AP - 59

G-35 ANNUAL GW MONITORING REPORT

DATE: 2004

RICE Operating Company

AP-39 G-35 Annual GWMon Report 2004

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

CERTIFIED MAIL RETURN RECEIPT NO. 7002 2410 0000 4940 1701

January 14, 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 G-35 SWD, VACUUM SWD SYSTEM UNIT 'G', SEC. 35, T17S, R35E NMOCD CASE #1R0332

Mr. Price:

Rice Operating Company (ROC) takes this opportunity to submit the 2004 Monitor Well Report for the <u>Vacuum G-35 SWD site</u> located in the Vacuum Salt Water Disposal (SWD) System. One monitoring well was installed on 1/10/2002 during the delineation and removal of a redwood tanks. 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, Basin will sample the well and Environmental Lab of Texas of Odessa, Texas will continue to analyze the water samples. R. T. Hicks Consultants of Albuquerque is retained by ROC to address groundwater concerns at this and develop a Corrective Action Plan (CAP).

ROC is the service provider (operator) for the Vacuum Salt Water Disposal System and has no ownership of any portion of pipeline, well, or facility. The Vacuum SWD System is owned by a consortium of oil producers, System Partners, who provide all operating capital on a percentage ownership/usage basis. In 2004, the Vacuum System Partners approved the discontinuance of the SWD System. Efforts are moving toward abandonment.

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

Knistin Farris Tope

Kristin Farris Pope Project Scientist

enclosures: Summary table & graph Analytical results Survey map

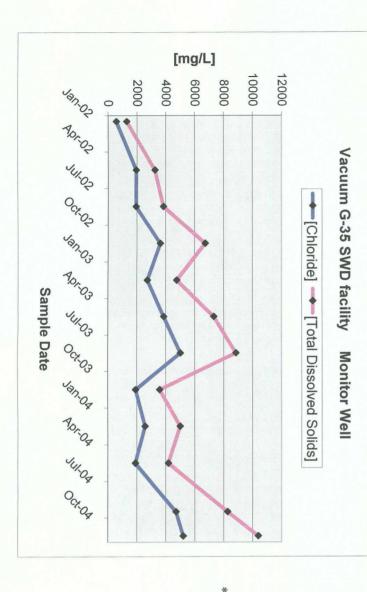
cc: LBG, CDH, R. T. Hicks, file, Rob Roy Industries,

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

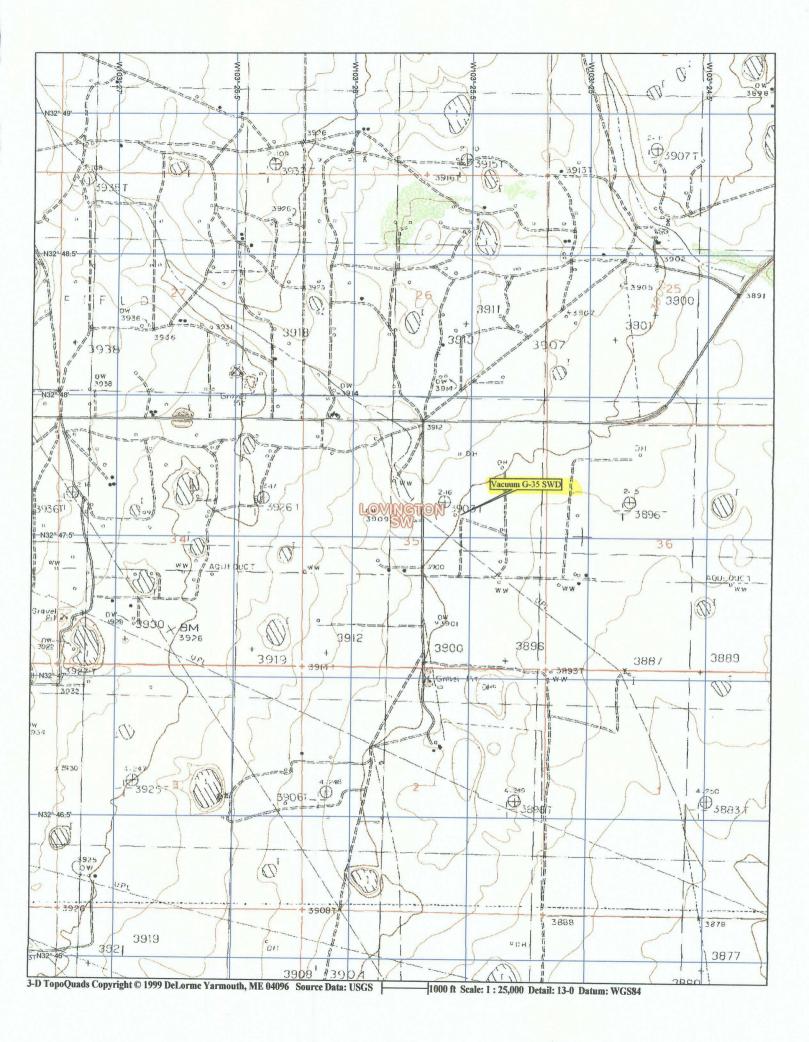
RICE Operating Company Monitor Well Data Sheet

Vacuum G-35 SWD unit 'G', Sec. 35, T17S, R35E

| | (ft) | (1) | (gal) | ul) | | | | All concentrations are in mg/L | tions are in | mg/L | | |
|---------|----------|-------|--------|--------|----------|------|-------|--------------------------------|--------------|-----------------|----------------|------------------|
| # /WW | DEPTH TO | TOTAL | WELL | VOLUME | SAMPLE | -1- | TINC | DENIZENIE | TOT I IENIE | ETHYL | TOTAL | COMMENTS |
| IVI W # | WATER * | DEPTH | VOLUME | PURGED | DATE | CI | IDS | BENZENE IOLUENE | IULUENE | BENZENE XYLENES | XYLENES | COMMENTS |
| 1 | 53.60 | 64.30 | 1.800 | 5.30 | 01/10/02 | 568 | 1284 | 0.011 | 0.0220 | 0.034 | 0.0550 | |
| 1 | 52.89 | 65.03 | 1.940 | 6.00 | 05/15/02 | 1950 | 3260 | 0.414 | 0.0570 | 0.131 | 0.0650 | oil skim |
| 1 | 53.02 | 64.75 | 1.877 | 5.75 | 08/19/02 | 1950 | 3850 | 0.705 | 0.5980 | 0.209 | 0.2530 | |
| - | 53.08 | 64.70 | 1.859 | 5.60 | 11/11/02 | 3630 | 6740 | 0.921 | 0.0780 | 0.154 | 0.1310 | oil skim; yellow |
| 1 | 53.06 | 64.19 | 1.780 | 5.30 | 02/28/03 | 2730 | 4770 | 0.713 | 0.0100 | 0.018 | 0.0270 | |
| - | 53.20 | 64.20 | 1.750 | 5.28 | 05/22/03 | 3860 | 7320 | 0.583 | 0.0020 | 0.120 | 0.0270 | |
| 1 | 53.21 | 64.10 | 1.740 | 5.20 | 08/21/03 | 5010 | 8850 | 0.689 | 0.0040 | 0.307 | 0.0320 | |
| 1 | 53.29 | 64.20 | 1.746 | 5.20 | 11/19/03 | 1930 | 3590 | 0.012 | 0.0020 | 0.090 | 0.0030 | |
| 1 | 53.30 | 64.15 | 1.730 | 5.20 | 02/18/04 | 2579 | 5000 | 0.059 | < 0.002 | 0.350 | 0.0070 | |
| 1 | 52.90 | 64.15 | 1.800 | 5.00 | 05/27/04 | 1899 | 4188 | 1.170 | 0.3080 | 0.357 | 0.3190 | |
| 1 | 52.60 | 64.40 | 1.890 | 5.66 | 09/07/04 | 4700 | 8270 | 1.110 | 0.0525 | 0.346 | 0.1382 | mod. odor; gray |
| 1 | 52.91 | 64.40 | 1.800 | 5.50 | 11/24/04 | 5200 | 10400 | 0.881 | 0.0226 | 0.133 | 0.0717 | |



