AP - 50

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 1770

January 21, 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

> 2004 MONITOR WELL REPORT/SAMPLING SUMMARY ZACHARY HINTON EOL, BD SWD SYSTEM UNIT 'O', SEC. 12, T22S, R37E NMOCD CASE #1R0426-36

Mr. Price:

As a supplement to the closure petition submitted by R. T. Hicks Consultants, Ltd. (Hicks) of Albuquerque, Rice Operating Company (ROC) takes this opportunity to submit the 2004 Monitor Well Report for the <u>Zachary Hinton EOL</u> junction box site located in the Blinebry-Drinkard (BD) Salt Water Disposal (SWD) System. The site has one monitor well that is sampled quarterly pursuant to NMOCD guidelines. Groundwater impact was suspected during the delineation and remediation process of the Junction Box Upgrade. The well was installed in 2002.

In 2004, ROC and Arcadis G&M, Inc. of Midland, Texas sampled the well. In 2005, Basin Environmental Service Technologies of Lovington will sample the well and Environmental Lab of Texas of Odessa will continue to conduct analytical tests of the water samples.

Hicks has been investigating potential environmental concerns at this site under an NMOCD-approved work plan (July 2, 2003). On January 30, 2004, Hicks submitted a final Corrective Action Plan (CAP) and a petition for closure which proposes the plugging and abandonment of the monitor well as the water quality is reflective of background concentrations.

On December 3, 2004, NMOCD requested additional information via email. This information was emailed and mailed on December 8, 2004 by Hicks. ROC would appreciate your prompt review of this information.

Thank you for your consideration concerning this annual summary of groundwater monitoring information. If you have any questions, do not hesitate to contact me.

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

RICE OPERATING COMAPANY

Kristin Farris Pope Project Scientist

enclosures:

Summary table & graph

Analytical results

Knistin Samo Pope

Map

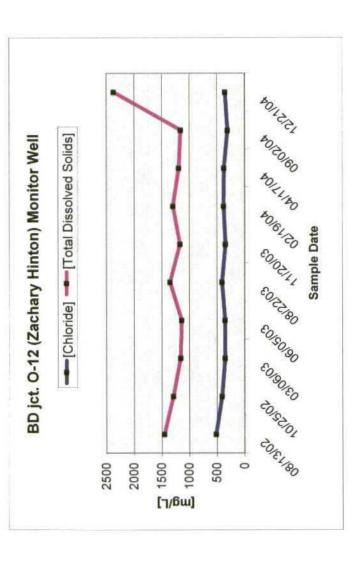
cc: LBG, CDH, Hicks, file, Rob Roy Industries,

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

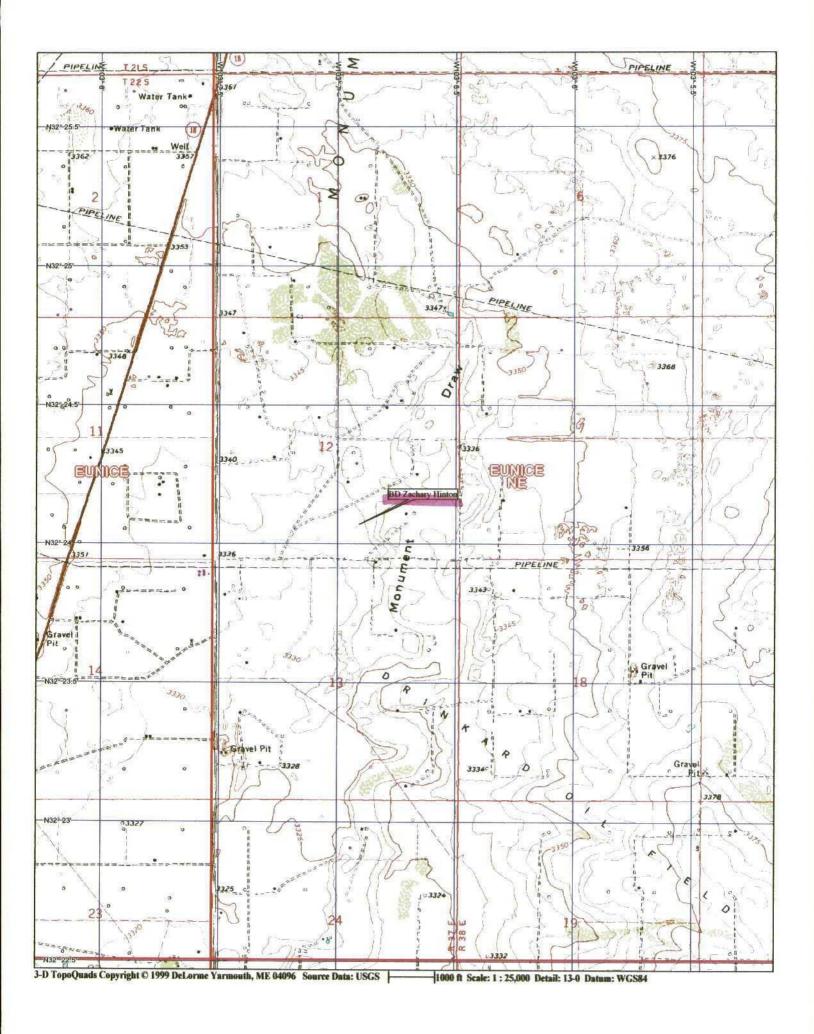
NMOCD CASE #1R0426-36

| (III | |
|------|-------|
| HINT | R37E |
| CHAL | T22S, |
| Z. | 12, |
| 71 | Sec. |
| 5 | 0, |
| Jet. | unit |
| 3 | |

| | ENTS | ilty | | | | | | | | : cloudy | y |
|--------------------------------|-----------------|-------------|----------|----------|----------|----------|----------|----------|----------|-------------------|------------|
| | COMMENTS | red & silty | | | | | | | | It. brown; cloudy | tan, silty |
| | ETHYL TOTAL | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.006 | <0.001 | <0.001 | <0.001 |
| | | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.002 | <0.001 | <0.001 | <0.001 |
| | BENZENE TOLUENE | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.002 | <0.001 | <0.001 | <0.001 |
| All concentrations are in mg/L | BENZENE | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.002 | <0.001 | <0.001 | <0.001 |
| ntrations | SQL | 1450 | 1290 | 1160 | 1140 | 1350 | 1170 | 1297 | 0611 | 0911 | 2370 |
| All conce | CL | 514 | 408 | 354 | 354 | 408 | 346 | 380 | 372 | 310 | 354 |
| | SAMPLE | 08/13/02 | 10/25/02 | 03/06/03 | 06/05/03 | 08/22/03 | 11/20/03 | 02/19/04 | 04/17/04 | 09/02/04 | 12/21/04 |
| 11) | VOLUME | 5.00 | 5.25 | 5.00 | 5.00 | 4.90 | 5.00 | 4.80 | 5.00 | XXX | 1.05 |
| (gal) | WELL | 1.700 | 1.682 | 1.670 | 1.692 | 1.600 | 1.600 | 1.590 | 1.660 | XXX | XXX |
| t) | TOTAL | 66.7 | 66.65 | 66.54 | 66.58 | 66.40 | 66.45 | 66.50 | 66.50 | 67.00 | 58.00 |
| (ff) | DEPTH TO | 56.10 | 56.14 | 26.07 | 26.00 | 26.00 | 56.00 | 56.59 | 55.65 | 56.00 | 55.90 |
| | MM# | 1 | - | - | - | - | - | - | - | - | - |



* Depth to water is measured from top of casing Casing is 3.458 ft





Analytical Report

Prepared for:

Sharon Hall
ARCADIS
1004 N. Big Spring Street
Midland, TX 79701

Project: Zachary Hinton / 729

Project Number: Zachary Hinton/729

Location: Rice Operating/BD

Lab Order Number: 4L22012

Report Date: 12/30/04

ARCADIS 1004 N. Big Spring Street Project: Zachary Hinton / 729
Project Number: Zachary Hinton/729

Fax: (432) 687-5401

Reported:

Midland TX, 79701

Project Manager: Sharon Hall

12/30/04 15:44

ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|-----------|---------------|--------|----------------|----------------|
| MW-1 | 4L22012-01 | Water | 12/21/04 16:55 | 12/21/04 18:00 |

ARCADIS 1004 N. Big Spring Street Midland TX, 79701 Project: Zachary Hinton / 729

Project Number: Zachary Hinton/729 Project Manager: Sharon Hall Fax: (432) 687-5401

Reported: 12/30/04 15:44

Organics by GC Environmental Lab of Texas

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| MW-1 (4L22012-01) Water | | | | | | | | | |
| Benzene | ND | 0.00100 | mg/L | 1 | EL43007 | 12/29/04 | 12/30/04 | EPA 8021B | |
| Toluene | ND | 0.00100 | II. | 11 | *1 | н | н | U | |
| Ethylbenzene | ND | 0.00100 | 11 | n | и | н | ** | II. | |
| Xylene (p/m) | ND | 0.00100 | 11 | n | н | n | " | H | |
| Xylene (o) | ND | 0.00100 | 11* | n | 11 | ** | н | u | |
| Surrogate: a,a,a-Trifluorotoluene | | 97.2 % | 80-12 | 20 | " | 11 | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 91.3 % | 80-12 | 20 | " | u | ,, _ | " | |

1004 N. Big Spring Street Midland TX, 79701 Project: Zachary Hinton / 729

Project Number: Zachary Hinton/729

Project Manager: Sharon Hall

Fax: (432) 687-5401

Reported: 12/30/04 15:44

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

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-------------------------|--------|--------------------|-------|----------|---------|----------|----------|------------|-------|
| MW-1 (4L22012-01) Water | | | | | | | | | |
| Total Alkalinity | 190 | 2.00 | mg/L | 1 | EL42907 | 12/29/04 | 12/29/04 | EPA 310.2M | |
| Chloride | 354 | 5.00 | 11 | 11 | EL42908 | 12/29/04 | 12/29/04 | EPA 325.3M | |
| Total Dissolved Solids | 2370 | 5.00 | n | н | EL42301 | 12/22/04 | 12/23/04 | EPA 160.1 | |
| Sulfate | 261 | 2.50 | 18 | 5 | EL42909 | 12/29/04 | 12/29/04 | EPA 375.4 | |

