

AP - 65

ANNUAL MONITORING REPORT

YEAR(S):

2002

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 0841

April 8, 2003

RECEIVED

APR 15 2003

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

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

**RE: 2002 MONITOR WELL REPORT/SAMPLING SUMMARY
EUNICE MONUMENT EUMONT (EME) M-9 SWD FACILITY
SEC. 9, T20S, R37E
LEA COUNTY, NEW MEXICO**

Mr. Price:

Rice Operating Company (ROC) takes this opportunity to submit the 2002 Monitor Well Report for the M-9 Salt Water Disposal Facility located near Monument, New Mexico. There is one monitor well at this site that is sampled quarterly pursuant to NMOCD guidelines. This groundwater impact became evident during the removal of redwood tanks in 2002. During the excavation of impact at this site, the original monitor well was sacrificed. A new monitor well was installed in October of 2002 and the well is now referred to as "MW-1A."

First quarter sampling events for 2002 were performed by Environmental Technology Group, Inc. of Hobbs. Subsequent quarterly samples were obtained by ROC. Cardinal Laboratories of Hobbs and Environmental Lab Of Texas of Odessa provided laboratory analysis. In 2003, ROC will continue to sample the monitor well with Environmental Lab performing the water analysis.

Trident Environmental of Midland, Texas has been contracted by ROC to generate a work plan to evaluate the extent of groundwater impact at this site. NMOCD can anticipate the submittal of the work plan for this site in 2003. After NMOCD approval, an AFE will be submitted to System Partners for approval.

ROC is the service provider (operator) for the EME Salt Water Disposal System and has not 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

Kristin Farris

Kristin Farris
Project Scientist

Enclosures: Summary table & graph
 Well log for new well
 Analytical results

Cc: LBG, CDH, file, Chris Williams
 NMOCD, District I Office
 1625 N. French Drive
 Hobbs, NM 88240

EME M-9 Tank Replacement
M, 9, 20S, 37E SWD facility

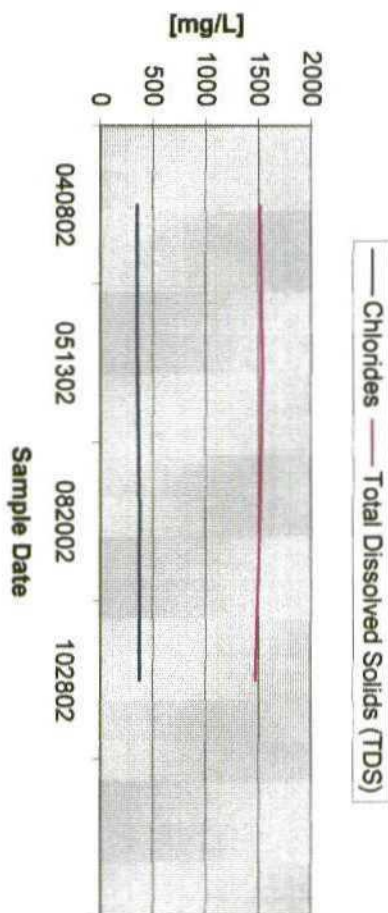
Rice Operating Co. Monitor Well Data Sheet

All parameter concentrations are in mg/L.

MW #	(ft)		(gal)		SAMPLE DATE	TIME	CL-	TDS	BENZENE	TOLUENE	ETHYL BENZENE	TOTAL XYLENES
	WATER LEVEL	TOTAL DEPTH	WELL VOLUME	VOLUME BAILED								
1	XXX	XXX	XXX	XXX	040802	0930	348	1512	<0.002	<0.002	<0.002	<0.006
1	21.02	38.40	2.780	8.50	051302	1630	354	1540	<0.001	<0.001	<0.001	<0.001
1	22.45	38.41	2.554	7.75	082002	1015	376	1517	<0.002	<0.002	<0.002	<0.006
1A	19.10	28.45	1.496	4.50	102802	1540	372	1470	<0.001	<0.001	<0.001	<0.001

new well

EME M-9 Tank Replacement Monitor Well



ANALYTICAL REPORT

Prepared for:

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

Project: M-9 SWD

PO#: 510

Order#: G0204875

Report Date: 11/06/2002

Certificates

US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

Rice Operating
122 W. Taylor
Hobbs, NM 88240
505-397-1471

Order#: G0204875
Project: None Given
Project Name: M-9 SWD
Location: EME

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u> <u>Collected</u>	<u>Date / Time</u> <u>Received</u>	<u>Container</u>	<u>Preservative</u>
0204875-01	MW 1	WATER	10/28/02 15:40	10/29/02 19:00	See COC	See COC
<u>Lab Testing:</u>		Rejected: No	Temp: 7.5 C			
8021B/5030 BTEX						
Anions						
Cations						
Total Dissolved Solids (TDS)						

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0204875
Project: None Given
Project Name: M-9 SWD
Location: EME

Lab ID: 0204875-01
Sample ID: MW 1

8021B/5030 BTEX

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
0003648-02		11/1/02	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	<0.001	0.001
Ethylbenzene	<0.001	0.001
Toluene	<0.001	0.001
p/m-Xylene	<0.001	0.001
o-Xylene	<0.001	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	94%	80	120
Bromofluorobenzene	97%	80	120

Approval:

Raland K. Tuttle, Lab Director, QA Officer
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

Date

Raland K. Tuttle 11-07-02

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0204875
Project: None Given
Project Name: M-9 SWD
Location: EME

Lab ID: 0204875-01
Sample ID: MW 1

Anions

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Bicarbonate Alkalinity	298	mg/L	1	2.00	310.1	10/31/02	SB
Carbonate Alkalinity	<0.10	mg/L	1	0.10	310.1	10/31/02	SB
Chloride	372	mg/L	1	5.00	9253	10/31/02	SB
Hydroxide Alkalinity	<0.10	mg/L	1	0.10	310.1	10/31/02	SB
SULFATE, 375.4	354	mg/L	10	5.0	375.4	10/31/02	SB

Cations

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Calcium	73.9	mg/L	10	0.10	6010B	11/6/02	SM
Magnesium	42.9	mg/L	10	0.010	6010B	11/6/02	SM
Potassium	11.7	mg/L	10	0.50	6010B	11/6/02	SM
Sodium	270	mg/L	100	1.0	6010B	11/6/02	SM

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Total Dissolved Solids (TDS)	1470	mg/L	1	5.0	160.1	10/30/02	TAL

Approval: Raland K. Tuttle 11-07-02
Raland K. Tuttle, Lab Director, QA Officer Date
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0204875

BLANK							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L		0003648-02			<0.001		
Ethylbenzene-mg/L		0003648-02			<0.001		
Toluene-mg/L		0003648-02			<0.001		
p/m-Xylene-mg/L		0003648-02			<0.001		
o-Xylene-mg/L		0003648-02			<0.001		
CONTROL							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L		0003648-03		0.1	0.096	96.%	
Ethylbenzene-mg/L		0003648-03		0.1	0.099	99.%	
Toluene-mg/L		0003648-03		0.1	0.098	98.%	
p/m-Xylene-mg/L		0003648-03		0.2	0.208	104.%	
o-Xylene-mg/L		0003648-03		0.1	0.101	101.%	
CONTROL DUP							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L		0003648-04		0.1	0.100	100.%	4.1%
Ethylbenzene-mg/L		0003648-04		0.1	0.103	103.%	4.%
Toluene-mg/L		0003648-04		0.1	0.102	102.%	4.%
p/m-Xylene-mg/L		0003648-04		0.2	0.218	109.%	4.7%
o-Xylene-mg/L		0003648-04		0.1	0.106	106.%	4.8%
SRM							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L		0003648-05		0.1	0.104	104.%	
Ethylbenzene-mg/L		0003648-05		0.1	0.109	109.%	
Toluene-mg/L		0003648-05		0.1	0.107	107.%	
p/m-Xylene-mg/L		0003648-05		0.2	0.230	115.%	
o-Xylene-mg/L		0003648-05		0.1	0.110	110.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Anions

