

AP - 59

G-35

**ANNUAL GW MONITORING
REPORT**

**DATE:
2002**

RICE Operating Company

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

AP-59
G-35 Annual GW Mon
Report
2002

CERTIFIED MAIL
RETURN RECEIPT NO. 7002 2410 0000 4940 0827

April 1, 2003

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

RECEIVED
APR 07 2003
ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

RE: 2002 MONITOR WELL REPORT/SAMPLING SUMMARY
VACUUM SWD SYSTEM
SEC. 35, T17S, R35E

Mr. Olson:

Rice Operating Company (ROC) takes this opportunity to submit the 2002 Monitor Well Report for the Vacuum Salt Water Disposal System. There are 2 sites in this system that have monitor wells that are sampled quarterly pursuant to NMOCD guidelines. These groundwater impacts became evident during the removal of redwood tanks.

Site Name	Unit Letter	Section	Township/Range
F-35	F	35	T17S, R35E
G-35	G	35	T17S, R35E

First quarter monitor well sampling events of 2002 were conducted by Environmental Plus, Inc. of Eunice. Cardinal Laboratory of Hobbs performed the water analysis. ROC performed the remainder of the sampling for the 2002 year. These samples were analyzed by Environmental Lab of Texas, of Odessa.

In 2003, ROC will continue to sample these monitor wells with Environmental Lab of Texas providing the water analysis. Closure advancement for the F-35 and G-35 sites is currently suspended due to System Partner negotiations.

ROC is the service provider (operator) for the Vacuum Salt Water Disposal System and has not ownership of any portion of pipeline, well, or facility. The Vacuum 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 for each site
 Analytical results

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

DRILLING LOG		Site Name/Location		Drilled by: F. Root	
RICE Operating Company 122 West Taylor Hobbs, New Mexico 88240 Phone: (505) 393-9174 Fax: (505) 397-1471		G-35 SWD Facility 35-T17S-R35E Vacuum SWD System Lea County, NM		Well No: MW1 Well Depth: 61' Casing Length: 61' Screen Length: 15'	Date Drilled: 1/10/02 Boring Depth: 61' Boring Diameter: 4.5" Drilling Method: Air Rotary
				Well Material: PVC Casing Size: 2" Slot Size: N/A	Sand and bentonite above screen.
TEST					
DEPTH	SUBSURFACE LITHOLOGY	SAMPLE TYPE	(ppm)	REMARKS	Boring
0	Ground surface		Cl		
1	Top Soil				
2	Caliche				
3					
4					
5		Grab	400	Field Test Strong TPH odor	
6					
7					
8					
9					
10		Grab	500	Field Test Strong TPH odor	
11					
12	Caliche and sand				
13					
14					
15		Grab	900	Field Test Strong TPH odor	
16					
17					
18	Sandstone				
19					
20		Grab	1900	Field Test Strong TPH odor	
21	Sand and sandstone stringers				
22					
23					
24					cuttings
25		Grab	1800	Field Test Strong TPH odor	
26					
27					
28					
29					
30		Grab	1900	Field Test Strong TPH odor	
31					
32					
33					
34					
35		Grab	1300	Field Test Strong TPH odor	
36					
37					
38					
39					
40		Grab	1125	Field Test Strong TPH odor	
41					
42					
43					
44					bentonite
45		Grab	900	Field Test Strong TPH odor	
46					
47					
48					
49					
50		Grab	175	Field Test Strong TPH odor	
51					
52					
53					
54					
55		Grab	175	Field Test TPH odor	
56					
57					
58					water
59					
60					
61					

Water sample taken 1/10/02 results: Chlorides 568 ppm, TDS 1284 ppm, Benzene 11 ppb.

Vacuum G-35
G, 35, 17S, 35E SWD facility

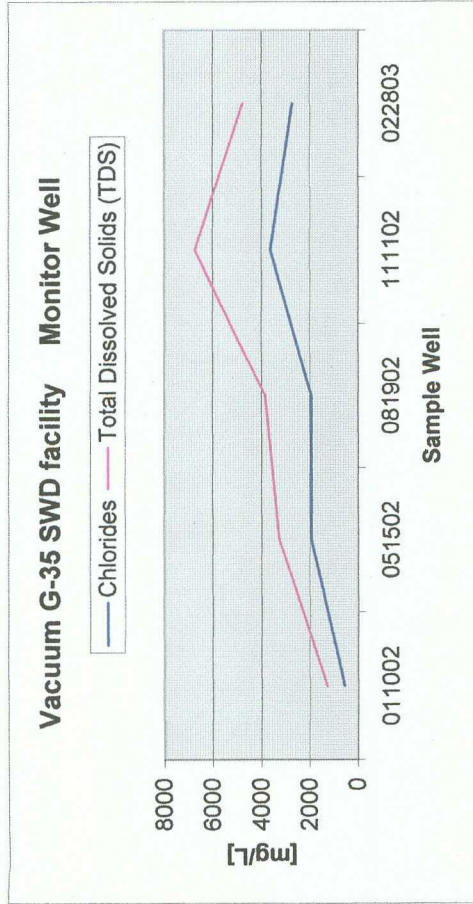
Rice Operating Co. Monitor Well Data Sheet

All parameter concentrations are in mg/L.

