

1R - 459

**Annual GW Mon.  
REPORTS**

**DATE:**

2010



**TETRA TECH**

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RETURN RECEIPT NO. 7008 3230 0001 9310 9093

March 25, 2011

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

**Re: 2010 Annual Groundwater Summary Report & Project Status Report, Rice Operating Company, K-4 Release, BD SWD System, Unit K, Section 4, T-22-S, R-37-E, Lea County, New Mexico, NMOCD CASE #1R0459**

Mr. Hansen:

Tetra Tech Inc. (Tetra Tech) submits the following 2010 Annual Groundwater Summary Report for the Rice Operating Company (ROC), K-4 Release, located in the BD Salt Water Disposal System. This report consists of the following sections:

1. A figure presenting the location of the monitoring wells and most recent groundwater sampling results.
2. Tables summarizing all laboratory results and depths to groundwater at the site, including the current year (2010).
3. Graphs depicting the concentration of chlorides, total dissolved solids (TDS), and sulfates over time.
4. Laboratory results for the most recent groundwater sampling event.

ROC has completed the Corrective Action Plan (CAP) dated April 23, 2007, which was granted verbal approval by the NMOCD on December 16, 2009.

As per the CAP, ROC was onsite February 22 through March 5, 2010, to excavate chloride impacted soils within the K-4 release area. An area measuring 68 feet wide by 120 feet long to a depth of 4 feet below ground surface (bgs) was excavated. Upon completion of the excavation, a 20 mil polyethylene liner was installed at 4 feet bgs in order to impede further vertical migration of the remaining chlorides within the soil. Between March 8 and March 10, 2010, clean offsite soils along with hay were brought to the site, mixed with existing soils and placed above the 20 mil liner to surface grade. On April 8, 2010 the site was reseeded with native grasses.

**Tetra Tech**

1910 North Big Spring, Midland, TX 79705

Tel 432.682.4559 Fax 432.682.3946 [www.tetrattech.com](http://www.tetrattech.com)

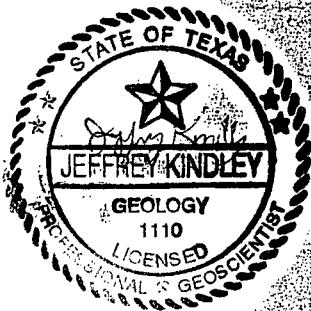


**TETRA TECH**

On September 22, 2010, a site termination request was submitted to the NMOCD. In an email dated October 13, 2010, the NMOCD denied the termination request and requested that ROC continue to remove chloride impacted groundwater and monitor the site for chlorides and TDS. As such, ROC will continue to monitor the groundwater at the site on a quarterly basis and will continue to remove groundwater in 2011.

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

Thank you for your consideration of this annual summary information. If you have any questions, please contact me at (432) 682-4559, or Hack Conder of ROC at (575) 393-9174.



Respectfully Submitted,  
Tetra Tech, Inc.

