mg/L	1	EE40710	05/07/04	05/07/04	EPA 310.2M	
Bicarbonate Alkalinity	**288**	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	**337**	5.00	"	"	EE40709	05/07/04	05/07/04	EPA 325.3M	
Total Dissolved Solids	**1400**	5.00	"	"	EE41102	05/07/04	05/11/04	EPA 160.1	
Sulfate	**440**	5.00	"	10	EE41114	05/11/04	05/11/04	EPA 375.4	
MW-2 (4E07002-02) Water									
Carbonate Alkalinity	ND	0.100	mg/L	1	EE40710	05/07/04	05/07/04	EPA 310.2M	
Bicarbonate Alkalinity	**378**	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	**328**	5.00	"	"	EE40709	05/07/04	05/07/04	EPA 325.3M	
Total Dissolved Solids	**1460**	5.00	"	"	EE41102	05/07/04	05/11/04	EPA 160.1	
Sulfate	**438**	5.00	"	10	EE41114	05/11/04	05/11/04	EPA 375.4	
MW-3 (4E07002-03) Water									
Carbonate Alkalinity	ND	0.100	mg/L	1	EE40710	05/07/04	05/07/04	EPA 310.2M	
Bicarbonate Alkalinity	**254**	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	**328**	5.00	"	"	EE40709	05/07/04	05/07/04	EPA 325.3M	
Total Dissolved Solids	**1530**	5.00	"	"	EE41102	05/07/04	05/11/04	EPA 160.1	
Sulfate	**542**	5.00	"	10	EE41114	05/11/04	05/11/04	EPA 375.4	
MW-4 (4E07002-04) Water									
Carbonate Alkalinity	ND	0.100	mg/L	1	EE40710	05/07/04	05/07/04	EPA 310.2M	
Bicarbonate Alkalinity	**272**	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	**549**	5.00	"	"	EE40709	05/07/04	05/07/04	EPA 325.3M	
Total Dissolved Solids	**1760**	5.00	"	"	EE41102	05/07/04	05/11/04	EPA 160.1	
Sulfate	**470**	5.00	"	10	EE41114	05/11/04	05/11/04	EPA 375.4	

Environmental Lab of Texas

Roland K. Tuttle

Quality Assurance Review

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

Rice Operating Co.	Project: EME System M-9 SWD Site	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris	05/13/04 15:11

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WW (4E07002-05) Water									
Carbonate Alkalinity	ND	0.100	mg/L	1	EE40710	05/07/04	05/07/04	EPA 310.2M	
Bicarbonate Alkalinity	**291**	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	**266**	5.00	"	"	EE40709	05/07/04	05/07/04	EPA 325.3M	
Total Dissolved Solids	**1040**	5.00	"	"	EE41102	05/07/04	05/11/04	EPA 160.1	
Sulfate	**261**	2.50	"	5	EE41114	05/11/04	05/11/04	EPA 375.4	

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Quality Assurance Review

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

Rice Operating Co.	Project: EME System M-9 SWD Site	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris	05/13/04 15:11

Total Metals by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (4E07002-01) Water									
Calcium	**56.6**	0.100	mg/L	10	EE41104	05/10/04	05/11/04	EPA 6010B	
Magnesium	**68.6**	0.0100	"	"	"	"	"	"	
Potassium	**14.8**	0.500	"	"	"	"	"	"	
Sodium	**397**	1.00	"	100	"	"	"	"	
MW-2 (4E07002-02) Water									
Calcium	**44.0**	0.100	mg/L	10	EE41104	05/10/04	05/11/04	EPA 6010B	
Magnesium	**73.3**	0.0100	"	"	"	"	"	"	
Potassium	**15.2**	0.500	"	"	"	"	"	"	
Sodium	**354**	1.00	"	100	"	"	"	"	
MW-3 (4E07002-03) Water									
Calcium	**129**	1.00	mg/L	100	EE41104	05/10/04	05/11/04	EPA 6010B	
Magnesium	**50.8**	0.0100	"	10	"	"	"	"	
Potassium	**8.74**	0.500	"	"	"	"	"	"	
Sodium	**287**	1.00	"	100	"	"	"	"	
MW-4 (4E07002-04) Water									
Calcium	**126**	1.00	mg/L	100	EE41104	05/10/04	05/11/04	EPA 6010B	
Magnesium	**64.8**	0.0100	"	10	"	"	"	"	
Potassium	**11.1**	0.500	"	"	"	"	"	"	
Sodium	**380**	1.00	"	100	"	"	"	"	
WW (4E07002-05) Water									
Calcium	**50.5**	0.100	mg/L	10	EE41104	05/10/04	05/11/04	EPA 6010B	
Magnesium	**48.9**	0.0100	"	"	"	"	"	"	
Potassium	**12.1**	0.500	"	"	"	"	"	"	
Sodium	**298**	1.00	"	100	"	"	"	"	

