

AP - 43

# ANNUAL MONITORING REPORT

YEAR(S):  
2004

# **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 1862

January 24, 2005

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

**RE: 2004 MONITOR WELL REPORT/SAMPLING SUMMARY  
JCT. A-20, EME SWD SYSTEM  
UNIT 'A', SEC. 20, T20S, R37E  
NMOCD CASE #1R0427-89**

Mr. Price:

Rice Operating Company (ROC) takes this opportunity to submit the 2004 Monitor Well Report for the EME Jct. A-20 site located in the Eunice Monument Eumont (EME) Salt Water Disposal (SWD) System. One monitoring well was installed in 2002 during delineation as part of the Junction Box Upgrade Program. This well is sampled quarterly pursuant to NMOCD guidelines. In 2004, ROC and Basin Environmental Service Technologies (Basin) of Lovington sampled the well. In 2005, Arcadis G&M, Inc. (Arcadis) of Midland, Texas will sample the well and Environmental Lab of Texas of Odessa will continue to conduct analytical tests of the water samples.

Arcadis has been contracted by ROC to address groundwater concerns at this. NMOCD may expect the submission of an Investigation & Characterization Plan (ICP) this year.

Soon after the well was installed, phase-separated hydrocarbon (PSH) was found on the water. ROC has actively worked at recovering the PSH in the well by hand bailing or by using an absorbent sock. In September of 2004 Basin assumed the maintenance and weekly replacement of the socks; PSH thickness and volume are measured weekly. Until an alternate recovery

method is submitted by Arcadis and approved by NMOCD, Basin will continue weekly recovery in 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 black ink that reads "Kristin Farris Pope". The signature is written in a cursive, flowing style.

Kristin Farris Pope  
Project Scientist

enclosures:      Summary table & graph  
                      PSH measurement tables  
                      Analytical results  
                      Map

cc: LBG, CDH, Arcadis, file, Rob Roy Industries,

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

# EME Jct. A-20

Unit 'A', Sec. 20, T20S, R37E

NMOCID Case #1R0427-89

RICE Operating Company  
Monitor Well Data Sheet

(ft) (gal)

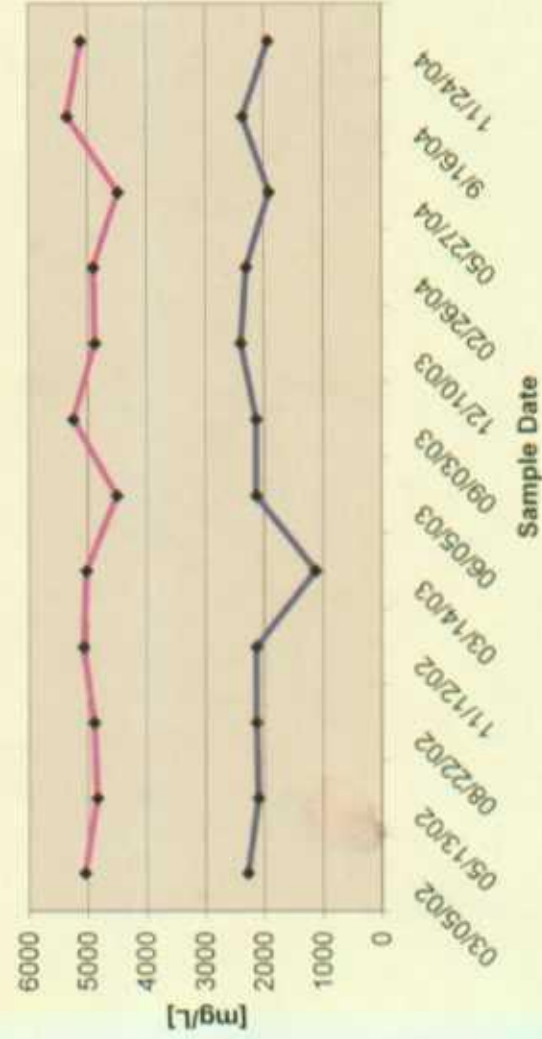
All concentrations are in mg/L

| MW # | DEPTH TO WATER | TOTAL DEPTH | WELL VOLUME | VOLUME PURGED | SAMPLE DATE | CI   | TDS  | BENZENE | TOLUENE | ETHYL BENZENE | TOTAL XYLENES | COMMENTS               |
|------|----------------|-------------|-------------|---------------|-------------|------|------|---------|---------|---------------|---------------|------------------------|
| 1    | 24.70          | 38.40       | 2.200       | 6.70          | 03/05/02    | 2279 | 5044 | <0.002  | 0.003   | 0.006         | 0.014         |                        |
| 1    | 25.62          | 38.22       | 2.000       | 6.00          | 05/13/02    | 2100 | 4840 | XXX     | XXX     | XXX           | XXX           | 12" oil                |
| 1    | 26.00          | 38.25       | 1.960       | 6.00          | 08/22/02    | 2130 | 4890 | XXX     | XXX     | XXX           | XXX           | 15.5" oil              |
| 1    | 24.97          | 38.25       | 2.125       | 6.50          | 11/12/02    | 2130 | 5070 | XXX     | XXX     | XXX           | XXX           | oil film               |
| 1    | 26.20          | 38.00       | 0.280       | 0.80          | 03/14/03    | 1120 | 5020 | XXX     | XXX     | XXX           | XXX           |                        |
| 1    | 23.20          | 26.00       | 0.448       | 1.30          | 06/05/03    | 2130 | 4500 | XXX     | XXX     | XXX           | XXX           |                        |
| 1    | 23.42          | 26.00       | 0.400       | 1.20          | 09/03/03    | 2130 | 5240 | XXX     | XXX     | XXX           | XXX           |                        |
| 1    | 23.20          | 26.00       | 0.448       | 1.30          | 12/10/03    | 2390 | 4870 | XXX     | XXX     | XXX           | XXX           |                        |
| 1    | 25.64          | 26.50       | 0.860       | 2.50          | 02/26/04    | 2300 | 4900 | XXX     | XXX     | XXX           | XXX           |                        |
| 1    | 23.02          | 26.00       | 0.448       | 1.30          | 05/27/04    | 1910 | 4480 | XXX     | XXX     | XXX           | XXX           |                        |
| 1    | XXX            | XXX         | XXX         | XXX           | 9/16/04     | 2360 | 5340 | XXX     | XXX     | XXX           | XXX           |                        |
| 1    | 24.53          | 38.36       | 2.210       | 6.60          | 11/24/04    | 1930 | 5110 | XXX     | XXX     | XXX           | XXX           | oil, strong odor, gray |

## EME Jct. A-20

## Monitor Well

— Chloride — Total Dissolved Solids (TDS)



