

1R - 424

REPORTS

DATE:

3/7/2005

RICE Operating Company

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

CERTIFIED MAIL

RETURN RECEIPT NO. 7002 2410 0000 4940 1893

RECEIVED

OIL CONSERVATION
DIVISION

March 7, 2005

? Cap #

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

RE: **2004 MONITOR WELL REPORT/SAMPLING SUMMARY**
M-5 SWD, EME SWD SYSTEM
UNIT 'M', SEC. 5, T20S, R37E

Mr. Price:

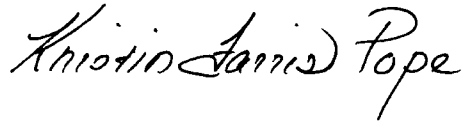
Rice Operating Company (ROC) takes this opportunity to submit the 2004 Monitor Well Report for the EME M-5 SWD site located in the EME Salt Water Disposal (SWD) System. Two monitoring wells were installed in one borehole on 11/4/2003 during the delineation of the redwood tanks. The shallow well is about 40 ft deep and the deep is 55 ft (measured from the ground surface). The well is sampled quarterly pursuant to NMOCD guidelines. In 2004, Trident Environmental (Trident) of Midland, Texas sampled the well. In 2005, Trident will sample the well and Environmental Lab of Texas of Odessa will continue to analyze the water samples.

R. T. Hicks Consultants of Albuquerque is retained by ROC to address groundwater concerns at this site. A Corrective Action Plan was submitted on 9/6/2004. NMOCD requested more information in an email on 11/8/2004. This information was addressed in a response to NMOCD by Hicks on 1/25/2005.

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.

RICE OPERATING COMAPANY

A handwritten signature in cursive script that reads "Kristin Farris Pope".