Environmental Lab of Texas

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Quality Assurance Review

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

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 EE41103 - EPA 5030C (GC)										
Blank (EE41103-BLK1)				Prepared & Analyzed: 05/07/04						
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	*23.2*		*ug/l*	*20.0*		*116*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*19.7*		*"*	*20.0*		*98.5*	*80-120*			
LCS (EE41103-BS1)				Prepared & Analyzed: 05/07/04						
Benzene	91.9		ug/l	100		91.9	80-120			
Toluene	101		"	100		101	80-120			
Ethylbenzene	102		"	100		102	80-120			
Xylene (p/m)	210		"	200		105	80-120			
Xylene (o)	106		"	100		106	80-120			
Surrogate: a,a,a-Trifluorotoluene	*20.6*		*"*	*20.0*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*23.5*		*"*	*20.0*		*118*	*80-120*			
Calibration Check (EE41103-CCV1)				Prepared & Analyzed: 05/07/04						
Benzene	85.5		ug/l	100		85.5	80-120			
Toluene	95.5		"	100		95.5	80-120			
Ethylbenzene	91.2		"	100		91.2	80-120			
Xylene (p/m)	194		"	200		97.0	80-120			
Xylene (o)	96.5		"	100		96.5	80-120			
Surrogate: a,a,a-Trifluorotoluene	*17.3*		*"*	*20.0*		*86.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*23.7*		*"*	*20.0*		*118*	*80-120*			
Duplicate (EE41103-DUP1)	**Source: 4E07001-01**			Prepared & Analyzed: 05/07/04						
Benzene	ND	0.00100	mg/L		ND				20	
Toluene	ND	0.00100	"		ND				20	
Ethylbenzene	ND	0.00100	"		ND				20	
Xylene (p/m)	ND	0.00100	"		ND				20	
Xylene (o)	ND	0.00100	"		ND				20	
Surrogate: a,a,a-Trifluorotoluene	*23.5*		*ug/l*	*20.0*		*118*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*21.4*		*"*	*20.0*		*107*	*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 EE41103 - EPA 5030C (GC)										
Matrix Spike (EE41103-MS1)	**Source: 4E07001-02**			Prepared & Analyzed: 05/07/04						
Benzene	86.2		ug/l	100	ND	86.2	80-120			
Toluene	96.9		"	100	ND	96.9	80-120			
Ethylbenzene	92.9		"	100	ND	92.9	80-120			
Xylene (p/m)	196		"	200	ND	98.0	80-120			
Xylene (o)	96.7		"	100	ND	96.7	80-120			
Surrogate: a,a,a-Trifluorotoluene	*20.8*		"	*20.0*		*104*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*23.3*		"	*20.0*		*116*	*80-120*			

Rice Operating Co.	Project: EME System M-9 SWD Site	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris	05/13/04 15:11

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 EE40709 - General Preparation (WetChem)										
Blank (EE40709-BLK1)				Prepared & Analyzed: 05/07/04						
Chloride	ND	5.00	mg/L							
Matrix Spike (EE40709-MS1)	**Source: 4E06007-02**			Prepared & Analyzed: 05/07/04						
Chloride	514	5.00	mg/L	250	270	97.6	80-120			
Matrix Spike Dup (EE40709-MSD1)	**Source: 4E06007-02**			Prepared & Analyzed: 05/07/04						
Chloride	514	5.00	mg/L	250	270	97.6	80-120	0.00	20	
Reference (EE40709-SRM1)				Prepared & Analyzed: 05/07/04						
Chloride	4780		mg/L	5000		95.6	80-120			
Batch EE40710 - General Preparation (WetChem)										
Blank (EE40710-BLK1)				Prepared & Analyzed: 05/07/04						
Carbonate Alkalinity	ND	0.100	mg/L							
Bicarbonate Alkalinity	ND	2.00	"							
Hydroxide Alkalinity	ND	0.100	"							
Calibration Check (EE40710-CCV1)				Prepared & Analyzed: 05/07/04						
Carbonate Alkalinity	0.0454		mg/L	0.0500		90.8	80-120			
Duplicate (EE40710-DUP1)	**Source: 4E06007-02**			Prepared & Analyzed: 05/07/04						
Carbonate Alkalinity	0.00	0.100	mg/L		0.00				20	
Bicarbonate Alkalinity	174	2.00	"		173			0.576	20	
Hydroxide Alkalinity	0.00	0.100	"		0.00				20	

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Quality Assurance Review

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

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 EE41102 - General Preparation (WetChem)										
Blank (EE41102-BLK1)				Prepared: 05/07/04 Analyzed: 05/11/04						
Total Dissolved Solids	ND	5.00	mg/L							
Duplicate (EE41102-DUP1)	**Source: 4E07001-01**			Prepared: 05/07/04 Analyzed: 05/11/04						
Total Dissolved Solids	1450	5.00	mg/L		1440			0.692	20	
Batch EE41114 - General Preparation (WetChem)										
Blank (EE41114-BLK1)				Prepared & Analyzed: 05/11/04						
Sulfate	ND	0.500	mg/L							
Calibration Check (EE41114-CCV1)				Prepared & Analyzed: 05/11/04						
Sulfate	50.9		mg/L	50.0		102	80-120			
Duplicate (EE41114-DUP1)	**Source: 4E06007-02**			Prepared & Analyzed: 05/11/04						
Sulfate	270	2.50	mg/L		274			1.47	20	

Rice Operating Co.	Project: EME System M-9 SWD Site	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris	05/13/04 15:11

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 EE41104 - General Preparation (Metals)										
Blank (EE41104-BLK1)				Prepared: 05/10/04 Analyzed: 05/11/04						
Calcium	ND	0.0100	mg/L							
Magnesium	ND	0.00100	"							
Potassium	ND	0.0500	"							
Sodium	ND	0.0100	"							
Calibration Check (EE41104-CCV1)				Prepared: 05/10/04 Analyzed: 05/11/04						
Calcium	1.98		mg/L	2.00		99.0	85-115			
Magnesium	2.12		"	2.00		106	85-115			
Potassium	1.83		"	2.00		91.5	85-115			
Sodium	1.72		"	2.00		86.0	85-115			
Duplicate (EE41104-DUP1)	**Source: 4E07001-01**			Prepared: 05/10/04 Analyzed: 05/11/04						
Calcium	24.4	0.100	mg/L		24.5			0.409	20	
Magnesium	4.18	0.00100	"		4.18			0.00	20	
Potassium	18.7	0.500	"		18.4			1.62	20	
Sodium	557	1.00	"		557			0.00	20	

Environmental Lab of Texas

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Quality Assurance Review

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

Notes and Definitions

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

Environmental Lab of Texas

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Kristin Farris
Company Name Rice Operating Company
Company Address: 122 West Taylor
City/State/Zip: Hobbs, New Mexico 88240
Telephone No: 505-393-9174 **Fax No:** 505-397-1471
Sampler Signature:

Project Name: EME System M-9 SWD Site
Project #:
Project Location: T20S, R37E, Sec 9, Unit Letter M
PO #:

4E07002

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	HNO3	HCl (BTEX + 1)	NaOH	H2SO4	None (1) L HDPE	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify):	Analyze For: TCLP: TPH: 418.1 8015M 1005 100	TOTAL: Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Total Dissolved Solids				RUSH TAT (Pre-Schedul	Standard TAT
-01	MW-1	05-05-04	1500	3	✓		✓					✓					✓	✓					✓			✓					✓
-02	MW-2	05-05-04	1307	3	✓		✓					✓					✓	✓					✓			✓					✓
-03	MW-3	05-05-04	1215	3	✓		✓					✓					✓	✓					✓			✓					✓
-04	MW-4	05-05-04	1240	3	✓		✓					✓					✓	✓					✓			✓					✓
-05	WW	05-05-04	1420	3	✓		✓					✓					✓	✓					✓			✓					✓

Special Instructions: Please email results to both gil@trident-environmental.com and to enviro@leaco.net

Sample Containers Intact? (Y) N
Temperature Upon Receipt: 2.5°C
Laboratory Comments:

Relinquished by:	Date	Time	Received by:	Date	Time
	05/06/04	6:00pm			
Relinquished by:	**Date**	**Time**	**Received by ELOT:**	**Date**	**Time**
Drop Box	05-07-04		Jeanne McMurrey	05-07-04	0805

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

Client: Rice Operating

Date/Time: 05-07-04 @ 0900

Order #: 4E07002

Initials: JMM

Sample Receipt Checklist

Temperature of container/cooler?	(Yes)	No	2.5 C
Shipping container/cooler in good condition?	(Yes)	No	
Custody Seals intact on shipping container/cooler?	Yes	No	(Not present)
Custody Seals intact on sample bottles?	Yes	No	(Not present)
Chain of custody present?	(Yes)	No	
Sample Instructions complete on Chain of Custody?	(Yes)	No	
Chain of Custody signed when relinquished and received?	(Yes)	No	
Chain of custody agrees with sample label(s)	(Yes)	No	
Container labels legible and intact?	(Yes)	No	
Sample Matrix and properties same as on chain of custody?	(Yes)	No	
Samples in proper container/bottle?	(Yes)	No	
Samples properly preserved?	(Yes)	No	
Sample bottles intact?	(Yes)	No	
Preservations documented on Chain of Custody?	(Yes)	No	
Containers documented on Chain of Custody?	(Yes)	No	
Sufficient sample amount for indicated test?	(Yes)	No	
All samples received within sufficient hold time?	(Yes)	No	
VOC samples have zero headspace?	(Yes)	No	Not Applicable

Other observations:

Variance Documentation:

Contact Person: - Date/Time: Contacted by:

Regarding:

Corrective Action Taken:

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Kristin Farris

Rice Operating Co.

122 W. Taylor

Hobbs, NM 88240

Project: EME System M-9 SWD Site

Project Number: None Given

Location: T20S, R37E, Sec. 9, Unit Letter M

Lab Order Number: 4H13002

Report Date: 08/19/04

Rice Operating Co.	Project: EME System M-9 SWD Site	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris	08/19/04 14:49

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	4H13002-01	Water	08/11/04 13:10	08/12/04 16:45
MW-2	4H13002-02	Water	08/11/04 12:42	08/12/04 16:45
MW-3	4H13002-03	Water	08/11/04 12:25	08/12/04 16:45
MW-4	4H13002-04	Water	08/11/04 13:47	08/12/04 16:45
WW	4H13002-05	Water	08/11/04 11:45	08/12/04 16:45

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
MW-1 (4H13002-01) Water									
Benzene	**0.00266**	0.00100	mg/L	1	EH41804	08/17/04	08/17/04	EPA 8021B	
Toluene	**J [0.000475]**	0.00100	"	"	"	"	"	"	J
Ethylbenzene	**J [0.000626]**	0.00100	"	"	"	"	"	"	J
Xylene (p/m)	**J [0.000265]**	0.00100	"	"	"	"	"	"	J
Xylene (o)	**J [0.000317]**	0.00100	"	"	"	"	"	"	J
Surrogate: a,a,a-Trifluorotoluene		*93.5 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*88.5 %*	*80-120*		"	"	"	"	
MW-2 (4H13002-02) Water									
Benzene	ND	0.00100	mg/L	1	EH41804	08/17/04	08/17/04	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		*104 %*	*80-120*		"		"	"	
Surrogate: 4-Bromofluorobenzene		*87.0 %*	*80-120*		"	"	"	"	
MW-3 (4H13002-03) Water									
Benzene	ND	0.00100	mg/L	1	EH41804	08/17/04	08/17/04	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		*82.0 %*	*80-120*		"	"	"	"	
MW-4 (4H13002-04) Water									
Benzene	ND	0.00100	mg/L	1	EH41804	08/17/04	08/17/04	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		*92.0 %*	*80-120*		"	"	"	"	

Rice Operating Co.	Project: EME System M-9 SWD Site	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris	08/19/04 14:49

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WW (4H13002-05) Water									
Benzene	ND	0.00100	mg/L	1	EH41804	08/17/04	08/17/04	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		*97.0 %*		*80-120*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*82.5 %*		*80-120*	"	"	"	"	

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Rice Operating Co.	Project: EME System M-9 SWD Site	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris	08/19/04 14:49

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (4H13002-01) Water									
Carbonate Alkalinity	ND	0.100	mg/L	1	EH41610	08/13/04	08/13/04	EPA 310.2M	
Bicarbonate Alkalinity	**377**	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	**390**	5.00	"	"	EH41702	08/16/04	08/16/04	EPA 325.3M	
Total Dissolved Solids	**1690**	5.00	"	"	EH41801	08/17/04	08/18/04	EPA 160.1	
Sulfate	**519**	0.500	"	"	EH41701	08/16/04	08/16/04	EPA 375.4	
MW-2 (4H13002-02) Water									
Carbonate Alkalinity	ND	0.100	mg/L	1	EH41610	08/13/04	08/13/04	EPA 310.2M	
Bicarbonate Alkalinity	**384**	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	**461**	5.00	"	"	EH41702	08/16/04	08/16/04	EPA 325.3M	
Total Dissolved Solids	**1770**	5.00	"	"	EH41801	08/17/04	08/18/04	EPA 160.1	
Sulfate	**372**	0.500	"	"	EH41701	08/16/04	08/16/04	EPA 375.4	
MW-3 (4H13002-03) Water									
Carbonate Alkalinity	ND	0.100	mg/L	1	EH41610	08/13/04	08/13/04	EPA 310.2M	
Bicarbonate Alkalinity	**260**	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	**337**	5.00	"	"	EH41702	08/16/04	08/16/04	EPA 325.3M	
Total Dissolved Solids	**1560**	5.00	"	"	EH41801	08/17/04	08/18/04	EPA 160.1	
Sulfate	**557**	0.500	"	"	EH41701	08/16/04	08/16/04	EPA 375.4	
MW-4 (4H13002-04) Water									
Carbonate Alkalinity	ND	0.100	mg/L	1	EH41610	08/13/04	08/13/04	EPA 310.2M	
Bicarbonate Alkalinity	**290**	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	**567**	5.00	"	"	EH41702	08/16/04	08/16/04	EPA 325.3M	
Total Dissolved Solids	**1770**	5.00	"	"	EH41801	08/17/04	08/18/04	EPA 160.1	
Sulfate	**433**	0.500	"	"	EH41701	08/16/04	08/16/04	EPA 375.4	