* Depth to water measured from top of casing Casing is <u>2.458 ft</u>





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

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

Receiving Date: 02/18/04 Reporting Date: 02/20/04 Project Number: NOT GIVEN Project Name: NOT GIVEN Project Location: VACUUM G-35 Sampling Date: 02/18/04 Sample Type: GROUNDWATER Sample Condition: COOL & INTACT Sample Received By: AH Analyzed By: AH

| LAB NUMBER | SAMPLE ID | Na (mg/L) | Ca (mg/L) | Mg (mg/L) | K (mg/L) | Conductivity (<i>u</i> S/cm) | T-Alkalinity (mgCaCO ₃ /L) |
|-----------------|------------------|--------------|--------------|--------------|-------------|----------------------------------|--|
| ANALYSIS DAT | re: | 02/19/04 | 02/19/04 | 02/19/04 | 02/19/04 | 02/19/04 | 02/19/04 |
| H8470-1 | VACUUM G-35 MW 1 | 1621 | 146 | 51 | 11.3 | 8834 | 480 |
| | | | | | | | |
| 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 Percer | nt 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_ | SO4 | CO3 | HCO₃ | pН | TDS |
| | | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (s.u.) | (mg/L) |
| ANALYSIS DAT | TE: | 02/19/04 | 02/19/04 | 02/19/04 | 02/19/04 | 02/19/04 | 02/20/04 |

| | | 02/10/04 | 02110/0-4 | 02/10/04 | 02/10/04 | 02/10/04 | 02/20/04 |
|--------------|------------------|----------|-----------|----------|----------|----------|----------|
| H8470-1 | VACUUM G-35 MW 1 | 2579 | 1.49 | 0 | 585 | 7.59 | 5000 |
| | | | | | | | |
| Quality Cont | trol | 1010 | 53.65 | NR | 1007 | 7.04 | NR |
| True Value (| QC | 1000 | 50.00 | NR | 1000 | 7.00 | NR |
| % Recovery | , | 101 | 107 | NR | 101 | 101 | NR |
| Relative Per | rcent Difference | 2.0 | 1.5 | NR | 1.1 | 0.3 | 1.4 |

METHODS: SM4500-CI-B 375.4 310.1 310.1 150.1 160.1 hemist

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In population to the program of the applicable in the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.



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

Receiving Date: 02/18/04 Reporting Date: 02/20/04 Project Number: NOT GIVEN Project Name: NOT GIVEN Project Location: VACUUM G-35 Sampling Date: 02/18/04 Sample Type: GROUNDWATER Sample Condition: COOL & INTACT Sample Received By: AH Analyzed By: BC

| LAB NUMBEF | R SAMPLE ID | BENZENE (mg/L) | TOLUENE (mg/L) | ETHYL BENZENE (mg/L) | TOTAL XYLENES (mg/L) |
|----------------------|------------------|-------------------|-------------------|----------------------------|----------------------------|
| ANALYSIS D | ATE | 02/18/04 | 02/18/04 | 02/18/04 | 02/18/04 |
| H8470-1 | VACUUM G-35 MW 1 | 0.059 | <0.002 | 0.350 | 0.007 |
| | | | | | |
| | | | | | |
| | | | | | |
| Quality Contro | | 0.094 | 0.096 | 0.099 | 0.304 |
| True Value Q | C | 0.100 | 0.100 | 0.100 | 0.300 |
| % Recovery | | 94.1 | 96.0 | 99.0 | 101 |
| Relative Perc | ent Difference | 1.9 | 5.1 | 2.5 | 0.4 |

METHOD: EPA SW-846 8260

Date

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| P.A. | ARDINAL LABORATORIES, 2111 Beechwood, Abliene, TX 79603 | ATORIES, 10, TX 79603 | - | INC. 101 East Marland, Hobbs, NM 88240 | CHAIN-OF- | | CUSTODY AND ANALYSIS REQUEST | ST |
|---|--|---|--|---|-----------------------------------|-----|---|--|
| Company Name: | | catina | | | 6 | | ANALYSIS REQUEST | |
| Project Manager: | Klistin F | accis | | P.O. # | | | | |
| Address: 122 | W. Taylor | | | Company: | | | | |
| city: Habbe | | State: N/M Z | Zip: 88240 | Attox | | | | |
| Phone #: 505 | 393-9174 | Fax #: (505) | 1247-1471 | Address: | | | | |
| Project #: | | Project Owner: | | City: | | | | |
| Project Name: | | | | State: Zlp: | | | | |
| Project Location: | " VACLIUM | 4-35 | | Phone #: | | | | |
| Sampler Name: | K. Farris | | | Fe | | | | |
| FOR LAB LISE CHLY | | | MATRIX | PRESERV | SAMPLING | | | |
| Lab I.D. | Sample I.D. | (G)RAB OR (C)OMF | CONTAINERS GROUNDWATER WASTEWATER SOIL CRUDE OIL | SLUDGE OTHER : ACID/BASE: ICE / COOL IOTHER : | TIME | TDS | BTEK | |
| H8470-1 | Vacuum 6- | 35 MW/ 6 | 2-12 | XXX | ELI | XXX | | |
| | | | | | | | | |
| | | | | | | | | |
| PLEASE HOTE: Labley and Dam analyses. At dations instation these | PEAGE MOTE: Under and Darmoon. Cardina's MUMP and claim? and and immedy for any date what whether bear manyour AI chains history three for maghance and any other can a with borrow that he donimal mained a sizes much | also ramedy for any claim | n at hig what has been in on it of a | ard den't such any remety for any daily what a time band is cost and or tool. Used to breach to day other daw for the other can a windowner blad be doornal is obtained a time made is on its cost and or tools. To days after completen of the systematic | i completion of the my final date | | Terms and Conditions: law and will be the port on all scores in inve 30 days part due at the rate of 21% yes arrest term the trighted data | cersita more fran retpinal data of Invaice, |
| Bampler Relinguished; | aided to Be parformator | te: A A A A A A A A A A A A A A A A A A | of services home and by Cardial populate of whether and which is a first the service of the serv | n be set upon my of the above shaled i | Phone Result: | | Z | |
| Relifquished by: | darene v | | Received By: (Lab Staff) | 1 | | | Add Fbx #: | |
| Delivered By: Sampler - UPS - | (Circle One) Bus - Other: | | Sample Cont Cool Inlac | ck (Initials) Kes (Initials) | | | | |
| † Cardinal c | Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476. | ges. Please fax | e written changes t | 0 505-393-2476. | | | : | |

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PHONE (325) 673-7001 · 2111 BEECHWOOD · ABILENE, TX 79603

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: 05/28/04 Reporting Date: 05/31/04 Project Number: NOT GIVEN Project Name: VACUUM G-35 Project Location: G-35 MW 1 Sampling Date: 05/28/04 Sample Type: GROUNDWATER Sample Condition: COOL & INTACT Sample Received By: AH Analyzed By: BC

| LAB NUMBER SAMPLE ID | BENZENE (mg/L) | TOLUENE (mg/L) | ETHYL BENZENE (mg/L) | TOTAL XYLENES (mg/L) |
|-----------------------------|-------------------|-------------------|----------------------------|----------------------------|
| ANALYSIS DATE | 05/30/04 | 05/30/04 | 05/30/04 | 05/30/04 |
| H8755-1 G-35 MW 1 | 1.17 | 0.308 | 0.357 | 0.319 |
| | | | | |
| Quality Control | 0.094 | 0.097 | 0.086 | 0.257 |
| True Value QC | 0.100 | 0.100 | 0.100 | 0.300 |
| % Recovery | 94.3 | 97.3 | 86.4 | 85.6 |
| Relative Percent Difference | 5.2 | 1.5 | 1.4 | 0.3 |