1004 N. Big Spring Street

Midland TX, 79701

Project: Zachary Hinton / 729

Project Number: Zachary Hinton/729

Project Manager: Sharon Hall

Fax: (432) 687-5401

Reported: 01/03/05 15:09

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

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-------------------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| MW-1 (4L22012-01) Water | | | | | | | | | |
| Calcium | 109 | 1.00 | mg/L | 100 | EL42302 | 12/23/04 | 12/23/04 | EPA 6010B | |
| Magnesium | 66.8 | 0.100 | 11 | и | 11 | B | ti. | 11 | |
| Potassium | 10.8 | 0.500 | и | 10 | h | n | 11 | 11 | |
| Sodium | 190 | 1.00 | n . | 100 | 11 | u | п | n. | |

1004 N. Big Spring Street

Midland TX, 79701

Project: Zachary Hinton / 729

Project Number: Zachary Hinton/729

Project Manager: Sharon Hall

Fax: (432) 687-5401

Reported:

12/30/04 15:44

Organics by GC - Quality Control **Environmental Lab of Texas**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|-----------------------------------|--------|--------------------|-------|----------------|------------------|----------|----------------|-----|--------------|-------|
| Batch EL43007 - EPA 5030C (GC) | | | | | | | | | | |
| Biank (EL43007-BLK1) | | | | Prepared: | 12/29/04 | Analyzed | : 12/30/04 | | | |
| Benzene | ND | 0.00100 | mg/L | | | | | | | |
| Toluene | ND | 0.00100 | 11 | | | | | | | |
| Ethylbenzene | ND | 0.00100 | 11 | | | | | | | |
| Xylene (p/m) | ND | 0.00100 | н | | | | | | | |
| Xylene (o) | ND | 0.00100 | 11 | | | | | | | |
| Surrogate: a,a,a-Trifluorotoluene | 90.9 | | ug/l | 100 | | 90.9 | 80-120 | _ | | |
| Surrogate: 4-Bromofluorobenzene | 80.2 | | " | 100 | | 80.2 | 80-120 | | | |
| LCS (EL43007-BS1) | • | | | Prepared: | 12/29/04 | Analyzed | 1: 12/30/04 | | | |
| Benzene | 87.9 | | ug/l | 100 | | 87.9 | 80-120 | | | |
| Toluene | 88.5 | | n | 100 | | 88.5 | 80-120 | | | |
| Ethylbenzene | 97.5 | | 11 | 100 | | 97.5 | 80-120 | | | |
| Xylene (p/m) | 219 | | | 200 | | 110 | 80-120 | | | |
| Xylene (o) | 111 | | ** | 100 | | 111 | 80-120 | | | |
| Surrogate: a,a,a-Trifluorotoluene | 109 | | " | 100 | | 109 | 80-120 | | | |
| Surrogate: 4-Bromofluorobenzene | 119 | | " | 100 | | 119 | 80-120 | | | |
| Calibration Check (EL43007-CCV1) | | | | Prepared | : 12/29/04 | Analyzeo | 1: 12/30/04 | ļ | | |
| Benzene | 87.8 | | ug/l | 100 | | 87.8 | 80-120 | | | |
| Toluene | 89.0 | | II. | 100 | | 89.0 | 80-120 | | | |
| Ethylbenzene | 95.3 | | " | 100 | | 95.3 | 80-120 | | | |
| Xylene (p/m) | 213 | | n | 200 | | 106 | 80-120 | | | |
| Xylene (o) | 104 | | 11 | 100 | | 104 | 80-120 | | | |
| Surrogate: a,a,a-Trifluorotoluene | 113 | | " | 100 | | 113 | 80-120 | | | |
| Surrogate: 4-Bromofluorobenzene | 116 | | " | 100 | | 116 | 80-120 | | | |
| Matrix Spike (EL43007-MS1) | So | ource: 4L220 | 09-05 | Prepared | : 12/29/04 | Analyze | d: 12/30/04 | 1 | | |
| Benzene | 88.6 | | ug/l | 100 | ND | 88.6 | 80-120 | | | |
| Toluene | 85.4 | | #1 | 100 | ND | 85.4 | 80-120 | | | |
| Ethylbenzene | 87.9 | | Ħ | 100 | ND | 87.9 | 80-120 | | | |
| Xylene (p/m) | 186 | | " | 200 | ND | 93.0 | 80-120 | | | |
| Xylene (o) | 94.2 | | " | 100 | ND | 94.2 | 80-120 | | | |
| Surrogate: a,a,a-Trifluorotoluene | 107 | | ,, | 100 | | 107 | 80-120 | | | |
| Surrogate: 4-Bromofluorobenzene | 119 | | " | 100 | | 119 | 80-120 | | | |

1004 N. Big Spring Street

Project: Zachary Hinton / 729

Fax: (432) 687-5401

Project Number: Zachary Hinton/729

Reported:

Midland TX, 79701 Project Manager: Sharon Hall 12/30/04 15:44

Organics by GC - Quality Control **Environmental Lab of Texas**

| Analyte | Result | Reporting Limit U | Jnits | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|-----------------------------------|-------------|----------------------------------------|-------|----------------|------------------|-----------|----------------|-------|--------------|-------|
| Batch EL43007 - EPA 5030C (GC) | | ······································ | | | | | | | | |
| Matrix Spike Dup (EL43007-MSD1) | Sou | rce: 4L22009-0 |)5 | Prepared: | 12/29/04 | Analyzed: | 12/30/04 | | | |
| Benzene | 92.9 | 1 | ug/l | 100 | ND | 92.9 | 80-120 | 4.74 | 20 | |
| Toluene | 86.0 | | 0 | 100 | ND | 86.0 | 80-120 | 0.700 | 20 | |
| Ethylbenzene | 87.2 | | | 100 | ND | 87.2 | 80-120 | 0.800 | 20 | |
| Xylene (p/m) | 164 | | 11 | 200 | ND | 82.0 | 80-120 | 12.6 | 20 | |
| Xylene (o) | 86.7 | | 11 | 100 | ND | 86.7 | 80-120 | 8.29 | 20 | |
| Surrogate: a,a,a-Trifluorotoluene | 112 | | " | 100 | | 112 | 80-120 | | ···· | |
| Surrogate: 4-Bromofluorobenzene | 117 | | n | 100 | | 117 | 80-120 | | | |

1004 N. Big Spring Street

Midland TX, 79701

Project: Zachary Hinton / 729

Project Number: Zachary Hinton/729

Project Manager: Sharon Hall

Fax: (432) 687-5401

Reported:

12/30/04 15:44

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

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|-------------------------------------|-------------|--------------------|-------|----------------|------------------|-------------|----------------|-------|--------------|-------|
| | | | | | | | | | | |
| Batch EL42301 - 413.1 | | | | | | | | | | |
| Blank (EL42301-BLK1) | | | | Prepared: | 12/22/04 | Analyzed | : 12/23/04 | | | |
| Total Dissolved Solids | ND | 5.00 | mg/L | | | | | | | |
| Duplicate (EL42301-DUP1) | So | urce: 4L2101 | 0-01 | Prepared: | 12/22/04 | Analyzed | : 12/23/04 | | | |
| Total Dissolved Solids | 590 | 5.00 | mg/L | | 567 | | | 3.98 | 20 | |
| Batch EL42907 - General Preparation | on (WetChen | n) | | | | | | | | |
| Blank (EL42907-BLK1) | | | | Prepared | & Analyz | ed: 12/29/ | 04 | ` | | |
| Total Alkalinity | ND | 2.00 | mg/L | | | | | | | |
| Duplicate (EL42907-DUP1) | So | urce: 4L2200 | 02-01 | Prepared | & Analyz | ed: 12/29/ | 04 | | | |
| Total Alkalinity | 181 | 2.00 | mg/L | | 182 | | | 0.551 | 20 | |
| Reference (EL42907-SRM1) | | | | Prepared | & Analyz | ed: 12/29/ | 04 | | | |
| Carbonate Alkalinity | 0.0501 | | mg/L | 0.0500 | | 100 | 80-120 | | | |
| Batch EL42908 - General Preparation | on (WetCher | n) | | | | | | | | |
| Blank (EL42908-BLK1) | | | | Prepared | & Analyz | zed: 12/29/ | 04 | | | |
| Chloride | ND | 5.00 | mg/L | | | | | | | |
| Matrix Spike (EL42908-MS1) | So | urce: 4L210 | 10-01 | Prepared | & Analyz | ed: 12/29/ | 04 | | | |
| Chloride | 390 | 5.00 | mg/L | 250 | 155 | 94.0 | 80-120 | | | |
| Matrix Spike Dup (EL42908-MSD1) | So | urce: 4L210 | 10-01 | Prepared | & Analyz | ed: 12/29/ | 04 | | | |
| Chloride | 394 | 5.00 | mg/L | 250 | 155 | 95.6 | 80-120 | 1.02 | 20 | |

1004 N. Big Spring Street

Midland TX, 79701

Project: Zachary Hinton / 729

Project Number: Zachary Hinton/729

Project Manager: Sharon Hall

Fax: (432) 687-5401

Reported:

12/30/04 15:44

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

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|-----------------------------------------------------------|-------------|--------------------|-------|----------------|------------------|------------|----------------|------|--------------|-------|
| Batch EL42908 - General Preparatio | n (WetChen | 1) | | | | | | | | |
| Reference (EL42908-SRM1) | | | | Prepared | & Analyz | ed: 12/29/ | 04 | | | |
| Chloride | 4960 | | mg/L | 5000 | | 99.2 | 80-120 | | | |
| Blank (EL42909 - General Preparation Blank (EL42909-BLK1) | on (WetChen | n) | ····· | Prepared | & Analyz | ed: 12/29/ | 04 | | | |
| Sulfate | ND | 0.500 | mg/L | | | | | | | |
| Calibration Check (EL42909-CCV1) | | | | Prepared | & Analyz | ed: 12/29/ | 04 | ~ | | |
| Sulfate | 48.9 | | mg/L | 50.0 | | 97.8 | 80-120 | | | |
| Duplicate (EL42909-DUP1) | So | urce: 4L210 | 10-01 | Prepared | & Analyz | ed: 12/29/ | 04 | | | |
| Sulfate | 96.6 | 1.00 | mg/[. | | 99.8 | | | 3.26 | 20 | |

1004 N. Big Spring Street

Project: Zachary Hinton / 729

Fax: (432) 687-5401

Project Number: Zachary Hinton/729

Reported:

Midland TX, 79701

Project Manager: Sharon Hall

01/03/05 15:09

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

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|------------------------------------|--------|--------------------|--------|----------------|------------------|------------|----------------|------|--------------|----------|
| Batch EL42302 - 6010B/No Digestion | | | | | | | | | | |
| Blank (EL42302-BLK1) | | | | Prepared | & Analyz | ed: 12/23/ | 04 | | | <u> </u> |
| Calcium | ND | 0.0100 | mg/L | | | | | | ATTENDED | |
| Magnesium | ND | 0.00100 | 41 | | | | | | | |
| Potassium | ND | 0.0500 | 11 | | | | | | | |
| Sodium | ND | 0.0100 | 11 | | | | | | | |
| Calibration Check (EL42302-CCV1) | | | | Prepared | & Analyz | ed: 12/23/ | 04 | | | |
| Calcium | 2.00 | | mg/L | 2.00 | | 100 | 85-115 | , | | |
| Magnesium | 2.28 | | н | 2.00 | | 114 | 85-115 | | | |
| Potassium | 1.78 | | u | 2.00 | | 89.0 | 85-115 | | | |
| Sodium | 1.92 | | " | 2.00 | | 96.0 | 85-115 | | | |
| Duplicate (EL42302-DUP1) | So | urce: 4L2101 | 0-01RE | 1 Prepared | & Analyz | ed: 12/23/ | 04 | • | | |
| Calcium | 55.1 | 0.100 | mg/L | | 57.3 | | | 3.91 | 20 | |
| Magnesium | 13.2 | 0.0100 | u. | | 13.0 | | | 1.53 | 20 | |
| Potassium | 12.5 | 0.500 | ** | | 13.2 | | | 5.45 | 20 | |
| Sodium | 105 | 1.00 | n | | 112 | | | 6.45 | 20 | |

1004 N. Big Spring Street

Midland TX, 79701

Project: Zachary Hinton / 729

Project Number: Zachary Hinton/729

Project Manager: Sharon Hall

Fax: (432) 687-5401

Reported: 12/30/04 15:44

Notes and Definitions

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By:

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director

Peggy Allen, QA Officer

Date:

Jeanne Mc Murrey, Inorg. Tech Director James L. Hawkins, Chemist/Geologist

Sandra Sanchez, Lab Tech.

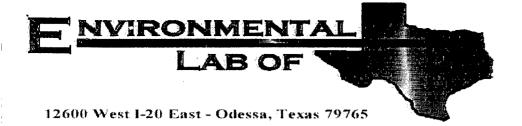
This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

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

| ARCADIS GERAGHTY & MILLER LABO | Laboratory Task Order No./P.O. No. | CHAIN-OF-CUSTODY RECORD | Y RECORD Page | of J |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------------------------------|----------------------------|
| t mit | | ANALYSIS / METHOD / SIZE | | |
| Project Location Rice Operating 0 / 64 | | | | |
| Droing Manage Kristin Farris Pope | 812 VO. | | | |
| Sampler(s)/AffiliationGC/ARCADIS | . 4 0 | | | |
| DateMXXXX Sample ID/Location Matrix Sampled | Time (2 P. C.) (3 P. C.) (4 P. C.) (4 P. C.) (5 P. C.) (| | Remarks | Total |
| / | 5591 h | | 422012-01 | \sim |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | - |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Sample Matrix: $L = Liquid;$ $S = Solid;$ | A = Air | | Total No. of Bottles/ Containers | of Bottles/ |
| \ <u>a</u> (| Organization: ARCADIS | 12,21 | 1800 | Inta |
| Received by: Jeann Intrum | Organization: Caro Ci IX | Date 12/ 21 / 64 | Time 1500 | Yes No (N/A) |
| Relinquished by: | Organization: | Date / / Date | Time | Seal Intact? Yes No N/A |
| Special Instructions/Remarks: | | | 1,13 6 | 0, |
| | | | | |
| Delivery Method: ⊠In Person | ☐ Common Carrier | ☐ Lab Courier | □ Other | SPECIFY AG 05-0597 |

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

| Client: Arcadis | | | | |
|-----------------------------------------------------------|-----------|----|----------------|--|
| Date/Time: 12-21-04 @ 1800 | | | | |
| Order#: 4L22012 | | | | |
| Order#: 4L 2ZO12 Initials: JMM | | | | |
| Sample Receip | t Checkli | st | | |
| Temperature of container/cooler? | (Yes) | No | 1.0 C | |
| Shipping container/cooler in good condition? | (Yes) | No | | |
| Custody Seals intact on shipping container/cooler? | Yes | No | Not present; | |
| Custody Seals intact on sample bottles? | Yes | No | Not present | |
| Chain of custody present? | Yes | No | | |
| Sample Instructions complete on Chain of Custody? | Yes | No | | |
| Chain of Custody signed when relinquished and received? | Yes | No | | |
| Chain of custody agrees with sample label(s) | (Yes) | No | | |
| Container labels legible and intact? | Yes | No | | |
| Sample Matrix and properties same as on chain of custody? | Yes | No | | |
| Samples in proper container/bottle? | Yes | No | | |
| Samples properly preserved? | (Yes) | No | | |
| Sample bottles intact? | Yes | No | | |
| Preservations documented on Chain of Custody? | Yes | No | | |
| Containers documented on Chain of Custody? | (Yes) | No | | |
| Sufficient sample amount for indicated test? | (Yes) | No | | |
| All samples received within sufficient hold time? | Yes | No | | |
| VOC samples have zero headspace? | Y/es\ | No | Not Applicable | |
| Other observations: | | | | |
| Variance Docu Contact Person: Date/Time: Regarding: | | | Contacted by: | |
| | | | | |
| Corrective Action Taken: | | | : | |
| | | | | |
| | | | | |
| • | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |



Analytical Report

Prepared for:

Sharon Hall
ARCADIS
1004 N. Big Spring Street
Midland, TX 79701

Project: Zachary Hinton / 729
Project Number: Zachary Hinton/729

Location: Rice Operating/BD

Lab Order Number: 4I03013

Report Date: 09/19/04

1004 N. Big Spring Street

Midland TX, 79701

Project: Zachary Hinton / 729

Project Number: Zachary Hinton/729

Project Manager: Sharon Hall

Fax: (432) 687-5401

Reported:

09/19/04 11:52

ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|-----------|---------------|--------|----------------|----------------|
| MW-1 | 4103013-01 | Water | 09/02/04 17:30 | 09/03/04 14:40 |

1004 N. Big Spring Street

Midland TX, 79701

Project: Zachary Hinton / 729

Project Number: Zachary Hinton/729

Project Manager: Sharon Hall

Fax: (432) 687-5401

Reported:

09/19/04 11:52

Organics by GC Environmental Lab of Texas

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------------|--------|--------------------|---------|----------|---------|----------|----------|-----------|-------|
| MW-1 (4103013-01) Water | | | | | | | | | |
| Benzene | ND | 0.00100 | mg/L | 1 | EI41004 | 09/08/04 | 09/08/04 | EPA 8021B | |
| Toluene | ND | 0.00100 | n | 11 | 0 | Ħ | ** | 11 | |
| Ethylbenzene | ND | 0.00100 | н | n | n | 11 | " | *1 | |
| Xylene (p/m) | ND | 0.00100 | н | и | " | n | н | n | |
| Xylene (o) | ND | 0.00100 | Ħ | н | н | u | п | u | |
| Surrogate: a,a,a-Trifluorotoluene | | 108 % | . 80-12 | 20 | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 102 % | 80-12 | 20 | " | " | " ~ | " | |

1004 N. Big Spring Street

Midland TX, 79701

Project: Zachary Hinton / 729

Project Number: Zachary Hinton/729 Project Manager: Sharon Hall

Fax: (432) 687-5401

Reported: 09/19/04 11:52

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

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-------------------------|--------|--------------------|-------|----------|---------|----------|----------|------------|-------|
| MW-1 (4103013-01) Water | | | | | | | | | · |
| Carbonate Alkalinity | ND | 0.100 | mg/L | 1 | E141608 | 09/03/04 | 09/03/04 | EPA 310.2M | |
| Bicarbonate Alkalinity | 182 | 2.00 | п | • | Ħ | 11 | Ħ | IF | |
| Hydroxide Alkalinity | ND | 0.100 | n | 11 | # | 11 | ** | " | |
| Chloride | 310 | 5.00 | ıı | ** | EI40805 | 09/07/04 | 09/07/04 | EPA 325.3M | |
| Total Dissolved Solids | 1160 | 5.00 | н | 11 | EI41607 | 09/09/04 | 09/09/04 | EPA 160.1 | |
| Sulfate | . 258 | 2.50 | n | 5 | EI41312 | 09/10/04 | 09/10/04 | EPA 375.4 | |

1004 N. Big Spring Street Midland TX, 79701 Project: Zachary Hinton / 729

Project Number: Zachary Hinton/729 Project Manager: Sharon Hall Fax: (432) 687-5401