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Rice Operating Co.	Project: EME System M-9 SWD Site	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris	08/19/04 14:49

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
WW (4H13002-05) Water									
Carbonate Alkalinity	ND	0.100	mg/L	1	EH41610	08/13/04	08/13/04	EPA 310.2M	
Bicarbonate Alkalinity	**298**	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	**266**	5.00	"	"	EH41702	08/16/04	08/16/04	EPA 325.3M	
Total Dissolved Solids	**1810**	5.00	"	"	EH41801	08/17/04	08/18/04	EPA 160.1	
Sulfate	**313**	0.500	"	"	EH41701	08/16/04	08/16/04	EPA 375.4	

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Total Metals by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (4H13002-01) Water									
Calcium	**54.8**	0.100	mg/L	10	EH41719	08/17/04	08/17/04	EPA 6010B	
Magnesium	**69.8**	0.0100	"	"	"	"	"	"	
Potassium	**16.1**	0.500	"	"	"	"	"	"	
Sodium	**448**	1.00	"	100	"	"	"	"	
MW-2 (4H13002-02) Water									
Calcium	**61.7**	0.100	mg/L	10	EH41719	08/17/04	08/17/04	EPA 6010B	
Magnesium	**76.6**	0.0100	"	"	"	"	"	"	
Potassium	**19.2**	0.500	"	"	"	"	"	"	
Sodium	**546**	1.00	"	100	"	"	"	"	
MW-3 (4H13002-03) Water									
Calcium	**115**	1.00	mg/L	100	EH41719	08/17/04	08/17/04	EPA 6010B	
Magnesium	**63.8**	0.0100	"	10	"	"	"	"	
Potassium	**9.06**	0.500	"	"	"	"	"	"	
Sodium	**375**	1.00	"	100	"	"	"	"	
MW-4 (4H13002-04) Water									
Calcium	**93.4**	0.100	mg/L	10	EH41719	08/17/04	08/17/04	EPA 6010B	
Magnesium	**78.1**	0.0100	"	"	"	"	"	"	
Potassium	**13.1**	0.500	"	"	"	"	"	"	
Sodium	**483**	1.00	"	100	"	"	"	"	
WW (4H13002-05) Water									
Calcium	**57.2**	0.100	mg/L	10	EH41719	08/17/04	08/17/04	EPA 6010B	
Magnesium	**54.9**	0.0100	"	"	"	"	"	"	
Potassium	**9.84**	0.500	"	"	"	"	"	"	
Sodium	**292**	1.00	"	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 EH41804 - EPA 5030C (GC)										
Blank (EH41804-BLK1)				Prepared & Analyzed: 08/14/04						
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	*22.7*		*ug/l*	*20.0*		*114*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*20.2*		"	*20.0*		*101*	*80-120*			
LCS (EH41804-BS1)				Prepared & Analyzed: 08/14/04						
Benzene	89.5		ug/l	100		89.5	80-120			
Toluene	102		"	100		102	80-120			
Ethylbenzene	98.1		"	100		98.1	80-120			
Xylene (p/m)	205		"	200		102	80-120			
Xylene (o)	101		"	100		101	80-120			
Surrogate: a,a,a-Trifluorotoluene	*22.5*		"	*20.0*		*112*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*22.5*		"	*20.0*		*112*	*80-120*			
Calibration Check (EH41804-CCV1)				Prepared & Analyzed: 08/14/04						
Benzene	83.5		ug/l	100		83.5	80-120			
Toluene	91.4		"	100		91.4	80-120			
Ethylbenzene	90.5		"	100		90.5	80-120			
Xylene (p/m)	195		"	200		97.5	80-120			
Xylene (o)	91.8		"	100		91.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	*18.5*		"	*20.0*		*92.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*20.6*		"	*20.0*		*103*	*80-120*			
Matrix Spike (EH41804-MS1)	**Source: 4H13013-02**			Prepared & Analyzed: 08/14/04						
Benzene	82.2		ug/l	100	ND	82.2	80-120			
Toluene	93.1		"	100	ND	93.1	80-120			
Ethylbenzene	89.4		"	100	ND	89.4	80-120			
Xylene (p/m)	188		"	200	ND	94.0	80-120			
Xylene (o)	94.5		"	100	ND	94.5	80-120			
Surrogate: a,a,a-Trifluorotoluene	*18.5*		"	*20.0*		*92.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*19.9*		"	*20.0*		*99.5*	*80-120*			

Rice Operating Co.	Project: EME System M-9 SWD Site	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris	08/19/04 14:49

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 EH41804 - EPA 5030C (GC)										
Matrix Spike Dup (EH41804-MSD1)	**Source: 4H13013-02**			Prepared & Analyzed: 08/14/04						
Benzene	81.3		ug/l	100	ND	81.3	80-120	1.10	20	
Toluene	95.0		"	100	ND	95.0	80-120	2.02	20	
Ethylbenzene	90.3		"	100	ND	90.3	80-120	1.00	20	
Xylene (p/m)	189		"	200	ND	94.5	80-120	0.531	20	
Xylene (o)	89.4		"	100	ND	89.4	80-120	5.55	20	
Surrogate: a,a,a-Trifluorotoluene	*19.9*		"	*20.0*		*99.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*20.0*		"	*20.0*		*100*	*80-120*			