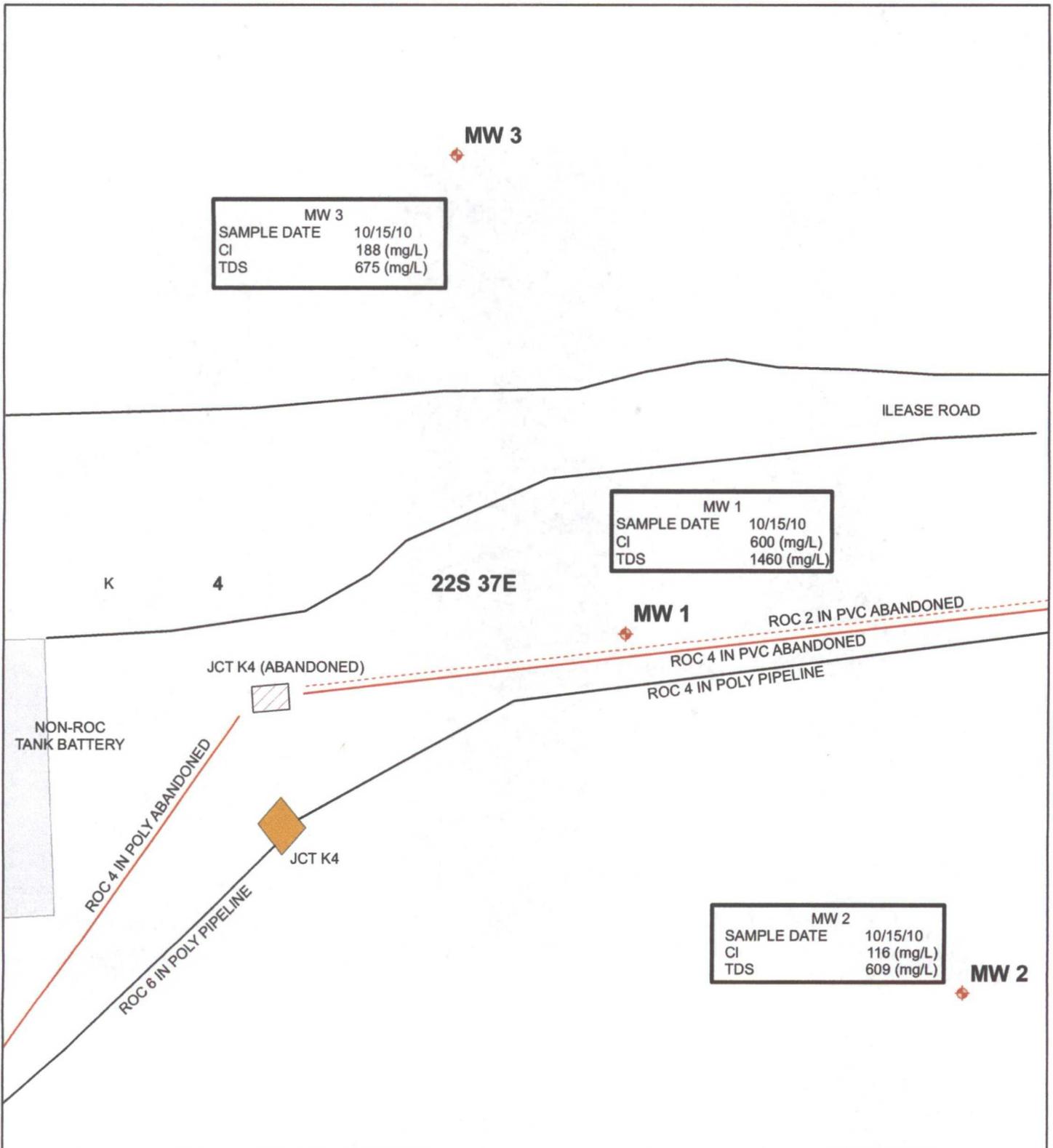
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Jeffrey Kindley, P.G.  
Senior Project Manager