Kristin Farris Pope
Project Scientist

enclosures: Summary table & graph
 Analytical results
 Survey map

cc: LBG, CDH, R. T. Hicks, Gil Van Deventer, file, Rob Roy Industries,

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

EME M-5 SWD
unit 'M', Sec. 5, T20S, R37E

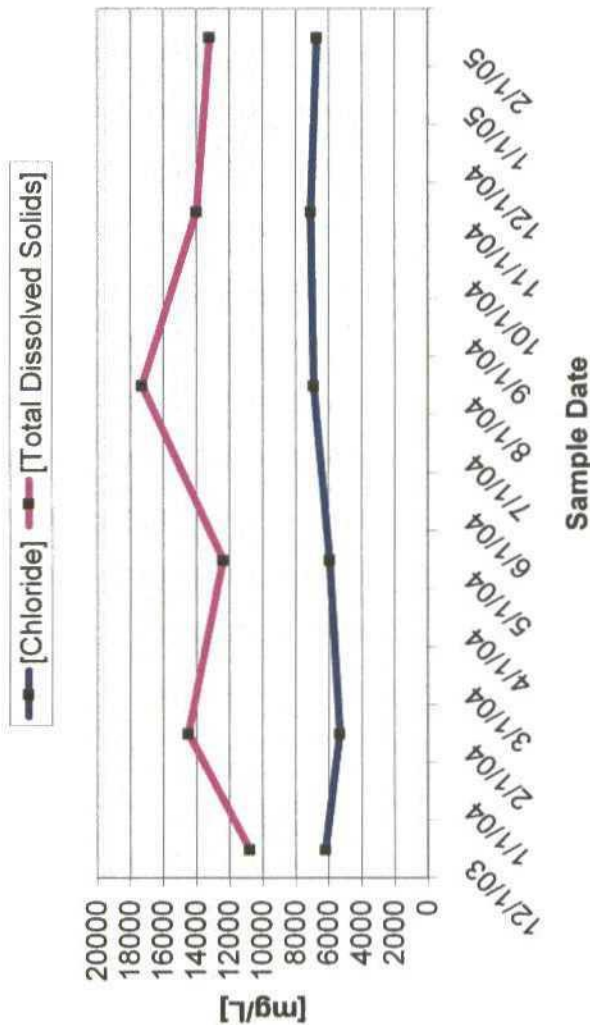
2 wells intalled in 1 borehole

RICE Operating Company
Monitor Well Data Sheet

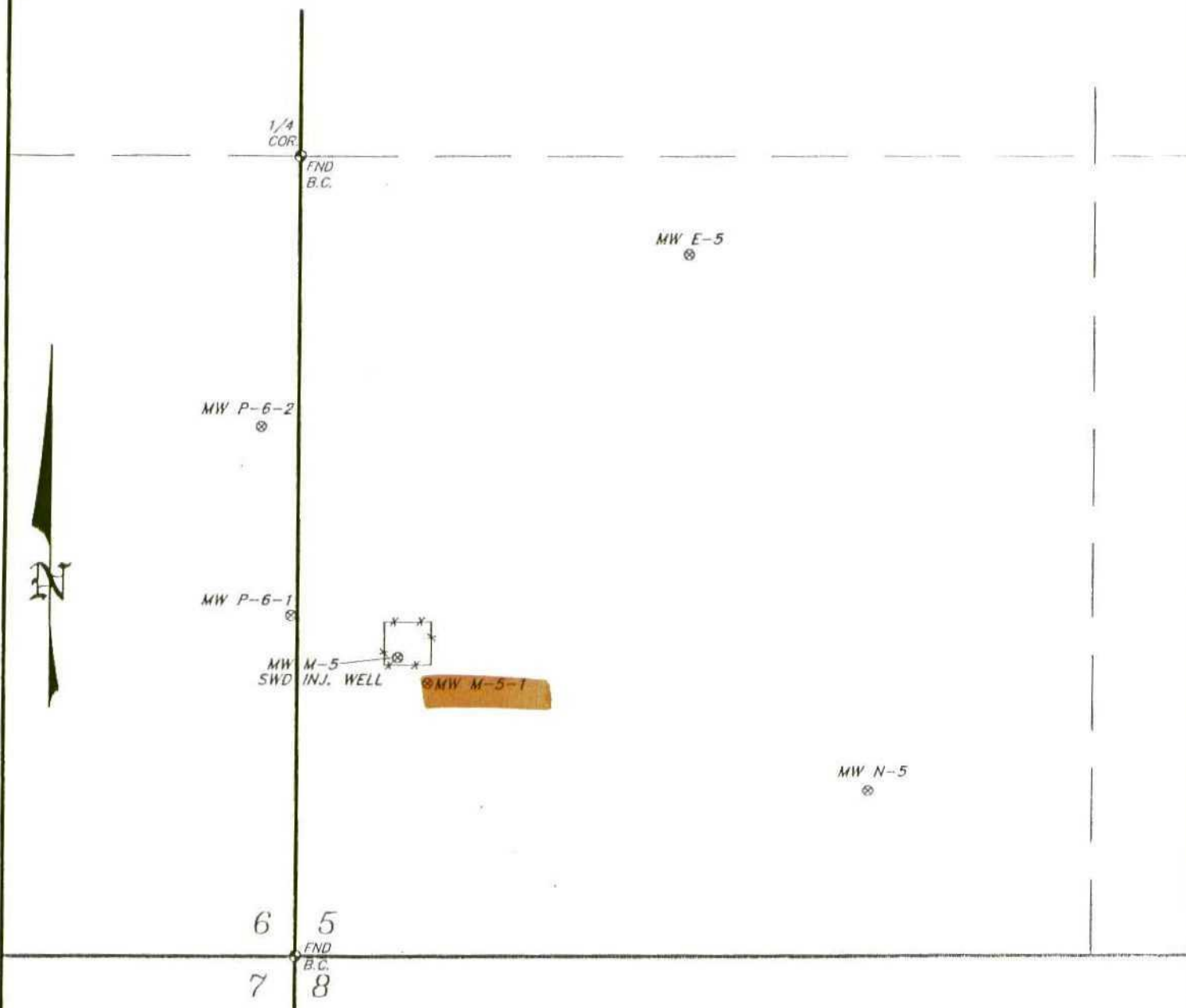
All concentrations are in mg/L

MW #	DEPTH TO WATER	TOTAL DEPTH	WELL VOLUME	VOLUME PURGED	SAMPLE DATE	Cl ⁻	TDS	BENZENE	TOLUENE	ETHYL BENZENE	TOTAL XYLENES	COMMENTS
Id	33.40	55.10	3.530	10.61	12/11/03	6198	11736	<0.002	<0.002	<0.002	<0.006	Deep
Is	33.28	40.11	1.110	3.33	12/11/03	6198	10784	<0.002	<0.002	<0.002	<0.006	Shallow
Is	33.37	39.85	1.07	4.00	02/20/04	5320	14500	<0.001	<0.001	<0.001	<0.001	Shallow
Is	32.79	XXX	XXX	XXX	05/06/04	5940	12400	<0.001	<0.001	<0.001	<0.001	Shallow
Is	32.52	XXX	XXX	XXX	08/10/04	6910	17300	<0.001	<0.001	<0.001	<0.001	Shallow
Is	31.63	XXX	XXX	XXX	11/10/04	7090	14000	<0.001	<0.001	<0.001	<0.001	Shallow
Is	28.85	XXX	XXX	XXX	2/8/05	6710	13200	<0.001	<0.001	<0.001	<0.001	Shallow

EME M-5 SWD Monitor Well #1



SECTION 5, TOWNSHIP 20 SOUTH, RANGE 37 EAST, N.M.P.M.,
LEA COUNTY,NEW MEXICO.



NEW MEXICO STATE PLANE COORDINATES (NAD 83)

WELL#	NORTHING	EASTING	LATITUDE	LONGITUDE	ELEV(TOC)	ELEV(CONC)	ELEV(GRND)
N-5	582359.139	866959.939	N32°35'47.4"	W103°16'33.6"	3559.35'	3557.20'	3557.02'
P-6-1	582925.132	865031.310	N32°35'53.2"	W103°16'56.1"	3559.02'	3556.58'	3556.47'
P-6-2	583552.878	864924.609	N32°35'59.4"	W103°16'57.3"	3559.64'	3556.64'	3556.64'
E-5	584127.856	866337.842	N32°36'04.9"	W103°16'40.7"	3559.64'	3556.84'	3556.84'
M-5	582790.171	865384.828	N32°35'51.8"	W103°16'52.0"	3554.99'	.	3555.91'
M-5-1	582701.364	865484.248	N32°35'50.9"	W103°16'50.9"	3554.41'	3554.72'	3554.64'

3554.99' - Top of Well

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

[Signature]
GARY L. JONES N.M. P.S.
TEXAS P.L.S.

[Seal]
No. 7977
No. 5074

BASIN SURVEYS

P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 4018

Drawn By: K. GOAD

Date: 03-18-2004

Disk: KJG CD#4 - RC4018A.DWG

50005001000 FEET

RICE OPERATING COMPANY

REF: EME P-6 LINE SITE

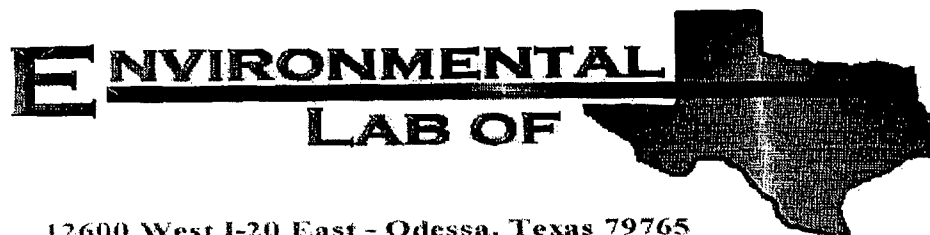
MONITOR WELLS LOCATED IN

SECTION 5, TOWNSHIP 20 SOUTH, RANGE 37 EAST;

N.M.P.M., LEA COUNTY, NEW MEXICO.