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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 EH41610 - General Preparation (WetChem)										
Blank (EH41610-BLK1)				Prepared & Analyzed: 08/13/04						
Carbonate Alkalinity	ND	0.100	mg/L							
Bicarbonate Alkalinity	ND	2.00	"							
Hydroxide Alkalinity	ND	0.100	"							
Duplicate (EH41610-DUP1)	**Source: 4H12015-01**			Prepared & Analyzed: 08/13/04						
Carbonate Alkalinity	0.00	0.100	mg/L		0.00				20	
Bicarbonate Alkalinity	232	2.00	"		232			0.00	20	
Hydroxide Alkalinity	0.00	0.100	"		0.00				20	
Reference (EH41610-SRM1)				Prepared & Analyzed: 08/13/04						
Carbonate Alkalinity	0.0530		mg/L	0.0500		106	80-120			
Batch EH41701 - General Preparation (WetChem)										
Blank (EH41701-BLK1)				Prepared & Analyzed: 08/16/04						
Sulfate	ND	0.500	mg/L							
Calibration Check (EH41701-CCV1)				Prepared & Analyzed: 08/16/04						
Sulfate	51.0		mg/L	50.0		102	80-120			
Duplicate (EH41701-DUP1)	**Source: 4H12014-01**			Prepared & Analyzed: 08/16/04						
Sulfate	358	0.500	mg/L		322			10.6	20	
Batch EH41702 - General Preparation (WetChem)										
Blank (EH41702-BLK1)				Prepared & Analyzed: 08/16/04						
Chloride	ND	5.00	mg/L							

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 EH41702 - General Preparation (WetChem)										
Matrix Spike (EH41702-MS1)	**Source: 4H12012-21**			Prepared & Analyzed: 08/16/04						
Chloride	160	5.00	mg/L	100	65.6	94.4	80-120			
Matrix Spike Dup (EH41702-MSD1)	**Source: 4H12012-21**			Prepared & Analyzed: 08/16/04						
Chloride	160	5.00	mg/L	100	65.6	94.4	80-120	0.00	20	
Reference (EH41702-SRM1)				Prepared & Analyzed: 08/16/04						
Chloride	4960		mg/L	5000		99.2	80-120			
Batch EH41801 - Filtration Preparation										
Blank (EH41801-BLK1)				Prepared: 08/17/04 Analyzed: 08/18/04						
Total Dissolved Solids	ND	5.00	mg/L							
Duplicate (EH41801-DUP1)	**Source: 4H17009-01**			Prepared: 08/17/04 Analyzed: 08/18/04						
Total Dissolved Solids	3900	5.00	mg/L		3910			0.256	20	

Rice Operating Co.	Project: EME System M-9 SWD Site	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris	08/19/04 14:49

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 EH41719 - 6010B/No Digestion										
Blank (EH41719-BLK1)				Prepared & Analyzed: 08/17/04						
Calcium	ND	0.0100	mg/L							
Magnesium	ND	0.00100	"							
Potassium	ND	0.0500	"							
Sodium	ND	0.0100	"							
Calibration Check (EH41719-CCV1)				Prepared & Analyzed: 08/17/04						
Calcium	2.02		mg/L	2.00		101	85-115			
Magnesium	2.12		"	2.00		106	85-115			
Potassium	1.79		"	2.00		89.5	85-115			
Sodium	1.89		"	2.00		94.5	85-115			
Duplicate (EH41719-DUP1)	**Source: 4H13013-04**			Prepared & Analyzed: 08/17/04						
Calcium	36.1	0.100	mg/L		35.2			2.52	20	
Magnesium	11.3	0.0100	"		10.9			3.60	20	
Potassium	34.3	0.500	"		33.2			3.26	20	
Sodium	405	1.00	"		415			2.44	20	

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Notes and Definitions

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

Report Approved By: Raland K Tuttle Date: 8/19/04

Raland K. Tuttle, QA Officer
Celey D. Keene, Lab Director, Org. Tech Director
Jeanne Mc Murrey, Inorg. Tech Director
James L. Hawkins, Chemist/Geologist
Sara Molina, Chemist
Sandra Biezugbe, Lab Tech.

Environmental Lab of Texas

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Kristin Farris
Company Name Rice Operating Company
Company Address: 122 West Taylor
City/State/Zip: Hobbs, New Mexico 88240
Telephone No: 505-393-9174 **Fax No:** 505-397-1471
Sampler Signature:

Project Name: EME System M-9 SWD Site
Project #:
Project Location: T20S, R37E, Sec 9, Unit Letter M
PO #:

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	HNO3	HCl	NaOH	H2SO4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify):	Analyze For: TPH: 418.1 8015M 1005 100	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Total Dissolved Solids	RUSH TAT (Pre-Sched)	Standard TAT
	MW-1	8-11-04	1310	3	✓		✓					✓					✓	✓					✓			✓		✓
	MW-2	8-11-04	1242	3	✓		✓					✓					✓	✓					✓			✓		✓
	MW-3	8-11-04	1225	3	✓		✓					✓					✓	✓					✓			✓		✓
	MW-4	8-11-04	1347	3	✓		✓					✓					✓	✓					✓			✓		✓
	WW	8-11-04	~~1230~~ 1145	3	✓		✓					✓					✓	✓					✓			✓		✓

Special Instructions: Please email results to both gil@trident-environmental.com and to enviro@leaco.net

Sample Containers Intact? Y N
Temperature Upon Receipt: −1.0°C
Laboratory Comments: COPY

Relinquished by:	Date	Time	Received by:	Date	Time
	8/12/04	4:45p			
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Jeanne McMurray	8-12-04	1645

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Kristin Farris

Rice Operating Co.