Reported: 09/19/04 11:52

Total Metals by EPA / Standard Methods Environmental Lab of Texas

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-------------------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| MW-1 (4I03013-01) Water | | | | | | | | | |
| Calcium | 93.0 | 1.00 | mg/L | 100 | EI41506 | 09/15/04 | 09/15/04 | EPA 6010B | |
| Magnesium | 48.6 | 0.0100 | 11 | 10 | tr. | ţi. | н | 0 | |
| Potassium | 9.51 | 0.500 | н | ti . | " | 11 | " | н | |
| Sodium | 186 | 1.00 | ** | 100 | н | ** | n | n, | |

1004 N. Big Spring Street Midland TX, 79701 Project: Zachary Hinton / 729

Project Number: Zachary Hinton/729 Project Manager: Sharon Hall Fax: (432) 687-5401

Reported: 09/19/04 11:52

Organics by GC - Quality Control Environmental Lab of Texas

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|-----------------------------------|--------|--------------------|----------|----------------|------------------|------------|----------------|-------|--------------|-------|
| Batch EI41004 - EPA 5030C (GC) | | | | | | | | | | |
| Blank (EI41004-BLK1) | | | | Prepared | & Analyze | ed: 09/08/ | 04 | | | |
| Benzene | ND | 0.00100 | mg/L | | | | | | | |
| Toluene | ND | 0.00100 | и | | | | | | | |
| Ethylbenzene | ND | 0.00100 | н | | | | | | | |
| Xylene (p/m) | ND | 0.00100 | н | | | | | | | |
| Xylene (o) | ND | 0.00100 | н | | | | | | | |
| Surrogate: a,a,a-Trifluorotoluene | 23.4 | | ug/l | 20.0 | | 117 | 80-120 | | • | |
| Surrogate: 4-Bromofluorobenzene | 18.3 | | " | 20.0 | | 91.5 | 80-120 | | | |
| LCS (EI41004-BS1) | * | | | Prepared: | 09/08/04 | Analyzed | i: 09/10/04 | | | |
| Benzene | 93.0 | | ug/l | 100 | | 93.0 | 80-120 | | | |
| Toluene | 95.0 | | tr | 100 | | 95.0 | 80-120 | | | |
| Ethylbenzene | 95.1 | | lf . | 100 | | 95.1 | 80-120 | | | |
| Xylene (p/m) | 196 | | " | 200 | | 98.0 | 80-120 | | | |
| Xylene (o) | 104 | | ** | 100 | | 104 | 80-120 | | | |
| Surrogate: a,a,a-Trifluorotoluene | 16.7 | | ····· | 20.0 | | 83.5 | 80-120 | | | |
| Surrogate: 4-Bromofluorobenzene | 18.6 | | " | 20.0 | | 93.0 | 80-120 | | | |
| LCS Dup (EI41004-BSD1) | | | | Prepared: | 09/08/04 | Analyzed | l: 09/10/04 | | | |
| Benzene | 96.3 | | ug/l | 100 | | 96.3 | 80-120 | 3.49 | 20 | |
| Γoluene | 99.4 | | 17 | 100 | | 99.4 | 80-120 | 4.53 | 20 | |
| Ethylbenzene | 99.5 | | n | 100 | | 99.5 | 80-120 | 4.52 | 20 | |
| Xylene (p/m) | 206 | | ** | 200 | | 103 | 80-120 | 4.98 | 20 | |
| Xylene (o) | 105 | | ** | 100 | | 105 | 80-120 | 0.957 | 20 | |
| Surrogate: a,a,a-Trifluorotoluene | 18.0 | | <i>1</i> | 20.0 | | 90.0 | 80-120 | | | |
| Surrogate: 4-Bromofluorobenzene | 21.9 | | " | 20.0 | | 110 | 80-120 | | | |
| Calibration Check (EI41004-CCV1) | | | | Prepared | & Analyze | ed: 09/08/ | 04 | | | |
| Benzene | 94.3 | | ug/l | 100 | | 94.3 | 80-120 | | | |
| Toluene | 95.8 | | ** | 100 | | 95.8 | 80-120 | | | |
| Ethylbenzene | 102 | | II. | 100 | | 102 | 80-120 | | | |
| Xylene (p/m) | 207 | | t† | 200 | | 104 | 80-120 | | | |
| Xylene (o) | 105 | | * | 100 | | 105 | 80-120 | | | |
| Surrogate: a,a,a-Trifluorotoluene | 23.0 | | | 20.0 | | 115 | 80-120 | | | |
| Surrogate: 4-Bromofluorobenzene | 18.6 | | " | 20.0 | | 93.0 | 80-120 | | | |

1004 N. Big Spring Street

Midland TX, 79701

Project: Zachary Hinton / 729

Project Number: Zachary Hinton/729

Project Manager: Sharon Hall

Fax: (432) 687-5401

Reported:

09/19/04 11:52

Organics by GC - Quality Control Environmental Lab of Texas

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|-----------------------------------|--------|--------------------|---------------|----------------|------------------|----------|----------------|------|--------------|-------|
| Batch E141004 - EPA 5030C (GC) | ····· | | | | | | | | | |
| Matrix Spike (EI41004-MS1) | Soi | ırce: 4107001 | l - 01 | Prepared: | 09/08/04 | Analyzed | : 09/10/04 | | | |
| Benzene | 97.5 | | ug/l | 100 | ND | 97.5 | 80-120 | | | |
| Toluene | 101 | | н | 100 | ND | 101 | 80-120 | | | |
| Ethylbenzene | 97.8 | | u | 100 | ND | 97.8 | 80-120 | | | |
| Xylene (p/m) | 203 | | н | 200 | ND | 102 | 80-120 | | | |
| Xylene (o) | 102 | | 11 | 100 | ND | 102 | 80-120 | | | |
| Surrogate: a,a,a-Trifluorotoluene | 17.2 | | 11" | 20.0 | | 86.0 | 80-120 | | | |
| Surrogate: 4-Bromofluorobenzene | 20.9 | | " | 20.0 | | 104 | 80-120 | | | |
| Matrix Spike Dup (EI41004-MSD1) | Sou | urce: 4107001 | I - 01 | Prepared: | 09/08/04 | Analyzed | : 09/10/04 | | | |
| Benzene | 99.0 | | ug/l | 100 | ND | 99.0 | 80-120 | 1.53 | 20 | |
| Toluene | 101 | | n | 100 | ND | 101 | 80-120 | 0.00 | 20 | |
| Ethylbenzene | 99.6 | | H | 100 | ND | 99.6 | 80-120 | 1.82 | 20 | |
| Xylene (p/m) | 201 | | ** | 200 | ND | 100 | 80-120 | 1.98 | 20 | |
| Xylene (o) | 100 | | 11 | 100 | ND | 100 | 80-120 | 1.98 | 20 | |
| Surrogate: a,a,a-Trifluorotoluene | 16.5 | | " | 20.0 | | 82.5 | 80-120 | | | |
| Surrogate: 4-Bromofluorobenzene | 19.3 | | " | 20.0 | | 96.5 | 80-120 | | | |

1004 N. Big Spring Street

Project: Zachary Hinton / 729

Fax: (432) 687-5401

Midland TX, 79701

Project Number: Zachary Hinton/729 Project Manager: Sharon Hall

Reported: 09/19/04 11:52

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

| | | Reporting | | Spike | Source | | %REC | | RPD | |
|--------------------------------------|-------------|-------------|-------------------------------|----------|----------|------------|--------|-------|-------|-------|
| Anaiyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |
| Batch EI40805 - General Preparation | n (WetChem) | | | | | | | | | |
| Blank (EI40805-BLK1) | | | | Prepared | & Analyz | ed: 09/07/ | 04 | | | |
| Chloride | ND | 5.00 | mg/L | | | | | | | |
| Matrix Spike (EI40805-MS1) | Sour | rce: 410700 | 1-06 | Prepared | & Analyz | ed: 09/07/ | 04 | | | |
| Chloride | 1670 | 5.00 | mg/L | 500 | 1170 | 100 | 90-110 | | | |
| Matrix Spike Dup (EI40805-MSD1) | Sour | rce: 4I0700 | 1-06 | Prepared | & Analyz | ed: 09/07/ | 04 | | | |
| Chloride | 1660 | 5.00 | mg/L | 500 | 1170 | 98.0 | 90-110 | 0.601 | 20 | |
| Reference (EI40805-SRM1) | | | Prepared & Analyzed: 09/07/04 | | | | | | | |
| Chloride | 4960 | | mg/L | 5000 | | 99.2 | 80-120 | | | 4 |
| Batch EI41312 - General Preparation | n (WetChem) | | | | | | | | | |
| Blank (EI41312-BLK1) | | | **** | Prepared | & Analyz | ed: 09/10/ | 04 | | | |
| Sulfate | ND | 0.500 | mg/L | | • • | | | | | |
| Calibration Check (EI41312-CCV1) | | | | Prepared | & Analyz | ed: 09/10/ | 04 | | | |
| Sulfate | 48.9 | | mg/L | 50.0 | | 97.8 | 80-120 | | | |
| Duplicate (EI41312-DUP1) | Sour | rce: 4I0301 | 0-01 | Prepared | & Analyz | ed: 09/10/ | '04 | | | |
| Sulfate | 76.4 | 0.500 | mg/L | | 74.6 | | | 2.38 | 20 | |
| Batch EI41607 - Filtration Preparati | on | | | | | | | | | |
| Blank (EI41607-BLK1) | | | | Prepared | & Analyz | ed: 09/09/ | ′04 | | | |
| Total Dissolved Solids | ND | 5.00 | mg/L | | | | | | | |