Survey Date: 02-20-2004

Sheet 1 of 1 Sheets



12600 West I-20 East - Odessa, Texas 79765

EME
M-5 SWD
MW-1

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 P-6 Line Leak Site

Lab Order Number: 4B20002

Report Date: 02/24/04

Trident Environmental
P.O. Box 7624
Midland TX, 79708

Project: Rice Operating Company
Project Number: V-117
Project Manager: Gilbert Vandeventer

Fax: 682-0727
Reported:
02/24/04 15:02

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
P6-1	4B20002-01	Water	02/19/04 09:20	02/19/04 16:35
P6-2	4B20002-02	Water	02/19/04 10:10	02/19/04 16:35
M5-1 (S)	4B20002-03	Water	02/19/04 12:50	02/19/04 16:35

Trident Environmental
P.O. Box 7624
Midland TX, 79708

Project: Rice Operating Company
Project Number: V-117
Project Manager: Gilbert Vandeventer

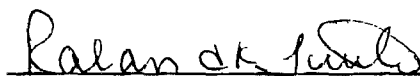
Fax: 682-0727
Reported:
02/24/04 15:02

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
P6-1 (4B20002-01)									
Benzene	ND	0.00100	mg/L	1	EB42310	02/23/04	02/23/04	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		102 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		91.5 %	80-120		"	"	"	"	
P6-2 (4B20002-02)									
Benzene	ND	0.00100	mg/L	1	EB42310	02/23/04	02/23/04	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		108 %	80-120		"	"	"	"	
MS-1 (S) (4B20002-03)									
Benzene	ND	0.00100	mg/L	1	EB42310	02/23/04	02/23/04	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		81.0 %	80-120		"	"	"	"	

Environmental Lab of Texas

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Quality Assurance Review

Page 2 of 10

Trident Environmental
P.O. Box 7624
Midland TX, 79708

Project: Rice Operating Company
Project Number: V-117
Project Manager: Gilbert Vandevcenter

Fax: 682-0727
Reported:
02/24/04 15:02

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
P6-1 (4B20002-01)									
Carbonate Alkalinity	ND	0.100	mg/L	1	EB42104	02/20/04	02/20/04	EPA 310.2M	
Bicarbonate Alkalinity	194	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	8510	5.00	"	"	EB42102	02/21/04	02/21/04	EPA 325.3	
Total Dissolved Solids	16600	5.00	"	"	EB42404	02/24/04	02/24/04	EPA 160.1	
Sulfate	830	6.25	"	12.5	EB42103	02/21/04	02/21/04	EPA 375.4	
P6-2 (4B20002-02)									
Carbonate Alkalinity	ND	0.100	mg/L	1	EB42104	02/20/04	02/20/04	EPA 310.2M	
Bicarbonate Alkalinity	227	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	9040	5.00	"	"	EB42102	02/21/04	02/21/04	EPA 325.3	
Total Dissolved Solids	19700	5.00	"	"	EB42404	02/24/04	02/24/04	EPA 160.1	
Sulfate	1260	12.5	"	25	EB42103	02/21/04	02/21/04	EPA 375.4	
M5-1 (S) (4B20002-03)									
Carbonate Alkalinity	ND	0.100	mg/L	1	EB42104	02/20/04	02/20/04	EPA 310.2M	
Bicarbonate Alkalinity	186	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	5320	5.00	"	"	EB42102	02/21/04	02/21/04	EPA 325.3	
Total Dissolved Solids	14500	5.00	"	"	EB42404	02/24/04	02/24/04	EPA 160.1	
Sulfate	454	6.25	"	12.5	EB42103	02/21/04	02/21/04	EPA 375.4	

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Quality Assurance Review

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Trident Environmental
P.O. Box 7624
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Project: Rice Operating Company
Project Number: V-117
Project Manager: Gilbert Vandeventer

Fax: 682-0727
Reported:
02/24/04 15:02

Total Metals by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
P6-1 (4B20002-01)									
Calcium	1800	10.0	mg/L	1000	EB42311	02/23/04	02/23/04	EPA 6010B	
Magnesium	482	0.100	"	100	"	"	02/23/04	"	
Potassium	65.3	0.500	"	10	"	"	02/23/04	"	
Sodium	3720	10.0	"	1000	"	"	02/23/04	"	
P6-2 (4B20002-02)									
Calcium	1590	10.0	mg/L	1000	EB42311	02/23/04	02/23/04	EPA 6010B	
Magnesium	451	0.100	"	100	"	"	02/23/04	"	
Potassium	75.9	0.500	"	10	"	"	02/23/04	"	
Sodium	3900	10.0	"	1000	"	"	02/23/04	"	
M5-1 (S) (4B20002-03)									
Calcium	1630	10.0	mg/L	1000	EB42311	02/23/04	02/23/04	EPA 6010B	
Magnesium	352	0.100	"	100	"	"	02/23/04	"	
Potassium	48.4	0.500	"	10	"	"	02/23/04	"	
Sodium	1970	10.0	"	1000	"	"	02/23/04	"	

Environmental Lab of Texas

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Ralca CK 1-10
Quality Assurance Review

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Trident Environmental
P.O. Box 7624
Midland TX, 79708

Project: Rice Operating Company
Project Number: V-117
Project Manager: Gilbert Vandeventer