\* Depth to water measured from top of casing  
Casing is 2.875 ft

# BASIN

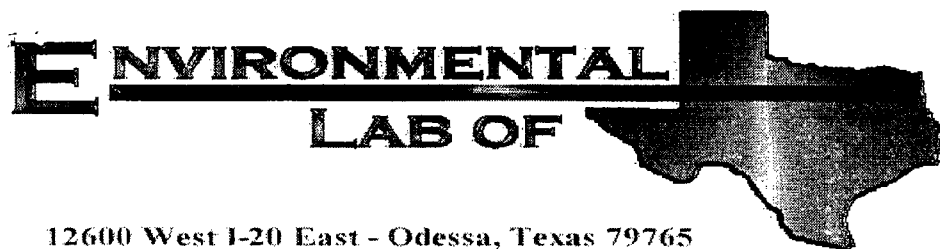
## FIELD MEASUREMENT/OBSERVATION LOG

### ENVIRONMENTAL

| ENVIRONMENTAL  |                                  |                               |                             |                                     |                            |   |                             |                               |                          |              |    |               |                           | PROJECT NAME:<br>Rice Operating Company   |  | PROJECT NUMBER:<br>EME Jct. A-20 (PO# 510) |  | LEAK NUMBER: |  |  |  |  |  |  |  |  |  |
|--|----------------------------------|-------------------------------|-----------------------------|-------------------------------------|----------------------------|---|-----------------------------|-------------------------------|--------------------------|--------------|----|---------------|---------------------------|---|--|--|--|--------------|--|--|--|--|--|--|--|--|--|
| PROJECT MANAGER:<br>Kristin Farris Pope - Rice Operating Company |                                  |                               |                             |                                     |                            |   |                             |                               |                          |              |    |               |                           | FIELD TECHNICIAN:<br>Rozanne Johnson - Basin Environmental  |  |  |  |              |  |  |  |  |  |  |  |  |  |
| WELL #<br>/SAMPLE<br>LOCATION                                    | TOTAL<br>WELL<br>DEPTH<br>(feet) | DEPTH TO<br>PRODUCT<br>(feet) | DEPTH TO<br>WATER<br>(feet) | HEIGHT<br>WATER<br>COLUMN<br>(feet) | PSH<br>THICKNESS<br>(feet) | WELL<br>FACTOR<br>2"=1.6<br>4"=1.65<br>6"=1.5 | PSH<br>Removed<br>(gallons) | Water<br>Removed<br>(gallons) | TOTAL<br>PURGED<br>(gal) | Temp<br>(°C) | pH | Cond.<br>(µs) | DATE/TIME SAMPLE<br>TAKEN | Comments  |  |  |  |              |  |  |  |  |  |  |  |  |  |
| MW-1   |                                  | 25.15                         | 25.16                       |                                     | 0.01                       |   | 0.2                         | 1.0                           | 1.2                      |              |    |               | 9/2/04-9:50               | 2.7" Sock Stained to 2.7"<br>Sock Replaced  |  |  |  |              |  |  |  |  |  |  |  |  |  |
| MW-1   |                                  | 25.09                         | 25.10                       |                                     | 0.01                       |   | 0.1                         | 1.0                           | 1.1                      |              |    |               | 9/9/04-14:20              | 2.7" Sock Stained to 0.45"<br>Sock Replaced   |  |  |  |              |  |  |  |  |  |  |  |  |  |
| MW-1   |                                  | 25.30                         | 25.31                       |                                     | 0.01                       |   | 0.1                         | 0.5                           | 0.6                      |              |    |               | 9/16/04 - 11:10           | 2.7" Sock Stained to 0.65"<br>Sock Replaced   |  |  |  |              |  |  |  |  |  |  |  |  |  |
| MW-1   |                                  | 25.25                         | 25.26                       |                                     | 0.01                       |   | 0.1                         | 0.2                           | 0.3                      |              |    |               | 9/23/04 - 17:20           | 2.7" Sock Stained to 0.9"<br>Sock Replaced  |  |  |  |              |  |  |  |  |  |  |  |  |  |
| MW-1   |                                  | 25.14                         | 25.16                       |                                     | 0.02                       |   | 0.1                         | 0.3                           | 0.4                      |              |    |               | 9/30/04 - 14:10           | 2.7" Sock Stained to 0.85"<br>Sock Replaced   |  |  |  |              |  |  |  |  |  |  |  |  |  |
| MW-1   |                                  | 25.05                         | 25.07                       |                                     | 0.02                       |   | 0.2                         | 0.5                           | 0.7                      |              |    |               | 10/8/04 - 7:45            | 2.7" Sock Stained to 1.8"<br>Sock Replaced / Well level<br>has changed due to rainfall.   |  |  |  |              |  |  |  |  |  |  |  |  |  |
| MW-1   |                                  | 24.66                         | 24.67                       |                                     | 0.01                       |   | 0.2                         | 0.8                           | 1.0                      |              |    |               | 10/14/04 - 12:45          | 2.7" Sock Stained to 1.4"<br>Sock Replaced / Well level<br>has changed due to rainfall.   |  |  |  |              |  |  |  |  |  |  |  |  |  |
| MW-1   |                                  | 24.65                         | 24.65                       |                                     | 0.00                       |   | 0.1                         | 0.4                           | 0.5                      |              |    |               | 10/21/04 - 13:09          | 2.7" Sock Stained to 0.9"<br>Sock Replaced / Heavy Skim<br>of Hydrocarbon   |  |  |  |              |  |  |  |  |  |  |  |  |  |
| MW-1   |                                  | 24.62                         | 24.63                       |                                     | 0.01                       |   | 0.3                         | 1.2                           | 1.5                      |              |    |               | 10/28/04 - 14:17          | 2" Sock stained to 0.9" / Sock<br>Replaced / Heavy Skim of<br>Hydrocarbon   |  |  |  |              |  |  |  |  |  |  |  |  |  |
| MW-1   |                                  | 24.61                         | 24.62                       |                                     | 0.01                       |   | 0.1                         | 0.9                           | 1.0                      |              |    |               | 11/04/04 - 16:16          | 2" Sock stained to 0.75" /<br>Sock Replaced / Heavy Skim<br>of Hydrocarbon  |  |  |  |              |  |  |  |  |  |  |  |  |  |
| MW-1   |                                  | 24.60                         | 24.60                       |                                     | 0.00                       |   | 0.1                         | 0.3                           | 0.4                      |              |    |               | 11/11/04 - 14:02          | 2" Sock stained to 10" / Sock<br>Replaced / Light Skim of<br>Hydrocarbon  |  |  |  |              |  |  |  |  |  |  |  |  |  |
| MW-1   |                                  | 24.58                         | 24.59                       |                                     | 0.01                       |   | 0.1                         | 0.3                           | 0.4                      |              |    |               | 11/17/04 - 14:07          | 2" Sock stained to 10" / Sock<br>Replaced / Light Skim of<br>Hydrocarbon  |  |  |  |              |  |  |  |  |  |  |  |  |  |
| MW-1   |                                  | 24.50                         | 24.53                       |                                     | 0.03                       |   | 1.0                         | 5.6                           | 6.6                      |              |    |               | 11/24/04 - 16:40          | 2" Sock stained to 1" / Sock<br>Replaced / Heavy Skim of<br>Hydrocarbon / Well Purged<br>for Sampling / Well Level<br>Changed due to recent<br>Rains. |  |  |  |              |  |  |  |  |  |  |  |  |  |
| MW-1   |                                  |                               |                             |                                     |                            |   |                             |                               |                          |              |    |               |                           |   |  |  |  |              |  |  |  |  |  |  |  |  |  |
| MW-1   |                                  |                               |                             |                                     |                            |   |                             |                               |                          |              |    |               |                           |   |  |  |  |              |  |  |  |  |  |  |  |  |  |
| MW-1   |                                  |                               |                             |                                     |                            |   |                             |                               |                          |              |    |               |                           |   |  |  |  |              |  |  |  |  |  |  |  |  |  |
| MW-1   |                                  |                               |                             |                                     |                            |   |                             |                               |                          |              |    |               |                           |   |  |  |  |              |  |  |  |  |  |  |  |  |  |
| MW-1   |                                  |                               |                             |                                     |                            |   |                             |                               |                          |              |    |               |                           |   |  |  |  |              |  |  |  |  |  |  |  |  |  |

| FIELD MEASUREMENT/OBSERVATION LOG                                |                                  |  |                             |                                     |  |  |                             |                               |                          |              |    |               |                           |  |
|--|----------------------------------|--|-----------------------------|-------------------------------------|--|--|-----------------------------|-------------------------------|--------------------------|--------------|----|---------------|---------------------------|--|
| PROJECT NAME:<br>Rice Operating Company                          |                                  |  |                             |                                     | PROJECT NUMBER:<br>EME jct. A-20 (PO# 510)                 |  |                             |                               |                          | LEAK NUMBER: |    |               |                           |  |
| PROJECT MANAGER:<br>Kristin Farris Pope - Rice Operating Company |                                  |  |                             |                                     | FIELD TECHNICIAN:<br>Rozanne Johnson - Basin Environmental |  |                             |                               |                          |              |    |               |                           |  |
| WELL #<br>/SAMPLE<br>LOCATION                                    | TOTAL<br>WELL<br>DEPTH<br>(feet) | DEPTH TO<br>PRODUCT<br>(feet)                | DEPTH TO<br>WATER<br>(feet) | HEIGHT<br>WATER<br>COLUMN<br>(feet) | PSH<br>THICKNES<br>S (feet)                                | WELL<br>FACTOR<br>2"=.16<br>4"=.65<br>6"=1.5 | PSH<br>Removed<br>(gallons) | Water<br>Removed<br>(gallons) | TOTAL<br>PURGED<br>(gal) | Temp<br>(°C) | pH | Cond.<br>(µs) | DATE/TIME SAMPLE<br>TAKEN | Comments   |
| MW-1   |                                  | 25.05  | 25.07                       |                                     | 0.02   |  | 0.2                         | 0.5                           | 0.7                      |              |    |               | 10/8/04 - 7:45            | 2.7" Sock Stained to 1.8' Sock Replaced / Well level has changed due to rainfall.  |
| MW-1   |                                  | 24.66  | 24.67                       |                                     | 0.01   |  | 0.2                         | 0.8                           | 1.0                      |              |    |               | 10/14/04 - 12:45          | 2.7" Sock Stained to 1.4' Sock Replaced / Well level has changed due to rainfall.  |
| MW-1   |                                  | 24.65  | 24.65                       |                                     | 0.00   |  | 0.1                         | 0.4                           | 0.5                      |              |    |               | 10/21/04 - 13:09          | 2.7" Sock Stained to 0.9' Sock Replaced / Heavy Skim of Hydrocarbon  |
| MW-1   |                                  | 24.62  | 24.63                       |                                     | 0.01   |  | 0.3                         | 1.2                           | 1.5                      |              |    |               | 10/28/04 - 14:17          | 2" Sock stained to 0.9" / Sock Replaced / Heavy Skim of Hydrocarbon  |
| MW-1   |                                  | 24.61  | 24.62                       |                                     | 0.01   |  | 0.1                         | 0.9                           | 1.0                      |              |    |               | 11/04/04 - 16:16          | 2" Sock stained to 0.75" / Sock Replaced / Heavy Skim of Hydrocarbon   |
| MW-1   |                                  | 24.60  | 24.60                       |                                     | 0.00   |  | 0.1                         | 0.3                           | 0.4                      |              |    |               | 11/11/04 - 14:02          | 2" Sock stained to 10" / Sock Replaced / Light Skim of Hydrocarbon   |
| MW-1   |                                  | 24.58  | 24.59                       |                                     | 0.01   |  | 0.1                         | 0.3                           | 0.4                      |              |    |               | 11/17/04 - 14:07          | 2" Sock stained to 10" / Sock Replaced / Light Skim of Hydrocarbon   |
| MW-1   |                                  | 24.50  | 24.53                       |                                     | 0.03   |  | 1.0                         | 5.6                           | 6.6                      |              |    |               | 11/24/04 - 16:40          | 2" Sock stained to 1" / Sock Replaced / Heavy Skim of Hydrocarbon / Well Purged for Sampling / Well Level Changed due to recent Rains. |
| MW-1   |                                  | 24.39  | 24.43                       |                                     | 0.04   |  | 0.7                         | 1.6                           | 2.0                      |              |    |               | 12/01/04 - 13:54          | 2" Sock stained to 10" / Sock Replaced / Very Heavy Skim of Hydrocarbon  |
| MW-1   |                                  | 24.33  | 24.48                       |                                     | 0.15   |  | 1.0                         | 3.0                           | 4.0                      |              |    |               | 12/09/04 - 14:15          | 2" Sock stained to 11" / Sock Replaced / Heavy Skim of Hydrocarbon   |
| MW-1   |                                  | 24.32  | 24.38                       |                                     | 0.06   |  | 0.4                         | 3.6                           | 4.0                      |              |    |               | 12/15/04 - 15:53          | 2" Sock stained to 15" / Sock Replaced / Very Heavy Skim of Hydrocarbon  |
| MW-1   |                                  | PSH RECOVERY NOT DONE DUE TO EXTREME WEATHER |                             |                                     |  |  |                             |                               |                          |              |    |               |                           |  |
| MW-1   |                                  | 24.22  | 24.44                       |                                     | 0.22   |  | 1.0                         | 2.0                           | 3.0                      |              |    |               | 12/30/04 - 8:50           | 2" Sock stained to 14" / Sock Replaced   |