cc: Hack Conder –ROC  
Enclosures: Figure, Tables, Graphs and Lab Results

**FIGURES**

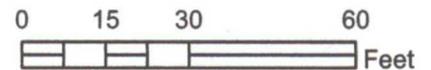
# MONITOR WELL SAMPLING DATA



**BD K-4**  
Legals: UL/K SEC. 4  
T-22-S R-37-E

Case #: 1R0459

FIGURE 1



Drawing date: 3/9/11  
Drafted by: TONY GRIECO

**TABLES**

Table 1  
Rice Operating Company  
BD K-4  
Lea County, New Mexico

| MW | Depth to Water | Total Depth | Well Volume | Volume Purged | Sample Date | Cl mg/L | TDS mg/L | Benzene mg/L | Toluene mg/L | Ethyl Benzene mg/L | Total Xylenes mg/L | Sulfate mg/L | Comments      |
|----|----------------|-------------|-------------|---------------|-------------|---------|----------|--------------|--------------|--------------------|--------------------|--------------|---------------|
| 1  | 85.02          | 93.63       | 1.40        | 5             | 11/13/06    | 1040    | 2120     | <0.001       | <0.001       | <0.001             | <0.001             | 152          | Clear no odor |
| 1  | 84.99          | 93.62       | 1.40        | 6             | 03/08/07    | 916     | 2100     | <0.001       | <0.001       | <0.001             | <0.001             | 148          | Clear no odor |
| 1  | 84.96          | 93.62       | 1.40        | 6             | 04/23/07    | 917     | 1950     | <0.001       | <0.001       | <0.001             | <0.001             | 339          | Clear no odor |
| 1  | 86.06          | 97.70       | 7.60        | 6             | 09/14/07    | 760     | 2028     | <0.001       | <0.001       | <0.001             | <0.003             | 159          | Clear no odor |
| 1  | 86.06          | 97.70       | 7.60        | 20            | 10/31/07    | 736     | 1770     | <0.002       | <0.002       | <0.002             | <0.006             | 124          | Clear no odor |
| 1  | 85.93          | 98.60       | 8.20        | 30            | 02/15/08    | 760     | 1880     | <0.002       | <0.002       | <0.002             | <0.006             | 157          | Clear no odor |
| 1  | 85.73          | 98.60       | 8.40        | 30            | 05/05/08    | 720     | 1880     | <0.002       | <0.002       | <0.002             | <0.006             | 195          | Clear no odor |
| 1  | 85.81          | 98.60       | 8.30        | 30            | 08/11/08    | 620     | 1590     | <0.001       | <0.001       | <0.001             | <0.003             | 106          | Clear no odor |
| 1  | 85.65          | 98.60       | 8.40        | 30            | 11/13/08    | 570     | 1470     | <0.001       | <0.001       | <0.001             | <0.003             | 148          | Clear no odor |
| 1  | 85.64          | 98.60       | 8.30        | 30            | 01/21/09    | 630     | 1560     | <0.001       | <0.001       | <0.001             | <0.003             | 143          | Clear no odor |
| 1  | 85.61          | 98.40       | 8.30        | 30            | 04/22/09    | 600     | 1680     | <0.001       | <0.001       | <0.001             | <0.003             | 123          | Clear no odor |
| 1  | 85.48          | 98.40       | 8.40        | 30            | 07/20/09    | 520     | 1380     | <0.001       | <0.001       | <0.001             | <0.003             | 113          | Clear no odor |
| 1  | 85.49          | 98.40       | 8.40        | 30            | 10/13/09    | 700     | 1700     | <0.001       | <0.001       | <0.001             | <0.003             | 131          | Clear no odor |
| 1  | 85.32          | 98.41       | 8.50        | 30            | 01/19/10    | 780     | 1860     | <0.001       | <0.001       | <0.001             | <0.003             | 173          | Clear no odor |
| 1  | 85.31          | 98.41       | 8.50        | 30            | 04/15/10    | 680     | 1610     | <0.001       | <0.001       | <0.001             | <0.003             | 155          | Clear no odor |
| 1  | 85.23          | 98.41       | 8.60        | 30            | 07/20/10    | 610     | 1550     | <0.001       | <0.001       | <0.001             | <0.003             | 143          | Clear no odor |
| 1  | 85.15          | 98.41       | 8.60        | 30            | 10/15/10    | 600     | 1460     | <0.001       | <0.001       | <0.001             | <0.003             | 125          | Clear no odor |