MW #	WATER LEVEL (ft)	TOTAL DEPTH	WELL VOLUME	VOLUME BAILED	SAMPLE DATE	TIME	CL-	TDS	BENZENE	TOLUENE	ETHYL BENZENE	TOTAL XYLENES
1	53.60	64.30	1.800	5.30	011002	1605	568	1284	0.011	0.022	0.034	0.055
1	52.89	65.03	1.940	6.00	051502	1445	1950	3260	0.414	0.057	0.131	0.065
1	53.02	64.75	1.877	5.75	081902	1235	1950	3850	0.705	0.598	0.209	0.253
1	53.08	64.70	1.859	5.60	111102	1210	3630	6740	0.921	0.078	0.154	0.131
1	53.06	64.19	1.780	5.30	022803	1245	2730	4770	0.713	0.010	0.018	0.027

oil skim

oil skim/yellow



ANALYTICAL REPORT

Prepared for:

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

Project: Vacuum G-35

PO#:

Order#: G0305853

Report Date: 03/05/2003

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#: G0305853
Project:
Project Name: Vacuum G-35
Location: Vacuum

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>
0305853-01	MW 1	WATER	2/28/03	2/28/03 19:40	See COC	See COC
<u>Lab Testing:</u>		Rejected: No	Temp:	3.5 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#: G0305853
Project:
Project Name: Vacuum G-35
Location: Vacuum

Lab ID: 0305853-01
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>
0004817-02		3/3/03 20:49	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	0.713	0.001
Toluene	0.010	0.001
Ethylbenzene	0.018	0.001
p/m-Xylene	0.013	0.001
o-Xylene	0.014	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	137%	80	120
Bromofluorobenzene	115%	80	120

Approval:

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

Date

3-05-03

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0305853
Project:
Project Name: Vacuum G-35
Location: Vacuum

Lab ID: 0305853-01
Sample ID: MW 1

Anions

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Bicarbonate Alkalinity	216	mg/L	1	2.00	310.1	3/3/03	SB
Carbonate Alkalinity	<0.10	mg/L	1	0.10	310.1	3/3/03	SB
Chloride	2730	mg/L	1	5.00	9253	3/3/03	SB
Hydroxide Alkalinity	<0.10	mg/L	1	0.10	310.1	3/3/03	SB
SULFATE, 375.4	24.6	mg/L	1	0.5	375.4	3/4/03	SB

Cations

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Calcium	646	mg/L	100	1.0	6010B	3/3/03	SM
Magnesium	123	mg/L	100	0.10	6010B	3/3/03	SM
Potassium	10.9	mg/L	10	0.50	6010B	3/3/03	SM
Sodium	810	mg/L	100	1.0	6010B	3/3/03	SM

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Total Dissolved Solids (TDS)	4770	mg/L	1	5.0	160.1	3/3/03	TAL

Approval:

Raland K. Tuttle 3-05-03

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#: G0305853

BLANK		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Benzene-mg/L		0004817-02			<0.001		
Toluene-mg/L		0004817-02			<0.001		
Ethylbenzene-mg/L		0004817-02			<0.001		
p/m-Xylene-mg/L		0004817-02			<0.001		
o-Xylene-mg/L		0004817-02			<0.001		
CONTROL		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Benzene-mg/L		0004817-03		0.1	0.100	100.0%	
Toluene-mg/L		0004817-03		0.1	0.101	101.0%	
Ethylbenzene-mg/L		0004817-03		0.1	0.100	100.0%	
p/m-Xylene-mg/L		0004817-03		0.2	0.206	103.0%	
o-Xylene-mg/L		0004817-03		0.1	0.099	99.0%	
CONTROL DUP		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Benzene-mg/L		0004817-04		0.1	0.095	95.0%	5.1%
Toluene-mg/L		0004817-04		0.1	0.095	95.0%	6.1%
Ethylbenzene-mg/L		0004817-04		0.1	0.094	94.0%	6.2%
p/m-Xylene-mg/L		0004817-04		0.2	0.193	96.5%	6.5%
o-Xylene-mg/L		0004817-04		0.1	0.094	94.0%	5.2%
SRM		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Benzene-mg/L		0004817-05		0.1	0.093	93.0%	
Toluene-mg/L		0004817-05		0.1	0.095	95.0%	
Ethylbenzene-mg/L		0004817-05		0.1	0.094	94.0%	
p/m-Xylene-mg/L		0004817-05		0.2	0.194	97.0%	
o-Xylene-mg/L		0004817-05		0.1	0.094	94.0%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Anions