12600 West I-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

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

Project: A-20  
Project Number: None Given  
Location: EME

Lab Order Number: 4C01008

Report Date: 03/09/04

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

Project: A-20  
Project Number: None Given  
Project Manager: Kristin Farris

Fax: (505) 397-1471

**Reported:**  
03/09/04 08:21

**ANALYTICAL REPORT FOR SAMPLES**

| Sample ID | Laboratory ID | Matrix | Date Sampled   | Date Received  |
|-----------|---------------|--------|----------------|----------------|
| MW 1      | 4C01008-01    | Water  | 02/26/04 14:30 | 02/28/04 08:30 |

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

Project: A-20  
Project Number: None Given  
Project Manager: Kristin Farris

Fax: (505) 397-1471

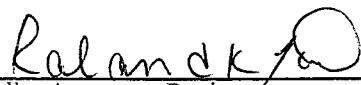
Reported:  
03/09/04 08:21

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

| Analyte                  | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method     | Notes |
|--------------------------|--------|--------------------|-------|----------|---------|----------|----------|------------|-------|
| <b>MW 1 (4C01008-01)</b> |        |                    |       |          |         |          |          |            |       |
| Carbonate Alkalinity     | ND     | 0.100              | mg/L  | 1        | EC40105 | 02/28/04 | 02/28/04 | EPA 310.2M |       |
| Bicarbonate Alkalinity   | 384    | 2.00               | "     | "        | "       | "        | "        | "          |       |
| Hydroxide Alkalinity     | ND     | 0.100              | "     | "        | "       | "        | "        | "          |       |
| Chloride                 | 2300   | 5.00               | "     | "        | EC40307 | 03/02/04 | 03/02/04 | EPA 325.3  |       |
| Total Dissolved Solids   | 4900   | 5.00               | "     | "        | EC40203 | 03/02/04 | 03/02/04 | EPA 160.1  |       |
| Sulfate                  | 588    | 0.500              | "     | "        | EB42806 | 02/28/04 | 02/28/04 | EPA 375.4  |       |

Environmental Lab of Texas

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

  
Quality Assurance Review

Page 2 of 7

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

Project: A-20  
Project Number: None Given  
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:  
03/09/04 08:21

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

| Analyte                  | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|--------------------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| <b>MW 1 (4C01008-01)</b> |        |                    |       |          |         |          |          |           |       |
| Calcium                  | 232    | 1.00               | mg/L  | 100      | EC40805 | 03/04/04 | 03/08/04 | EPA 6010B |       |
| Magnesium                | 188    | 0.100              | "     | "        | "       | "        | "        | "         |       |
| Potassium                | 23.0   | 0.500              | "     | 10       | "       | "        | 03/08/04 | "         |       |
| Sodium                   | 968    | 1.00               | "     | 100      | "       | "        | 03/08/04 | "         |       |

Environmental Lab of Texas

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Quality Assurance Review

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

Project: A-20  
Project Number: None Given  
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:  
03/09/04 08:21

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

| Analyte | Result | Reporting<br>Limit | Units | Spike<br>Level | Source<br>Result | %REC | %REC<br>Limits | RPD | RPD<br>Limit | Notes |
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|

**Batch EB42806 - General Preparation (WetChem)**

**Blank (EB42806-BLK1)**

Prepared & Analyzed: 02/28/04

|         |    |       |      |
|---------|----|-------|------|
| Sulfate | ND | 0.500 | mg/L |
|---------|----|-------|------|

**Calibration Check (EB42806-CCV1)**

Prepared & Analyzed: 02/28/04

|         |      |  |      |      |     |        |
|---------|------|--|------|------|-----|--------|
| Sulfate | 50.6 |  | mg/L | 50.0 | 101 | 80-120 |
|---------|------|--|------|------|-----|--------|

**Duplicate (EB42806-DUP1)**

Source: 4B26003-01

Prepared & Analyzed: 02/28/04

|         |      |       |      |      |      |    |
|---------|------|-------|------|------|------|----|
| Sulfate | 34.6 | 0.500 | mg/L | 35.0 | 1.15 | 20 |
|---------|------|-------|------|------|------|----|

**Batch EC40105 - General Preparation (WetChem)**

**Blank (EC40105-BLK1)**

Prepared & Analyzed: 02/28/04

|                        |    |       |      |
|------------------------|----|-------|------|
| Carbonate Alkalinity   | ND | 0.100 | mg/L |
| Bicarbonate Alkalinity | ND | 2.00  | "    |
| Hydroxide Alkalinity   | ND | 0.100 | "    |

**Calibration Check (EC40105-CCV1)**

Prepared & Analyzed: 02/28/04

|                      |        |  |      |        |      |        |
|----------------------|--------|--|------|--------|------|--------|
| Carbonate Alkalinity | 0.0496 |  | mg/L | 0.0500 | 99.2 | 80-120 |
|----------------------|--------|--|------|--------|------|--------|

**Duplicate (EC40105-DUP1)**

Source: 4C01008-01

Prepared & Analyzed: 02/28/04

|                        |      |       |      |      |       |    |
|------------------------|------|-------|------|------|-------|----|
| Carbonate Alkalinity   | 0.00 | 0.100 | mg/L | 0.00 |       | 20 |
| Bicarbonate Alkalinity | 385  | 2.00  | "    | 384  | 0.260 | 20 |
| Hydroxide Alkalinity   | 0.00 | 0.100 | "    | 0.00 |       | 20 |

**Batch EC40203 - General Preparation (WetChem)**

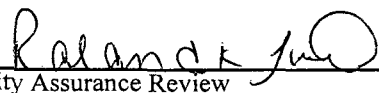
**Blank (EC40203-BLK1)**

Prepared & Analyzed: 03/02/04

|                        |    |      |      |
|------------------------|----|------|------|
| Total Dissolved Solids | ND | 5.00 | mg/L |
|------------------------|----|------|------|

Environmental Lab of Texas

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Quality Assurance Review

Page 4 of 7

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

Project: A-20  
Project Number: None Given  
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:  
03/09/04 08:21

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

| Analyte | Result | Reporting<br>Limit | Units | Spike<br>Level | Source<br>Result | %REC | %REC<br>Limits | RPD | RPD<br>Limit | Notes |
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|

**Batch EC40203 - General Preparation (WetChem)**

**Duplicate (EC40203-DUP1)** Source: 4C01008-01 Prepared & Analyzed: 03/02/04

|                        |      |      |      |  |      |  |  |       |    |  |
|------------------------|------|------|------|--|------|--|--|-------|----|--|
| Total Dissolved Solids | 4930 | 5.00 | mg/L |  | 4900 |  |  | 0.610 | 20 |  |
|------------------------|------|------|------|--|------|--|--|-------|----|--|

**Batch EC40307 - General Preparation (WetChem)**

**Blank (EC40307-BLK1)** Prepared & Analyzed: 03/02/04

|          |    |      |      |  |  |  |  |  |  |  |
|----------|----|------|------|--|--|--|--|--|--|--|
| Chloride | ND | 5.00 | mg/L |  |  |  |  |  |  |  |
|----------|----|------|------|--|--|--|--|--|--|--|

**Calibration Check (EC40307-CCV1)** Prepared & Analyzed: 03/02/04

|          |      |  |      |      |  |      |        |  |  |  |
|----------|------|--|------|------|--|------|--------|--|--|--|
| Chloride | 4960 |  | mg/L | 5000 |  | 99.2 | 80-120 |  |  |  |
|----------|------|--|------|------|--|------|--------|--|--|--|

**Matrix Spike (EC40307-MS1)** Source: 4C01008-01 Prepared & Analyzed: 03/02/04

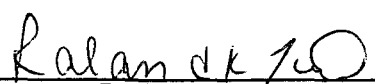
|          |      |  |      |      |      |      |        |  |  |  |
|----------|------|--|------|------|------|------|--------|--|--|--|
| Chloride | 4780 |  | mg/L | 2500 | 2300 | 99.2 | 80-120 |  |  |  |
|----------|------|--|------|------|------|------|--------|--|--|--|