METHOD: EPA SW-846 8260

13/1/14

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

Receiving Date: 05/28/04 Reporting Date: 06/02/04 Project Number: NOT GIVEN Project Name: VACUUM G-35 Project Location: G-35 MW1

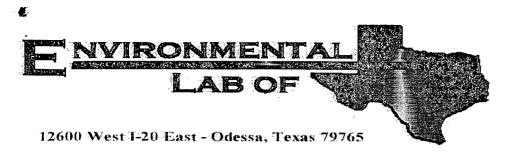
Sampling Date: 05/28/04 Sample Type: GROUNDWATER Sample Condition: COOL & INTACT Sample Received By: AH Analyzed By: AH

| | Na | Са | Mg | К | Conductivity | T-Alkalinity |
|----------------------|--------|--------|--------|--------|------------------|--------------------------|
| LAB NUMBER SAMPLE ID | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (<i>u</i> S/cm) | (mgCaCO ₃ /L) |

| ANALYSIS DATE: | 06/01/04 | 06/01/04 | 06/01/04 | 06/01/04 | 06/01/04 | 06/01/04 |
|-----------------------------|-------------|-----------|-----------|----------|----------|----------|
| H8755-1 G-35 MW1 | 1404 | 70 | 22 | 3.49 | 7398 | 644 |
| | | | | | | |
| Quality Control | NR | 50 | 55 | 4.58 | 1322 | NR |
| True Value QC | NR | 50 | 50 | 5.00 | 1413 | NR |
| % Recovery | NR | 100 | 110 | 91.6 | 93.6 | NR |
| Relative Percent Difference | NR | 0 | 0 | 7.2 | 0.7 | NR |
| METHODS: | SM | 3500-Ca-D | 3500-Mg E | 8049 | 120.1 | 310.1 |
| | CI | SO₄ | CO3 | HCO₃ | pН | TDS |
| | (mg/L) | (mg/L) | (mg/L) | (mg/L) | (s.u.) | (mg/L) |
| ANALYSIS DATE: | 06/01/04 | 06/01/04 | 06/01/04 | 06/01/04 | 06/01/04 | 06/02/04 |
| H8755-1 G-35 MW1 | 1899 | 2.15 | 0 | 786 | 7.53 | 4188 |
| | | | | | | |
| Quality Control | 950 | 48.21 | NR | 927 | 7.02 | NR |
| True Value QC | 1000 | 50.00 | NR | 1000 | 7.00 | NR |
| % Recovery | 95.0 | 96.4 | NR | 92.7 | 101 | NR |
| Relative Percent Difference | 6.0 | 6.2 | NR | 0 | 0.3 | 1.4 |
| METHODS: | SM4500-CI-B | 375.4 | 310.1 | 310.1 | 150.1 | 160.1 |

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Analytical Report

Prepared for:

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

Project: G-35 SWD Project Number: None Given Location: Vacuum

Lab Order Number: 4I10003

Report Date: 09/17/04

| Rice Operating Co. | Project: G-35 SWD | Fax: (505) 397-1471 |
|--------------------|-------------------------------|---------------------|
| 122 W. Taylor | Project Number: None Given | Reported: |
| Hobbs NM, 88240 | Project Manager: Kristin Pope | 09/17/04 10:52 |
| | | |

ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|-----------|---------------|--------|----------------|----------------|
| MW-1 | 4110003-01 | Water | 09/07/04 09:20 | 09/09/04 19:20 |

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

Project: G-35 SWD Project Number: None Given Project Manager: Kristin Pope

Organics by GC

Environmental Lab of Texas

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| MW-1 (4110003-01) Water | ····· | · ···· | | | | | | | |
| Benzene | 1.11 | 0.00500 | mg/L | 5 | EI41604 | 09/14/04 | 09/15/04 | EPA 8021B | |
| Toluene | 0.0525 | 0.00500 | *1 | " | н | | | U | |
| Ethylbenzene | 0.346 | 0.00500 | " | | н | 11 | ** | n | |
| Xylene (p/m) | 0.0911 | 0.00500 | Ħ | | " | н | " | | |
| Xylene (0) | 0.0405 | 0.00500 | н | * | | " | " | н | |
| Surrogate: a,a,a-Trifluorotoluene | | 214 % | 80-12 | 0 | 11 | . " | " | " | S-04 |
| Surrogate: 4-Bromofluorobenzene | | 106 % | 80-12 | 20 | " | | " ~ | " | |

Environmental Lab of Texas

Project: G-35 SWD Project Number: None Given Project Manager: Kristin Pope

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-------------------------|--------|--------------------|-------|----------|---------|----------|----------|------------|-------|
| MW-1 (4110003-01) Water | | | | | | | | | |
| Chloride | 4700 | 5.00 | mg/L | 1 | EI41612 | 09/12/04 | 09/12/04 | EPA 325.3M | |
| Total Dissolved Solids | 8270 | 20.0 | " | 4 | EI41702 | 09/13/04 | 09/13/04 | EPA 160.1 | |
| Sulfate | 17.7 | 0.500 | " | 1 | EI41312 | 09/10/04 | 09/10/04 | EPA 375.4 | |

Environmental Lab of Texas

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

Project: G-35 SWD Project Number: None Given Project Manager: Kristin Pope

Fax: (505) 397-1471

Reported: 09/17/04 10:52

Total Metals by EPA / Standard Methods

Environmental Lab of Texas

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-------------------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| MW-1 (4I10003-01) Water | | | | | | | | | |
| Calcium | 371 | 1.00 | mg/L | 100 | E141506 | 09/15/04 | 09/15/04 | EPA 6010B | |
| Magnesium | 105 | 0.100 | " | n | " | n | ** | 11 | |
| Potassium | 16.6 | 0.500 | " | 10 | · • | н | " | " | |
| Sodium | 2530 | 10.0 | н | 1000 | " | " | ** | n | |