Graph 1  
 Rice Operating Company  
 MW-1  
 BD K-4  
 Lea County, New Mexico

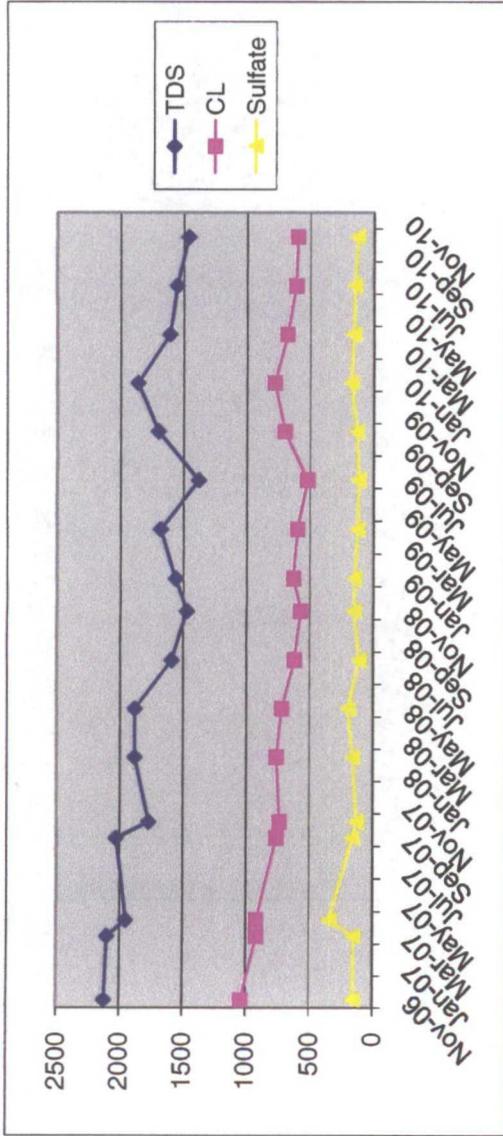


Table 2  
Rice Operating Company  
BD K-4  
Lea County, New Mexico

| MW | Depth to Water | Total Depth | Well Volume | Volume Purged | Sample Date | Cl mg/L | TDS mg/L | Benzene mg/L | Toluene mg/L | Ethyl Benzene mg/L | Total Xylenes mg/L | Sulfate mg/L | Comments      |
|----|----------------|-------------|-------------|---------------|-------------|---------|----------|--------------|--------------|--------------------|--------------------|--------------|---------------|
| 2  | 83.35          | 94.10       | 1.70        | 7             | 11/13/06    | 77      | 542      | <0.001       | <0.001       | <0.001             | <0.001             | 85           | Clear no odor |
| 2  | 83.28          | 94.08       | 1.70        | 7             | 03/08/07    | 75.3    | 574      | <0.001       | <0.001       | <0.001             | <0.001             | 80.8         | Clear no odor |
| 2  | 83.25          | 94.08       | 1.70        | 7             | 04/23/07    | 83.5    | 564      | <0.001       | <0.001       | <0.001             | <0.001             | 83           | Clear no odor |
| 2  | 83.12          | 94.08       | 1.80        | 7             | 09/14/07    | 110     | 588      | <0.001       | <0.001       | <0.001             | <0.003             | 130          | Clear no odor |
| 2  | 83.11          | 94.08       | 1.80        | 6             | 10/31/07    | 84      | 596      | <0.002       | <0.002       | <0.002             | <0.006             | 82.7         | Clear no odor |
| 2  | 82.97          | 94.05       | 1.80        | 6             | 02/15/08    | 92      | 574      | <0.002       | <0.002       | <0.002             | <0.006             | 86.6         | Clear no odor |
| 2  | 82.81          | 94.05       | 1.80        | 6             | 05/05/08    | 100     | 570      | <0.002       | <0.002       | <0.002             | <0.006             | 117          | Clear no odor |
| 2  | 82.86          | 94.05       | 1.80        | 6             | 08/11/08    | 108     | 596      | <0.001       | <0.001       | <0.001             | <0.003             | 94           | Clear no odor |
| 2  | 82.75          | 94.05       | 1.80        | 6             | 11/13/08    | 144     | 578      | <0.001       | <0.001       | <0.001             | <0.003             | 93.7         | Clear no odor |
| 2  | 82.77          | 93.98       | 1.80        | 6             | 01/21/09    | 104     | 598      | <0.001       | <0.001       | <0.001             | <0.003             | 95.4         | Clear no odor |
| 2  | 82.69          | 93.98       | 1.80        | 6             | 04/22/09    | 108     | 621      | <0.001       | <0.001       | <0.001             | <0.003             | 89.8         | Clear no odor |
| 2  | 82.61          | 93.98       | 1.80        | 6             | 07/20/09    | 144     | 628      | <0.001       | <0.001       | <0.001             | <0.003             | 95.4         | Clear no odor |
| 2  | 82.58          | 93.98       | 1.80        | 6             | 10/13/09    | 108     | 641      | <0.001       | <0.001       | <0.001             | <0.003             | 78.9         | Clear no odor |
| 2  | 82.40          | 93.67       | 1.80        | 6             | 01/19/10    | 116     | 605      | <0.001       | <0.001       | <0.001             | <0.003             | 105          | Clear no odor |
| 2  | 82.37          | 93.67       | 1.80        | 6             | 04/15/10    | 112     | 625      | <0.001       | <0.001       | <0.001             | <0.003             | 91.2         | Clear no odor |
| 2  | 82.32          | 93.67       | 1.80        | 6             | 07/20/10    | 116     | 596      | <0.001       | <0.001       | <0.001             | <0.003             | 74.2         | Clear no odor |
| 2  | 82.23          | 93.67       | 1.80        | 6             | 10/15/10    | 116     | 609      | <0.001       | <0.001       | <0.001             | <0.003             | 93.9         | Clear no odor |