**Matrix Spike Dup (EC40307-MSD1)** Source: 4C01008-01 Prepared & Analyzed: 03/02/04

|          |      |  |      |      |      |     |        |      |    |  |
|----------|------|--|------|------|------|-----|--------|------|----|--|
| Chloride | 4830 |  | mg/L | 2500 | 2300 | 101 | 80-120 | 1.04 | 20 |  |
|----------|------|--|------|------|------|-----|--------|------|----|--|

Environmental Lab of Texas

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Quality Assurance Review

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

Project: A-20  
Project Number: None Given  
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:  
03/09/04 08:21

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

| Analyte | Result | Reporting<br>Limit | Units | Spike<br>Level | Source<br>Result | %REC | %REC<br>Limits | RPD | RPD<br>Limit | Notes |
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|

**Batch EC40805 - General Preparation (Metals)**

**Blank (EC40805-BLK1)**

Prepared: 03/04/04 Analyzed: 03/08/04

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

**Calibration Check (EC40805-CCV1)**

Prepared: 03/04/04 Analyzed: 03/08/04

|           |      |  |      |      |     |        |
|-----------|------|--|------|------|-----|--------|
| Calcium   | 2.27 |  | mg/L | 2.00 | 114 | 85-115 |
| Magnesium | 2.06 |  | "    | 2.00 | 103 | 85-115 |
| Potassium | 2.02 |  | "    | 2.00 | 101 | 85-115 |
| Sodium    | 2.25 |  | "    | 2.00 | 112 | 85-115 |

**Duplicate (EC40805-DUP1)**

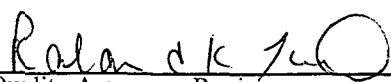
Source: 4B26006-01

Prepared: 03/04/04 Analyzed: 03/08/04

|           |      |        |      |      |      |    |
|-----------|------|--------|------|------|------|----|
| Calcium   | 83.0 | 0.100  | mg/L | 80.3 | 3.31 | 20 |
| Magnesium | 46.4 | 0.0100 | "    | 44.9 | 3.29 | 20 |
| Potassium | 9.37 | 0.0500 | "    | 9.26 | 1.18 | 20 |
| Sodium    | 148  | 1.00   | "    | 150  | 1.34 | 20 |

Environmental Lab of Texas

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Quality Assurance Review

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

Project: A-20  
Project Number: None Given  
Project Manager: Kristin Farris

Fax: (505) 397-1471

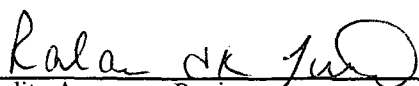
**Reported:**  
03/09/04 08:21

### 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

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Quality Assurance Review

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# Environmental Lab of Texas

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

Client: Rice Operating Co.

Date/Time: 02-28-04 @ 0830

Order #: 4C01008

Initials: JMM

### Sample Receipt Checklist

|   |   |                             |  |   |
|---|---|-----------------------------|--|---|
| Temperature of container/cooler?                          | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | 4  | C |
| Shipping container/cooler in good condition?              | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |  |   |
| Custody Seals intact on shipping container/cooler?        | <input type="checkbox"/> Yes            | <input type="checkbox"/> No | <input checked="" type="checkbox"/> Not present    |   |
| Custody Seals intact on sample bottles?                   | <input type="checkbox"/> Yes            | <input type="checkbox"/> No | <input checked="" type="checkbox"/> 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 type="checkbox"/> Yes            | <input type="checkbox"/> No | NO LABEL   |   |
| Container labels legible and intact?                      | <input type="checkbox"/> Yes            | <input type="checkbox"/> No | NO LABEL   |   |
| 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 type="checkbox"/> Yes            | <input type="checkbox"/> No | <input checked="" type="checkbox"/> Not Applicable |   |

Other observations:

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### Variance Documentation:

Contact Person: - \_\_\_\_\_ Date/Time: \_\_\_\_\_ Contacted by: \_\_\_\_\_  
Regarding: \_\_\_\_\_

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Corrective Action Taken:

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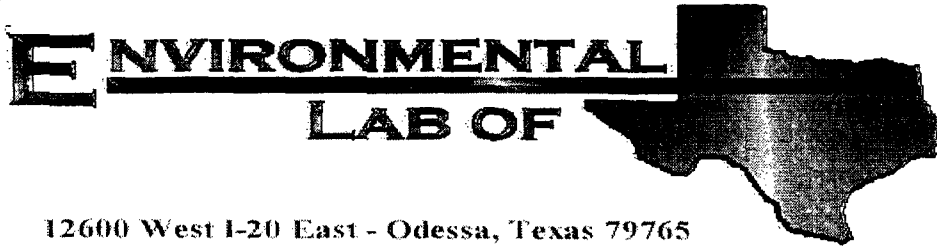
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12600 West I-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

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

Project: A-20  
Project Number: None Given  
Location: EME

Lab Order Number: 4E29004

Report Date: 06/04/04

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

Project: A-20  
Project Number: None Given  
Project Manager: Kristin Farris

Fax: (505) 397-1471

**Reported:**  
06/04/04 16:50

**ANALYTICAL REPORT FOR SAMPLES**

| Sample ID      | Laboratory ID | Matrix | Date Sampled   | Date Received  |
|----------------|---------------|--------|----------------|----------------|
| Monitor Well 1 | 4E29004-01    | Water  | 05/27/04 11:00 | 05/28/04 16:30 |

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

Project: A-20  
Project Number: None Given  
Project Manager: Kristin Farris

Fax: (505) 397-1471

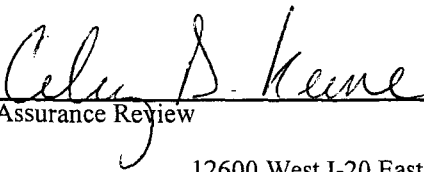
Reported:  
06/04/04 16:50

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

| Analyte                                  | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method     | Notes |
|--|--------|--------------------|-------|----------|---------|----------|----------|------------|-------|
| <b>Monitor Well 1 (4E29004-01) Water</b> |        |                    |       |          |         |          |          |            |       |
| Carbonate Alkalinity                     | ND     | 0.100              | mg/L  | 1        | EF40408 | 05/29/04 | 05/29/04 | EPA 310.2M |       |
| Bicarbonate Alkalinity                   | 680    | 2.00               | "     | "        | "       | "        | "        | "          |       |
| Hydroxide Alkalinity                     | ND     | 0.100              | "     | "        | "       | "        | "        | "          |       |
| Chloride                                 | 1910   | 5.00               | "     | "        | EF40407 | 06/03/04 | 06/03/04 | EPA 325.3M |       |
| Total Dissolved Solids                   | 4480   | 5.00               | "     | "        | EF40310 | 06/01/04 | 06/02/04 | EPA 160.1  |       |
| Sulfate                                  | 273    | 2.50               | "     | 5        | EF40418 | 06/04/04 | 06/04/04 | 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: A-20  
Project Number: None Given  
Project Manager: Kristin Farris

Fax: (505) 397-1471

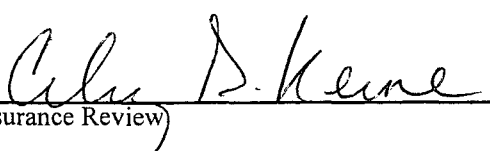
Reported:  
06/04/04 16:50

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

| Analyte                                  | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|--|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| <b>Monitor Well 1 (4E29004-01) Water</b> |        |                    |       |          |         |          |          |           |       |
| Calcium                                  | 174    | 1.00               | mg/L  | 100      | EF40416 | 06/02/04 | 06/02/04 | EPA 6010B |       |
| Magnesium                                | 214    | 0.100              | "     | "        | "       | "        | "        | "         |       |
| Potassium                                | 26.4   | 0.500              | "     | 10       | "       | "        | 06/02/04 | "         |       |
| Sodium                                   | 1040   | 10.0               | "     | 1000     | "       | "        | 06/02/04 | "         |       |

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: A-20  
Project Number: None Given  
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:  
06/04/04 16:50

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

| Analyte | Result | Reporting<br>Limit | Units | Spike<br>Level | Source<br>Result | %REC | %REC<br>Limits | RPD | RPD<br>Limit | Notes |
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|

**Batch EF40310 - Filtration Preparation**

**Blank (EF40310-BLK1)**

Prepared: 06/01/04 Analyzed: 06/02/04

|                        |    |      |      |
|------------------------|----|------|------|
| Total Dissolved Solids | ND | 5.00 | mg/L |
|------------------------|----|------|------|

**Duplicate (EF40310-DUP1)**

Source: 4E29001-01

Prepared: 06/01/04 Analyzed: 06/02/04

|                        |     |      |      |     |       |    |
|------------------------|-----|------|------|-----|-------|----|
| Total Dissolved Solids | 831 | 5.00 | mg/L | 830 | 0.120 | 20 |
|------------------------|-----|------|------|-----|-------|----|

**Batch EF40407 - General Preparation (WetChem)**

**Blank (EF40407-BLK1)**

Prepared & Analyzed: 06/03/04

|          |    |      |      |
|----------|----|------|------|
| Chloride | ND | 5.00 | mg/L |
|----------|----|------|------|

**Matrix Spike (EF40407-MS1)**

Source: 4E29001-01

Prepared & Analyzed: 06/03/04

|          |     |      |      |     |     |      |        |
|----------|-----|------|------|-----|-----|------|--------|
| Chloride | 709 | 5.00 | mg/L | 500 | 213 | 99.2 | 80-120 |
|----------|-----|------|------|-----|-----|------|--------|