Order#: G0305853

BLANK		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Bicarbonate Alkalinity-mg/L		0004837-01			<2.00		
Carbonate Alkalinity-mg/L		0004833-01			<0.10		
Chloride-mg/L		0004836-01			<5.00		
Hydroxide Alkalinity-mg/L		0004834-01			<0.10		
SULFATE, 375.4-mg/L		0004835-01			<0.50		
DUPLICATE		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Bicarbonate Alkalinity-mg/L		0305850-01	440		441		0.2%
Carbonate Alkalinity-mg/L		0305850-01	0		<0.10		0.0%
Hydroxide Alkalinity-mg/L		0305850-01	0		<0.10		0.0%
SULFATE, 375.4-mg/L		0305850-01	501		493		1.6%
MS		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Chloride-mg/L		0305850-01	3470	1000	4450	98.0%	
MSD		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Chloride-mg/L		0305850-01	3470	1000	4470	100.0%	0.4%
SRM		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Bicarbonate Alkalinity-mg/L		0004837-04		0.05	0.0496	99.2%	
Carbonate Alkalinity-mg/L		0004833-04		0.05	0.0496	99.2%	
Chloride-mg/L		0004836-04		5000	4960	99.2%	
Hydroxide Alkalinity-mg/L		0004834-04		0.05	0.0496	99.2%	
SULFATE, 375.4-mg/L		0004835-04		50	48.9	97.8%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Cations

Order#: G0305853

BLANK		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Calcium-mg/L		0004810-01			<0.010		
Magnesium-mg/L		0004810-01			<0.001		
Potassium-mg/L		0004810-01			<0.050		
Sodium-mg/L		0004810-01			<0.010		
DUPLICATE		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Calcium-mg/L		0305851-01	95.8		98.8		3.1%
Magnesium-mg/L		0305851-01	54.3		53.5		1.5%
Potassium-mg/L		0305851-01	9.4		9.42		0.2%
Sodium-mg/L		0305851-01	265		261		1.5%
SRM		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Calcium-mg/L		0004810-04		2	2.08	104.%	
Magnesium-mg/L		0004810-04		2	2.22	111.%	
Potassium-mg/L		0004810-04		2	1.72	86.%	
Sodium-mg/L		0004810-04		2	1.79	89.5%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0305853

BLANK	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L		0004824-01			<5.0		
DUPLICATE	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L		0305850-01	6870		6880		0.1%

CASE NARRATIVE

ENVIRONMENTAL LAB OF TEXAS

Prepared for:

Rice Operating
122 W. Taylor
Hobbs, NM 88240

Order#: G0305853

Project: Vacuum G-35

The following samples were received as indicated below and on the attached Chain of Custody record. All analyses were performed within the holding time and with acceptable quality control results unless otherwise noted.

SAMPLE ID	LAB ID	MATRIX	Date Collected	Date Received
MW 1	0305853-01	WATER	02/28/2003	02/28/2003

Surrogate recoveries on the 8021B BTEX are outside control limits due to matrix interference from coeluting compounds. (0305853-01)

The enclosed results of analyses are representative of the samples as received by the laboratory. Environmental Lab of Texas makes no representations or certifications as to the methods of sample collection, sample identification, or transportation handling procedures used prior to our receipt of samples. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved By:

Raland K. Jule
Environmental Lab of Texas I, Ltd.

Date:

3-05-03

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Uddrum 6-35

Project #:

Project Loc: Uksum

PO #: _____

Fax No: (505) 397-1471

μ. 2

ANALYTICAL REPORT

Prepared for:

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

Project: G-35 SWD

PO#: 570

Order#: G0205000

Report Date: 11/19/2002

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#: G0205000
Project:
Project Name: G-35 SWD
Location: Vacuum

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>
0205000-01	MW 1	WATER	11/11/02 12:10	11/12/02 19:15	See COC	See COC
<u>Lab Testing:</u>		Rejected: No	Temp: 4 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#: G0205000
Project:
Project Name: G-35 SWD
Location: Vacuum

Lab ID: 0205000-01
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>
0003799-02		11/18/02 19:12	1	10	CK	8021B

Parameter	Result mg/L	RL
Benzene	0.921	0.010
Ethylbenzene	0.154	0.010
Toluene	0.078	0.010
p/m-Xylene	0.056	0.010
o-Xylene	0.075	0.010

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	107%	80	120
Bromofluorobenzene	106%	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 11-19-02

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0205000
Project:
Project Name: G-35 SWD
Location: Vacuum

Lab ID: 0205000-01
Sample ID: MW 1

Cations

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Prepared</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Calcium	275	mg/L	100	1.0	6010B	11/15/2002	11/15/02	SM
Magnesium	9.45	mg/L	10	0.010	6010B	11/15/2002	11/15/02	SM
Potassium	14.2	mg/L	10	0.50	6010B	11/15/2002	11/15/02	SM
Sodium	1830	mg/L	1000	10.0	6010B	11/15/2002	11/15/02	SM

Approval:

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.