1004 N. Big Spring Street

Project: Zachary Hinton / 729

Fax: (432) 687-5401

Midland TX, 79701

Project Number: Zachary Hinton/729 Project Manager: Sharon Hall

Reported: 09/19/04 11:52

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

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|----------------------------------|-----------------|--------------------|-------|----------------|------------------|------------|----------------|-------|--------------|-------|
| Batch EI41607 - Filtration Prepa | ration | | | | | | | | | |
| Duplicate (EI41607-DUP1) | Sou | rce: 4I0301 | 0-01 | Prepared | & Analyzo | ed: 09/09/ | 04 | | | |
| Total Dissolved Solids | 1610 | 5.00 | mg/L | | 1640 | | | 1.85 | 20 | |
| Batch E141608 - General Prepara | ation (WetChem) | | | | | | | | | |
| Blank (EI41608-BLK1) | | | | Prepared | & Analyzo | ed: 09/03/ | 04 | | | |
| Carbonate Alkalinity | ND | 0.100 | mg/L | | | | | | | |
| Bicarbonate Alkalinity | ND | 2.00 | II. | | | | | _ | | |
| Hydroxide Alkalinity | ND | 0.100 | 11 | | | | | | | |
| Duplicate (EI41608-DUP1) | Sou | rce: 4I0301 | 0-01 | Prepared | & Analyzo | ed: 09/03/ | 04 | | | |
| Carbonate Alkalinity | 0.00 | 0.100 | mg/L | | 0.00 | | | | 20 | |
| Bicarbonate Alkalinity | 444 | 2.00 | u | | 446 | | | 0.449 | 20 | |
| Hydroxide Alkalinity | 0.00 | 0.100 | 11 | | 0.00 | | | | 20 | |
| Reference (EI41608-SRM1) | | | | Prepared | & Analyz | ed: 09/03/ | 04 | | | |
| Carbonate Alkalinity | 0.0501 | | mg/L | 0.0500 | | 100 | 80-120 | | | |

1004 N. Big Spring Street

Midland TX, 79701

Project: Zachary Hinton / 729

Project Number: Zachary Hinton/729 Project Manager: Sharon Hall Fax: (432) 687-5401

Reported:

09/19/04 11:52

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

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|-------------------------------------|------------|--------------------|-------|---------------------------------------|------------------|------------|----------------|-------|--------------|-------|
| Batch E141506 - General Preparation | ı (Metals) | | | · · · · · · · · · · · · · · · · · · · | <u> </u> | | | | | |
| Blank (EI41506-BLK1) | | | | Prepared | & Analyzo | ed: 09/15/ | 04 | | | |
| Calcium | ND | 0.0100 | mg/L | | | | | | | |
| Magnesium | ND | 0.00100 | 11 | | | | | | | |
| Potassium | ND | 0.0500 | и | | | | | | | |
| Sodium | ND | 0.0100 | п | | | | | | | |
| Blank (EI41506-BLK2) | | | | Prepared | & Analyz | ed: 09/15/ | 04 | | | |
| Calcium | ND | 0.0100 | mg/L | | | | | | | |
| Magnesium | ND | 0.00100 | ** | | | | | | | |
| Potassium | ND | 0.0500 | 11 | | | | | | | |
| Sodium | ND | 0.0100 | и | | | | | | | |
| Calibration Check (EI41506-CCV1) | | | | Prepared | & Analyz | ed: 09/15/ | 04 | | | ٠ |
| Calcium | 2.03 | * | mg/L | 2.00 | | 102 | 85-115 | | | |
| Magnesium | 2.04 | | 11 | 2.00 | | 102 | 85-115 | | | |
| Potassium | 1.75 | | н | 2.00 | | 87.5 | 85-115 | | | |
| Sodium | 1.79 | | и | 2.00 | | 89.5 | 85-115 | | | |
| Calibration Check (EI41506-CCV2) | | | | Prepared | & Analyz | ed: 09/15/ | 04 | | | |
| Calcium | 1.93 | | mg/L | 2.00 | | 96.5 | 85-115 | | | |
| Magnesium | 2.02 | | *1 | 2.00 | | 101 | 85-115 | | | |
| Potassium | 1.76 | | н | 2.00 | | 88.0 | 85-115 | | | |
| Sodium | 1.77 | | Ħ | 2.00 | | 88.5 | 85-115 | | | |
| Duplicate (EI41506-DUP1) | So | urce: 410300 | 9-01 | Prepared | & Analyz | ed: 09/15/ | 04 | | | |
| Calcium | 281 | 1.00 | mg/L | | 280 | | | 0.357 | 20 | |
| Magnesium | 110 | 0.100 | ** | | 111 | | | 0.905 | 20 | |
| Potassium | 8.18 | 0.500 | 11 | | 8.31 | | | 1.58 | 20 | |
| Sodium | 359 | 1.00 | 11 | | 365 | | | 1.66 | 20 | |

1004 N. Big Spring Street

Midland TX, 79701

Project: Zachary Hinton / 729

Project Number: Zachary Hinton/729

Project Manager: Sharon Hall

Fax: (432) 687-5401

Reported:

09/19/04 11:52

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

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

Batch EI41506 - General Preparation (Metals)

| Duplicate (El41506-DUP2) | Sour | rce: 4I1001: | 5-01 | Prepared & Analyzed: 09/15/04 | | |
|--------------------------|------|--------------|------|-------------------------------|-------|----|
| Calcium | 20.2 | 0.100 | mg/L | 20.2 | 0.00 | 20 |
| Magnesium | 28.4 | 0.0100 | +1 | 28.6 | 0.702 | 20 |
| Potassium | 16.4 | 0.500 | ** | 16.6 | 1.21 | 20 |
| Sodium | 103 | 0.100 | ** | 103 | 0.00 | 20 |

1004 N. Big Spring Street

Midland TX, 79701

Project: Zachary Hinton / 729

Project Number: Zachary Hinton/729 Project Manager: Sharon Hall

Fax: (432) 687-5401

Reported: 09/19/04 11:52

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

Duplicate Dup

Report Approved By:

Kaland & Jull

0-15-04 Date:

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.

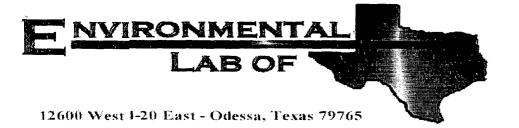
This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