**Matrix Spike Dup (EF40407-MSD1)**

Source: 4E29001-01

Prepared & Analyzed: 06/03/04

|          |     |      |      |     |     |      |        |      |    |
|----------|-----|------|------|-----|-----|------|--------|------|----|
| Chloride | 700 | 5.00 | mg/L | 500 | 213 | 97.4 | 80-120 | 1.28 | 20 |
|----------|-----|------|------|-----|-----|------|--------|------|----|

**Reference (EF40407-SRM1)**

Prepared & Analyzed: 06/03/04

|          |      |  |      |      |      |        |
|----------|------|--|------|------|------|--------|
| Chloride | 4960 |  | mg/L | 5000 | 99.2 | 80-120 |
|----------|------|--|------|------|------|--------|

**Batch EF40408 - General Preparation (WetChem)**

**Blank (EF40408-BLK1)**

Prepared & Analyzed: 05/29/04

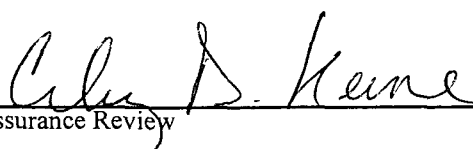
|                      |    |       |      |
|----------------------|----|-------|------|
| Carbonate Alkalinity | ND | 0.100 | mg/L |
|----------------------|----|-------|------|

|                        |    |      |   |
|------------------------|----|------|---|
| Bicarbonate Alkalinity | ND | 2.00 | " |
|------------------------|----|------|---|

|                      |    |       |   |
|----------------------|----|-------|---|
| Hydroxide Alkalinity | ND | 0.100 | " |
|----------------------|----|-------|---|

Environmental Lab of Texas

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Quality Assurance Review

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

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

Project: A-20  
Project Number: None Given  
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:  
06/04/04 16:50

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

| Analyte | Result | Reporting<br>Limit | Units | Spike<br>Level | Source<br>Result | %REC | %REC<br>Limits | RPD | RPD<br>Limit | Notes |
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|

**Batch EF40408 - General Preparation (WetChem)**

|                                 |      |                           |      |  |      |  |  |      |    |  |
|---------------------------------|------|---------------------------|------|--|------|--|--|------|----|--|
| <b>Duplicate (EF40408-DUP1)</b> |      | <b>Source: 4E29001-01</b> |      | <b>Prepared &amp; Analyzed: 05/29/04</b> |      |  |  |      |    |  |
| Carbonate Alkalinity            | 0.00 | 0.100                     | mg/L |  | 0.00 |  |  |      | 20 |  |
| Bicarbonate Alkalinity          | 214  | 2.00                      | "    |  | 214  |  |  | 0.00 | 20 |  |
| Hydroxide Alkalinity            | 0.00 | 0.100                     | "    |  | 0.00 |  |  |      | 20 |  |

**Reference (EF40408-SRM1)**

**Prepared & Analyzed: 05/29/04**

|                      |        |  |      |        |  |      |        |  |  |  |
|----------------------|--------|--|------|--------|--|------|--------|--|--|--|
| Carbonate Alkalinity | 0.0496 |  | mg/L | 0.0500 |  | 99.2 | 80-120 |  |  |  |
|----------------------|--------|--|------|--------|--|------|--------|--|--|--|

**Batch EF40418 - General Preparation (WetChem)**

**Blank (EF40418-BLK1)**

**Prepared & Analyzed: 06/04/04**

|         |    |       |      |  |  |  |  |  |  |  |
|---------|----|-------|------|--|--|--|--|--|--|--|
| Sulfate | ND | 0.500 | mg/L |  |  |  |  |  |  |  |
|---------|----|-------|------|--|--|--|--|--|--|--|

**Calibration Check (EF40418-CCV1)**

**Prepared & Analyzed: 06/04/04**

|         |      |  |      |      |  |      |        |  |  |  |
|---------|------|--|------|------|--|------|--------|--|--|--|
| Sulfate | 49.2 |  | mg/L | 50.0 |  | 98.4 | 80-120 |  |  |  |
|---------|------|--|------|------|--|------|--------|--|--|--|

**Duplicate (EF40418-DUP1)**

**Source: 4E29001-01**

**Prepared & Analyzed: 06/04/04**

|         |     |      |      |  |     |  |  |      |    |  |
|---------|-----|------|------|--|-----|--|--|------|----|--|
| Sulfate | 140 | 1.00 | mg/L |  | 138 |  |  | 1.44 | 20 |  |
|---------|-----|------|------|--|-----|--|--|------|----|--|

Environmental Lab of Texas

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Quality Assurance Review

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

Project: A-20  
Project Number: None Given  
Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported:  
06/07/04 15:49

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

| Analyte | Result | Reporting<br>Limit | Units | Spike<br>Level | Source<br>Result | %REC | %REC<br>Limits | RPD | RPD<br>Limit | Notes |
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|

**Batch EF40416 - General Preparation (Metals)**

**Blank (EF40416-BLK1)**

Prepared & Analyzed: 06/02/04

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

**Calibration Check (EF40416-CCV1)**

Prepared & Analyzed: 06/02/04

|           |      |  |      |      |      |        |
|-----------|------|--|------|------|------|--------|
| Calcium   | 2.08 |  | mg/L | 2.00 | 104  | 85-115 |
| Magnesium | 2.29 |  | "    | 2.00 | 114  | 85-115 |
| Potassium | 1.97 |  | "    | 2.00 | 98.5 | 85-115 |
| Sodium    | 1.93 |  | "    | 2.00 | 96.5 | 85-115 |

**Duplicate (EF40416-DUP1)**

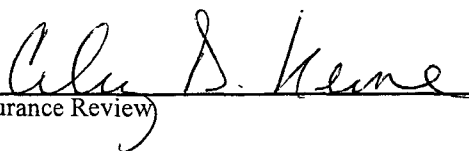
Source: 4E29001-01

Prepared & Analyzed: 06/02/04

|           |      |        |      |      |       |    |
|-----------|------|--------|------|------|-------|----|
| Calcium   | 165  | 1.00   | mg/L | 170  | 2.99  | 20 |
| Magnesium | 29.9 | 0.0100 | "    | 29.3 | 2.03  | 20 |
| Potassium | 4.76 | 0.0500 | "    | 4.82 | 1.25  | 20 |
| Sodium    | 96.5 | 0.100  | "    | 96.8 | 0.310 | 20 |

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: A-20  
Project Number: None Given  
Project Manager: Kristin Farris

Fax: (505) 397-1471

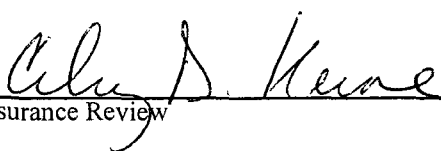
Reported:  
06/04/04 16:50

### 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

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Quality Assurance Review

Page 7 of 7

12600 West 1-20 East  
Odessa, Texas 79763

Phone: 915-563-1800  
Fax: 915-563-1713

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

**Project Manager:**

Keirstin Farris

Project Name: A-20

Company Name

## RICE Operating

Project #:

Company Address:

Company Address: 1322 W. Taylor

Project Loc: 1-1 M E

City/State/Zip:

City/State/Zip: Fla 665, NM 88240

Telephone No (

(505) 393-9174

**Fax No:**

(505) 397-1471

**Sampler Signature:**

*John C.*

[illegible]

# Environmental Lab of Texas

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

Client: Rice Operating Co.

Date/Time: 05-29-04 @ 1030

Order #: 4E29004

Initials: JMM

### Sample Receipt Checklist

|   |   |    |   |           |
|---|---|----|---|-----------|
| Temperature of container/cooler?                          | <input checked="" type="checkbox"/> Yes | No | 17.5  | C         |
| Shipping container/cooler in good condition?              | <input checked="" type="checkbox"/> Yes | No |   |           |
| Custody Seals intact on shipping container/cooler?        | Yes                                     | No | <input checked="" type="checkbox"/> Not present |           |
| Custody Seals intact on sample bottles?                   | Yes                                     | No | <input checked="" type="checkbox"/> Not present |           |
| Chain of custody present?                                 | <input checked="" type="checkbox"/> Yes | No |   |           |
| Sample Instructions complete on Chain of Custody?         | <input checked="" type="checkbox"/> Yes | No |   |           |
| Chain of Custody signed when relinquished and received?   | Yes                                     | No | missing 1st rec.                                | signature |
| Chain of custody agrees with sample label(s)              | <input checked="" type="checkbox"/> Yes | No |   |           |
| Container labels legible and intact?                      | <input checked="" type="checkbox"/> Yes | No |   |           |
| Sample Matrix and properties same as on chain of custody? | <input checked="" type="checkbox"/> Yes | No |   |           |
| Samples in proper container/bottle?                       | <input checked="" type="checkbox"/> Yes | No |   |           |
| Samples properly preserved?                               | Yes                                     | No | should be 4°C                                   | ± 2°C     |
| Sample bottles intact?                                    | <input checked="" type="checkbox"/> Yes | No |   |           |
| Preservations documented on Chain of Custody?             | <input checked="" type="checkbox"/> Yes | No |   |           |
| Containers documented on Chain of Custody?                | <input checked="" type="checkbox"/> Yes | No |   |           |
| Sufficient sample amount for indicated test?              | <input checked="" type="checkbox"/> Yes | No |   |           |
| All samples received within sufficient hold time?         | <input checked="" type="checkbox"/> Yes | No |   |           |
| VOC samples have zero headspace?                          | <input checked="" type="checkbox"/> Yes | No | Not Applicable                                  |           |