Fax: 682-0727
Reported:
02/24/04 15:02

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 EB42310 - EPA 5030C (GC)										
Blank (EB42310-BLK1)				Prepared & Analyzed: 02/23/04						
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	23.5		ug/l	20.0		118	80-120			
Surrogate: 4-Bromofluorobenzene	16.8		"	20.0		84.0	80-120			
LCS (EB42310-BS1)				Prepared & Analyzed: 02/23/04						
Benzene	97.9		ug/l	100		97.9	80-120			
Toluene	100		"	100		100	80-120			
Ethylbenzene	100		"	100		100	80-120			
Xylene (p/m)	216		"	200		108	80-120			
Xylene (o)	112		"	100		112	80-120			
Surrogate: a,a,a-Trifluorotoluene	21.8		"	20.0		109	80-120			
Surrogate: 4-Bromofluorobenzene	22.7		"	20.0		114	80-120			
Calibration Check (EB42310-CCV1)				Prepared & Analyzed: 02/23/04						
Benzene	89.1		ug/l	100		89.1	80-120			
Toluene	92.0		"	100		92.0	80-120			
Ethylbenzene	93.8		"	100		93.8	80-120			
Xylene (p/m)	197		"	200		98.5	80-120			
Xylene (o)	102		"	100		102	80-120			
Surrogate: a,a,a-Trifluorotoluene	18.9		"	20.0		94.5	80-120			
Surrogate: 4-Bromofluorobenzene	23.9		"	20.0		120	80-120			
Duplicate (EB42310-DUP1)				Source: 4B20004-02		Prepared & Analyzed: 02/23/04				
Benzene	0.0163	0.00100	mg/L		0.0142			13.8	20	
Toluene	0.00542	0.00100	"		0.00457			17.0	20	
Ethylbenzene	0.00483	0.00100	"		0.00422			13.5	20	
Xylene (p/m)	0.00235	0.00100	"		0.00201			15.6	20	
Xylene (o)	0.00108	0.00100	"		0.000961			11.7	20	
Surrogate: a,a,a-Trifluorotoluene	29.9		ug/l	20.0		150	80-120			S-04
Surrogate: 4-Bromofluorobenzene	28.9		"	20.0		144	80-120			S-04

Environmental Lab of Texas

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Ralan A. K. Kuhl
Quality Assurance Review

Page 5 of 10

Trident Environmental
P.O. Box 7624
Midland TX, 79708

Project: Rice Operating Company
Project Number: V-117
Project Manager: Gilbert Vandeventer

Fax: 682-0727
Reported:
02/24/04 15:02

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							

Environmental Lab of Texas

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Ralanda K. Schulz
Quality Assurance Review

Page 6 of 10

Trident Environmental
P.O. Box 7624
Midland TX, 79708

Project: Rice Operating Company
Project Number: V-117
Project Manager: Gilbert Vandeventer

Fax: 682-0727
Reported:
02/24/04 15:02

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	

Environmental Lab of Texas

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Kalan K. Joubert
Quality Assurance Review

Trident Environmental
P.O. Box 7624
Midland TX, 79708

Project: Rice Operating Company
Project Number: V-117
Project Manager: Gilbert Vandeventer

Fax: 682-0727
Reported:
02/24/04 15:02

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 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

Environmental Lab of Texas

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Quality Assurance Review

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Trident Environmental
P.O. Box 7624
Midland TX, 79708

Project: Rice Operating Company
Project Number: V-117
Project Manager: Gilbert Vandeventer

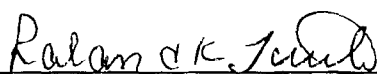
Fax: 682-0727
Reported:
02/24/04 15:02

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

Page 9 of 10

Trident Environmental
P.O. Box 7624
Midland TX, 79708

Project: Rice Operating Company
Project Number: V-117
Project Manager: Gilbert Vandeventer

Fax: 682-0727
Reported:
02/24/04 15:02

Notes and Definitions

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

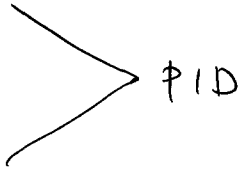
The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.


Quality Assurance Review

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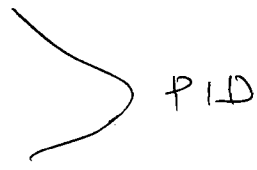
Remed. Soil
4-Wall Field comp.
Bottom Field comp.

● N Wall 1
2
3
4
5



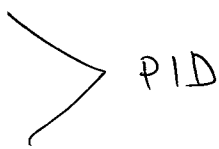
PID

S Wall 1
2
3
4
5



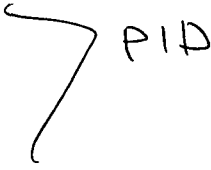
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E Wall 1
2
3
4
5



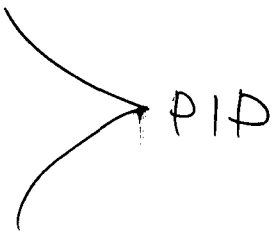
PID

W Wall 1
2
3
4
5



PID

Bottom 1
2
3
4
5

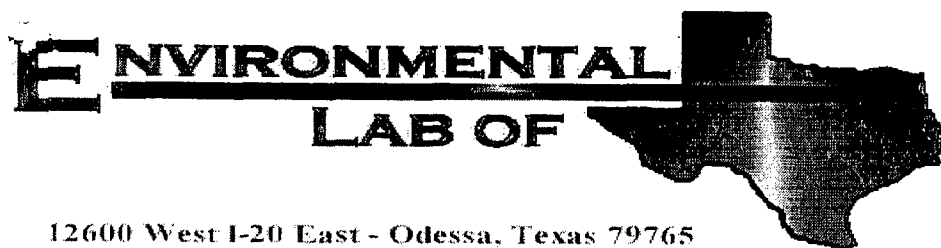


PID

Report:

4-Wall Lab Comp.

Bottom Lab Comp



RECEIVED
FEB 02 2005
OIL CONSERVATION
DIVISION

Analytical Report

Prepared for:

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

Project: EME System M-5 SWD Site
Project Number: None Given
Location: T20S, R37E, Sec 5, Unit Letter M

Lab Order Number: 4E07004

Report Date: 05/12/04

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
05/12/04 15:04

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
M5-1	4E07004-01	Water	05/06/04 13:20	05/07/04 08:05

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

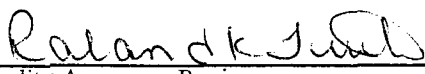
Fax: (505) 397-1471
Reported:
05/12/04 15:04

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
M5-1 (4E07004-01) 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		110 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		90.0 %	80-120		"	"	"	"	

Environmental Lab of Texas

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Quality Assurance Review

Page 2 of 10

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
05/12/04 15:04

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
M5-1 (4E07004-01) Water									
Carbonate Alkalinity	ND	0.100	mg/L	1	EE40710	05/07/04	05/07/04	EPA 310.2M	
Bicarbonate Alkalinity	210	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	5940	5.00	"	"	EE40709	05/07/04	05/07/04	EPA 325.3M	
Total Dissolved Solids	12400	5.00	"	"	EE41102	05/07/04	05/11/04	EPA 160.1	
Sulfate	420	5.00	"	10	EE41114	05/11/04	05/11/04	EPA 375.4	