N/A = Not Applicable

RL = Reporting Limit

Page 1 of 1

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0205000
Project:
Project Name: G-35 SWD
Location: Vacuum

Lab ID: 0205000-01
Sample ID: MW 1

Anions

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution</u> <u>Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date</u> <u>Analyzed</u>	<u>Analyst</u>
Bicarbonate Alkalinity	516	mg/L	1	2.00	310.1	11/13/02	SB
Carbonate Alkalinity	<0.10	mg/L	1	0.10	310.1	11/13/02	SB
Chloride	3630	mg/L	1	5.00	9253	11/13/02	SB
Hydroxide Alkalinity	<0.10	mg/L	1	0.10	310.1	11/13/02	SB
SULFATE, 375.4	5.8	mg/L	1	0.5	375.4	11/14/02	SB

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution</u> <u>Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date</u> <u>Analyzed</u>	<u>Analyst</u>
Total Dissolved Solids (TDS)	6740	mg/L	1	5.0	160.1	11/13/02	TAL

Approval: Raland K. Tuttle 11-19-02
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.

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0205000

BLANK		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Benzene-mg/L		0003799-02			<0.001		
Ethylbenzene-mg/L		0003799-02			<0.001		
Toluene-mg/L		0003799-02			<0.001		
p/m-Xylene-mg/L		0003799-02			<0.001		
o-Xylene-mg/L		0003799-02			<0.001		
CONTROL		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Benzene-mg/L		0003799-03		0.1	0.099	99.%	
Ethylbenzene-mg/L		0003799-03		0.1	0.103	103.%	
Toluene-mg/L		0003799-03		0.1	0.102	102.%	
p/m-Xylene-mg/L		0003799-03		0.2	0.218	109.%	
o-Xylene-mg/L		0003799-03		0.1	0.105	105.%	
CONTROL DUP		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Benzene-mg/L		0003799-04		0.1	0.098	98.%	1.%
Ethylbenzene-mg/L		0003799-04		0.1	0.102	102.%	1.%
Toluene-mg/L		0003799-04		0.1	0.101	101.%	1.%
p/m-Xylene-mg/L		0003799-04		0.2	0.215	107.5%	1.4%
o-Xylene-mg/L		0003799-04		0.1	0.104	104.%	1.%
SRM		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Benzene-mg/L		0003799-05		0.1	0.101	101.%	
Ethylbenzene-mg/L		0003799-05		0.1	0.104	104.%	
Toluene-mg/L		0003799-05		0.1	0.103	103.%	
p/m-Xylene-mg/L		0003799-05		0.2	0.219	109.5%	
o-Xylene-mg/L		0003799-05		0.1	0.106	106.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Anions

Order#: G0205000

BLANK		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Bicarbonate Alkalinity-mg/L		0003746-01			<2.00		
Carbonate Alkalinity-mg/L		0003747-01			<0.10		
Chloride-mg/L		0003750-01			<5.00		
Hydroxide Alkalinity-mg/L		0003748-01			<0.10		
SULFATE, 375.4-mg/L		0003767-01			<0.50		
DUPLICATE		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Bicarbonate Alkalinity-mg/L		0204999-01	512		510		0.4%
Carbonate Alkalinity-mg/L		0204999-01	0		<0.10		0.0%
Hydroxide Alkalinity-mg/L		0204999-01	0		<0.10		0.0%
SULFATE, 375.4-mg/L		0204999-01	2.8		2.9		3.5%
MS		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Chloride-mg/L		0204999-01	3720	5000	8680	99.2%	
MSD		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Chloride-mg/L		0204999-01	3720	5000	8600	97.6%	0.9%
SRM		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Bicarbonate Alkalinity-mg/L		0003746-04		0.05	0.0496	99.2%	
Carbonate Alkalinity-mg/L		0003747-04		0.05	0.0496	99.2%	
Chloride-mg/L		0003750-04		5000	4960	99.2%	
Hydroxide Alkalinity-mg/L		0003748-04		0.05	0.0496	99.2%	
SULFATE, 375.4-mg/L		0003767-04		50	53.2	106.4%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Cations

Order#: G0205000

BLANK		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Calcium-mg/L		0003781-02			<0.010		
Magnesium-mg/L		0003781-02			<0.001		
Potassium-mg/L		0003781-02			<0.050		
Sodium-mg/L		0003781-02			<0.010		
DUPLICATE		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Calcium-mg/L		0204999-01	171		172		0.6%
Magnesium-mg/L		0204999-01	6.77		7.47		9.8%
Potassium-mg/L		0204999-01	11		11.6		5.3%
Sodium-mg/L		0204999-01	1940		1900		2.1%
SRM		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Calcium-mg/L		0003781-05		2	2.09	104.5%	
Magnesium-mg/L		0003781-05		2	1.89	94.5%	
Potassium-mg/L		0003781-05		2	1.75	87.5%	
Sodium-mg/L		0003781-05		2	1.88	94.4%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0205000