Order#: G0204875

BLANK						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery RPD
Bicarbonate Alkalinity-mg/L		0003573-01			<2.00	
Carbonate Alkalinity-mg/L		0003574-01			<0.10	
Chloride-mg/L		0003572-01			<5.00	
Hydroxide Alkalinity-mg/L		0003575-01			<0.10	
SULFATE, 375.4-mg/L		0003614-01			<0.50	
DUPLICATE						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery RPD
Bicarbonate Alkalinity-mg/L		0204875-01	298		299	0.3%
Carbonate Alkalinity-mg/L		0204875-01	0		<0.10	0.0%
Hydroxide Alkalinity-mg/L		0204875-01	0		<0.10	0.0%
SULFATE, 375.4-mg/L		0204875-01	354		350	1.1%
MS						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery RPD
Chloride-mg/L		0204875-01	372	500	868	99.2%
MSD						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery RPD
Chloride-mg/L		0204875-01	372	500	860	97.6% 0.9%
SRM						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery RPD
Bicarbonate Alkalinity-mg/L		0003573-04		0.05	0.0496	99.2%
Carbonate Alkalinity-mg/L		0003574-04		0.05	0.0496	99.2%
Chloride-mg/L		0003572-04		5000	4960	99.2%
Hydroxide Alkalinity-mg/L		0003575-04		0.05	0.0496	99.2%
SULFATE, 375.4-mg/L		0003614-04		50	49.0	98.8%

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Cations

Order#: G0204875

BLANK							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L		0003651-02			<0.010		
Magnesium-mg/L		0003651-02			<0.001		
Potassium-mg/L		0003651-02			<0.050		
Sodium-mg/L		0003651-02			<0.010		
CONTROL							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L		0003651-03		2	1.99	99.5%	
Magnesium-mg/L		0003651-03		2	2.17	108.5%	
Potassium-mg/L		0003651-03		2	1.97	98.5%	
Sodium-mg/L		0003651-03		2	1.92	96.%	
CONTROL DUP							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L		0003651-04		2	2.04	102.%	2.5%
Magnesium-mg/L		0003651-04		2	2.24	112.%	3.2%
Potassium-mg/L		0003651-04		2	1.93	96.5%	2.1%
Sodium-mg/L		0003651-04		2	1.88	94.%	2.1%
SRM							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L		0003651-05		2	2.04	102.%	
Magnesium-mg/L		0003651-05		2	2.24	112.%	
Potassium-mg/L		0003651-05		2	1.93	96.5%	
Sodium-mg/L		0003651-05		2	1.88	94.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0204875

BLANK	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L		0003594-01			<5.0		
DUPLICATE	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L		0204875-01	1470		1480		0.7%

12600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager:

Kristin Farris

Company Name

Rice Operating

Company Address:

22 W. Taylor

City/State/Zip:

Hobbs, NM 88240

Telephone No: (

505) 393-9174

Sampler Signature:

Christie Farrie

Fax No: (505) 397-1471

Project Name:

~~XXXXXXXXXX~~ M-9 SWD

Project #:

Project Loc:

EME ~~DESSA~~

註

510

[illegible]



PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

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

Receiving Date: 08/20/02
Reporting Date: 08/23/02
Project Number: NOT GIVEN
Project Name: MW 1
Project Location: EME M-9

Sampling Date: 08/20/02
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: AH

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (μ S/cm)	T-Alkalinity (mgCaCO ₃ /L)
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ANALYSIS DATE:	08/23/02	08/21/02	08/21/02	08/21/02	08/21/02	08/21/02
H6967-1 MW 1	336	86.0	32.3	7.6	2087	284
Quality Control	NR	42.4	48.0	4.62	1489	NR
True Value QC	NR	50.0	50.0	5.00	1413	NR
% Recovery	NR	84.9	96.1	92.4	105	NR
Relative Percent Difference	NR	11.8	4.4	9.0	0.3	NR