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: Archadis | | | | |
|-----------------------------------------------------------|-----------|-------------|----------------|--|
| Date/Time: 9-3-04 | | | | |
| Order #:<1 I C 3 C 13 - 6 | | | | |
| Initials: | | | | |
| Sample Receipt | t Checkli | st | | |
| Temperature of container/cooler? | (es/ | No | 3.5 C | |
| Shipping container/cooler in good condition? | (es) | No | | |
| Custody Seals intact on shipping container/cooler? | Yes | No | Not present | |
| Custody Seals intact on sample bottles? | Yes | No | (Not present | |
| Chain of custody present? | (Yes) | No | (100.0100 | |
| Sample Instructions complete on Chain of Custody? | (Yes) | No | | |
| Chain of Custody signed when relinquished and received? | Res | No | | |
| Chain of custody agrees with sample label(s) | (Yes) | No | | |
| Container labels legible and intact? | Yes | No | | |
| Sample Matrix and properties same as on chain of custody? | Yes | No | | |
| Samples in proper container/bottle? | Yes | No | | |
| Samples properly preserved? | Yes | No | | |
| Sample bottles intact? | (Ves) | No | | |
| Preservations documented on Chain of Custody? | | No | | |
| Containers documented on Chain of Custody? | (Yes) | No | | |
| Sufficient sample amount for indicated test? | Yes | No | | |
| All samples received within sufficient hold time? | TO S | No | | |
| VOC samples have zero headspace? | (Yes) | No | Not Applicable | |
| Other observations: | | | | |
| | | | | |
| Variance Docu | mentatio | n: | | |
| Contact Person: Date/Time: | | | Contacted by: | |
| | | | Contacted by: | |
| Regarding: | | | | |
| | | | | |
| | | | | |
| Corrective Action Taken: | | | | |
| Corrective Action Taken. | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| Laboratory CNV Cornect of Laboratory CNV | Some of 1730 2 10 20 10 10 10 10 10 10 10 10 10 10 10 10 10 | So MCMUS Something Time of the state of the | So ARCHOUS STATE OF S | Sometimes of the state of the s | Section 1 Time 1 | ARCADIS GERAGHTY & MILLER Laboratory Tash Project Number/Name Cochary Horbay | Order No./P.O. No. | CHAIN-OF-CUSTODY RECORD ANALYSIS / METHOD / SIZE | Page of |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|---------------------|--------------------------------------------------|--------------------|
| ed 1730 2 1 2 2 1 4 1730 2 1 4 1730 2 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Femarks and 132 2 2 2 4103013 - C1 | m 7 m & Marks d 1730 2 410 30 13 -0.1 | mentance of the first of the fi | Time Time of States of Sta | | 4504 | 70 50 VIN | | |
| 4103c13- | 4503C13 | 4103013 | 4103613 | 5 = 50ijd: 1/2 Air No of Bottless | 1765-1 1730 2 | Date /Lim e Matrix Sampled | 10 h Cz | Remar | |
| | | | | S = Solid: 1/9 = Air S = Solid: 1/9 = Air Cet 3 5°C, Total No. of Bottles/ Containers | S = Solid: A = Air Containers Organization: Containers Organization: Containers A | 73 | 7 | 4103C13 | ; |
| | | | | S = Solid: JY = Air | S = Solid; A = Air Conganization: Conganizat | | | | |
| | | | | \$ = \$olid: \(\lambda = Air \) \(\lambda \) | S = Solid: A = Air S = Solid: A = Air Cec 3.5°C Containers Con | | | | |
| | | | | ξ = Solid: μ/= Air Containers Containers Containers | S = Solid; A = Air S = Solid; A = Air Organization: Organizatio | | | | |
| | | | | \$ = \$0 d; y = Air \tag{Total No. of Bottles/ Containers} | S = Solid; A = Air S = Solid; A = Air Organization: Containers Organization: Organiza | | | | |
| | | | | S = Solid; 1A = Air (2012) | S = Solid; A = Air S = Solid; A = Air Organization: Cut. Cas. of Texes. Date 2/3/CY Time 1440. Yes No (| | | | |
| | | | | S = Solid; A = Air Containers Containers | S = Solid; A = Air S = Solid; A = Air Organization: Organizatio | | | | |
| | | | | S = Solid; A = Air Containers Containers | S = Solid; A = Air Containers Con | | | | |
| S = Solid; A = Air S = Solid; A = Air Organization: Cruc. Co. 7 Texes. Date 7 5 / O Time 1440 Organization: Date 7 Sol Time 1440 Organization: Date 7 Sol Time 1440 Organization: Date 7 Sol Time 1440 Seal Interpretation: Date 7 Texes Date 7 Sol Time 1440 Organization: Date 7 Texes Date 7 Time 7 Yes No Date 7 Time 7 Time 7 Yes No Date 7 Time 7 Time 7 Yes No Date 7 Time 7 Time 7 Time 7 Yes No Date 7 Time 7 T | S = Solid; A = Air S = Solid; A = Air Organization: Organization: Organization: Organization: Organization: Organization: Date Organization: Organization: Date Organization: Date Organization: Organization: Organization: Date Organization: Organization: Date Organization: Organizatio | S = Solid; A = Air Organization: O | Evu., Co. C. of Texts Date 1/5 / O' Time 1440 Seal Inta Evu., Co. C. of Texts Date 1/3 / O' Time Yes No Date 1/1 Time Seal Inta Date 1/1 Time Yes No | Seal Inta Date / / Time Seal Inta Ves No | | s * (mai | analysis to Kristin | envira@ kaco pot | |
| d; $S = Solid$; $A = Air$ Organization: Organizat | d; S = Solid; A = Air Organization: Organization: | d; $\xi = \text{Solid}$; $A = \text{Air}$ Organization: Organization: Organization: Organization: Organization: Organization: A Chance of the control of the co | Organization: Call of Texts Date 1/3/07 Time 1440 Seal Intage 1/3/07 Time 1440 Seal Intage 1/3/07 Time 1440 Seal Intage 1/3/07 Time 1/40 Yes No Organization: Date 1/1/17/07/07 Fine Yes No Yes No Almon Among the Process of Among the Amon | Organization: Date / / Time Seal Inta Organization: Date / / Time Yes No ** (| * (mail analysis to Kristin University Raco | | | | |
| it: $M = Air$ Organization: Organi | d; $S = Solid$; $A = Air$ Well Solid; $A = Air$ Organization: Organization: Organization: Date 7 2 0 Time 1440 Seal Inta Date 7 3 0 Y Time 1440 Organization: Date 7 1 Time 1440 Seal Inta Seal Inta Seal Inta Seal Inta Date 7 1 Time 1440 Organization: A Containers Organization: A Containers Organization: A Containers Organization: A Containers Organization: Date 7 1 Time 1440 Yes No | d; $\xi = \text{Solid}$; $A = \text{Air}$ Organization: Organization: Organization: Organization: Organization: Organization: A Containers Date Organization: A Containers Co | Organization: Cauc. Cac. Of Texes. Date 1/3/04 Time 1440. Seal Intage of Organization: Date 1/3/04 Time 1440. Yes No Seal Intage Organization: Date 1/1 Time 1440. Yes No | Organization: Organization: A CMCX PSIS CO Wish Orithead Organization: *** CMCX PSIS CO Wish Orithead Organization Organiza | * Email analysis to Kristin environde leads | | | | SPECIFY AG 05 0597 |
| d: \$ = \$0lid; | d: \$ = Solid: \(\text{A} = Air \) Organization: \(\text{Cut, Call of Text)} \) Organization: \(\text{Cut, Call of Text)} \) Organization: \(\text{Cut, Call of Text)} \) Organization: \(\text{Date } \) Organization: \(D | d; $\xi = \text{Solid}$; $A = \text{Air}$ Organization: Organization: Organization: Organization: Organization: Organization: Organization: Organization: Organization: A Containers Date 1/5/0/1 Time 1440 Yes No Date 1/1 Time 1440 Yes | Organization: Lack of Texts Date 1/3/04 Time 1440 Seal Int Organization: Lack of Texts Date 1/3/04 Time 1440 Yes No Seal Int Organization: Date 1/4/04 Time 1440 Yes No Seal Int Organization: Date 1/4/04 Time 1440 Yes No Seal Int Organization: Date 1/4/04 Time 1440 Yes No Yes No Specify Seal Int Specify Spe | Organization: A CMCA A Sis た Krishn CMVrのの Rach Courier Common Carrier SPECIFY Time Seal Int SPECIFY SPECIFY SIS た Krishn CMVrのの Not SPECIFY SPEC | * Common Carrier Specier Courier Cour | | | | |



Analytical Report

Prepared for:

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

Project: O-12 Zach Hinton Project Number: None Given Location: B-D

Lab Order Number: 4E29007

Report Date: 06/04/04

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

Project: O-12 Zach Hinton

Project Number: None Given Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported: 06/04/04 17:04

ANALYTICAL REPORT FOR SAMPLES

| Sample 11) | Laboratory ID | Matrix | Date Sampled | Date Received |
|-----------------|---------------|--------|----------------|----------------|
| Monitor Well #1 | 4E29007-01 | Water | 05/27/04 15:00 | 05/28/04 16:30 |

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

Project: O-12 Zach Hinton

Project Number: None Given Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported: 06/04/04 17:04

Organics by GC Environmental Lab of Texas

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Monitor Well #1 (4E29007-01) Water | | | | | | | | | |
| Benzene | ND | 0.00100 | mg/L | 1 | EF40313 | 06/02/04 | 06/02/04 | EPA 8021B | |
| Toluene | ND | 0.00100 | u | ** | ** | ** | " | п | |
| Ethylbenzene | ND | 0.00100 | n | 11 | 11 | 11 | • | n | |
| Xylene (p/m) | ND | 0.00100 | 11 | 0 | 41 | rt | n | н | |
| Xylene (o) | ND | 0.00100 | н | ** | II. | 11 | ti | ** | |
| Surrogate: a,a,a-Trifluorotoluene | | 118%. | 80-12 | 20 | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 111 % | 80-12 | 20 | " | " | " - | " | |

Environmental Lab of Texas

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

Quality Assurance Review

Page 2 of 10

Rice Operating Co. 122 W. Taylor Hobbs NM, 88240 Project: O-12 Zach Hinton

Project Number: None Given Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported: 06/04/04 17:04

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

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------------------|--------|--------------------|-------|----------|---------|----------|----------|------------|-------|
| Monitor Well #1 (4E29007-01) Water | | | | | | | | | |
| Carbonate Alkalinity | ND | 0.100 | mg/L | 1 | EF40408 | 05/29/04 | 05/29/04 | EPA 310.2M | |
| Bicarbonate Alkalinity | 201 | 2.00 | ** | tt | ч | n | u | п | |
| Hydroxide Alkalinity | ND | 0.100 | 11 | n | " | †ŧ | 11 | 11 | |
| Chloride | 372 | 5.00 | ** | ** | EF40407 | 06/03/04 | 06/03/04 | EPA 325.3M | |
| Total Dissolved Solids | 1190 | 5.00 | Ħ | n | EF40310 | 06/01/04 | 06/02/04 | EPA 160.1 | |
| Sulfate | 252 | . 2.50 | 11 | 5 | EF40418 | 06/04/04 | 06/04/04 | 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 3 of 10

Project: O-12 Zach Hinton

Project Number: None Given Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported: 06/04/04 17:04

Total Metals by EPA / Standard Methods Environmental Lab of Texas

| Analyte Monitor Well #1 (4E29007-01) Water | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------------------------------------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| Calcium | 108 | 1.00 | mg/L | 100 | EF40420 | 06/02/04 | 06/04/04 | EPA 6010B | |
| Magnesium | 67.8 | 0.0100 | n | 10 | п | 11 | 06/04/04 | 11 | |
| Potassium | 17.8 | 0.500 | " | ** | 11 | " | • | ** | |
| Sodium | 310 | 1.00 | н | 100 | ** | ** | 06/04/04 | " | |