Other observations:

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### Variance Documentation:

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

Regarding:

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Corrective Action Taken:

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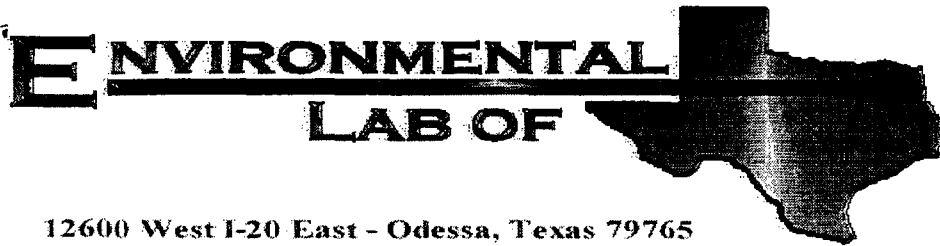
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## Analytical Report

**Prepared for:**

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

Project: Jct. A-20  
Project Number: None Given  
Location: EME

Lab Order Number: 4I17010

Report Date: 09/28/04

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

Project: Jct. A-20  
Project Number: None Given  
Project Manager: Kristin Pope

Fax: (505) 397-1471

**Reported:**  
09/28/04 08:18

### ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled   | Date Received  |
|-----------|---------------|--------|----------------|----------------|
| MW-1      | 4117010-01    | Water  | 09/16/04 11:10 | 09/17/04 14:15 |

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

Project: Jct. A-20  
Project Number: None Given  
Project Manager: Kristin Pope

Fax: (505) 397-1471

Reported:  
09/28/04 08:18

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

| Analyte                        | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method     | Notes |
|--------------------------------|--------|--------------------|-------|----------|---------|----------|----------|------------|-------|
| <b>MW-1 (4117010-01) Water</b> |        |                    |       |          |         |          |          |            |       |
| Carbonate Alkalinity           | ND     | 0.500              | mg/L  | 5        | EI42722 | 09/17/04 | 09/17/04 | EPA 310.2M |       |
| Bicarbonate Alkalinity         | 450    | 10.0               | "     | "        | "       | "        | "        | "          |       |
| Hydroxide Alkalinity           | ND     | 0.500              | "     | "        | "       | "        | "        | "          |       |
| Chloride                       | 2360   | 5.00               | "     | 1        | EI42704 | 09/24/04 | 09/24/04 | EPA 325.3M |       |
| Total Dissolved Solids         | 5340   | 10.0               | "     | 2        | EI42719 | 09/22/04 | 09/22/04 | EPA 160.1  |       |
| Sulfate                        | 568    | 6.25               | "     | 12.5     | EI42706 | 09/27/04 | 09/27/04 | EPA 375.4  |       |

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

Project: Jct. A-20  
Project Number: None Given  
Project Manager: Kristin Pope

Fax: (505) 397-1471

**Reported:**  
09/28/04 08:18

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

| Analyte                        | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|--------------------------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| <b>MW-1 (4117010-01) Water</b> |        |                    |       |          |         |          |          |           |       |
| Calcium                        | 270    | 1.00               | mg/L  | 100      | EI42107 | 09/20/04 | 09/20/04 | EPA 6010B |       |
| Magnesium                      | 226    | 0.100              | "     | "        | "       | "        | "        | "         |       |
| Potassium                      | 24.0   | 0.500              | "     | 10       | "       | "        | "        | "         |       |
| Sodium                         | 1180   | 1.00               | "     | 100      | "       | "        | "        | "         |       |

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

Project: Jct. A-20  
Project Number: None Given  
Project Manager: Kristin Pope

Fax: (505) 397-1471

Reported:  
09/28/04 08:18

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

| Analyte  | Result | Reporting<br>Limit | Units | Spike<br>Level                                   | Source<br>Result | %REC | %REC<br>Limits | RPD   | RPD<br>Limit | Notes |
|--|--------|--------------------|-------|--|------------------|------|----------------|-------|--------------|-------|
| <b>Batch EI42704 - General Preparation (WetChem)</b> |        |                    |       |  |                  |      |                |       |              |       |
| <b>Blank (EI42704-BLK1)</b>                          |        |                    |       | Prepared & Analyzed: 09/24/04                    |                  |      |                |       |              |       |
| Chloride   | ND     | 5.00               | mg/L  |  |                  |      |                |       |              |       |
| <b>Matrix Spike (EI42704-MS1)</b>                    |        |                    |       | Source: 4I20003-04 Prepared & Analyzed: 09/24/04 |                  |      |                |       |              |       |
| Chloride   | 1040   | 5.00               | mg/L  | 500  | 550              | 98.0 | 90-110         |       |              |       |
| <b>Matrix Spike Dup (EI42704-MSD1)</b>               |        |                    |       | Source: 4I20003-04 Prepared & Analyzed: 09/24/04 |                  |      |                |       |              |       |
| Chloride   | 1050   | 5.00               | mg/L  | 500  | 550              | 100  | 90-110         | 0.957 | 20           |       |
| <b>Reference (EI42704-SRM1)</b>                      |        |                    |       | Prepared & Analyzed: 09/24/04                    |                  |      |                |       |              |       |
| Chloride   | 4960   |                    | mg/L  | 5000   |                  | 99.2 | 80-120         |       |              |       |
| <b>Batch EI42706 - General Preparation (WetChem)</b> |        |                    |       |  |                  |      |                |       |              |       |
| <b>Blank (EI42706-BLK1)</b>                          |        |                    |       | Prepared & Analyzed: 09/27/04                    |                  |      |                |       |              |       |
| Sulfate  | ND     | 0.500              | mg/L  |  |                  |      |                |       |              |       |
| <b>Calibration Check (EI42706-CCV1)</b>              |        |                    |       | Prepared & Analyzed: 09/27/04                    |                  |      |                |       |              |       |
| Sulfate  | 48.8   |                    | mg/L  | 50.0   |                  | 97.6 | 80-120         |       |              |       |
| <b>Duplicate (EI42706-DUP1)</b>                      |        |                    |       | Source: 4I24017-01 Prepared & Analyzed: 09/27/04 |                  |      |                |       |              |       |
| Sulfate  | 172    | 1.25               | mg/L  |  | 175              |      |                | 1.73  | 20           |       |
| <b>Batch EI42719 - Filtration Preparation</b>        |        |                    |       |  |                  |      |                |       |              |       |
| <b>Blank (EI42719-BLK1)</b>                          |        |                    |       | Prepared & Analyzed: 09/22/04                    |                  |      |                |       |              |       |
| Total Dissolved Solids                               | ND     | 5.00               | mg/L  |  |                  |      |                |       |              |       |

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

Project: Jct. A-20  
Project Number: None Given  
Project Manager: Kristin Pope

Fax: (505) 397-1471

Reported:  
09/28/04 08:18

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

| Analyte | Result | Reporting<br>Limit | Units | Spike<br>Level | Source<br>Result | %REC | %REC<br>Limits | RPD | RPD<br>Limit | Notes |
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|

**Batch EI42719 - Filtration Preparation**

**Duplicate (EI42719-DUP1)** Source: 4I17010-01 Prepared & Analyzed: 09/22/04

|                        |      |      |      |  |      |  |  |      |    |  |
|------------------------|------|------|------|--|------|--|--|------|----|--|
| Total Dissolved Solids | 5160 | 10.0 | mg/L |  | 5340 |  |  | 3.43 | 20 |  |
|------------------------|------|------|------|--|------|--|--|------|----|--|

**Batch EI42722 - General Preparation (WetChem)**

**Blank (EI42722-BLK1)** Prepared & Analyzed: 09/17/04

|                        |    |       |      |  |  |  |  |  |  |  |
|------------------------|----|-------|------|--|--|--|--|--|--|--|
| Carbonate Alkalinity   | ND | 0.100 | mg/L |  |  |  |  |  |  |  |
| Bicarbonate Alkalinity | ND | 2.00  | "    |  |  |  |  |  |  |  |
| Hydroxide Alkalinity   | ND | 0.100 | "    |  |  |  |  |  |  |  |

**Calibration Check (EI42722-CCV1)** Prepared & Analyzed: 09/17/04

|                      |        |  |      |        |  |      |        |  |  |  |
|----------------------|--------|--|------|--------|--|------|--------|--|--|--|
| Carbonate Alkalinity | 0.0492 |  | mg/L | 0.0500 |  | 98.4 | 80-120 |  |  |  |
|----------------------|--------|--|------|--------|--|------|--------|--|--|--|

**Duplicate (EI42722-DUP1)** Source: 4I17010-01 Prepared & Analyzed: 09/17/04

|                        |      |       |      |  |      |  |  |      |    |  |
|------------------------|------|-------|------|--|------|--|--|------|----|--|
| Carbonate Alkalinity   | 0.00 | 0.500 | mg/L |  | 0.00 |  |  |      | 20 |  |
| Bicarbonate Alkalinity | 430  | 10.0  | "    |  | 450  |  |  | 4.55 | 20 |  |
| Hydroxide Alkalinity   | 0.00 | 0.500 | "    |  | 0.00 |  |  |      | 20 |  |

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

Project: Jct. A-20  
Project Number: None Given  
Project Manager: Kristin Pope

Fax: (505) 397-1471

Reported:  
09/28/04 08:18

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

| Analyte | Result | Reporting<br>Limit | Units | Spike<br>Level | Source<br>Result | %REC | %REC<br>Limits | RPD | RPD<br>Limit | Notes |
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|