Environmental Lab of Texas

| Rice Operating Co. 122 W. Taylor Hobbs NM, 88240 | | Project Nur Project Man | | Fax: (505) 39 Reporte 09/17/04 1 | | | | | | | | |
|--|-------------------------------|----------------------------|----------|---|------------------|------------|----------------|------|--------------|-------|--|--|
| | | ganics by Environm | | - • | | | | | | | | |
| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes | | |
| Batch EI41604 - EPA 5030C (GC) | | | | | | | | | | | | |
| Blank (EI41604-BLK1) | Prepared & Analyzed: 09/14/04 | | | | | | | | | | | |
| Benzene | ND | 0.00100 | mg/L | | | | | | | | | |
| Toluene | ND | 0.00100 | н | | | | | | | | | |
| Ethylbenzene | ND | 0.00100 | н | | | | | | | | | |
| Xylene (p/m) | ND | 0.00100 | " | | | | | | | | | |
| Xylene (o) | ND | 0.00100 | | | | | | | | | | |
| Surrogate: a,a,a-Trifluorotoluene | 20.0 | | ug/l | 20.0 | | 100 | 80-120 | | | | | |
| Surrogate: 4-Bromofluorobenzene | 17.4 | | " | 20.0 | | 87.0 | 80-120 | - | | | | |
| LCS (EI41604-BS1) | | | | | | | | | | | | |
| Benzene | 95.7 | | ug/l | 100 | & Analyzo | 95.7 | 80-120 | | | | | |
| Toluene | 110 | | | 100 | | 110 | 80-120 | | | | | |
| Ethylbenzene | 108 | | n | 100 | | 108 | 80-120 | | | | | |
| Xylene (p/m) | 228 | | н | 200 | | 114 | 80-120 | | | | | |
| Xylene (o) | 103 | | н | 100 | | 103 | 80-120 | | | | | |
| Surrogate: a,a,a-Trifluorotoluene | 21.5 | | | 20.0 | | 108 | 80-120 | | | | | |
| Surrogate: 4-Bromofluorobenzene | 23.5 | | " | 20.0 | | 118 | 80-120 | | | | | |
| LCS Dup (EI41604-BSD1) | | | | Prepared | & Analyze | ed: 09/14/ | 04 | | | | | |
| Benzene | 92.0 | | ug/l | 100 | | 92.0 | 80-120 | 3.94 | 20 | | | |
| Toluene | 104 | | " | 100 | | 104 | 80-120 | 5.61 | 20 | | | |
| Ethylbenzene | 103 | | и | 100 | | 103 | 80-120 | 4.74 | 20 | | | |
| Xylene (p/m) | 215 | | н | 200 | | 108 | 80-120 | 5.41 | 20 | | | |
| Xylenc (o) | 99.5 | | It | 100 | | 99.5 | 80-120 | 3.46 | 20 | | | |
| Surrogate: a,a,a-Trifluorotoluene | 20.6 | | <i>n</i> | 20.0 | <i>a</i> . | 103 | 80-120 | | | | | |
| Surrogate: 4-Bromofluorobenzene | 21.2 | | " | 20.0 | | 106 | 80-120 | | | | | |
| Calibration Check (EI41604-CCV1) | | | | Prepared | & Analyze | ed: 09/14/ | 04 | | | | | |
| Benzene | 82.8 | | ug/l | 100 | | 82.8 | 80-120 | | | | | |
| Toluene | 94.0 | | " | 100 | | 94.0 | 80-120 | | | | | |
| Ethylbenzene | 91.4 | | H | 100 | | 91.4 | 80-120 | | | | | |
| Xylene (p/m) | 196 | | | 200 | | 98.0 | 80-120 | | | | | |
| Xylene (o) | 89.9 | | " | 100 | | 89.9 | 80-120 | | | | | |
| Surrogate: a.a.,a-Trifluorotoluene | 18.1 | | н | 20.0 | | 90.5 | 80-120 | | | | | |
| Surrogate: 4-Bromofluorobenzene | 17.1 | | " | 20.0 | | 85.5 | 80-120 | | | | | |

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

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| *Rice Operating Co. |
|---------------------|
| .122 W. Taylor |
| Hobbs NM, 88240 |

Project: G-35 SWD Project Number: None Given Project Manager: Kristin Pope

09/17/04 10:52

Organics by GC - Quality Control

Environmental Lab of Texas

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

Batch EI41604 - EPA 5030C (GC)

| Matrix Spike (E141604-MS1) | Source: 4 | Source: 4110005-02 | | | Prepared: 09/14/04 Analyzed: 09/16/04 | | | | |
|-----------------------------------|-----------|--------------------|------|----|---------------------------------------|--------|--|--|--|
| Benzene | 81.1 | ug/l | 100 | ND | 81.1 | 80-120 | | | |
| Toluene | 83.7 | ** | 100 | ND | 83.7 | 80-120 | | | |
| Ethylbenzene | 81.6 | n | 100 | ND | 81.6 | 80-120 | | | |
| Xylene (p/m) | 174 | н | 200 | ND | 87.0 | 80-120 | | | |
| Xylene (o) | 80.6 | н | 100 | ND | 80.6 | 80-120 | | | |
| Surrogate: a,a,a-Trifluorotoluene | 17.0 | | 20.0 | | 85.0 | 80-120 | | | |
| Surrogate: 4-Bromofluorobenzene | 16.5 | " | 20.0 | | 82.5 | 80-120 | | | |

Environmental Lab of Texas

| Rice Operating Co. | | Pro | oject: G- | 35 SWD | | | | | Fax: (505) | 397-1471 |
|--|----------------------------|----------------------------|-----------|-------------------------------|------------|------------|-------------|--------|-------------------------|----------|
| 122 W. Taylor Hobbs NM, 88240 | | Project Nur Project Man | | | | | | | Repo 09/17/0- | |
| General Chemistr | v Paran | | | | d Moth | oda (| hality | Contro | | |
| General Chemistr | - | Environm | | | | ious - C | guanty v | Contro | 91 | |
| | | Reporting | | Spike | Source | | %REC | | RPD | |
| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |
| Batch EI41312 - General Preparation (V | vetChem |) | | | | | | | | |
| Blank (EI41312-BLK1) | | | | Prepared | & Analyze | ed: 09/10/ | 04 | | | |
| Sulfate | ND | 0.500 | mg/L | | | | | | | |
| Calibration Check (EI41312-CCV1) | | | Prepared | & Analyze | | | | | | |
| Sulfate | 48.9 mg/L 50.0 97.8 80-120 | | | | | | | ···· | | |
| Duplicate (EI41312-DUP1) | Soi | irce: 410301 | Prepared | & Analyze | ed: 09/10/ | 04 | | | | |
| Sulfate | 76.4 | 0.500 | mg/L | | 74.6 | | | 2.38 | 20 | |
| Batch EI41612 - General Preparation (V | VetChem |) | | | | | | | | |
| Blank (EI41612-BLK1) | | | | Prepared | & Analyze | ed: 09/12/ | 04 | | | |
| Chloride | ND | 5.00 | mg/L | | | | · · · · · - | | | |
| Matrix Spike (EI41612-MS1) | Soi | irce: 410900' | 7-03 | Prepared | & Analyze | ed: 09/12/ | 04 | | | |
| Chloride | 1280 | 5.00 | mg/L | 500 | 780 | 100 | 90-110 | | , | |
| Matrix Spike Dup (EI41612-MSD1) | Sou | irce: 410900 | 7-03 | Prepared | & Analyze | ed: 09/12/ | 04 | | | |
| Chloride | 1280 | 5.00 | mg/L | 500 | 780 | 100 | 90-110 | 0.00 | 20 | |
| Reference (EI41612-SRM1) | | | | Prepared & Analyzed: 09/12/04 | | | | | | |
| Chloride | 4960 | | mg/L | 5000 | | 99.2 | 80-120 | | | |
| Batch EI41702 - Filtration Preparation | | | | | | | | | | |
| Blank (EI41702-BLK1) | | | | Prepared | & Analyze | ed: 09/13/ | 04 | | | |
| Total Dissolved Solids | ND | 5.00 | mg/L | | | | | | | |

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Page 7 of 11

| Rice Operating Co. | Project: G-35 SWD | Fax: (505) 397-1471 |
|--------------------|-------------------------------|---------------------|
| 122 W. Taylor | Project Number: None Given | Reported: |
| Hobbs NM, 88240 | Project Manager: Kristin Pope | 09/17/04 10:52 |
| 1 | | 1 |

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 EI41702 - Filtration Prepara | tion | | | | | | | | | |
| Duplicate (EI41702-DUP1) | So | urce: 411000: | 5-02 | Prepared | & Analyze | ed: 09/13/ | 04 | | <u></u> | |
| Total Dissolved Solids | 797 | 5.00 | mg/L | | 937 | | | 16.1 | 20 | |