METHODS:	SM3500-Ca-D	3500-Mg E	8049	120.1	310.1
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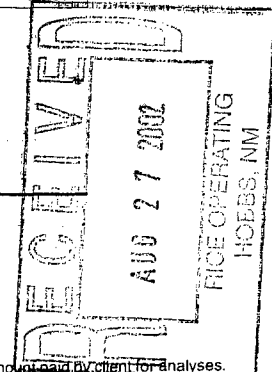
	Cl ⁻ (mg/L)	SO ₄ (mg/L)	CO ₃ (mg/L)	HCO ₃ (mg/L)	pH (s.u.)	TDS (mg/L)
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ANALYSIS DATE:	08/21/02	08/21/02	08/21/02	08/21/02	08/21/02	08/21/02
H6967-1 MW 1	376	263	0	347	7.13	1517
Quality Control	1030	49.34	NR	1016	6.98	NR
True Value QC	1000	50.00	NR	1000	7.00	NR
% Recovery	103	98.7	NR	102	99.8	NR
Relative Percent Difference	1.2	0.2	NR	13.6	0.4	NR

METHODS:	SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1
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Amy Hill
Chemist

8-23-02
Date



PLEASE NOTE: **Liability and Damages.** Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.



PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

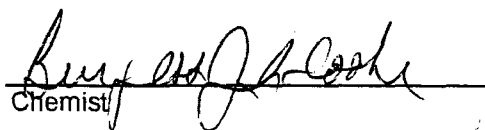
ANALYTICAL RESULTS FOR
RICE OPERATING CO.
ATTN: KRISTIN FARRIS
122 W. TAYLOR
HOBBS, NM 88240
FAX TO: (505) 397-1471

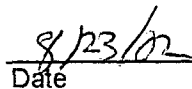
Receiving Date: 08/20/02
Reporting Date: 08/23/02
Project Number: NOT GIVEN
Project Name: MW 1
Project Location: EME M-9

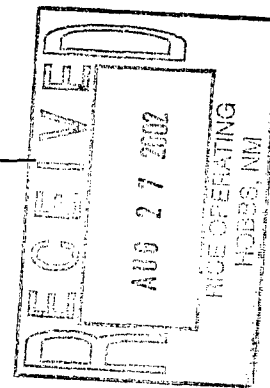
Sampling Date: 08/20/02
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: BC

LAB NUMBER	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE		08/23/02	08/25/02	08/23/02	08/23/02
H6967-1	MW 1	<0.002	<0.002	<0.002	<0.006
Quality Control		0.111	0.104	0.106	0.309
True Value QC		0.100	0.100	0.100	0.300
% Recovery		111	104	106	103
Relative Percent Difference		7.3	4.7	2.2	3.8

METHOD: EPA SW-846 8260


Chemist


Date



PLEASE NOTE: **Liability and Damages.** Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. **Cardinal** be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by **Cardinal**, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

22111 Beechwood, Abilene, TX 79603 101 East Marland, Hobbs, NM 88240
(915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

BILL TO										ANALYSIS REQUEST									
Company Name: Rice Operating Project Manager: Kristin Farris Address: 122 W. Taylor City: Hobbs State: NM Zip: 88240 Phone #: (505) 393-9174 Fax #: (505) 397-1471 Project #: Project Name: MW 1 Project Location: EME M-9 Sampler Name: K. Farris										P.O. #: Company: Attn: Address: City: State: Zip: Phone #: Fax #:									
Lab I.D. 46967-1 MW 1 46967-2 MW 1										Matrix # CONTAINERS: 1 (G) RAB OR (C) COMP. 2 GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:									
Sample I.D.										Preserv. ACID/BASE: ICE / COOL OTHER:									
DATE 082002 082002										TIME 1015 1015									
Major anions / cations BTEX TDS										Other X X									

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims, including those for negligence and any other cause, whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of this applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services furnished by Cardinal, regardless of whether such claim is based upon any of the above stated measures or otherwise.