122 W. Taylor

Hobbs, NM 88240

Project: EME System M-9 SWD Site

Project Number: V117M9

Location: T20S, R37E, Sec 9, Unit Letter M

Lab Order Number: 4K11007

Report Date: 11/22/04

Rice Operating Co.	Project: EME System M-9 SWD Site	Fax: (505) 397-1471
122 W. Taylor	Project Number: V117M9	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris	11/22/04 17:11

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	4K11007-01	Water	11/10/04 15:00	11/11/04 11:00
MW-2	4K11007-02	Water	11/10/04 13:57	11/11/04 11:00
MW-3	4K11007-03	Water	11/10/04 13:32	11/11/04 11:00
MW-4	4K11007-04	Water	11/10/04 14:28	11/11/04 11:00
Water Well	4K11007-05	Water	11/10/04 12:45	11/11/04 11:00

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Rice Operating Co.	Project: EME System M-9 SWD Site	Fax: (505) 397-1471
122 W. Taylor	Project Number: V117M9	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris	11/22/04 17:11

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (4K11007-01) Water									
Benzene	**0.00292**	0.00100	mg/L	1	EK41502	11/12/04	11/12/04	EPA 8021B	
Toluene	**J [0.000326]**	0.00100	"	"	"	"	"	"	J
Ethylbenzene	**J [0.000971]**	0.00100	"	"	"	"	"	"	J
Xylene (p/m)	**0.00170**	0.00100	"	"	"	"	"	"	
Xylene (o)	**0.00191**	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*150 %*		*80-120*		"	"	"	*S-04*
Surrogate: 4-Bromofluorobenzene		*106 %*		*80-120*		"	"	"	
MW-2 (4K11007-02) Water									
Benzene	ND	0.00100	mg/L	1	EK41502	11/12/04	11/12/04	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		*116 %*		*80-120*		"	"	"	
Surrogate: 4-Bromofluorobenzene		*105 %*		*80-120*		"	"	"	
MW-3 (4K11007-03) Water									
Benzene	ND	0.00100	mg/L	1	EK41502	11/12/04	11/12/04	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		*110 %*		*80-120*		"	"	"	
MW-4 (4K11007-04) Water									
Benzene	ND	0.00100	mg/L	1	EK41502	11/12/04	11/12/04	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		*112 %*		*80-120*		"	"	"	
Surrogate: 4-Bromofluorobenzene		*108 %*		*80-120*		"	"	"	

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Rice Operating Co.	Project: EME System M-9 SWD Site	Fax: (505) 397-1471
122 W. Taylor	Project Number: V117M9	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris	11/22/04 17:11

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Water Well (4K11007-05) Water									
Benzene	ND	0.00100	mg/L	1	EK41502	11/12/04	11/12/04	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		*117 %*		*80-120*		"	"	"	
Surrogate: 4-Bromofluorobenzene		*108 %*		*80-120*		"	"	"	

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Rice Operating Co.	Project: EME System M-9 SWD Site	Fax: (505) 397-1471
122 W. Taylor	Project Number: V117M9	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris	11/22/04 17:11

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (4K11007-01) Water									
Carbonate Alkalinity	ND	0.100	mg/L	1	EK41814	11/11/04	11/11/04	EPA 310.2M	
Bicarbonate Alkalinity	**392**	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	**390**	5.00	"	"	EK41809	11/17/04	11/17/04	EPA 325.3M	
Total Dissolved Solids	**1740**	5.00	"	"	EK41206	11/11/04	11/11/04	EPA 160.1	
Sulfate	**598**	6.25	"	12.5	EK41904	11/11/04	11/11/04	EPA 375.4	
MW-2 (4K11007-02) Water									
Carbonate Alkalinity	ND	0.100	mg/L	1	EK41814	11/11/04	11/11/04	EPA 310.2M	
Bicarbonate Alkalinity	**370**	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	**346**	5.00	"	"	EK41809	11/17/04	11/17/04	EPA 325.3M	
Total Dissolved Solids	**1610**	5.00	"	"	EK41206	11/11/04	11/11/04	EPA 160.1	
Sulfate	**590**	6.25	"	12.5	EK41904	11/11/04	11/11/04	EPA 375.4	
MW-3 (4K11007-03) Water									
Carbonate Alkalinity	ND	0.100	mg/L	1	EK41814	11/11/04	11/11/04	EPA 310.2M	
Bicarbonate Alkalinity	**252**	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	**337**	5.00	"	"	EK41809	11/17/04	11/17/04	EPA 325.3M	
Total Dissolved Solids	**1600**	5.00	"	"	EK41206	11/11/04	11/11/04	EPA 160.1	
Sulfate	**664**	6.25	"	12.5	EK41904	11/11/04	11/11/04	EPA 375.4	
MW-4 (4K11007-04) Water									
Carbonate Alkalinity	ND	0.100	mg/L	1	EK41814	11/11/04	11/11/04	EPA 310.2M	
Bicarbonate Alkalinity	**278**	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	**514**	5.00	"	"	EK41809	11/17/04	11/17/04	EPA 325.3M	
Total Dissolved Solids	**1790**	5.00	"	"	EK41206	11/11/04	11/11/04	EPA 160.1	
Sulfate	**580**	6.25	"	12.5	EK41904	11/11/04	11/11/04	EPA 375.4	

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Rice Operating Co.	Project: EME System M-9 SWD Site	Fax: (505) 397-1471
122 W. Taylor	Project Number: V117M9	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris	11/22/04 17:11

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Water Well (4K11007-05) Water									
Carbonate Alkalinity	ND	0.100	mg/L	1	EK41814	11/11/04	11/11/04	EPA 310.2M	
Bicarbonate Alkalinity	**270**	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	**284**	5.00	"	"	EK41809	11/17/04	11/17/04	EPA 325.3M	
Total Dissolved Solids	**959**	5.00	"	"	EK41206	11/11/04	11/11/04	EPA 160.1	
Sulfate	**418**	6.25	"	12.5	EK41904	11/11/04	11/11/04	EPA 375.4	

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Rice Operating Co.	Project: EME System M-9 SWD Site	Fax: (505) 397-1471
122 W. Taylor	Project Number: V117M9	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris	11/22/04 17:11