BLANK						
WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L	0003753-01			<5.0		
DUPLICATE						
WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L	0204999-01	6020		6070		0.8%

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Kristin Farris

RICE Operating

122 W. Taylor

Fla 665, NM 88240

Fax No: (505) 397-1471

Kristin Farina

[illegible]

ANALYTICAL REPORT

Prepared for:

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

G-35

Project: MW 1
PO#: 570
Order#: G0204266
Report Date: 08/27/2002

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#: G0204266
Project:
Project Name: MW 1
Location: Vacuum G-35

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>
0204266-01	MW 1	WATER	8/19/02 12:35	8/19/02 19:55	See COC	See COC
<u>Lab Testing:</u>		Rejected: No	Temp: 4 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#: G0204266
Project:
Project Name: MW 1
Location: Vacuum G-35

Lab ID: 0204266-01
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>
0002969-02		8/26/02 21:57	1	10	CK	8021B

Parameter	Result mg/L	RL
Benzene	0.705	0.010
Ethylbenzene	0.209	0.010
Toluene	0.598	0.010
p/m-Xylene	0.168	0.010
o-Xylene	0.085	0.010

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	100%	73	115
Bromofluorobenzene	116%	72	110

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

8-28-02

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0204266
Project:
Project Name: MW 1
Location: Vacuum G-35

Lab ID: 0204266-01
Sample ID: MW 1

Anions

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution</u> <u>Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date</u> <u>Analyzed</u>	<u>Analyst</u>
Bicarbonate Alkalinity	391	mg/L	1	2.00	310.1	8/20/02	SB
Carbonate Alkalinity	<0.10	mg/L	1	0.10	310.1	8/20/02	SB
Chloride	1950	mg/L	1	5.00	9253	8/20/02	SB
Hydroxide Alkalinity	<0.10	mg/L	1	0.10	310.1	8/20/02	SB
SULFATE, 375.4	7.00	mg/L	1	0.5	375.4	8/21/02	SB

Cations

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution</u> <u>Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date</u> <u>Analyzed</u>	<u>Analyst</u>
Calcium	119	mg/L	100	1.0	6010B	8/22/02	SM
Magnesium	26.3	mg/L	10	0.010	6010B	8/22/02	SM
Potassium	25.6	mg/L	10	0.50	6010B	8/22/02	SM
Sodium	1520	mg/L	1000	10.0	6010B	8/22/02	SM

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution</u> <u>Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date</u> <u>Analyzed</u>	<u>Analyst</u>
Total Dissolved Solids (TDS)	3850	mg/L	1	5.0	160.1	8/20/02	SB

Approval:

Raland K. Tuttle 8-28-02
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.

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0204266

BLANK		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Benzene-mg/L		0002969-02			<0.001		
Ethylbenzene-mg/L		0002969-02			<0.001		
Toluene-mg/L		0002969-02			<0.001		
p/m-Xylene-mg/L		0002969-02			<0.001		
o-Xylene-mg/L		0002969-02			<0.001		
MS		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Benzene-mg/L		0204252-01	0	0.1	0.097	97.0%	
Ethylbenzene-mg/L		0204252-01	0	0.1	0.098	98.0%	
Toluene-mg/L		0204252-01	0	0.1	0.099	99.0%	
p/m-Xylene-mg/L		0204252-01	0	0.2	0.205	102.5%	
o-Xylene-mg/L		0204252-01	0	0.1	0.098	98.0%	
MSD		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Benzene-mg/L		0204252-01	0	0.1	0.091	91.0%	6.4%
Ethylbenzene-mg/L		0204252-01	0	0.1	0.092	92.0%	6.3%
Toluene-mg/L		0204252-01	0	0.1	0.093	93.0%	6.3%
p/m-Xylene-mg/L		0204252-01	0	0.2	0.192	96.0%	6.5%
o-Xylene-mg/L		0204252-01	0	0.1	0.092	92.0%	6.3%
SRM		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Benzene-mg/L		0002969-05		0.1	0.094	94.0%	
Ethylbenzene-mg/L		0002969-05		0.1	0.094	94.0%	
Toluene-mg/L		0002969-05		0.1	0.095	95.0%	
p/m-Xylene-mg/L		0002969-05		0.2	0.196	98.0%	
o-Xylene-mg/L		0002969-05		0.1	0.094	94.0%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Anions