Environmental Lab of Texas

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Quality Assurance Review

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

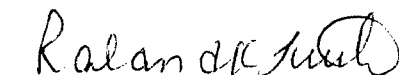
Reported:
05/12/04 15:04

Total Metals by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
M5-1 (4E07004-01) Water									
Calcium	2110	10.0	mg/L	1000	EE41104	05/10/04	05/11/04	EPA 6010B	
Magnesium	565	0.100	"	100	"	"	"	"	
Potassium	56.0	0.500	"	10	"	"	"	"	
Sodium	2520	10.0	"	1000	"	"	"	"	

Environmental Lab of Texas

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Quality Assurance Review

Page 4 of 10

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
05/12/04 15:04

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)

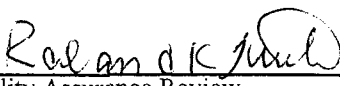
Source: 4E07001-01

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			

Environmental Lab of Texas

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Quality Assurance Review

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
05/12/04 15:04

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 EE41103 - EPA 5030C (GC)

Matrix Spike (EE41103-MS1)

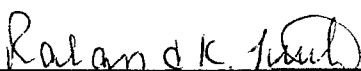
Source: 4E07001-02

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			

Environmental Lab of Texas

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Quality Assurance Review

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
05/12/04 15:04

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
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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
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Batch EE40710 - General Preparation (WetChem)

Blank (EE40710-BLK1)

Prepared & Analyzed: 05/07/04

Carbonate Alkalinity	ND	0.100	mg/L
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Bicarbonate Alkalinity	ND	2.00	"
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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
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Duplicate (EE40710-DUP1)

Source: 4E06007-02

Prepared & Analyzed: 05/07/04

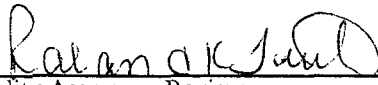
Carbonate Alkalinity	0.00	0.100	mg/L	0.00					20
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Bicarbonate Alkalinity	174	2.00	"	173				0.576	20
------------------------	-----	------	---	-----	--	--	--	-------	----

Hydroxide Alkalinity	0.00	0.100	"	0.00					20
----------------------	------	-------	---	------	--	--	--	--	----

Environmental Lab of Texas

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Quality Assurance Review

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
05/12/04 15:04

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)

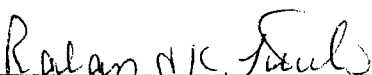
Source: 4E06007-02

Prepared & Analyzed: 05/11/04

Sulfate 270 2.50 mg/L 274 1.47 20

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

Page 8 of 10

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
05/12/04 15:04

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)

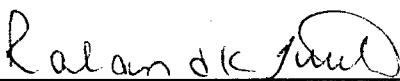
Source: 4E07001-01

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

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

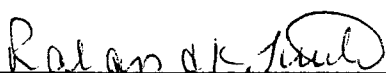
Reported:
05/12/04 15:04

Notes and Definitions

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

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

Page 10 of 10

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Name: EME System M-5 SWD Site

Project #:

Project Location: T20S, R37E, Sec 5, Unit Letter M

PO #:

Fax No: 505-397-1471



55715
Kilpatrick

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative	Matrix	Analyze For:
1007004	MS-1	05-06-04	1320	3	<input checked="" type="checkbox"/> Ice <input type="checkbox"/> HNO ₃ <input checked="" type="checkbox"/> HCl (BTEX analysis) <input type="checkbox"/> NaOH <input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> None (I) L HDP <input type="checkbox"/> Other (Specify)	<input checked="" type="checkbox"/> Water <input type="checkbox"/> Sludge <input type="checkbox"/> Soil <input type="checkbox"/> Other (Specify)	TPH: 418.1 8015M 1005 100 <input checked="" type="checkbox"/> Cations (Ca, Mg, Na, K) <input checked="" type="checkbox"/> Anions (Cl, SO ₄ , CO ₃ , HCO ₃) SAR / ESP / CEC Metals: As Ag Ba Cd Cr Pb Hg Se Volatiles Semivolatiles <input checked="" type="checkbox"/> BTEX 80218/5030 or BTEX 8260 RCI N.O.R.M. Total Dissolved Solids Standard TAT <input checked="" type="checkbox"/> RUSH TAT (Pre-Schedule)

Sampler Signature: *[Signature]* (2) 40mL

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

Sample Containers Intact?
Temperature Upon Receipt:
Laboratory Comments:

Relinquished by:		Date	05/06/04	Time	6:00 PM	Received by:		Date		Time	
Relinquished by:	Drop Box	Date	05-07-04	Time		Received by ELOT:		Date	05-07-04	Time	02:05

Environmental Lab of Texas

Variance / Corrective Action Report – Sample Log-In

Client: Price Operating

Date/Time: 05-07-04 @ 0900

Order #: 4E07064

Initials: JMM

Sample Receipt Checklist

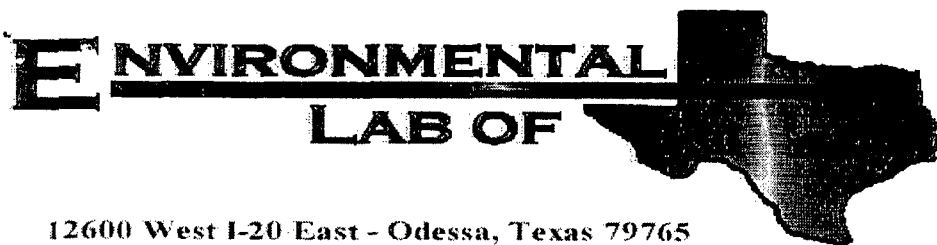
Temperature of container/cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	2.5	C
Shipping container/cooler in good condition?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Custody Seals intact on shipping container/cooler?	<input checked="" type="checkbox"/>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

Other observations:

Variance Documentation:

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

Corrective Action Taken:



12600 West I-20 East - Odessa, Texas 79765

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OIL CONSERVATION
DIVISION

Analytical Report

Prepared for:

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

Project: EME System M-5 SWD Site
Project Number: None Given
Location: T20S, R37E, Sec 5, Unit Letter M

Lab Order Number: 4H13001

Report Date: 08/20/04

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
08/20/04 17:59

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
M 5-1	4H13001-01	Water	08/11/04 10:41	08/12/04 16:45

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
08/20/04 17:59

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
M 5-1 (4H13001-01) 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: <i>a,a,a</i> -Trifluorotoluene		117 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		91.5 %	80-120		"	"	"	"	

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
08/20/04 17:59

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
M 5-1 (4H13001-01) Water									
Carbonate Alkalinity	ND	0.100	mg/L	1	EH41610	08/13/04	08/13/04	EPA 310.2M	
Bicarbonate Alkalinity	222	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	6910	5.00	"	"	EH41702	08/16/04	08/16/04	EPA 325.3M	
Total Dissolved Solids	17300	5.00	"	"	EH41801	08/17/04	08/18/04	EPA 160.1	
Sulfate	470	0.500	"	"	EH41701	08/16/04	08/16/04	EPA 375.4	

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
08/20/04 17:59

Total Metals by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
M 5-1 (4H13001-01) Water									
Calcium	2360	10.0	mg/L	1000	EH41719	08/17/04	08/17/04	EPA 6010B	
Magnesium	530	0.100	"	100	"	"	"	"	
Potassium	44.2	0.500	"	10	"	"	"	"	
Sodium	2580	10.0	"	1000	"	"	"	"	

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
08/20/04 17:59

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.
122 W. Taylor
Hobbs NM, 88240

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
08/20/04 17:59

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 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			

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
08/20/04 17:59

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 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
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Batch EH41701 - General Preparation (WetChem)

Blank (EH41701-BLK1)

Prepared & Analyzed: 08/16/04

Sulfate	ND	0.500	mg/L
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Calibration Check (EH41701-CCV1)

Prepared & Analyzed: 08/16/04

Sulfate	51.0		mg/L	50.0	102	80-120
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Duplicate (EH41701-DUP1)

Source: 4H12014-01

Prepared & Analyzed: 08/16/04

Sulfate	358	0.500	mg/L	322		10.6	20
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Batch EH41702 - General Preparation (WetChem)

Blank (EH41702-BLK1)

Prepared & Analyzed: 08/16/04

Chloride	ND	5.00	mg/L
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Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471
Reported:
08/20/04 17:59

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 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			
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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	
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Reference (EH41702-SRM1) Prepared & Analyzed: 08/16/04

Chloride	4960		mg/L	5000		99.2	80-120			
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Batch EH41801 - Filtration Preparation

Blank (EH41801-BLK1) Prepared: 08/17/04 Analyzed: 08/18/04

Total Dissolved Solids	ND	5.00	mg/L							
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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	
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Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
08/20/04 17:59

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

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
08/20/04 17:59

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference
LCS Laboratory Control Spike
MS Matrix Spike
Dup Duplicate

Report Approved By:

Raland K. Tuttle

Date:

8-20-04

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.

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

Environmental Lab of Texas

Variance / Corrective Action Report – Sample Log-In

Client: Rice Operating

Date/Time: 08-13-04 @ 0800

Order #: 4413001

Initials: JMM

Sample Receipt Checklist

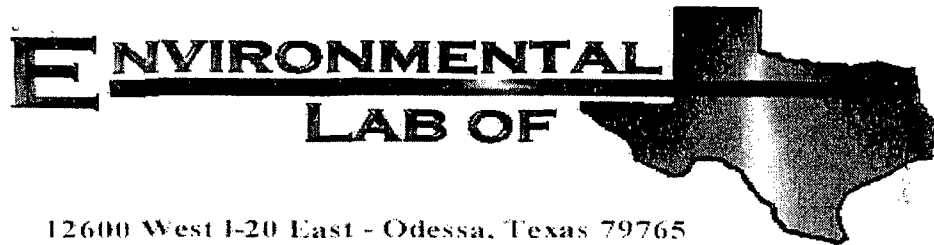
Temperature of container/cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	-1.0	C
Shipping container/cooler in good condition?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Custody Seals intact on shipping container/cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Not present	
Custody Seals intact on sample bottles?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Not present	
Chain of custody present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Sample Instructions complete on Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Chain of Custody signed when relinquished and received?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Chain of custody agrees with sample label(s)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Container labels legible and intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Sample Matrix and properties same as on chain of custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Samples in proper container/bottle?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Samples properly preserved?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Sample bottles intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Preservations documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Containers documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Sufficient sample amount for indicated test?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
All samples received within sufficient hold time?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
VOC samples have zero headspace?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Not Applicable	

Other observations:

Variance Documentation:

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

Corrective Action Taken:



12600 West I-20 East - Odessa, Texas 79765

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OIL CONSERVATION
DIVISION

MW

Analytical Report

Prepared for:

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

Project: EME System M-5 SWD Site
Project Number: None Given
Location: T20S, R37E, Sec 5, Unit Letter M

Lab Order Number: 4K11005

Report Date: 11/22/04

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
11/22/04 11:44

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
M5-1	4K11005-01	Water	11/10/04 10:30	11/11/04 11:00

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
11/22/04 11:44

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
M5-1 (4K11005-01) 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: <i>a,a,a</i> -Trifluorotoluene		96.0 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %	80-120		"	"	"	"	

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
11/22/04 11:44

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
M5-1 (4K11005-01) Water									
Carbonate Alkalinity	ND	0.100	mg/L	1	EK41814	11/11/04	11/11/04	EPA 310.2M	
Bicarbonate Alkalinity	256	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	7090	5.00	"	"	EK41809	11/17/04	11/17/04	EPA 325.3M	
Total Dissolved Solids	14000	5.00	"	"	EK41206	11/11/04	11/11/04	EPA 160.1	
Sulfate	614	6.25	"	12.5	EK41904	11/11/04	11/11/04	EPA 375.4	