Total Metals by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (4K11007-01) Water									
Calcium	**80.1**	0.100	mg/L	10	EK42201	11/15/04	11/19/04	EPA 6010B	
Magnesium	**67.8**	0.0100	"	"	"	"	"	"	
Potassium	**10.2**	0.500	"	"	"	"	"	"	
Sodium	**278**	1.00	"	100	"	"	"	"	
MW-2 (4K11007-02) Water									
Calcium	**88.7**	0.100	mg/L	10	EK42201	11/15/04	11/19/04	EPA 6010B	
Magnesium	**59.0**	0.100	"	100	"	"	"	"	
Potassium	**11.0**	0.500	"	10	"	"	"	"	
Sodium	**244**	1.00	"	100	"	"	"	"	
MW-3 (4K11007-03) Water									
Calcium	**92.6**	0.100	mg/L	10	EK42201	11/15/04	11/19/04	EPA 6010B	
Magnesium	**53.6**	0.100	"	100	"	"	"	"	
Potassium	**6.91**	0.500	"	10	"	"	"	"	
Sodium	**238**	1.00	"	100	"	"	"	"	
MW-4 (4K11007-04) Water									
Calcium	**87.9**	0.100	mg/L	10	EK42201	11/15/04	11/19/04	EPA 6010B	
Magnesium	**65.9**	0.100	"	100	"	"	"	"	
Potassium	**10.6**	0.500	"	10	"	"	"	"	
Sodium	**305**	1.00	"	100	"	"	"	"	
Water Well (4K11007-05) Water									
Calcium	**53.9**	0.100	mg/L	10	EK42201	11/15/04	11/19/04	EPA 6010B	
Magnesium	**37.1**	0.0100	"	"	"	"	"	"	
Potassium	**6.18**	0.500	"	"	"	"	"	"	
Sodium	**214**	1.00	"	100	"	"	"	"	

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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 EK41502 - EPA 5030C (GC)										
Blank (EK41502-BLK1)				Prepared & Analyzed: 11/12/04						
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	*17.8*		*ug/l*	*20.0*		*89.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*19.9*		"	*20.0*		*99.5*	*80-120*			
LCS (EK41502-BS1)				Prepared & Analyzed: 11/12/04						
Benzene	106		ug/l	100		106	80-120			
Toluene	107		"	100		107	80-120			
Ethylbenzene	113		"	100		113	80-120			
Xylene (p/m)	237		"	200		118	80-120			
Xylene (o)	107		"	100		107	80-120			
Surrogate: a,a,a-Trifluorotoluene	*20.3*		"	*20.0*		*102*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*23.4*		"	*20.0*		*117*	*80-120*			
LCS Dup (EK41502-BSD1)				Prepared & Analyzed: 11/12/04						
Benzene	105		ug/l	100		105	80-120	0.948	20	
Toluene	106		"	100		106	80-120	0.939	20	
Ethylbenzene	113		"	100		113	80-120	0.00	20	
Xylene (p/m)	223		"	200		112	80-120	5.22	20	
Xylene (o)	106		"	100		106	80-120	0.939	20	
Surrogate: a,a,a-Trifluorotoluene	*19.3*		"	*20.0*		*96.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*22.2*		"	*20.0*		*111*	*80-120*			
Calibration Check (EK41502-CCV1)				Prepared & Analyzed: 11/12/04						
Benzene	102		ug/l	100		102	80-120			
Toluene	101		"	100		101	80-120			
Ethylbenzene	109		"	100		109	80-120			
Xylene (p/m)	213		"	200		106	80-120			
Xylene (o)	112		"	100		112	80-120			
Surrogate: a,a,a-Trifluorotoluene	*17.8*		"	*20.0*		*89.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*21.7*		"	*20.0*		*108*	*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 EK41502 - EPA 5030C (GC)										
Matrix Spike (EK41502-MS1)	**Source: 4K11005-01**			Prepared & Analyzed: 11/12/04						
Benzene	116		ug/l	100	ND	116	80-120			
Toluene	115		"	100	ND	115	80-120			
Ethylbenzene	107		"	100	ND	107	80-120			
Xylene (p/m)	227		"	200	ND	114	80-120			
Xylene (o)	115		"	100	ND	115	80-120			
Surrogate: a,a,a-Trifluorotoluene	*21.2*		*"*	*20.0*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*21.9*		*"*	*20.0*		*110*	*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 EK41206 - Filtration Preparation										
Blank (EK41206-BLK1)				Prepared & Analyzed: 11/11/04						
Total Dissolved Solids	ND	5.00	mg/L							
Duplicate (EK41206-DUP1)	**Source: 4K11004-01**			Prepared & Analyzed: 11/11/04						
Total Dissolved Solids	2000	5.00	mg/L		1910			4.60	20	
Batch EK41809 - General Preparation (WetChem)										
Blank (EK41809-BLK1)				Prepared & Analyzed: 11/17/04						
Chloride	ND	5.00	mg/L							
Matrix Spike (EK41809-MS1)	**Source: 4K11004-01**			Prepared & Analyzed: 11/17/04						
Chloride	1220	5.00	mg/L	500	727	98.6	80-120			
Matrix Spike Dup (EK41809-MSD1)	**Source: 4K11004-01**			Prepared & Analyzed: 11/17/04						
Chloride	1230	5.00	mg/L	500	727	101	80-120	0.816	20	
Reference (EK41809-SRM1)				Prepared & Analyzed: 11/17/04						
Chloride	4960		mg/L	5000		99.2	80-120			
Batch EK41814 - General Preparation (WetChem)										
Blank (EK41814-BLK1)				Prepared & Analyzed: 11/11/04						
Carbonate Alkalinity	ND	0.100	mg/L							
Bicarbonate Alkalinity	ND	2.00	"							
Hydroxide Alkalinity	ND	0.100	"							

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 EK41814 - General Preparation (WetChem)										
Duplicate (EK41814-DUP1)	**Source: 4K11004-01**			Prepared & Analyzed: 11/11/04						
Carbonate Alkalinity	0.00	0.100	mg/L		0.00				20	
Bicarbonate Alkalinity	161	2.00	"		160			0.623	20	
Hydroxide Alkalinity	0.00	0.100	"		0.00				20	
Reference (EK41814-SRM1)				Prepared & Analyzed: 11/11/04						
Carbonate Alkalinity	0.0500		mg/L	0.0500		100	80-120			
Batch EK41904 - General Preparation (WetChem)										
Blank (EK41904-BLK1)				Prepared & Analyzed: 11/11/04						
Sulfate	ND	0.500	mg/L							
Calibration Check (EK41904-CCV1)				Prepared & Analyzed: 11/11/04						
Sulfate	49.3		mg/L	50.0		98.6	80-120			
Duplicate (EK41904-DUP1)	**Source: 4K11004-01**			Prepared & Analyzed: 11/11/04						
Sulfate	241	2.50	mg/L		238			1.25	20	