Environmental Lab of Texas

Project: G-35 SWD Project Number: None Given Project Manager: Kristin Pope

Reported: 09/17/04 10:52

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 EI41506 - General Preparatior | n (Metals) | | | | ···· | | | | | |
| Blank (EI41506-BLK1) | | | | Prepared | & Analyz | ed: 09/15/ | 04 | | | |
| Calcium | ND | 0.0100 | mg/L | | | | | | | |
| Magnesium | ND | 0.00100 | H | | | | | | | |
| Potassium | ND | 0.0500 | 11 | | | | | | | |
| Sodium | ND | 0.0100 | " | | | | | | | |
| Blank (E141506-BLK2) | | | | Prepared | & Analyz | ed: 09/15/ | 04 | | | |
| Calcium | ND | 0.0100 | mg/L | | | | | ~ | | |
| Magnesium | ND | 0.00100 | 0 | | | | | | | |
| Potassium | ND | 0.0500 | u | | | | | | | |
| Sodium | ND | 0.0100 | 11 | | | | | | | |
| Calibration Check (EI41506-CCV1) | | | | Prepared | & Analyz | ed: 09/15/ | 04 | | | |
| Calcium | 2.03 | | mg/L | 2.00 | | 102 | 85-115 | , an | | |
| Magnesium | 2.04 | | n | 2.00 | | 102 | 85-115 | | | |
| Potassium | 1.75 | | " | 2.00 | | 87.5 | 85-115 | | | |
| Sodium | 1.79 | | " | 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 | | " | 2.00 | | 101 | 85-115 | | | |
| Potassium | 1.76 | | " | 2.00 | | 88.0 | 85-115 | | | |
| Sodium | 1.77 | | " | 2.00 | | 88.5 | 85-115 | | | |
| Duplicate (E141506-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 | It | | 111 | | | 0.905 | 20 | |
| Potassium | 8.18 | 0.500 | H | | 8.31 | | | 1.58 | 20 | |
| Sodium | 359 | 1.00 | 17 | | 365 | | | 1.66 | 20 | |

Environmental Lab of Texas

| • Rice Operating Co. | Project: | G-35 SWD | Fax: (505) 397-1471 | |
|----------------------|------------------|--------------|---------------------|---|
| 122 W. Taylor | Project Number: | None Given | Reported: | ł |
| Hobbs NM, 88240 | Project Manager: | Kristin Pope | 09/17/04 10:52 | |
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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 EI41506 - General Prepar | ation (Metals) | | | | | | | | | |
| Duplicate (EI41506-DUP2) | Source: 4110015-01 Pre | | Prepared & Analyzed: 09/15/04 | | | | | | | |
| Calcium | 20.2 | 0.100 | mg/L | | 20.2 | | | 0.00 | 20 | |
| Magnesium | 28.4 | 0.0100 | | | 28.6 | | | 0.702 | 20 | |
| Potassium | 16.4 | 0.500 | " | | 16.6 | | | 1.21 | 20 | |
| Sodium | 103 | 0.100 | 11 | | 103 | | | 0.00 | 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.

Page 10 of 11

| 1 | Rice Operating Co. | Project: G-35 SWD | Fax: (505) 397-1471 |
|---|--------------------|-------------------------------|---------------------|
| | 122 W. Taylor | Project Number: None Given | Reported: |
| | Hobbs NM, 88240 | Project Manager: Kristin Pope | 09/17/04 10:52 |

Notes and Definitions

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

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

Dup Duplicate

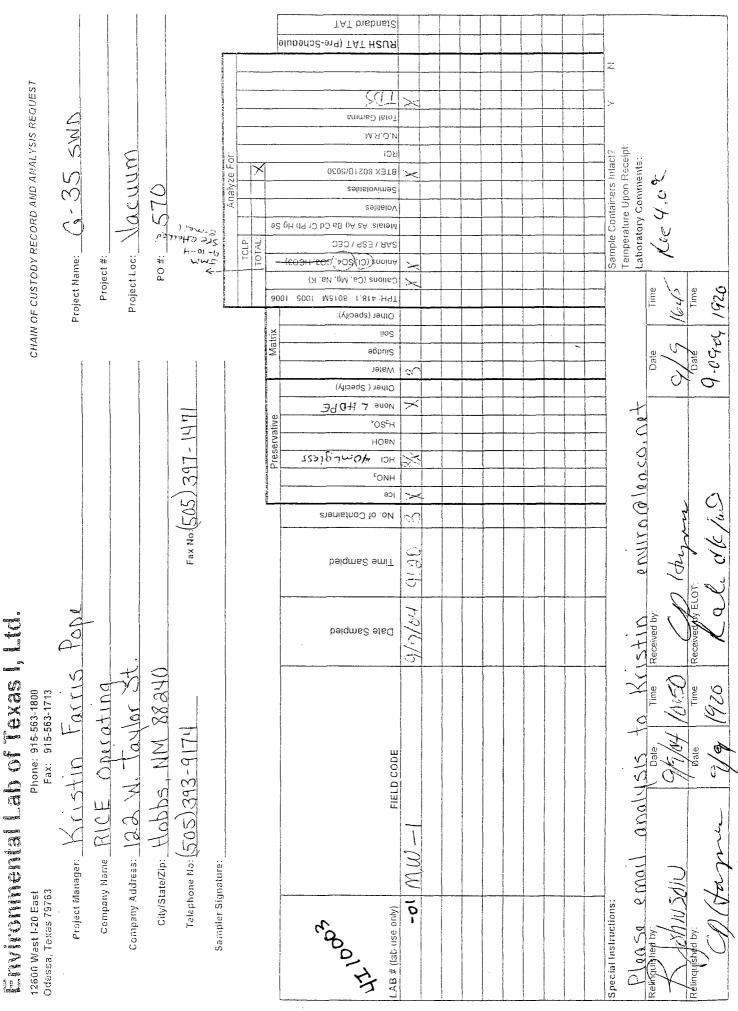
aland K J Report Approved By: Date: a- 12-04

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.

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.



Jeanne McMurrey

From:"Kristin Farris" <enviro@leaco.net>To:"Jeanne McMurrey" <jeanne@elabtexas.com>Sent:Friday, September 10, 2004 9:33 AMSubject:MW samples

Please do not analyze the water samples that were collected on 9/7/2004 for HCO3 since the hold time of 48 hrs. has expired.

Also, for the COC for the site F-35 SWD, the corresponding samples were mistakenly labeled as H-35 SWD.

Thank you. Kristin Farris Pope RICE Operating Company Hobbs, NM 88240 (505) 393-9174

This message has been scanned for viruses and dangerous content by MailScanner at **BasinBroadBand.com**, and is believed to be clean.