Sampler Relinquished: Date: 082002 Time: 1625
 Relinquished By: *Kristin Farris*

Received By: Date: 082002 Time: 1625
 Received By: (Lab Staff) *Burke Cooke*

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

Remarks: Fax results to D. Anderson ASAP.

Phone Result: ☒ Yes ☐ No
Fax Result: ☒ Yes ☐ No

† Cardinal cannot accept verbal changes. Please fax written changes to (916) 673-7020.

ANALYTICAL REPORT

Prepared for:

DONNIE ANDERSON
RICE OPERATING COMPANY
122 W. TAYLOR
HOBBS, NM 88242

Project: M-9
Order#: G0203355
Report Date: 05/17/2002

Certificates

US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

RICE OPERATING COMPANY
122 W. TAYLOR
HOBBS, NM 88242
505-397-1471

Order#: G0203355
Project:
Project Name: M-9
Location: EME SWD

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u> <u>Collected</u>	<u>Date / Time</u> <u>Received</u>	<u>Container</u>	<u>Preservative</u>
0203355-01	MW 1	WATER	5/13/02 16:30	5/15/02 10:00	See COC	See COC
<u>Lab Testing:</u>		Rejected: No	Temp: See COC			
8021B/5030 BTEX						
Anions						
Cations						
Total Dissolved Solids (TDS)						

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

DONNIE ANDERSON
RICE OPERATING COMPANY
122 W. TAYLOR
HOBBS, NM 88242

Order#: G0203355
Project:
Project Name: M-9
Location: EME SWD

Lab ID: 0203355-01
Sample ID: MW 1

8021B/5030 BTEX

Method	Date	Date	Sample	Dilution		
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>	<u>Analyst</u>	<u>Method</u>
0001724-02		5/15/02 17:36	1	1	CK	8021B

Parameter	Result µg/L	RL
Benzene	<1.00	1.00
Ethylbenzene	<1.00	1.00
Toluene	<1.00	1.00
p/m-Xylene	<1.00	1.00
o-Xylene	<1.00	1.00

Approval:

Cele D. Keene 5/18/02
Raland K. Tuttle, Lab Director, QA Officer
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

Date

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

DONNIE ANDERSON
RICE OPERATING COMPANY
122 W. TAYLOR
HOBBS, NM 88242

Order#: G0203355
Project:
Project Name: M-9
Location: EME SWD

Lab ID: 0203355-01

Sample ID: MW 1

Anions

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Bicarbonate Alkalinity	232	mg/L	1	2.0	310.1	5/15/02	SB
Carbonate Alkalinity	<0.10	mg/L	1	0.1	310.1	5/15/02	SB
Chloride	354	mg/L	1	5.00	9253	5/16/02	SB
Hydroxide Alkalinity	<0.10	mg/L	1	0.1	310.1	5/15/02	SB
SULFATE, 375.4	610	mg/L	25	12.5	375.4	5/17/02	SB

Cations

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Calcium	94.0	mg/L	50	0.500	6010B	5/16/02	SM
Magnesium	39.9	mg/L	10	0.010	6010B	5/16/02	SM
Potassium	7.58	mg/L	10	0.500	6010B	5/16/02	SM
Sodium	330	mg/L	250	2.50	6010B	5/16/02	SM

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Total Dissolved Solids (TDS)	1540	mg/L	1	5.0	160.1	5/15/02	SB

Approval:

Raland K Tuttle 5-19-02

Raland K. Tuttle, Lab Director, QA Officer

Date

Celey D. Keene, Org. Tech. Director

Jeanne McMurrey, Inorg. Tech. Director

Sandra Biezugbe, Lab Tech.

Sara Molina, Lab Tech.