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 4 of 10

Project: O-12 Zach Hinton

Project Number: None Given Project Manager: Kristin Farris Fax: (505) 397-1471

Reported: 06/04/04 17:04

Organics by GC - Quality Control Environmental Lab of Texas

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|-----------------------------------|--------|--------------------|----------|----------------|------------------|------------|----------------|---------------|--------------|-------|
| Batch EF40313 - EPA 5030C (GC) | | | | | | | | | | |
| Blank (EF40313-BLK1) | | | | Prepared | & Analyzi | ed: 06/02/ | | . | | |
| Benzene | ND | 0.00100 | mg/L | | - Analy Zi | | | | | ····· |
| Toluene | ND | 0.00100 | 11.67.23 | | | | | | | |
| Ethylbenzene | ND | 0.00100 | ** | | | | | | | |
| Xylene (p/m) | ND | 0.00100 | и | | | | | | | |
| Xylene (o) | ND | 0.00100 | 11 | | | | | | | |
| Surrogate: a,a,a-Trifluorotoluene | 22.6 | | ug/l | 20.0 | | 113 | 80-120 | • | | |
| Surrogate: 4-Bromofluorobenzene | 18.7 | | " | 20.0 | | 93.5 | 80-120 | | | |
| LCS (EF40313-BS1) | | | | Prepared | & Analyz | ed: 06/02/ | 04 | | | |
| Benzene | 87.9 | | ug/l | 100 | | 87.9 | 80-120 | | | |
| Toluene | 94.6 | | n | 100 | | 94.6 | 80-120 | | | |
| Ethylbenzene | 91.2 | | n | 100 | | 91.2 | 80-120 | | | |
| Xylene (p/m) | 196 | | n | 200 | | 98.0 | 80-120 | | | |
| Xylene (o) | 94.9 | | II . | 100 | | 94.9 | 80-120 | | | |
| Surrogate: a,a,a-Trifluorotoluene | 21.2 | | <i>n</i> | 20.0 | · | 106 | 80-120 | | | |
| Surrogate: 4-Bromofluorobenzene | 22.0 | | " | 20.0 | | 110 | 80-120 | | | |
| Calibration Check (EF40313-CCV1) | | | | Prepared | & Analyz | ed: 06/02/ | 04 | | | |
| Benzene | 83.3 | | ug/l | 100 | | 83.3 | 80-120 | | | |
| Toluene | 92.4 | | Ħ | 100 | | 92.4 | 80-120 | | | |
| Ethylbenzene | 92.3 | | H | 100 | | 92.3 | 80-120 | | | |
| Xylene (p/m) | 196 | | +1 | 200 | | 98.0 | 80-120 | | | |
| Xylene (o) | 92.0 | | н | 100 | | 92.0 | 80-120 | | | |
| Surrogate: a,a,a-Trifluorotoluene | 17.6 | | -11 | 20.0 | | 88.0 | 80-120 | | | |
| Surrogate: 4-Bromofluorobenzene | 20.7 | | " | 20.0 | | 104 | 80-120 | | | |
| Matrix Spike (EF40313-MS1) | So | urce: 4E2900 | 01-01 | Prepared | & Analyz | ed: 06/02/ | 04 | | | |
| Benzene | 92.3 | | ug/l | 100 | ND | 92.3 | 80-120 | | | |
| Toluene | 103 | | 11 | 100 | ND | 103 | 80-120 | | | |
| Ethylbenzene | 99.5 | | | 100 | ND | 99.5 | 80-120 | | | |
| Xylene (p/m) | 214 | | H | 200 | ND | 107 | 80-120 | | | |
| Xylene (o) | 102 | | W | 100 | ND | 102 | 80-120 | | | |
| Surrogate: a,a,a-Trifluorotoluene | 22.2 | | | 20.0 | | 111 | 80-120 | | | |
| Surrogate: 4-Bromofluorobenzene | 23.0 | | " | 20.0 | | 115 | 80-120 | | | |

Environmental Lab of Texas

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

Quality Assurance Review

Page 5 of 10

Project: O-12 Zach Hinton

Project Number: None Given Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported: 06/04/04 17:04

Organics by GC - Quality Control Environmental Lab of Texas

| Analyte | Result | Reporting Limit Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|-----------------------------------|--------|---------------------------------------|----------------|------------------|------------|----------------|------|--------------|-------|
| Batch EF40313 - EPA 5030C (GC) | | | | | | | | | |
| Matrix Spike Dup (EF40313-MSD1) | Sou | rce: 4E29001-01 | Prepared | & Analyz | ed: 06/02/ | 04 | | | |
| Benzene | 83.2 | ug/l | 100 | ND | 83.2 | 80-120 | 10.4 | 20 | |
| Toluene | 92.2 | н | 100 | ND | 92.2 | 80-120 | 11.1 | 20 | |
| Ethylbenzene | 89.4 | 11 | 100 | ND | 89.4 | 80-120 | 10.7 | 20 | |
| Xylene (p/m) | 192 | н | 200 | ND | 96.0 | 80-120 | 10.8 | 20 | |
| Xylene (o) | 92.6 | н | 100 | ND | 92.6 | 80-120 | 9.66 | 20 | |
| Surrogate: a,a,a-Trifluorotoluene | 20.5 | · · · · · · · · · · · · · · · · · · · | 20.0 | | 102 | 80-120 | | | |
| Surrogate: 4-Bromofluorobenzene | 22.8 | " | 20.0 | | 114 | 80-120 | - | | |

Environmental Lab of Texas

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

Quality Assurance Review

Page 6 of 10

Project: O-12 Zach Hinton

Project Number: None Given Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported: 06/04/04 17:04

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

| | | Reporting | | Spike | Source | | %REC | | RPD | |
|-------------------------------------|-------------|-------------|-------|-----------|-----------|------------|------------|-------|-------|-------|
| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |
| Batch EF40310 - Filtration Preparat | ion | | | | | | | | | |
| Blank (EF40310-BLK1) | | | | Prepared: | 06/01/04 | Analyzed | : 06/02/04 | | | |
| Total Dissolved Solids | ND | 5.00 | mg/L | | | | | | | |
| Duplicate (EF40310-DUP1) | Sour | ce: 4E2900 | 01-01 | Prepared: | 06/01/04 | Analyzed | : 06/02/04 | | | |
| Total Dissolved Solids | 831 | 5.00 | mg/L | ··· | 830 | | | 0.120 | 20 | |
| Batch EF40407 - General Preparatio | n (WetChem) | | | | | | | | | |
| Blank (EF40407-BLK1) | | | | Prepared | & Analyzo | ed: 06/03/ | 04 | * | | |
| Chloride | , ND | 5.00 | mg/L | | | | | | | |
| Matrix Spike (EF40407-MS1) | Sour | ce: 4E2900 | 01-01 | Prepared | & Analyz | ed: 06/03/ | 04 | | | |
| Chloride | 709 | 5.00 | mg/L | 500 | 213 | 99.2 | 80-120 | | | |
| Matrix Spike Dup (EF40407-MSD1) | Sour | rce: 4E2900 | 01-01 | Prepared | & Analyz | ed: 06/03/ | 04 | | | |
| Chloride | 700 | 5.00 | mg/L | 500 | 213 | 97.4 | 80-120 | 1.28 | 20 | |
| Reference (EF40407-SRM1) | | | | Prepared | & Analyz | ed: 06/03/ | 04 | | | |
| Chloride | 4960 | | mg/L | 5000 | | 99.2 | 80-120 | | | |
| Batch EF40408 - General Preparatio | n (WetChem) | | | | | | | | | |
| Blank (EF40408-BLK1) | | | | Prepared | & Analyzo | ed: 05/29/ | 04 | | | |
| Carbonate Alkalinity | ND | 0.100 | mg/L | | | | | | | |
| | 3.175 | 2.00 | н | | | | | | | |
| Bicarbonate Alkalinity | ND | 2.00 | | | | | | | | |

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 7 of 10

Project: O-12 Zach Hinton

Project Number: None Given Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported: 06/04/04 17:04

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

| | | Reporting | | Spike | Source | | %REC | | RPD | |
|------------------------------------|-------------|-------------|-------|----------|----------|------------|--------|------|-------|-------|
| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |
| Batch EF40408 - General Preparatio | n (WetChem) | | | | | | | | | |
| Duplicate (EF40408-DUP1) | Sou | rce: 4E2900 | 1-01 | Prepared | & Analyz | ed: 05/29/ | 04 | | | |
| Carbonate Alkalinity | 0.00 | 0.100 | mg/L | | 0.00 | | | | 20 | |
| Bicarbonate Alkalinity | 214 | 2.00 | n | | 214 | | | 0.00 | 20 | |
| Hydroxide Alkalinity | 0.00 | 0.100 | u | | 0.00 | | | | 20 | |
| Reference (EF40408-SRM1) | | | | Prepared | & Analyz | ed: 05/29/ | 04 | | | |
| Carbonate Alkalinity . | 0.0496 | | mg/L | 0.0500 | | 99.2 | 80-120 | | | |
| Batch EF40418 - General Preparatio | n (WetChem) | | | | | | | | | |
| Blank (EF40418-BLK1) | | | | Prepared | & Analyz | ed: 06/04/ | 04 | | | |
| Sulfate | ND | 0.500 | mg/L | | | | | | | |
| Calibration Check (EF40418-CCV1) | | | | Prepared | & Analyz | ed: 06/04/ | 04 | | | |
| Sulfate | 49.2 | | mg/L | 50.0 | | 98.4 | 80-120 | | | |
| Duplicate (EF40418-DUP1) | Sour | rce: 4E2900 | 1-01 | Prepared | & Analyz | ed: 06/04/ | 04 | | | |
| Sulfate | 140 | 1.00 | mg/L | | 138 | | · | 1.44 | 20 | - |

Environmental Lab of Texas

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

Quality Assurance Review

Page 8 of 10

Project: O-12 Zach Hinton

Project Number: None Given Project Manager: Kristin Farris

Fax: (505) 397-1471

Reported: 06/04/04 17:04

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

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|------------------------------------|------------|--------------------|-------|----------------|------------------|----------|----------------|------|--------------|-------|
| Batch EF40420 - General Preparatio | n (Metals) | | | | | | | | | |
| Blank (EF40420-BLK1) | | | | Prepared: | 06/02/04 | Analyzed | l: 06/04/04 | | | |
| Calcium | ND | 0.0100 | mg/L | | | | | | | |
| Magnesium | ND | 0.00100 | ** | | | | | | | |
| Potassium | ND | 0.0500 | H | | | | | | | |
| Sodium | ND | 0.0100 | ** | | | | | | | |
| Calibration Check (EF40420-CCV1) | | | | Prepared: | 06/02/04 | Analyzed | 1: 06/04/04 | | | |
| Calcium | 2.00 | | mg/L | 2.00 | | 100 | 85-115 | ~ | | |
| Magnesium | 2.27 | | tr. | 2.00 | | 114 | 85-115 | | | |
| Potassium | 1.82 | | н | 2.00 | | 91.0 | 85-115 | | | |
| Sodium | 1.86 | | " | 2.00 | | 93.0 | 85-115 | | | |
| Duplicate (EF40420-DUP1) | So | urce: 4E2900 | 6-01 | Prepared: | 06/02/04 | Analyzed | 1: 06/04/04 | | | |
| Calcium | 69.2 | 0.0100 | mg/L | | 58.9 | | | 16.1 | 20 | |
| Magnesium | 47.0 | 0.00100 | п | | 43.0 | | | 8.89 | 20 | |
| Potassium | 7.56 | 0.0500 | tt | | 7.95 | | | 5.03 | 20 | |
| Sodium | 126 | 0.0100 | H | | 145 | | | 14.0 | 20 | |