Graph 2  
Rice Operating Company  
MW-2  
BD K-4  
Lea County, New Mexico

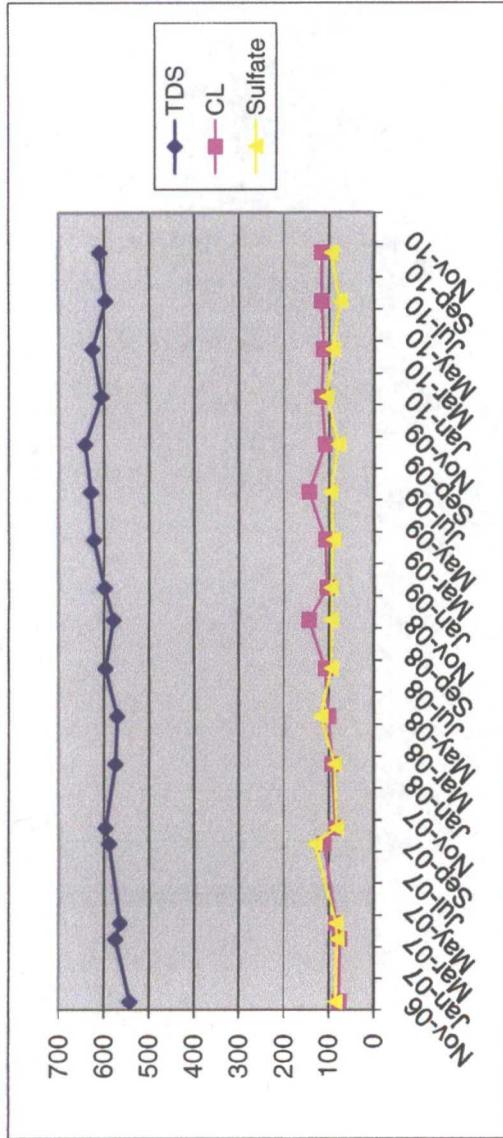
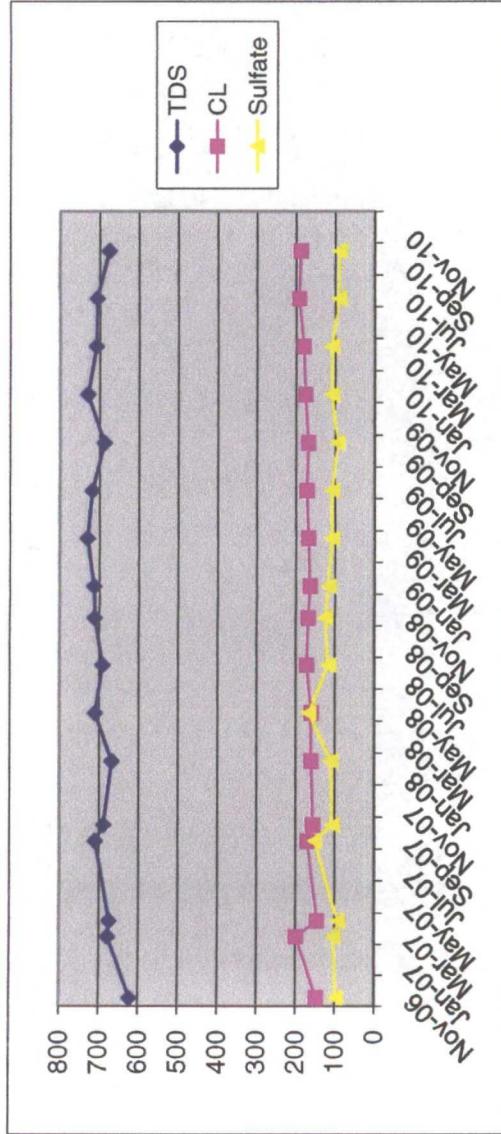