RL = Reporting Limit

N/A = Not Applicable

Page 1 of 1

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ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0203355

BLANK						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery RPD
Benzene-µg/L		0001724-02			<1.00	
Ethylbenzene-µg/L		0001724-02			<1.00	
Toluene-µg/L		0001724-02			<1.00	
p/m-Xylene-µg/L		0001724-02			<1.00	
o-Xylene-µg/L		0001724-02			<1.00	
CONTROL						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery RPD
Benzene-µg/L		0001724-03		100	115	115.%
Ethylbenzene-µg/L		0001724-03		100	114	114.%
Toluene-µg/L		0001724-03		100	112	112.%
p/m-Xylene-µg/L		0001724-03		200	225	112.5%
o-Xylene-µg/L		0001724-03		100	113	113.%
CONTROL DUP						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery RPD
Benzene-µg/L		0001724-04		100	114	114.% 0.9%
Ethylbenzene-µg/L		0001724-04		100	110	110.% 3.6%
Toluene-µg/L		0001724-04		100	109	109.% 2.7%
p/m-Xylene-µg/L		0001724-04		200	225	112.5% 0.%
o-Xylene-µg/L		0001724-04		100	112	112.% 0.9%
SRM						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery RPD
Benzene-µg/L		0001724-05		100	115	115.%
Ethylbenzene-µg/L		0001724-05		100	112	112.%
Toluene-µg/L		0001724-05		100	109	109.%
p/m-Xylene-µg/L		0001724-05		200	226	113.%
o-Xylene-µg/L		0001724-05		100	111	111.%

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Anions

Order#: G0203355

BLANK						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Bicarbonate Alkalinity-mg/L		0001737-01			<2.00	
Carbonate Alkalinity-mg/L		0001738-01			<0.10	
Chloride-mg/L		0001733-01			<5.00	
Hydroxide Alkalinity-mg/L		0001739-01			<0.10	
SULFATE, 375.4-mg/L		0001741-01			<0.50	
DUPLICATE						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Bicarbonate Alkalinity-mg/L		0203354-01	292		293	0.3%
Carbonate Alkalinity-mg/L		0203354-01	0		<0.10	0.0%
Hydroxide Alkalinity-mg/L		0203354-01	0		<0.10	0.0%
SULFATE, 375.4-mg/L		0203355-01	610		610	0.0%
MS						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Chloride-mg/L		0203354-01	860	500	1360	100.0%
MSD						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Chloride-mg/L		0203354-01	860	500	1360	100.0%
SRM						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Bicarbonate Alkalinity-mg/L		0001737-04		0.05	0.0496	99.2%
Carbonate Alkalinity-mg/L		0001738-04		0.05	0.0496	99.2%
Chloride-mg/L		0001733-04		5000	5050	101.0%
Hydroxide Alkalinity-mg/L		0001739-04		0.05	0.0496	99.2%
SULFATE, 375.4-mg/L		0001741-04		50	49.9	99.8%

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Cations

Order#: G0203355

BLANK						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Calcium-mg/L		0001725-02			<0.010	
Magnesium-mg/L		0001725-02			<0.001	
Potassium-mg/L		0001725-02			<0.050	
Sodium-mg/L		0001725-02			<0.010	
DUPLICATE						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Calcium-mg/L		0203354-01	266		264	0.8%
Magnesium-mg/L		0203354-01	106		106	0.0%
Potassium-mg/L		0203354-01	15.4		14.8	4.0%
Sodium-mg/L		0203354-01	303		308	1.6%
SRM						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Calcium-mg/L		0001725-05		2	1.99	99.5%
Magnesium-mg/L		0001725-05		2	2.06	103.0%
Potassium-mg/L		0001725-05		2	1.77	88.5%
Sodium-mg/L		0001725-05		2	1.91	95.5%

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0203355

BLANK	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L		0001731-01			<5.00		
DUPLICATE	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L		0203354-01	2680		2760		2.9%

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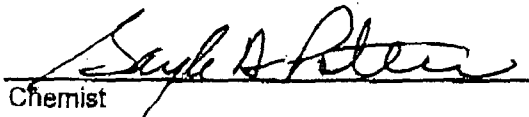
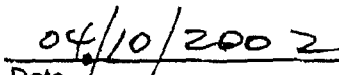
ANALYTICAL RESULTS FOR
ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: DONNIE ANDERSON
2540 W. MARLAND
HOBBS, NM 88240
FAX TO: (505) 397-4701