Environmental Lab of Texas

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

Quality Assurance Review

Page 9 of 10

Project: O-12 Zach Hinton

Project Number: None Given Project Manager: Kristin Farris Fax: (505) 397-1471 Reported:

06/04/04 17:04

Notes and Definitions

DET

Analyte DETECTED

ND

Analyte NOT DETECTED at or above the reporting limit

NR

Not Reported

dry

Sample results reported on a dry weight basis

RPD

Relative Percent Difference

Environmental Lab of Texas

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

Quality Assurance Review

Page 10 of 10

Project Hame: U - 12 Zach, Hinton

 $C_{\mathcal{L}}$

Project Loc: 2012

Project #:

LEE OF TOARD, HIV. (2600 West 1.20 East

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

Odessa, Texas 79763

Project Manager: Aristin Facers

Company Address: AZ N. Taylac

City/State/Zip: + Labbs, NM 88240 Telephone No (505) 393-9174

Fax No: (505) 397-1471

TAT bigonat2 Bubberioe-eng) TAT HZUR Temperature Upon Réceipt Sample Containers Irlact? Analyze For aboratory Comments SE RH 49 10 bO SE DA 2A ;alateM 101P 3001/2001 XT HGT 1,817,491 ع-جهد»] بوج<u>ن</u> Time CB / BAS (JO (SOT) Other (spacity): lios Matrix Sinage)**∌ie**∧∖ \times Other (Specify) (3047) 2UON os: H Howce Glass HNG × 76 No. of Containers 3:00 1:00 baigma2 amiT Enviro @ Leaco. Net 5/27/eu 2/27/69 Received by: beloma2 sta@ Sampler Signature: (X C.C.C.) FIELD CODE 4 Mentera well m uniter well E-mall Special Instructions: inquished by:

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

| Client: Rice Operating Co. | | | , † |
|-----------------------------------------------------------|-----------|-----------------|--------------|
| Date/Time: 05-29-04@1030 | | | |
| Order #: | | | |
| Initials: JMM | | | |
| Sample Receipt | Checklist | | |
| Temperature of container/cooler? | (Yes No | (0.5 | C |
| Shipping container/cooler in good condition? | YES No | | |
| Custody Seals intact on shipping container/cooler? | Yes No | Not present | - |
| Custody Seals intact on sample bottles? | Yes No | Not present | 5 |
| Chain of custody present? | Yes No | | |
| Sample Instructions complete on Chain of Custody? | Yes No | | |
| Chain of Custody signed when relinquished and received? | Yes No | Missing 15 rec. | Signature |
| Chain of custody agrees with sample label(s) | (Yes) No | 1 23127 11 121 | 3 |
| Container labels legible and intact? | Yes No | | |
| Sample Matrix and properties same as on chain of custody? | Yes No | | |
| Samples in proper container/bottle? | Yes No | | |
| Samples properly preserved? | Yes No | should be 4 | 1:C + 2°C |
| Sample bottles intact? | Yes No | di locia ise i | |
| Preservations documented on Chain of Custody? | Yes No | | |
| Containers documented on Chain of Custody? | Yes No | | |
| Sufficient sample amount for indicated test? | Yes No | | |
| All samples received within sufficient hold time? | (Yes) No | | |
| VOC samples have zero headspace? | Yes No | Not Applicable | 9 |
| Other observations: | | | |
| Contact Person: Date/Time: Regarding: | | | <i>"</i> : |
| | | | |
| Corrective Action Taken: | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| _ | | | |
| | | | |
| | | | |
| | | **** | |



PHONE (915) 673-7001 · 2111

PHONE (505) 393-2326 - 10 E. MARLANDE FIDES AND 8240

FEB 2 5 2004 BEEDHWOOD - ABILENE, TX 7960

HOBBS, NM

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

Receiving Date: 02/19/04
Reporting Date: 02/23/04
Project Number: NOT GIVEN
Project Name: MONITOR WELLS
Project Location: ZACH HINTON 0-12

Sampling Date: 02/19/04

Sample Type: GROUNDWATER Sample Condition: COOL & INTACT

Sample Received By: AH Analyzed By: AH

| | Na | Ca | Mg | K | Conductivity | T-Alkalinity |
|-----------------------------|-----------------|-----------------|-----------------|------------------|--------------|--------------------------|
| LAB NUMBER SAMPLE ID | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (uS/cm) | (mgCaCO ₃ /L) |
| ANALYSIS DATE: | 02/20/04 | 02/20/04 | 02/20/04 | 02/20/04 | 02/20/04 | 02/20/04 |
| H8476-1 ZACH HINTON 0-12 MW | 171 | 84 | 63 | 8.08 | 2059 | 216 |
| | | | | | | |
| Quality Control | NR | 59 | 42 | 5.17 | 1322 | NR |
| True Value QC | NR | 50 | 50 | 5.00 | 1413 | NR |
| % Recovery | NR | 118 | 85 | 103 | 93.6 | NR |
| Relative Percent Difference | NR | 1.7 | 2.3 | 1.0 | 0.7 | NR |
| METHODS: | SM3 | 3500-Ca-D | 3500-Mg E | 8049 | 120.1 | 310.1 |
| | CI [—] | SO ₄ | CO ₃ | HCO ₃ | рН | TDS |
| | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (s.u.) | (mg/L) |
| ANALYSIS DATE: | 02/20/04 | 02/20/04 | 02/20/04 | 02/20/04 | 02/20/04 | 02/21/04 |
| H8476-1 ZACH HINTON 0-12 MW | 380 | 97 | 0 | 263 | 7.51 | 1297 |
| | - Andrews | | | | | |
| Quality Control | 1010 | 53.65 | NR | 1007 | 7.04 | NR |
| True Value QC | 1000 | 50.00 | NR | 1000 | 7.00 | NR |
| A/ B | 101 | 107 | NR | 101 | 101 | NF |
| % Recovery | | 4 = | NR | 1.1 | 0.3 | 1.4 |
| Relative Percent Difference | 2.0 | 1.5 | NIX | | 0.5 | |

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





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

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

Receiving Date: 02/19/04

Reporting Date: 02/23/04

Project Number: NOT GIVEN
Project Name: MONITOR WELLS

Project Location: ZACH HINTON 0-12

Sampling Date: 02/19/04

Sample Type: GROUNDWATER Sample Condition: COOL & INTACT

0.299

0.300

99.5

2.0

Sample Received By: AH

0.099

0.100

99.3

2.1

Analyzed By: BC

| LAB NUMBE | R SAMPLE ID | BENZENE (mg/L) | TOLUENE (mg/L) | ETHYL BENZENE (mg/L) | TOTAL XYLENES (mg/L) |
|------------|------------------|-------------------|-------------------|----------------------------|----------------------------|
| ANALYSIS D | ATE | 02/19/04 | 02/19/04 | 02/19/04 | 02/19/04 |
| H8476-1 | ZACH HINTON 0-12 | < 0.002 | <0.002 | < 0.002 | <0.006 |
| | MONITOR WELL | | | | |
| | | | | | |
| | | | | | |

0.093

0.100

93.2

0.9

0.097

0.100

97.4

3.6

METHOD: EPA SW-846 8260

Relative Percent Difference

Quality Control

True Value QC

% Recovery

Date

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ARDINAL LABORATORIES, INC.
2111 Beechwood, Abilene, TX 79603 101 East Marland, Hobbs, NM 88240
(915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

| 1010) 010 100 1 0X (010) 010 1020 | (202) 222-7350 Lax (203) 283-7410 | n after |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| Company Name: RICE Optioting | 87170 | ANALYSIS REQUEST |
| Project Manager: Klistin Faccis | P.O. #: | |
| Address: 122 N. Taylal | Company: | |
| City: Habbs State: NM Zip: 88240 | Attn: | |
| Phone #: (505) 393-9/74 Fax #: (505) 397-147 | Address: | |
| Project Owner: | City: | |
| Project Name: Mgnitol WBILS | State: Zip: | |
| Project Location: 2 a Ch Hinton 0 - 12 | Phone #: | |
| Sampler Name: 1 Farris | Fax 4: | |
| FOR LAB USE CALY | MATRIX PRESERV SAMPLING | |
| RS ATER | | |
| (G)RAB OR (C) # CONTAINER GROUNDWAY WASTEWATE | CRUDE OIL SLUDGE OTHER: ACID/BASE: ICE / COOL OTHER: DATE | Cation Anion TDS BI |
| - | X | × × × |
| Lates O. M. Man | x x 2/19/64 11:11 | |
| | | |
| | | |
| | | |
| of Seas 1975. Index and Company, Cardyll holds and chart was two market by any than of the water band in content or tool side to be account put by the chart to the | content or bot, shad be inflaed to the arrange put by the cheef for the | Terms and Objections: like and with the diverged do all accounts from their |
| sudyes. All deline including these for regionate and my other cases with the overall bed decembed with a misse made in willing and received by Cardinal within 30 days after completion of the applicable service. In no event about Cardinal be habe for hardened or completion of the applicable service. In no event about Cardinal be habe for hardened or completion of the applicable. | tilling and received by Cardinal within 30 days after completion of the appetic ptions, loss of use, or loss of protts incursed by disnit, its subsidianies, | • · |
| illides o accessors siding od of or related to be performed to be related by Cardial regarding of stellars such claim is based upon my of the above untied resum | ch claim is based upon my of the above stated reasons or offerwise. | רעה רועה |
| Sampler Relinquished: Date: Received By: Time: | Phone Result: Fax Result: REMARKS: | ult: ☐ Yes ☐ No Add'I Fhone #: : ☐ Yes ☐ No Add'I Fax #: |
| Imas: 30 Received By: | | |
| : (Circle One) | - ≅ ♡ | |
| Sampler - UPS - Bus - Other: | Yes | |

1

[†] Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476.