Rice Operating Co.	Project: EME System M-9 SWD Site	Fax: (505) 397-1471
122 W. Taylor	Project Number: V117M9	**Reported:**
Hobbs NM, 88240	Project Manager: Kristin Farris	11/22/04 17:11

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 EK42201 - 6010B/No Digestion										
Blank (EK42201-BLK1)				Prepared: 11/15/04 Analyzed: 11/19/04						
Calcium	ND	0.0100	mg/L							
Magnesium	ND	0.00100	"							
Potassium	ND	0.0500	"							
Sodium	ND	0.0100	"							
Blank (EK42201-BLK2)				Prepared: 11/15/04 Analyzed: 11/19/04						
Calcium	ND	0.0100	mg/L							
Magnesium	ND	0.00100	"							
Potassium	ND	0.0500	"							
Sodium	ND	0.0100	"							
Calibration Check (EK42201-CCV1)				Prepared: 11/15/04 Analyzed: 11/19/04						
Calcium	2.15		mg/L	2.00		108	85-115			
Magnesium	2.10		"	2.00		105	85-115			
Potassium	2.08		"	2.00		104	85-115			
Sodium	1.88		"	2.00		94.0	85-115			
Calibration Check (EK42201-CCV2)				Prepared: 11/15/04 Analyzed: 11/22/04						
Calcium	1.83		mg/L	2.00		91.5	85-115			
Magnesium	1.96		"	2.00		98.0	85-115			
Potassium	1.78		"	2.00		89.0	85-115			
Sodium	1.72		"	2.00		86.0	85-115			
Duplicate (EK42201-DUP1)		**Source: 4K11013-01RE1**		Prepared: 11/15/04 Analyzed: 11/19/04						
Calcium	34.6	0.100	mg/L		ND				20	
Magnesium	25.6	0.0100	"		ND				20	
Potassium	4.08	0.500	"		ND				20	
Sodium	77.4	1.00	"		ND				20	

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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 EK42201 - 6010B/No Digestion										
Duplicate (EK42201-DUP2)	**Source: 4K11004-01**			Prepared: 11/15/04 Analyzed: 11/19/04						
Calcium	180	1.00	mg/L		179			0.557	20	
Magnesium	48.9	0.0100	"		47.2			3.54	20	
Potassium	11.7	0.500	"		9.88			16.9	20	
Sodium	283	1.00	"		268			5.44	20	

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Raland K Tuttle Date: 11/22/2004

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer
Jeanne Mc Murrey, Inorg. Tech Director
James L. Hawkins, Chemist/Geologist
Sandra Sanchez, Lab Tech.

Environmental Lab of Texas

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Kristin Farris

Company Name Rice Operating Company

Company Address: 122 West Taylor

City/State/Zip: Hobbs, New Mexico 88240

Telephone No: 505-393-9174 **Fax No:** 505-397-1471

Sampler Signature: [signature]

Project Name: EME System M-9 SWD Site

Project #: V117M9

Project Location: T20S, R37E, Sec 9, Unit Letter M

COC #: V117-1104-3

4K11007

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	HNO_3	HCl (BTEX only)	NaOH	H_2SO_4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify):	Analyze For: TPH: 418.1 8015M 1005 100	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Total Dissolved Solids				RUSH TAT (Pre-Sched)	Standard TAT
-01	MW-1	11-10-04	1500	3	✓		✓					✓					✓	✓					✓			✓					✓
-02	MW-2	11-10-04	1357	3	✓		✓					✓					✓	✓					✓			✓					✓
-03	MW-3	11-10-04	1332	3	✓		✓					✓					✓	✓					✓			✓					✓
-04	MW-4	11-10-04	1428	3	✓		✓					✓					✓	✓					✓			✓					✓
-05	Water Well	11-10-04	1245	3	✓		✓					✓					✓	✓					✓			✓					✓

Special Instructions: Please email results to both gil@trident-environmental.com and to enviro@leaco.net

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	11/11/04	11:00			
Relinquished by:	Date	Time	Received by ELOT: [illegible]	11/11/04	1100

Sample Containers Intact? Y N
Temperature Upon Receipt:
Laboratory Comments:
Rec -2.5°C

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

Client: Rice Operating Co.

Date/Time: 11-11-04 @ 1200

Order #: 4K11007

Initials: JMM

Sample Receipt Checklist

Temperature of container/cooler?	(Yes)	No	-2.5 C
Shipping container/cooler in good condition?	(Yes)	No	
Custody Seals intact on shipping container/cooler?	Yes	No	(Not present)
Custody Seals intact on sample bottles?	Yes	No	(Not present)
Chain of custody present?	(Yes)	No	
Sample Instructions complete on Chain of Custody?	(Yes)	No	
Chain of Custody signed when relinquished and received?	(Yes)	No	
Chain of custody agrees with sample label(s)	(Yes)	No	
Container labels legible and intact?	(Yes)	No	
Sample Matrix and properties same as on chain of custody?	(Yes)	No	
Samples in proper container/bottle?	(Yes)	No	
Samples properly preserved?	(Yes)	No	
Sample bottles intact?	(Yes)	No	
Preservations documented on Chain of Custody?	(Yes)	No	
Containers documented on Chain of Custody?	(Yes)	No	
Sufficient sample amount for indicated test?	(Yes)	No	
All samples received within sufficient hold time?	(Yes)	No	
VOC samples have zero headspace?	(Yes)	No	Not Applicable

Other observations:

_____

_____

_____

Variance Documentation:

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

Regarding:

_____

_____

_____

Corrective Action Taken:

_____

_____

_____

_____

_____

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_____

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