Receiving Date: 04/08/02
Reporting Date: 04/10/02
Project Number: RIC
Project Name: EME M-9
Project Location: MONUMENT, NM

Analysis Date: 04/10/02
Sampling Date: 04/08/02
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: AH
Analyzed By: AH

LAB NUMBER	SAMPLE ID	TDS (mg/L)
H8657-1	MW 1	1512
Quality Control		NR
True Value QC		NR
% Accuracy		NR
Relative Percent Difference		8.1

METHOD: 600/4-79-020 160.1


Chemist
Date

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H8657a


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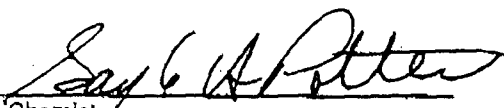
ANALYTICAL RESULTS FOR
 ENVIRONMENTAL TECHNOLOGY GROUP, INC.
 ATTN: DONNIE ANDERSON
 2540 W. MARLAND
 HOBBS, NM 88240
 FAX TO: (505) 397-4701

Receiving Date: 04/08/02
 Reporting Date: 04/10/02
 Project Number: RIC
 Project Name: EME M-9
 Project Location: MONUMENT, NM

Sampling Date: 04/08/02
 Sample Type: GROUNDWATER
 Sample Condition: COOL & INTACT
 Sample Received By: AH
 Analyzed By: AH

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (mS/cm)	T-Alkalinity (mgCaCO ₃ /L)
ANALYSIS DATE:		04/10/02	04/08/02	04/08/02	04/08/02	04/08/02	04/08/02
H6557-1	MW 1	180	96	38	6.63	2365	178
Quality Control		NR	55	49	5.27	1489	NR
True Value QC		NR	50	50	5.00	1413	NR
% Recovery		NR	110	97.2	105	105	NR
Relative Percent Difference		NR	0	6.0	0	0.3	NR
METHODS:		SM3500-Ca-D 3500-Mg E			8049	120.1	310.1

		Cl ⁻ (mg/L)	SO ₄ (mg/L)	CO ₃ (mg/L)	HCO ₃ (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:		04/08/02	04/08/02	04/08/02	04/08/02	04/08/02	04/10/02
H6557-1	MW 1	348	122	0	217	7.12	1512
Quality Control		1040	52.66	NR	975	7.00	NR
True Value QC		1000	50.00	NR	1000	7.00	NR
% Recovery		104	105	NR	97.5	100	NR
Relative Percent Difference		0.0	0.6	NR	2.7	0.3	8.1
METHODS:		SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1


 Chemist

 04/10/2002
 Date

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h6657



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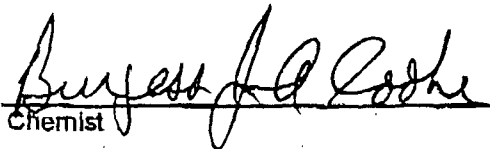
ANALYTICAL RESULTS FOR
ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: DONNIE ANDERSON
2540 W. MARLAND
HOBBS, NM 8240
FAX TO:

Receiving Date: 04/08/02
Reporting Date: 04/09/02
Project Number: RIC
Project Name: EME M-9
Project Location: MONUMENT, NM

Sampling Date: 04/08/02
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: AH
Analyzed By: BC

LAB NUMBER	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		04/08/02	04/08/02	04/08/02	04/08/02
H6657-1	MW 1	<0.002	<0.002	<0.002	<0.006
Quality Control		0.102	0.101	0.106	0.308
True Value QC		0.100	0.100	0.100	0.300
% Recovery		102	101	106	102
Relative Percent Difference		3.1	1.1	2.9	3.1

METHOD: EPA SW-846 8260


Chemist

4/9/03
Date

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H6657B.XLS



LABORATORIES, INC.
2141 Bassettwood, Addicks, TX 75001

101 East Marlband, Hobbs, NM 88240

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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