**Batch EI42107 - 6010B/No Digestion**

**Blank (EI42107-BLK1)**

Prepared & Analyzed: 09/20/04

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

**Calibration Check (EI42107-CCV1)**

Prepared & Analyzed: 09/20/04

|           |      |  |      |      |      |        |
|-----------|------|--|------|------|------|--------|
| Calcium   | 1.98 |  | mg/L | 2.00 | 99.0 | 85-115 |
| Magnesium | 2.10 |  | "    | 2.00 | 105  | 85-115 |
| Potassium | 1.72 |  | "    | 2.00 | 86.0 | 85-115 |
| Sodium    | 1.80 |  | "    | 2.00 | 90.0 | 85-115 |

**Duplicate (EI42107-DUP1)**

Source: 4117010-01

Prepared & Analyzed: 09/20/04

|           |      |       |      |      |       |    |
|-----------|------|-------|------|------|-------|----|
| Calcium   | 274  | 1.00  | mg/L | 270  | 1.47  | 20 |
| Magnesium | 228  | 0.100 | "    | 226  | 0.881 | 20 |
| Potassium | 25.0 | 0.500 | "    | 24.0 | 4.08  | 20 |
| Sodium    | 1200 | 1.00  | "    | 1180 | 1.68  | 20 |

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

Project: Jct. A-20  
Project Number: None Given  
Project Manager: Kristin Pope

Fax: (505) 397-1471

Reported:  
09/28/04 08:18

### 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:

9-28-04

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 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: 09-17-04 @ 1530

Order #: 4 I 17010

Initials: JMM

### Sample Receipt Checklist

|   |   |                             |                                 |
|---|---|-----------------------------|---------------------------------|
| Temperature of container/cooler?                          | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | -15 C                           |
| Shipping container/cooler in good condition?              | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |                                 |
| Custody Seals intact on shipping container/cooler?        | <input type="checkbox"/> Yes            | <input type="checkbox"/> No | Not present                     |
| Custody Seals intact on sample bottles?                   | <input 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 type="checkbox"/> Yes            | <input type="checkbox"/> No | NO LABEL - WRITTEN ON CONTAINER |
| Container labels legible and intact?                      | <input type="checkbox"/> Yes            | <input type="checkbox"/> No | NO LABEL - WRITTEN ON CONTAINER |
| 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 type="checkbox"/> Yes            | <input type="checkbox"/> No | Not Applicable                  |

Other observations:

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### Variance Documentation:

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

Regarding:

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Corrective Action Taken:

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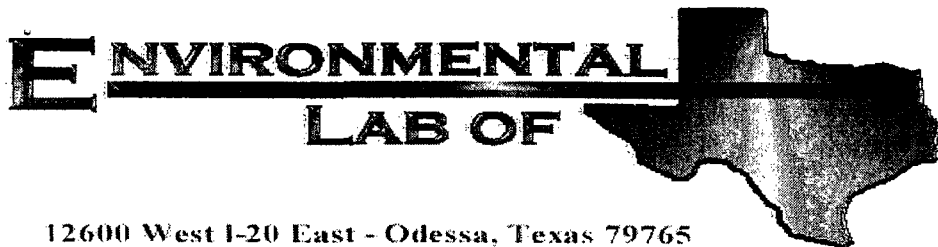
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## Analytical Report

**Prepared for:**

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

Project: Jct. A-20  
Project Number: None Given  
Location: EME

Lab Order Number: 4K30010

Report Date: 12/08/04

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

Project: Jct. A-20  
Project Number: None Given  
Project Manager: Kristin Pope

Fax: (505) 397-1471

**Reported:**  
12/08/04 17:22

### ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled   | Date Received  |
|-----------|---------------|--------|----------------|----------------|
| MW-1      | 4K30010-01    | Water  | 11/24/04 16:40 | 11/30/04 10:35 |

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

Project: Jct. A-20  
Project Number: None Given  
Project Manager: Kristin Pope

Fax: (505) 397-1471

Reported:  
12/08/04 17:22

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

| Analyte                        | Result      | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method     | Notes |
|--------------------------------|-------------|--------------------|-------|----------|---------|----------|----------|------------|-------|
| <b>MW-1 (4K30010-01) Water</b> |             |                    |       |          |         |          |          |            |       |
| <b>Total Alkalinity</b>        | <b>502</b>  | 2.00               | mg/L  | 1        | EL40313 | 12/03/04 | 12/03/04 | EPA 310.2M |       |
| <b>Total Dissolved Solids</b>  | <b>5110</b> | 5.00               | "     | "        | EL40105 | 11/30/04 | 12/01/04 | EPA 160.1  |       |

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

Project: Jct. A-20  
Project Number: None Given  
Project Manager: Kristin Pope

Fax: (505) 397-1471

Reported:  
12/08/04 17:22

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

| Analyte                        | Result      | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|--------------------------------|-------------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| <b>MW-1 (4K30010-01) Water</b> |             |                    |       |          |         |          |          |           |       |
| <b>Calcium</b>                 | <b>269</b>  | 1.00               | mg/L  | 100      | EL40101 | 11/30/04 | 11/30/04 | EPA 6010B |       |
| <b>Magnesium</b>               | <b>232</b>  | 0.100              | "     | "        | "       | "        | "        | "         |       |
| <b>Potassium</b>               | <b>27.3</b> | 0.500              | "     | 10       | "       | "        | "        | "         |       |
| <b>Sodium</b>                  | <b>1420</b> | 10.0               | "     | 1000     | "       | "        | "        | "         |       |

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

Project: Jct. A-20  
Project Number: None Given  
Project Manager: Kristin Pope

Fax: (505) 397-1471

**Reported:**  
12/08/04 17:22

**Anions by EPA Method 300.0**  
**Environmental Lab of Texas**

| Analyte                        | Result      | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|--------------------------------|-------------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| <b>MW-1 (4K30010-01) Water</b> |             |                    |       |          |         |          |          |           |       |
| <b>Chloride</b>                | <b>1930</b> | 50.0               | mg/L  | 100      | EL40811 | 12/02/04 | 12/02/04 | EPA 300.0 |       |
| <b>Sulfate</b>                 | <b>422</b>  | 50.0               | "     | "        | EL40812 | "        | "        | "         |       |

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

Project: Jct. A-20  
Project Number: None Given  
Project Manager: Kristin Pope

Fax: (505) 397-1471

Reported:  
12/08/04 17:22

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

| Analyte | Result | Reporting<br>Limit | Units | Spike<br>Level | Source<br>Result | %REC | %REC<br>Limits | RPD | RPD<br>Limit | Notes |
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|

**Batch EL40105 - General Preparation (WetChem)**

**Blank (EL40105-BLK1)** Prepared: 11/30/04 Analyzed: 12/01/04

Total Dissolved Solids ND 5.00 mg/L

**Duplicate (EL40105-DUP1)** Source: 4K24009-01 Prepared: 11/30/04 Analyzed: 12/01/04

Total Dissolved Solids 1480 5.00 mg/L 1480 0.00 20

**Batch EL40313 - General Preparation (WetChem)**

**Blank (EL40313-BLK1)** Prepared & Analyzed: 12/03/04

Total Alkalinity ND 2.00 mg/L

**Duplicate (EL40313-DUP1)** Source: 4K30004-01 Prepared & Analyzed: 12/03/04

Total Alkalinity 207 2.00 mg/L 208 0.482 20

**Reference (EL40313-SRM1)** Prepared & Analyzed: 12/03/04

Carbonate Alkalinity 0.0501 mg/L 0.0500 100 80-120

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

Project: Jct. A-20  
Project Number: None Given  
Project Manager: Kristin Pope

Fax: (505) 397-1471

Reported:  
12/08/04 17:22

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

| Analyte | Result | Reporting<br>Limit | Units | Spike<br>Level | Source<br>Result | %REC | %REC<br>Limits | RPD | RPD<br>Limit | Notes |
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|

**Batch EL40101 - 6010B/No Digestion**

**Blank (EL40101-BLK1)**

Prepared & Analyzed: 11/30/04

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

**Calibration Check (EL40101-CCV1)**

Prepared & Analyzed: 11/30/04

|           |      |  |      |      |      |        |
|-----------|------|--|------|------|------|--------|
| Calcium   | 1.87 |  | mg/L | 2.00 | 93.5 | 85-115 |
| Magnesium | 2.08 |  | "    | 2.00 | 104  | 85-115 |
| Potassium | 1.83 |  | "    | 2.00 | 91.5 | 85-115 |
| Sodium    | 1.78 |  | "    | 2.00 | 89.0 | 85-115 |

**Duplicate (EL40101-DUP1)**

Source: 4K24009-01

Prepared & Analyzed: 11/30/04

|           |      |        |      |      |      |    |
|-----------|------|--------|------|------|------|----|
| Calcium   | 108  | 1.00   | mg/L | 122  | 12.2 | 20 |
| Magnesium | 46.0 | 0.0100 | "    | 51.6 | 11.5 | 20 |
| Potassium | 11.1 | 0.500  | "    | 13.2 | 17.3 | 20 |
| Sodium    | 222  | 1.00   | "    | 235  | 5.69 | 20 |