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

| Client: | Rice Operating Co. |
|----------|---------------------------|
| Date/Tir | me: $09 - 10 - 04 @ 0900$ |
| Order # | 4110003 |

Initials: JMM

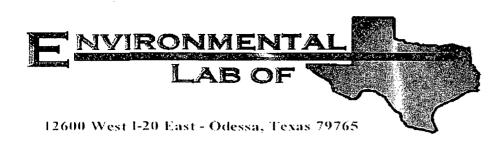
Sample Receipt Checklist

| Temperature of container/cooler? | (Yes) | No | 4.C C | |
|---|-------|----|--------------------------------|----|
| Shipping container/cooler in good condition? | (Yes) | No | | |
| Custody Seals intact on shipping container/cooler? | Yes | No | Not present N: | |
| Custody Seals intact on sample bottles? | Yes | No | Not present | |
| Chain of custody present? | Yes- | No | | |
| Sample Instructions complete on Chain of Custody? | (es) | No | | |
| Chain of Custody signed when relinquished and received? | (es) | No | | |
| Chain of custody agrees with sample label(s) | (Yes) | No | | |
| Container labels legible and intact? | Ves | No | | |
| Sample Matrix and properties same as on chain of custody? | Yes | No | | |
| Samples in proper container/bottle? | (es) | No | | |
| Samples properly preserved? | Yes | No | | |
| Sample bottles intact? | Yes | No | | |
| Preservations documented on Chain of Custody? | (es | No | | |
| Containers documented on Chain of Custody? | (Tes) | No | | |
| Sufficient sample amount for indicated test? | Kes- | No | | |
| All samples received within sufficient hold time? | Yes (| No | CO3/HCO3 oct of 48 hr. hold to | ne |
| VOC samples have zero headspace? | (Yes) | No | Not Applicable | |

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Other observations:

| Variance Documentation: Contact Person: - <u>Kristin Farris</u> Date/Time: <u>09-10-04@ 0930</u> Contacted by: <u>Jeanne</u> Regarding: hold time - CO3/HCO3 | |
|---|---|
| Corrective Action Taken: <u>client doesn't want to run (02/14(03</u> <u>on 9/2/4 samples see attacher(e-mail</u> | |
| | - |



Analytical Report

Prepared for:

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

Project: G-35 SWD Project Number: None Given Location: Vacuum

Lab Order Number: 4K30007

Report Date: 12/10/04

| Rice Operating Co. | Project: G-35 SWD | Fax: (505) 397-1471 |
|--------------------|-------------------------------|---------------------|
| 122 W. Taylor | Project Number: None Given | Reported: |
| Hobbs NM, 88240 | Project Manager: Kristin Pope | 12/10/04 13:01 |

ANALYTICAL REPORT FOR SAMPLES

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| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|-----------|---------------|--------|----------------|----------------|
| MW-1 | 4K30007-01 | Water | 11/24/04 13:05 | 11/30/04 10:35 |

| Rice Operating Co. 122 W. Taylor Hobbs NM, 88240 | Project: G-35 SWD Project Number: None Given Project Manager: Kristin Pope | | | | | Project Number: None Given | | | |
|--|--|--------------------|----------------------|----------|---------|----------------------------|----------|-----------|-------|
| <u>.</u> | | Org Environn | ganics b nental I | • | exas | | | | |
| Analyte | . Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
| MW-1 (4K30007-01) Water | | | | | | | | | |
| Benzeve | 0.881 | 0.0100 | mg/L | 10 | EL40601 | 12/02/04 | 12/02/04 | EPA 8021B | |
| Toluene | 0.0226 | 0.0100 | " | " | | | n | | |
| Ethylbenzene | 0.133 | 0.0100 | " | н | 17 | 11 | " | " | |
| Kylene (p/m) | 0.0464 | 0.0100 | | " | " | It | | 4 | |
| Xylene (0) | 0.0253 | 0.0100 | | н | | n | n | " | |

80-120

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S-04

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Environmental Lab of Texas

Surrogate: a,a,a-Trifluorotoluene

Surrogate: 4-Bromofluorobenzene

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

Page 2 of 12

| Rice Operating Co. | Project: | G-35 SWD | Fax: (505) 397-1471 |
|--------------------|------------------|--------------|---------------------|
| 122 W. Taylor | Project Number: | None Given | Reported: |
| Hobbs NM, 88240 | Project Manager: | Kristin Pope | 12/10/04 13:01 |

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

| Analyte MW-1 (4K30007-01) Water | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--|--------------|--------------------|-----------|----------|--------------------|----------------------|----------|-------------------------|-------|
| Total Alkalinity Total Dissolved Solids | 400 10400 | 2.00 | mg/L " | 1 | EL40313 EL40105 | 12/03/04 11/30/04 | 12/03/04 | EPA 310.2M EPA 160.1 | |

Environmental Lab of Texas

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| Rice Operating Co. | Project: G- | -35 SWD | Fax: (505) 397-1471 |
|--------------------|---------------------|-------------|---------------------|
| 122 W. Taylor | Project Number: No | one Given | Reported: |
| Hobbs NM, 88240 | Project Manager: Kr | ristin Pope | 12/10/04 13:01 |

Total Metals by EPA / Standard Methods

Environmental Lab of Texas

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-------------------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| MW-1 (4K30007-01) Water | | | | | | | | | |
| Calcium | 438 | 1.00 | mg/L | 100 | EL40101 | 11/30/04 | 11/30/04 | EPA 6010B | |
| Magnesium | 125 | 0.100 | " | " | n | 1 | n | " | |
| Potassium | 22.1 | 0.500 | | 10 | " | " | н | " | |
| Sodium | 3970 | 10.0 | " | 1000 | " | | н | " | |

Environmental Lab of Texas

| Rice Operating Co. 122 W. Taylor Hobbs NM, 88240 | | Project Nu Project Ma | | one Given | | | | Fax: (505) 3 Report 12/10/04 | ted: |
|--|--------|--------------------------|-------|-----------|---------|----------|----------|------------------------------------|------|
| | | Anions by Environn | | | | | | | |
| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Note |
| MW-1 (4K30007-01) Water | 5200 | 50.0 | mg/L | 100 | EL40916 | 12/08/04 | 12/08/04 | EPA 300.0 | |

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Sulfate

Rice Operating Co. 122 W. Taylor Hobbs NM, 88240 $^{\prime}l$

Project: G-35 SWD Project Number: None Given Project Manager: Kristin Pope

Fax: (505) 397-1471

Reported: 12/10/04 13:01

Organics by GC - Quality Control

Environmental Lab of Texas

| | | Reporting | | Spike | Source | | %REC | | , RPD | |
|-----------------------------------|--------|-----------|-------|-------------|-------------|-------------|--------|-------|-------|-------|
| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |
| Batch EL40601 - EPA 5030C (GC) | | | | | | | | | | |
| Blank (EL40601-BLK1) | | | | Prepared & | Analyzed: | 12/02/04 | | | | |
| Benzene | ND | 0.00100 | mg/L | | | | | | | |
| Toluene | ND | 0.00100 | н | | | | | | | |
| Ethylbenzene | ND | 0.00100 | | | | | | | | |
| Xylene (p/m) | ND | 0.00100 | " | | | | | | | |
| Xylene (o) | ND | 0.00100 | " | | | | | | | |
| Surrogate: a,a,a-Trifluorotoluene | 0.0223 | | " | 0.0200 | | 112 | 80-120 | ~ | | |
| Surrogate: 4-Bromofluorobenzene | 0.0183 | | " | 0.0200 | | 91.5 | 80-120 | | | |
| LCS (EL40601-BS1) | | | | Prepared & | : Analyzed: | 12/02/04 | | | | |
| Benzene | 99.2 | | ug/l | 100 | | 99.2 | 80-120 | | | |
| Toluene | 107 | | " | 100 | | 107 | 80-120 | | | |
| Ethylbenzene | 107 | | " | 100 | | 107 | 80-120 | | • | |
| Xylene (p/m) | 219 | | ۲ | 200 | | 110 | 80-120 | | | |
| Xylene (o) | 116 | | " | 100 | | 116 | 80-120 | | | |
| Surrogate: a,a,a-Trifluorotoluene | 0.0196 | | mg/L | 0.0200 | | 98.0 | 80-120 | | | |
| Surrogate: 4-Bromofluorobenzene | 0.0199 | | " | 0.0200 | | 99.5 | 80-120 | | | |
| LCS Dup (EL40601-BSD1) | | | | Prepared & | Analyzed: | 12/02/04 | | | | |
| Benzene | 100 | | ug/l | 100 | | 100 | 80-120 | 0.803 | 20 | **** |
| Toluene | 110 | | n | 100 | | 110 | 80-120 | 2.76 | 20 | |
| Ethylbenzene | 111 | | n | 100 | | 111 | 80-120 | 3.67 | 20 | |
| Xylene (p/m) | 230 | | 'n | 200 | | 115 | 80-120 | 4.44 | 20 | |
| Xylene (o) | 119 | | " | 100 | | 119 | 80-120 | 2.55 | 20 | |
| Surrogate: a,a,a-Trifluorotoluene | 0.0199 | | mg/L | 0.0200 | | 99.5 | 80-120 | | | |
| Surrogate: 4-Bromofluorobenzene | 0.0202 | | " | 0.0200 | | 101 | 80-120 | | | |
| Calibration Check (EL40601-CCV1) | | | | Prepared: 1 | 2/02/04 Ai | nalyzed: 12 | /03/04 | | | |
| Benzene | 98.7 | | ug/l | 100 | | 98.7 | 80-120 | | | |
| Toluene | 105 | | " | 100 | | 105 | 80-120 | | | |
| Ethylbenzene | 109 | | 1* | 100 | | 109 | 80-120 | | | |
| Xylene (p/m) | 221 | | " | 200 | | 110 | 80-120 | | | |
| Xylene (o) | 111 | | | 100 | | 111 | 80-120 | | | |
| Surrogate: a,a,a-Trifluorotoluene | 0.0218 | | mg/L | 0.0200 | | 109 | 80-120 | | | |
| Surrogate: 4-Bromofluorobenzene | 0.0227 | | " | 0.0200 | | 114 | 80-120 | | | |