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
11/22/04 11:44

Total Metals by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
M5-1 (4K11005-01) Water									
Calcium	1600	10.0	mg/L	1000	EK42201	11/15/04	11/19/04	EPA 6010B	
Magnesium	428	0.100	"	100	"	"	"	"	
Potassium	39.2	0.500	"	10	"	"	"	"	
Sodium	1940	10.0	"	1000	"	"	"	"	

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
11/22/04 11:44

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			

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
11/22/04 11:44

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 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			

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
11/22/04 11:44

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 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 "

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
11/22/04 11:44

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 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.
122 W. Taylor
Hobbs NM, 88240

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
11/22/04 11:44

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 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	

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
11/22/04 11:44

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	

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
11/22/04 11:44

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference
LCS Laboratory Control Spike
MS Matrix Spike
Dup Duplicate

Report Approved By:

Roland K. Tuttle

Date:

11-22-04

Roland 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.

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

**12600 West I-20 East
Odessa, Texas 79765**

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:[illegible]

Environmental Lab of Texas

Variance / Corrective Action Report – Sample Log-In

Client: Rice Operating Co.

Date/Time: 11-11-04 @ 1200

Order #: 4K11005

Initials: Jmm

Sample Receipt Checklist

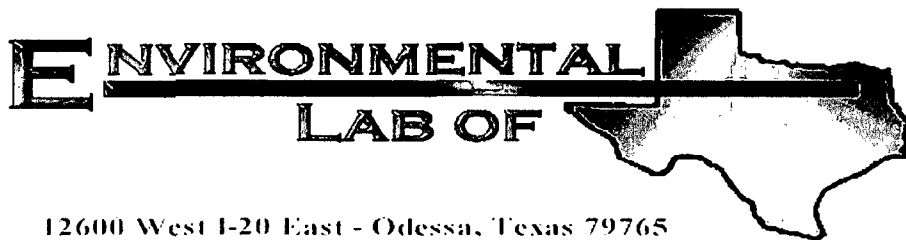
Temperature of container/cooler?	<u>Yes</u>	No	-2.5 C
Shipping container/cooler in good condition?	<u>Yes</u>	No	
Custody Seals intact on shipping container/cooler?	Yes	No	<u>Not present</u>
Custody Seals intact on sample bottles?	Yes	No	<u>Not present</u>
Chain of custody present?	<u>Yes</u>	No	
Sample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

Other observations:

Variance Documentation:

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

Corrective Action Taken:



RECEIVED

MAR 0 2005

OIL CONSUMPTION
LIVE

Analytical Report

Prepared for:

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

Project: EME System M-5 SWD Site

Project Number: None Given

Location: T2OS, R36E, Sec 5, Unit Letter M

Lab Order Number: 5B09007

Report Date: 02/20/05

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
02/20/05 14:23

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
M5-1	5B09007-01	Water	02/08/05 09:40	02/09/05 07:00

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
02/20/05 14:23

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
M5-1 (5B09007-01) Water									
Benzene	ND	0.00100	mg/L	1	EB51807	02/14/05	02/15/05	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene		110 %	80-120		"	"	"	"	
Surrogate: <i>4</i> -Bromofluorobenzene		95.5 %	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.

Page 2 of 10

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
02/20/05 14:23

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
M5-1 (5B09007-01) Water									
Total Alkalinity	238	2.00	mg/L	1	EB51404	02/15/05	02/15/05	EPA 310.2M	
Chloride	6710	500	"	1000	EB51713	02/10/05	02/10/05	EPA 300.0	
Total Dissolved Solids	13200	5.00	"	1	EB51004	02/09/05	02/10/05	EPA 160.1	
Sulfate	1450	500	"	1000	EB51713	02/10/05	02/10/05	EPA 300.0	

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
02/20/05 14:23

Total Metals by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
M5-1 (5B09007-01) Water									
Calcium	1800	10.0	mg/L	1000	EB51702	02/14/05	02/16/05	EPA 6010B	
Magnesium	431	0.100	"	100	"	"	"	"	
Potassium	40.4	0.500	"	10	"	"	"	"	
Sodium	2420	10.0	"	1000	"	"	"	"	

Environmental Lab of Texas

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Page 4 of 10

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
02/20/05 14:23

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 EB51807 - EPA 5030C (GC)

Blank (EB51807-BLK1)

Prepared & Analyzed: 02/14/05

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	16.5		ug/l	20.0		82.5	80-120			
Surrogate: 4-Bromofluorobenzene	17.4		"	20.0		87.0	80-120			

LCS (EB51807-BS1)

Prepared & Analyzed: 02/14/05

Benzene	105		ug/l	100		105	80-120			
Toluene	105		"	100		105	80-120			
Ethylbenzene	95.9		"	100		95.9	80-120			
Xylene (p/m)	196		"	200		98.0	80-120			
Xylene (o)	95.7		"	100		95.7	80-120			
Surrogate: a,a,a-Trifluorotoluene	16.5		"	20.0		82.5	80-120			
Surrogate: 4-Bromofluorobenzene	16.8		"	20.0		84.0	80-120			

LCS Dup (EB51807-BSD1)

Prepared & Analyzed: 02/14/05

Benzene	113		ug/l	100		113	80-120	7.34	20	
Toluene	112		"	100		112	80-120	6.45	20	
Ethylbenzene	107		"	100		107	80-120	10.9	20	
Xylene (p/m)	224		"	200		112	80-120	13.3	20	
Xylene (o)	111		"	100		111	80-120	14.8	20	
Surrogate: a,a,a-Trifluorotoluene	18.6		"	20.0		93.0	80-120			
Surrogate: 4-Bromofluorobenzene	20.2		"	20.0		101	80-120			

Calibration Check (EB51807-CCV1)

Prepared: 02/14/05 Analyzed: 02/16/05

Benzene	97.5		ug/l	100		97.5	80-120			
Toluene	104		"	100		104	80-120			
Ethylbenzene	93.1		"	100		93.1	80-120			
Xylene (p/m)	194		"	200		97.0	80-120			
Xylene (o)	97.9		"	100		97.9	80-120			
Surrogate: a,a,a-Trifluorotoluene	16.7		"	20.0		83.5	80-120			
Surrogate: 4-Bromofluorobenzene	17.8		"	20.0		89.0	80-120			