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

Project: Jct. A-20  
Project Number: None Given  
Project Manager: Kristin Pope

Fax: (505) 397-1471

Reported:  
12/08/04 17:22

**Anions by EPA Method 300.0 - Quality Control**  
**Environmental Lab of Texas**

| Analyte  | Result | Reporting<br>Limit           | Units | Spike<br>Level                | Source<br>Result | %REC | %REC<br>Limits | RPD   | RPD<br>Limit | Notes |
|--|--------|------------------------------|-------|-------------------------------|------------------|------|----------------|-------|--------------|-------|
| <b>Batch EL40811 - General Preparation (WetChem)</b> |        |                              |       |                               |                  |      |                |       |              |       |
| <b>Blank (EL40811-BLK1)</b>                          |        |                              |       | Prepared & Analyzed: 12/02/04 |                  |      |                |       |              |       |
| Chloride   | 0.00   | 0.500                        | mg/L  |                               |                  |      |                |       |              |       |
| <b>Blank (EL40811-BLK2)</b>                          |        |                              |       | Prepared & Analyzed: 12/02/04 |                  |      |                |       |              |       |
| Chloride   | 0.00   | 0.500                        | mg/L  |                               |                  |      |                |       |              |       |
| <b>LCS (EL40811-BS1)</b>                             |        |                              |       | Prepared & Analyzed: 12/02/04 |                  |      |                |       |              |       |
| Chloride   | 5.73   | 0.500                        | mg/L  | 5.00                          |                  | 115  | 80-120         |       |              |       |
| <b>LCS (EL40811-BS2)</b>                             |        |                              |       | Prepared & Analyzed: 12/02/04 |                  |      |                |       |              |       |
| Chloride   | 5.81   | 0.500                        | mg/L  | 5.00                          |                  | 116  | 80-120         |       |              |       |
| <b>LCS Dup (EL40811-BSD1)</b>                        |        |                              |       | Prepared & Analyzed: 12/02/04 |                  |      |                |       |              |       |
| Chloride   | 5.42   | 0.500                        | mg/L  | 5.00                          |                  | 108  | 80-120         | 5.56  | 20           |       |
| <b>LCS Dup (EL40811-BSD2)</b>                        |        |                              |       | Prepared & Analyzed: 12/02/04 |                  |      |                |       |              |       |
| Chloride   | 5.51   | 0.500                        | mg/L  | 5.00                          |                  | 110  | 80-120         | 5.30  | 20           |       |
| <b>Calibration Check (EL40811-CCV1)</b>              |        |                              |       | Prepared & Analyzed: 12/02/04 |                  |      |                |       |              |       |
| Chloride   | 25.8   |                              | mg/L  | 25.0                          |                  | 103  | 80-120         |       |              |       |
| <b>Calibration Check (EL40811-CCV2)</b>              |        |                              |       | Prepared & Analyzed: 12/02/04 |                  |      |                |       |              |       |
| Chloride   | 26.1   |                              | mg/L  | 25.0                          |                  | 104  | 80-120         |       |              |       |
| <b>Duplicate (EL40811-DUP1)</b>                      |        | <b>Source: 4K30004-03</b>    |       | Prepared & Analyzed: 12/02/04 |                  |      |                |       |              |       |
| Chloride   | 55.7   | 10.0                         | mg/L  |                               | 55.2             |      |                | 0.902 | 20           |       |
| <b>Duplicate (EL40811-DUP2)</b>                      |        | <b>Source: 4K30006-01RE1</b> |       | Prepared & Analyzed: 12/02/04 |                  |      |                |       |              |       |
| Chloride   | 446    | 10.0                         | mg/L  |                               | 445              |      |                | 0.224 | 20           |       |

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Reported:  
12/08/04 17:22

**Anions by EPA Method 300.0 - Quality Control**  
**Environmental Lab of Texas**

| Analyte  | Result | Reporting<br>Limit           | Units | Spike<br>Level                | Source<br>Result | %REC | %REC<br>Limits | RPD  | RPD<br>Limit | Notes |
|--|--------|------------------------------|-------|-------------------------------|------------------|------|----------------|------|--------------|-------|
| <b>Batch EL40812 - General Preparation (WetChem)</b> |        |                              |       |                               |                  |      |                |      |              |       |
| <b>Blank (EL40812-BLK1)</b>                          |        |                              |       | Prepared & Analyzed: 12/02/04 |                  |      |                |      |              |       |
| Sulfate  | 0.00   | 0.500                        | mg/L  |                               |                  |      |                |      |              |       |
| <b>Blank (EL40812-BLK2)</b>                          |        |                              |       | Prepared & Analyzed: 12/02/04 |                  |      |                |      |              |       |
| Sulfate  | 0.00   | 0.500                        | mg/L  |                               |                  |      |                |      |              |       |
| <b>LCS (EL40812-BS1)</b>                             |        |                              |       | Prepared & Analyzed: 12/02/04 |                  |      |                |      |              |       |
| Sulfate  | 5.28   | 0.500                        | mg/L  | 5.00                          |                  | 106  | 80-120         |      |              |       |
| <b>LCS (EL40812-BS2)</b>                             |        |                              |       | Prepared & Analyzed: 12/02/04 |                  |      |                |      |              |       |
| Sulfate  | 5.53   | 0.500                        | mg/L  | 5.00                          |                  | 111  | 80-120         |      |              |       |
| <b>LCS Dup (EL40812-BSD1)</b>                        |        |                              |       | Prepared & Analyzed: 12/02/04 |                  |      |                |      |              |       |
| Sulfate  | 5.22   | 0.500                        | mg/L  | 5.00                          |                  | 104  | 80-120         | 1.14 | 20           |       |
| <b>LCS Dup (EL40812-BSD2)</b>                        |        |                              |       | Prepared & Analyzed: 12/02/04 |                  |      |                |      |              |       |
| Sulfate  | 5.34   | 0.500                        | mg/L  | 5.00                          |                  | 107  | 80-120         | 3.50 | 20           |       |
| <b>Calibration Check (EL40812-CCV1)</b>              |        |                              |       | Prepared & Analyzed: 12/02/04 |                  |      |                |      |              |       |
| Sulfate  | 10.1   |                              | mg/L  | 10.0                          |                  | 101  | 80-120         |      |              |       |
| <b>Calibration Check (EL40812-CCV2)</b>              |        |                              |       | Prepared & Analyzed: 12/02/04 |                  |      |                |      |              |       |
| Sulfate  | 10.3   |                              | mg/L  | 10.0                          |                  | 103  | 80-120         |      |              |       |
| <b>Duplicate (EL40812-DUP1)</b>                      |        | <b>Source: 4K30004-03</b>    |       | Prepared & Analyzed: 12/02/04 |                  |      |                |      |              |       |
| Sulfate  | 101    | 10.0                         | mg/L  |                               | 99.2             |      |                | 1.80 | 20           |       |
| <b>Duplicate (EL40812-DUP2)</b>                      |        | <b>Source: 4K30006-01RE1</b> |       | Prepared & Analyzed: 12/02/04 |                  |      |                |      |              |       |
| Sulfate  | 123    | 10.0                         | mg/L  |                               | 123              |      |                | 0.00 | 20           |       |

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12/08/04 17:22

### 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:

12-09-04

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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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 Co.

Date/Time: 11-30-04 @ 1200

Order #: 4K 30010

Initials: JMM

### Sample Receipt Checklist

|   |                                      |    |  |                |
|---|--------------------------------------|----|--|----------------|
| Temperature of container/cooler?                          | <input checked="" type="radio"/> Yes | No | 0.5  | C              |
| Shipping container/cooler in good condition?              | <input checked="" type="radio"/> Yes | No |  |                |
| Custody Seals intact on shipping container/cooler?        | <input checked="" type="radio"/> Yes | No | <input checked="" type="radio"/> Not present |                |
| Custody Seals intact on sample bottles?                   | <input checked="" type="radio"/> Yes | No | <input checked="" type="radio"/> Not present |                |
| Chain of custody present?                                 | <input checked="" type="radio"/> Yes | No |  |                |
| Sample Instructions complete on Chain of Custody?         | <input checked="" type="radio"/> Yes | No |  |                |
| Chain of Custody signed when relinquished and received?   | <input checked="" type="radio"/> Yes | No |  |                |
| Chain of custody agrees with sample label(s)              | <input checked="" type="radio"/> Yes | No |  |                |
| Container labels legible and intact?                      | <input checked="" type="radio"/> Yes | No |  |                |
| Sample Matrix and properties same as on chain of custody? | <input checked="" type="radio"/> Yes | No |  |                |
| Samples in proper container/bottle?                       | <input checked="" type="radio"/> Yes | No |  |                |
| Samples properly preserved?                               | <input checked="" type="radio"/> Yes | No |  |                |
| Sample bottles intact?                                    | <input checked="" type="radio"/> Yes | No |  |                |
| Preservations documented on Chain of Custody?             | <input checked="" type="radio"/> Yes | No |  |                |
| Containers documented on Chain of Custody?                | <input checked="" type="radio"/> Yes | No |  |                |
| Sufficient sample amount for indicated test?              | <input checked="" type="radio"/> Yes | No |  |                |
| All samples received within sufficient hold time?         | <input checked="" type="radio"/> Yes | No |  |                |
| VOC samples have zero headspace?                          | <input checked="" type="radio"/> Yes | No |  | Not Applicable |

Other observations:

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### Variance Documentation:

Contact Person: - \_\_\_\_\_ Date/Time: \_\_\_\_\_ Contacted by: \_\_\_\_\_  
Regarding: \_\_\_\_\_

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Corrective Action Taken:

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