Order#: G0204266

BLANK		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Bicarbonate Alkalinity-mg/L		0002909-01			<2.00		
Carbonate Alkalinity-mg/L		0002910-01			<0.10		
Chloride-mg/L		0002908-01			<5.00		
Hydroxide Alkalinity-mg/L		0002911-01			<0.10		
SULFATE, 375.4-mg/L		0002932-01			<0.50		
DUPLICATE		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Bicarbonate Alkalinity-mg/L		0204265-01	490		490		0.0%
Carbonate Alkalinity-mg/L		0204265-01	0		<0.10		0.0%
Hydroxide Alkalinity-mg/L		0204265-01	0		<0.10		0.0%
SULFATE, 375.4-mg/L		0204251-01	256		255		0.4%
MS		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Chloride-mg/L		0204259-01	111	250	359	99.2%	
MSD		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Chloride-mg/L		0204259-01	111	250	354	97.2%	1.4%
SRM		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Bicarbonate Alkalinity-mg/L		0002909-04		0.05	.0496	99.2%	
Carbonate Alkalinity-mg/L		0002910-04		0.05	0.0496	99.2%	
Chloride-mg/L		0002908-04		5000	4960	99.2%	
Hydroxide Alkalinity-mg/L		0002911-04		0.05	0.0496	99.2%	
SULFATE, 375.4-mg/L		0002932-04		50	49.5	99.9%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Cations

Order#: G0204266

BLANK							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L		0002943-02			<0.01		
Magnesium-mg/L		0002943-02			<0.001		
Potassium-mg/L		0002943-02			<0.05		
Sodium-mg/L		0002943-02			<0.01		
DUPLICATE							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L		0204220-04	100		99.5		0.5%
Magnesium-mg/L		0204220-04	13.7		13.5		1.5%
Potassium-mg/L		0204220-04	5.48		5.4		1.5%
Sodium-mg/L		0204220-04	78.8		78.7		0.1%
SRM							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L		0002943-05		2	2.02	101.%	
Magnesium-mg/L		0002943-05		2	1.91	95.5%	
Potassium-mg/L		0002943-05		2	1.94	97.%	
Sodium-mg/L		0002943-05		2	2	100.%	

QUALITY CONTROL REPORT

Test Parameters

Order#: G0204266

BLANK WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L	0002931-01			<5.00		
DUPLICATE WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L	0204259-01	619		606		2.1%

ANALYTICAL REPORT

Prepared for:

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

Project: G-35
Order#: G0203376
Report Date: 05/21/2002

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#: G0203376
Project:
Project Name: G-35
Location: Vacuum 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>
0203376-01	MW 1	WATER	5/15/02 14:45	5/16/02 19:45	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

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

Order#: G0203376
Project:
Project Name: G-35
Location: Vacuum SWD

Lab ID: 0203376-01
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>
0001761-02		5/20/02 15:16	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	0.414	0.001
Ethylbenzene	0.131	0.001
Toluene	0.057	0.001
p/m-Xylene	0.031	0.001
o-Xylene	0.034	0.001

Approval: Raland K Tuttle 5-21-02
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

ANALYTICAL REPORT

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

Order#: G0203376
Project:
Project Name: G-35
Location: Vacuum SWD

Lab ID: 0203376-01

Sample ID: MW 1

Anions

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Bicarbonate Alkalinity	402	mg/L	1	2.00	310.1	5/17/02	SB
Carbonate Alkalinity	<0.10	mg/L	1	0.10	310.1	5/17/02	SB
Chloride	1950	mg/L	1	5.00	9253	5/17/02	SB
Hydroxide Alkalinity	<0.10	mg/L	1	0.10	310.1	5/17/02	SB
SULFATE, 375.4	2.10	mg/L	1	0.50	375.4	5/17/02	SB

Cations

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Calcium	192	mg/L	50	0.500	6010B	5/17/02	SM
Magnesium	43.7	mg/L	10	0.010	6010B	5/17/02	SM
Potassium	10.2	mg/L	10	0.500	6010B	5/17/02	SM
Sodium	998	mg/L	500	5.00	6010B	5/17/02	SM

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Total Dissolved Solids (TDS)	3260	mg/L	1	5.0	160.1	5/17/02	SB

Approval:

Raland K Tuttle 5-22-02

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#: G0203376

BLANK						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
						RPD
Benzene-mg/L		0001761-02			<0.001	
Ethylbenzene-mg/L		0001761-02			<0.001	
Toluene-mg/L		0001761-02			<0.001	
p/m-Xylene-mg/L		0001761-02			<0.001	
o-Xylene-mg/L		0001761-02			<0.001	
MS						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
						RPD
Benzene-mg/L		0203378-01	0	0.1	0.104	104.%
Ethylbenzene-mg/L		0203378-01	0	0.1	0.104	104.%
Toluene-mg/L		0203378-01	0	0.1	0.105	105.%
p/m-Xylene-mg/L		0203378-01	0	0.2	0.210	105.%
o-Xylene-mg/L		0203378-01	0	0.1	0.104	104.%
MSD						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
						RPD
Benzene-mg/L		0203378-01	0	0.1	0.101	101.%
Ethylbenzene-mg/L		0203378-01	0	0.1	0.101	101.%
Toluene-mg/L		0203378-01	0	0.1	0.103	103.%
p/m-Xylene-mg/L		0203378-01	0	0.2	0.205	102.5%
o-Xylene-mg/L		0203378-01	0	0.1	0.101	101.%
SRM						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
						RPD
Benzene-mg/L		0001761-05		0.1	0.102	102.%
Ethylbenzene-mg/L		0001761-05		0.1	0.102	102.%
Toluene-mg/L		0001761-05		0.1	0.104	104.%
p/m-Xylene-mg/L		0001761-05		0.2	0.208	104.%
o-Xylene-mg/L		0001761-05		0.1	0.102	102.%