Environmental Lab of Texas

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Page 5 of 10

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
02/20/05 14:23

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 EB51807 - EPA 5030C (GC)

Matrix Spike (EB51807-MS1)

Source: 5B09008-01

Prepared: 02/14/05 Analyzed: 02/18/05

Benzene	93.3		ug/l	100	ND	93.3	80-120			
Toluene	101		"	100	ND	101	80-120			
Ethylbenzene	102		"	100	ND	102	80-120			
Xylene (p/m)	206		"	200	ND	103	80-120			
Xylene (o)	97.3		"	100	ND	97.3	80-120			
Surrogate: a,a,a-Trifluorotoluene	23.3		"	20.0		116	80-120			
Surrogate: 4-Bromofluorobenzene	20.4		"	20.0		102	80-120			

Environmental Lab of Texas

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Page 6 of 10

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
02/20/05 14:23

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 EB51004 - General Preparation (WetChem)

Blank (EB51004-BLK1)

Prepared: 02/09/05 Analyzed: 02/10/05

Total Dissolved Solids ND 5.00 mg/L

Duplicate (EB51004-DUP1)

Source: 5B09003-01

Prepared: 02/09/05 Analyzed: 02/10/05

Total Dissolved Solids 16200 5.00 mg/L 14600 10.4 20

Batch EB51404 - General Preparation (WetChem)

Blank (EB51404-BLK1)

Prepared & Analyzed: 02/15/05

Total Alkalinity ND 2.00 mg/L

Duplicate (EB51404-DUP1)

Source: 5B09003-01

Prepared & Analyzed: 02/15/05

Total Alkalinity 395 2.00 mg/L 396 0.253 20

Reference (EB51404-SRM1)

Prepared & Analyzed: 02/15/05

Carbonate Alkalinity 0.0510 mg/L 0.0500 102 80-120

Batch EB51713 - General Preparation (WetChem)

Blank (EB51713-BLK1)

Prepared & Analyzed: 02/10/05

Sulfate ND 0.500 mg/L

Chloride ND 0.500 "

LCS (EB51713-BS1)

Prepared & Analyzed: 02/10/05

Sulfate 9.66 mg/L 10.0 96.6 80-120

Chloride 9.56 " 10.0 95.6 80-120

Environmental Lab of Texas

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Page 7 of 10

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
02/20/05 14:23

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 EB51713 - General Preparation (WetChem)

LCS Dup (EB51713-BSD1)

Prepared & Analyzed: 02/10/05

Sulfate	9.64		mg/L	10.0		96.4	80-120	0.207	20	
Chloride	9.51		"	10.0		95.1	80-120	0.524	20	

Calibration Check (EB51713-CCV1)

Prepared & Analyzed: 02/10/05

Chloride	9.73		mg/L	10.0		97.3	80-120			
Sulfate	9.88		"	10.0		98.8	80-120			

Duplicate (EB51713-DUP1)

Source: 5B09004-01

Prepared & Analyzed: 02/10/05

Chloride	304	10.0	mg/L		304			0.00	20	
Sulfate	357	10.0	"		356			0.281	20	

Environmental Lab of Texas

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Page 8 of 10

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
02/20/05 14:23

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 EB51702 - 6010B/No Digestion

Blank (EB51702-BLK1)

Prepared: 02/14/05 Analyzed: 02/16/05

Calcium	ND	0.0100	mg/L
Magnesium	ND	0.00100	"
Potassium	ND	0.0500	"
Sodium	ND	0.0100	"

Calibration Check (EB51702-CCV1)

Prepared: 02/14/05 Analyzed: 02/16/05

Calcium	2.22		mg/L	2.00	111	85-115
Magnesium	2.08		"	2.00	104	85-115
Potassium	1.75		"	2.00	87.5	85-115
Sodium	1.94		"	2.00	97.0	85-115

Duplicate (EB51702-DUP1)

Source: 5B09003-01

Prepared: 02/14/05 Analyzed: 02/16/05

Calcium	905	1.00	mg/L	848	6.50	20
Magnesium	254	0.100	"	239	6.09	20
Potassium	88.3	2.50	"	90.7	2.68	20
Sodium	5810	10.0	"	4840	18.2	20

Environmental Lab of Texas

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

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

Project: EME System M-5 SWD Site
Project Number: None Given
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:
02/20/05 14:23

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference
LCS Laboratory Control Spike
MS Matrix Spike
Dup Duplicate

Report Approved By:

Raland K. Tuttle

Date:

2/20/2005

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.

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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.

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12600 West I-20 East
Odessa, Texas 79765

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Name: EME System M-5 SWD Site

Project #:

Project Location: T205, R36E, Sec 5, Unit Letter M

COC #: V117M5-0205

Fax No: 505-397-1471

Y. L. B. J.

Good morning

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

Client: Rice Operating Co.

Date/Time: 02-09-05 @ 0700

Order #: 5309007

Initials: JMM

Sample Receipt Checklist

Temperature of container/cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	-1.0 C
Shipping container/cooler in good condition?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Custody Seals intact on shipping container/cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Not present
Custody Seals intact on sample bottles?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Not present
Chain of custody present?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Sample Instructions complete on Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Chain of Custody signed when relinquished and received?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Chain of custody agrees with sample label(s)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Container labels legible and intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Sample Matrix and properties same as on chain of custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Samples in proper container/bottle?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Samples properly preserved?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Sample bottles intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Preservations documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Containers documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Sufficient sample amount for indicated test?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
All samples received within sufficient hold time?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
VOC samples have zero headspace?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Not Applicable

→ on Black Bay
not in dropbox
Client dropped by
later

Other observations:

Variance Documentation:

Contact Person: - Gal Van Derent Date/Time: 02-09-05 @ 0800 Contacted by: Jeanne McMurry

Regarding:

missing COC

Corrective Action Taken:

Client will bring COC by later this morning