Environmental Lab of Texas

,

Project: G-35 SWD Project Number: None Given Project Manager: Kristin Pope

Fax: (505) 397-1471

Reported: 12/10/04 13:01

Organics by GC - Quality Control

Environmental Lab of Texas

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

Batch EL40601 - EPA 5030C (GC)

| Matrix Spike (EL40601-MS1) | Source: 41 | K30004-03 | Prepared: 1 | 2/02/04 A | nalyzed: 12 | 2/03/04 | |
|-----------------------------------|------------|-----------|-------------|-----------|-------------|---------|---|
| Benzene | 107 | ug/l | 100 | ND | 107 | 80-120 | |
| Toluene | 108 | 11 | 100 | ND | 108 | 80-120 | |
| Ethylbenzene | 114 | ** | 100 | ND | 114 | 80-120 | |
| Xylene (p/m) | 229 | | 200 | ND | 114 | 80-120 | |
| Xylene (o) | 111 | " | 100 | ND | 111 | 80-120 | |
| Surrogate: a,a,a-Trifluorotoluene | 0.0206 | mg/L | 0.0200 | | 103 | 80-120 | ~ |
| Surrogate: 4-Bromofluorobenzene | 0.0201 | " | 0.0200 | | 100 | 80-120 | |

Environmental Lab of Texas

| Rice Operating Co. 122 W. Taylor Hobbs NM, 88240 | | Project: G-35 SWD Project Number: None Given Project Manager: Kristin Pope | | | | | | | Fax: (505) 397-147 Reported: 12/10/04 13:01 | | |
|--|------------------|--|-------|-------------|------------|-------------|-----------|------|---|-------|--|
| Genera | l Chemistry Para | meters by Environm | | | | ls - Qual | lity Cont | trol | | | |
| | | Reporting | | Spike | Source | ····· | %REC | | RPD | · | |
| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes | |
| Batch EL40105 - General Preparati | on (WetChem) | | | | | | | | | | |
| Blank (EL40105-BLK1) | | | | Prepared: 1 | 11/30/04 A | nalyzed: 12 | /01/04 | | | | |
| Total Dissolved Solids | ND | 5.00 | mg/L | | | | | | | | |
| Duplicate (EL40105-DUP1) | Sou | rce: 4K24009- | -01 | Prepared: | 11/30/04 A | nalyzed: 12 | /01/04 | | | | |
| Total Dissolved Solids | 1480 | 5.00 | mg/L | | 1480 | | | 0.00 | 20 | | |

Batch EL40313 - General Preparation (WetChem)

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| Blank (EL40313-BLK1) | | | | Prepared & Analy | yzed: 12/03/04 | | | |
|--------------------------|--------|-------------|------|------------------|----------------|--------|-------|----|
| Total Alkalinity | ND | 2,00 | mg/L | | | | | |
| Duplicate (EL40313-DUP1) | Sourc | e: 4K30004- | -01 | Prepared & Analy | yzed: 12/03/04 | | | |
| Total Alkalinity | 207 | 2.00 | mg/L | 20 |)8 | | 0.482 | 20 |
| Reference (EL40313-SRM1) | | | | Prepared & Analy | yzed: 12/03/04 | | | |
| Carbonate Alkalinity | 0.0501 | | mg/L | 0.0500 | 100 | 80-120 | | |

Environmental Lab of Texas

| Rice Operating Co. | Project: G-35 SWD | Fax: (505) 397-1471 |
|--------------------|-------------------------------|---------------------|
| 122 W. Taylor | Project Number: None Given | Reported: |
| Hobbs NM, 88240 | Project Manager: Kristin Pope | 12/10/04 13:01 |

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 EL40101 - 6010B/No Digestion | | | | | | | | | | |
| Blank (EL40101-BLK1) | | | | Prepared & | k Analyzed: | 11/30/04 | | | | |
| Calcium | ND | 0.0100 | mg/L | | | | | | | |
| Magnesium | ND | 0.00100 | 11 | | | | | | | |
| Potassium | ND | 0.0500 | 11 | | | | | | | |
| Sodium | ND | 0.0100 | u | | | | | | | |
| Calibration Check (EL40101-CCV1) | | | | Prepared & | z Analyzed: | 11/30/04 | | | | |
| Calcium | 1.87 | | mg/L | 2.00 | | 93.5 | 85-115 | | | |
| Magnesium | 2.08 | | n | 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) | Sou | rce: 4K24009- | -01 | Prepared & | k Analyzed: | 11/30/04 | | | | |
| Calcium | 108 | 1.00 | mg/L | | 122 | | | 12.2 | 20 | |
| Magnesium | 46.0 | 0.0100 | n | | 51.6 | | | 11.5 | 20 | |
| Potassium | 11.1 | 0.500 | . " | | 13.2 | | | 17.3 | 20 | |
| Sodium | 222 | 1.00 | n | | 235 | | | 5.69 | 20 | |

Environmental Lab of Texas

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| Rice Operating Co. | Project: G-35 SWD | Fax: (505) 397-1471 |
|--------------------|-------------------------------|---------------------|
| 122 W. Taylor | Project Number: None Given | Reported: |
| Hobbs NM, 88240 | Project Manager: Kristin Pope | 12/10/04 13:01 |