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Anions

Order#: G0203376

BLANK		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Bicarbonate Alkalinity-mg/L		0001754-01			<2.00		
Carbonate Alkalinity-mg/L		0001755-01			<0.10		
Chloride-mg/L		0001753-01			<5.00		
Hydroxide Alkalinity-mg/L		0001756-01			<0.10		
SULFATE, 375.4-mg/L		0001741-01			<0.50		
DUPLICATE		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Bicarbonate Alkalinity-mg/L		0203375-01	503		505		0.4%
Carbonate Alkalinity-mg/L		0203375-01	0		<0.10		0.0%
Hydroxide Alkalinity-mg/L		0203375-01	0		<0.10		0.0%
SULFATE, 375.4-mg/L		0203355-01	610		610		0.0%
MS		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Chloride-mg/L		0203375-01	3720	5000	8600	97.6%	
MSD		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Chloride-mg/L		0203375-01	3720	5000	8680	99.2%	0.9%
SRM		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Bicarbonate Alkalinity-mg/L		0001754-04		0.05	0.0496	99.2%	
Carbonate Alkalinity-mg/L		0001755-04		0.05	0.0496	99.2%	
Chloride-mg/L		0001753-04		5000	5050	101.1%	
Hydroxide Alkalinity-mg/L		0001756-04		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#: G0203376

BLANK		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Calcium-mg/L		0001757-02			<0.01		
Magnesium-mg/L		0001757-02			<0.001		
Potassium-mg/L		0001757-02			<0.05		
Sodium-mg/L		0001757-02			<0.01		
DUPLICATE		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Calcium-mg/L		0203375-01	240		258		7.2%
Magnesium-mg/L		0203375-01	93.4		96.4		3.2%
Potassium-mg/L		0203375-01	13.4		13.5		0.7%
Sodium-mg/L		0203375-01	2120		1970		7.3%
SRM		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Calcium-mg/L		0001757-05		2	2.06	103.3%	
Magnesium-mg/L		0001757-05		2	2.11	105.5%	
Potassium-mg/L		0001757-05		2	2.07	103.5%	
Sodium-mg/L		0001757-05		2	2.1	105.0%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

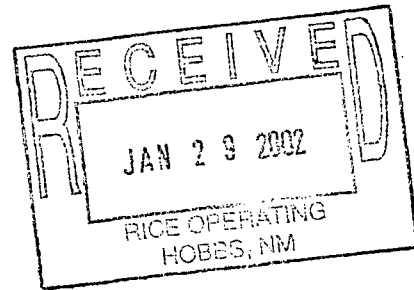
Order#: G0203376

BLANK	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L		0001760-01			<5.00		
DUPLICATE	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L		0203376-01	3260		3580		9.4%

[illegible]

January 25, 2002

Mr. Donnie Anderson
Rice Operating Company
122 West Taylor
Hobbs, New Mexico 88240



Subject: Buckeye Vacuum System Monitor Well Sampling

Dear Mr. Anderson,

Included below is the information for the Buckeye Vacuum System monitor wells sampled and measured by Environmental Plus, Inc. on 1-10-02.

RICE OPERATING BUCKEYE VACUUM SYSTEM MONITOR WELLS						
MONITOR WELL ID	DATE	WELL CASING INSIDE DIAMETER INCHES	WATER LEVEL FROM TOP OF CASING FEET	TOTAL DEPTH FROM TOP OF CASING FEET	BORE WATER VOLUME GALLONS	PURGE VOLUME GALLONS
F-35	1/10/2002	2	58.00	66.00	1.3	3.9
G-35	1/10/2002	2	53.55	64.30	1.8	5.3

If you have any questions or require more information please call Mr. Ben Miller or myself at the office or at 505.390.0288 or 505.390.7864, respectively.

Sincerely,

Par McCasland
EPI Technical Services Manager

cc: Ben Miller, EPI Vice President and General Manager
Sherry Miller, EPI President
file

P.O. BOX 1338

2100 WEST AVENUE O
TELEPHONE 505.394.3481

EUNICE, NEW MEXICO 88231
FAX 505.394.2601

ENVIRONMENTAL PLUS, INC.



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: DONNIE ANDERSON
122 W. TAYLOR
HOBBS, NM 88240
FAX TO:

Receiving Date: 01/11/02
Reporting Date: 01/16/02
Project Owner: RICE OPERATING CO.
Project Name: G-35
Project Location: NOT GIVEN

Sampling Date: 01/10/02
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: AH
Analyzed By: HM

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (u S/cm)	T-Alkalinity (mgCaCO ₃ /L)
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ANALYSIS DATE:	01/16/02	01/15/02	01/15/02	01/15/02	01/15/02	01/15/02	01/15/02
H6426-1 R011002G35MW	226	152	35.2	5.6	2326	199	
Quality Control	NR	55.0	48.6	5.27	1489	NR	
True Value QC	NR	50.0	50.0	5.00	1413	NR	
% Recovery	NR	110	97.2	105	105	NR	
Relative Percent Difference	NR	0	6.0	0	0.3	NR	

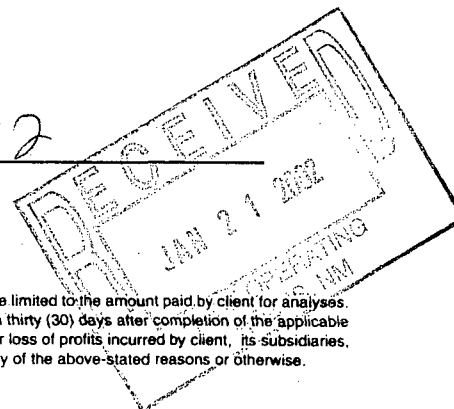
METHODS:	SM3500-Ca-D	3500-Mg-E	8049	120.1	310.1
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	Cl ⁻ (mg/L)	SO ₄ (mg/L)	CO ₃ (mg/L)	HCO ₃ (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:	01/15/02	01/15/02	01/15/02	01/15/02	01/15/02	01/15/02
H6426-1 R011002G35MW	568	23	0	243	7.18	1284
Quality Control	1040	52.66	NR	984	7.00	NR
True Value QC	1000	50.00	NR	1000	7.00	NR
% Recovery	104	105	NR	98.4	100	NR
Relative Percent Difference	1.0	0.6	NR	2.7	0.1	NR

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

1-16-02
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.

H6426A.XLS



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

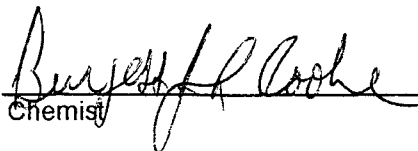
ANALYTICAL RESULTS FOR
RICE OPERATING CO.
ATTN: DONNIE ANDERSON
122 W. TAYLOR
HOBBS, NM 88240
FAX TO:

Receiving Date: 01/11/02
Reporting Date: 01/12/02
Project Owner: RICE OPERATING CO.
Project Name: G-35
Project Location: NOT GIVEN

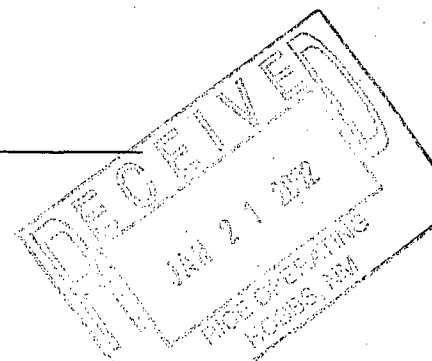
Sampling Date: 01/10/02
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: AH
Analyzed By: BC

LAB NUMBER	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		01/11/02	01/11/02	01/11/02	01/11/02
H6426-1	R011002G35MW	0.011	0.022	0.034	0.055
Quality Control		0.100	0.104	0.108	0.314
True Value QC		0.100	0.100	0.100	0.300
% Recovery		99.9	104	108	105
Relative Percent Difference		1.6	2.8	2.2	1.9

METHOD: EPA SW-846 8260


Chemist

1/12/02
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.

H6426B.XLS

101 East Marland, Hobbs, NM 88240
505-393-2326 Fax 505-393-2476

2111 Beechwood, Abilene, TX 79603
915-673-7001 Fax 915-673-7020

Sampler Relinquished: <i>Bradley Marks</i>	Received By: Date: 1-11-02 Time: 3:05	Relinquished by: <i>Bradley Marks</i>	Received By: (lab staff) <i>[Signature]</i>	Checked By: Date: 1-11-02 Time: 4:00	Sample Cool & Intact Yes ☒ No ☐
Delivered by Sampler					

Price, Wayne

From: Price, Wayne
Sent: Saturday, November 17, 2001 3:58 PM
To: 'riceswd@leaco.net'
Cc: Sheeley, Paul; Johnson, Larry
Subject: Redwood Tank and Pit closures

Contacts: Carolyn Doran Haynes

The OCD is in receipt of the following closure plans and have assigned them the following case numbers. Please provide final closure reports for OCD approval for these sites by June 30, 2002.

M-33 OCD Case # 1R0329
F-35 OCD Case # 1R0330
M-9 OCD Case # 1R0331
G-35 OCD Case # 1R0332
H-2 OCD Case # 1R0333

Tracking:

Recipient

'riceswd@leaco.net'

Sheeley, Paul

Johnson, Larry

Delivery

Delivered: 11/17/01 3:58 PM

Delivered: 11/17/01 3:58 PM