Anions by EPA Method 300.0 - Quality Control

Environmental Lab of Texas

| | | Reporting | | Spike | Source | | %REC | | RPD | |
|--|----------|-----------|-------|------------|-------------|----------|--------|-------|-------|-------|
| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |
| Batch EL40916 - General Preparation (V | VetChem) | - | | | | | | | | |
| Blank (EL40916-BLK1) | | | | Prepared 8 | z Analyzed: | 12/08/04 | | | | |
| Sulfate | 0.00 | 0.500 | mg/L | | | | | | | |
| Chloride | 0.00 | 0.500 | | | | | | | | |
| Blank (EL40916-BLK2) | | | | Prepared & | ż Analyzed: | 12/08/04 | | | | |
| Sulfate | 0.00 | 0.500 | mg/L | | | | | | | |
| Chloride | 0.00 | 0.500 | u | | | | | - | | |
| LCS (EL40916-BS1) | | | | Prepared & | ż Analyzed: | 12/08/04 | | | | |
| Sulfate | 11.7 | 0.500 | mg/L | 10.0 | | 117 | 80-120 | | | |
| Chloride | 9.75 | 0.500 | " | 10.0 | | 97.5 | 80-120 | | | |
| LCS (EL40916-BS2) | | | | Prepared & | ż Analyzed: | 12/08/04 | | | | |
| Chloride | 9.77 | 0,500 | mg/L | 10.0 | | 97.7 | 80-120 | | | |
| Sulfate | 11.8 | 0.500 | " | 10.0 | | 118 | 80-120 | | | |
| LCS Dup (EL40916-BSD1) | | | | Prepared & | & Analyzed: | 12/08/04 | | | | |
| Chloride | 9.83 | 0.500 | mg/L | 10.0 | | 98.3 | 80-120 | 0.817 | 20 | |
| Sulfate | 11.8 | 0.500 | " | 10.0 | | 118 | 80-120 | 0.851 | 20 | |
| LCS Dup (EL40916-BSD2) | | | | Prepared & | & Analyzed: | 12/08/04 | | | | |
| Chloride | 9.74 | 0.500 | mg/L | 10.0 | | 97.4 | 80-120 | 0.308 | 20 | |
| Sulfate | 11.7 | 0.500 | n | 10.0 | | 117 | 80-120 | 0.851 | 20 | |
| Calibration Check (EL40916-CCV1) | | | | Prepared & | & Analyzed: | 12/08/04 | | | | |
| Sulfate | 11.7 | | mg/L | 10.0 | | 117 | 80-120 | | | |
| Chloride | 9.79 | | " | 10.0 | | 97.9 | 80-120 | | | |
| Calibration Check (EL40916-CCV2) | | | | Prepared & | & Analyzed: | 12/08/04 | | | | |
| Chloride | 9.80 | | mg/L | 10.0 | | 98.0 | 80-120 | | | |
| Sulfate | 11.7 | | " | 10.0 | | 117 | 80-120 | | | |

Environmental Lab of Texas

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| Rice Operating Co. | Project: G-35 SWD | Fax: (505) 397-1471 |
|--------------------|-------------------------------|---------------------|
| 122 W. Taylor | Project Number: None Given | Reported: |
| Hobbs NM, 88240 | Project Manager: Kristin Pope | 12/10/04 13:01 |

Anions by EPA Method 300.0 - Quality Control

Environmental Lab of Texas

| | | Reporting | | Spike | Source | | %REC | | RPD | |
|-----------------------------------|--------------|-------------|-------|------------|-------------|----------|--------|-------|-------|-------|
| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |
| Batch EL40916 - General Preparati | on (WetChem) | | | | | | | | | |
| Duplicate (EL40916-DUP1) | Sourc | e: 4L03001- | -01 | Prepared & | : Analyzed: | 12/08/04 | | | | |
| Chloride | 1570 | 20.0 | mg/L | | 1330 | | | 16.6 | 20 | |
| Sulfate | 809 | 20.0 | n | | 682 | | | 17.0 | 20 | |
| Duplicate (EL40916-DUP2) | Sourc | e: 4L06003- | -02 | Prepared & | : Analyzed: | 12/08/04 | | | | |
| Chloride | 731 | 20.0 | mg/L | | 725 | | | 0.824 | 20 | |
| Sulfate | 1210 | 20.0 | 11 | | 1200 | | | 0.830 | 20 | |

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| Rice Operating Co. 122 W. Taylor Hobbs NM, 88240 | | Project: C Project Number: N Project Manager: H | None Given | Fax: (505) 397-1471 Reported: 12/10/04 13:01 | |
|--|--|---|------------|--|--|
| <u></u> , | | Notes and Defi | nitions | | |
| S-04 | The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect. | | | | |
| DET | Analyte DETECTED | | | | |
| ND | Analyte NOT DETECTED at or above the report | ting 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 Junes Date:

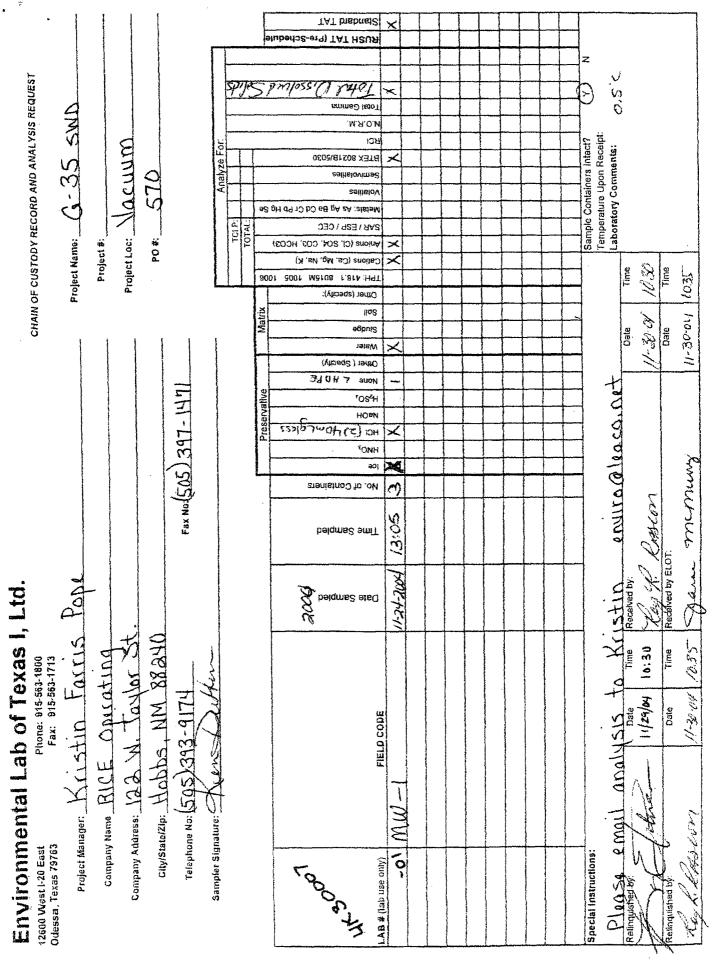
12/10/2004

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director Peggy Allen, QA Officer Jeanne Mc Murrey, Inorg. Tech Director James L. Hawkins, Chemist/Geologist Sandra Sanchez, Lab Tech.

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Environmental Lab of Texas



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

| Client: <u>Rice Operating Co</u> | | | | | | | |
|----------------------------------|--|--|--|--|--|--|--|
| Date/Time: 11-30-64 @. 1200 | | | | | | | |
| Order #: 4K 30007 | | | | | | | |
| Initials: JMM | | | | | | | |

Sample Receipt Checklist

| Temperature of container/cooler? | Yes | No | O.S. 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? | Tes | No | ~ |
| Chain of Custody signed when relinquished and received? | (Yes) | No | |
| Chain of custody agrees with sample label(s) | Tes | Na | |
| Container labels legible and intact? | (res) | No | |
| Sample Matrix and properties same as on chain of custody? | (Tes) | No | |
| Samples in proper container/bottle? | (es) | No | |
| Samples properly preserved? | res | No | |
| Sample bottles intact? | (es) | No | |
| Preservations documented on Chain of Custody? | (es | No | |
| Containers documented on Chain of Custody? | (Yes) | No | |
| Sufficient sample amount for indicated test? | Mes | No | |
| All samples received within sufficient hold time? | Nes | No | |
| VOC samples have zero headspace? | (Yes) | No | Not Applicable |

Other observations:

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| Contact Person: Regarding: | Variance Documentation: Date/Time: | _ Contacted by: |
|--|---------------------------------------|-----------------|
| ······································ | | |
| Corrective Action Taken: | | ÷ |
| | | |
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