Table 3  
Rice Operating Company  
BD K-4  
Lea County, New Mexico

| MW | Depth to Water | Total Depth | Well Volume | Volume Purged | Sample Date | Cl mg/L | TDS mg/L | Benzene mg/L | Toluene mg/L | Ethyl Benzene mg/L | Total Xylenes mg/L | Sulfate mg/L | Comments      |
|----|----------------|-------------|-------------|---------------|-------------|---------|----------|--------------|--------------|--------------------|--------------------|--------------|---------------|
| 3  | 86.45          | 94.60       | 1.30        | 5             | 11/13/06    | 148     | 622      | <0.001       | <0.001       | <0.001             | <0.001             | 97.6         | Clear no odor |
| 3  | 86.41          | 94.50       | 1.30        | 5             | 03/08/07    | 199     | 678      | <0.001       | <0.001       | <0.001             | <0.001             | 103          | Clear no odor |
| 3  | 86.35          | 94.50       | 1.30        | 6             | 04/23/07    | 145     | 674      | <0.001       | <0.001       | <0.001             | <0.001             | 92.1         | Clear no odor |
| 3  | 86.23          | 94.50       | 1.30        | 6             | 09/14/07    | 170     | 710      | <0.001       | <0.001       | <0.001             | <0.003             | 151          | Clear no odor |
| 3  | 86.19          | 94.50       | 1.30        | 6             | 10/31/07    | 156     | 689      | <0.002       | <0.002       | <0.002             | <0.006             | 106          | Clear no odor |
| 3  | 86.09          | 94.35       | 1.30        | 6             | 02/15/08    | 160     | 668      | <0.002       | <0.002       | <0.002             | <0.006             | 110          | Clear no odor |
| 3  | 85.89          | 94.35       | 1.40        | 6             | 05/05/08    | 160     | 710      | <0.002       | <0.002       | <0.002             | <0.006             | 166          | Clear no odor |
| 3  | 85.94          | 94.35       | 1.30        | 6             | 08/11/08    | 172     | 691      | <0.001       | <0.001       | <0.001             | <0.003             | 117          | Clear no odor |
| 3  | 85.84          | 94.35       | 1.40        | 6             | 11/13/08    | 168     | 711      | <0.001       | <0.001       | <0.001             | <0.003             | 124          | Clear no odor |
| 3  | 85.84          | 94.20       | 1.30        | 6             | 01/21/09    | 164     | 713      | <0.001       | <0.001       | <0.001             | <0.003             | 116          | Clear no odor |
| 3  | 85.76          | 94.20       | 1.40        | 6             | 04/22/09    | 168     | 730      | <0.001       | <0.001       | <0.001             | <0.003             | 108          | Clear no odor |
| 3  | 85.64          | 94.20       | 1.40        | 6             | 07/20/09    | 172     | 718      | <0.001       | <0.001       | <0.001             | <0.003             | 107          | Clear no odor |
| 3  | 85.63          | 94.20       | 1.40        | 6             | 10/13/09    | 168     | 688      | <0.001       | <0.001       | <0.001             | <0.003             | 94.1         | Clear no odor |
| 3  | 85.52          | 94.58       | 1.40        | 6             | 01/19/10    | 176     | 729      | <0.001       | <0.001       | <0.001             | <0.003             | 108          | Clear no odor |
| 3  | 85.46          | 94.58       | 1.50        | 6             | 04/15/10    | 180     | 708      | <0.001       | <0.001       | <0.001             | <0.003             | 108          | Clear no odor |
| 3  | 85.38          | 94.58       | 1.50        | 6             | 07/20/10    | 192     | 706      | <0.001       | <0.001       | <0.001             | <0.003             | 89.5         | Clear no odor |
| 3  | 85.33          | 94.58       | 1.50        | 6             | 10/15/10    | 188     | 675      | <0.001       | <0.001       | <0.001             | <0.003             | 87.7         | Clear no odor |

Graph 3  
 Rice Operating Company  
 MW-3  
 BD K-4  
 Lea County, New Mexico



**APPENDIX A**



October 25, 2010

Hack Conder  
Rice Operating Company  
112 W. Taylor  
Hobbs, NM 88240

RE: BD K-4 RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 10/19/10 10:40.

Cardinal Laboratories is accredited through Texas NELAP for:

|                    |  |
|--------------------|--|
| Method SW-846 8021 | Benzene, Toluene, Ethyl Benzene, and Total Xylenes |
| Method SW-846 8260 | Benzene, Toluene, Ethyl Benzene, and Total Xylenes |
| Method TX 1005     | Total Petroleum Hydrocarbons                       |

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

|                  |                              |
|------------------|------------------------------|
| Method EPA 552.2 | Haloacetic Acids (HAA-5)     |
| Method EPA 524.2 | Total Trihalomethanes (TTHM) |
| Method EPA 524.4 | Regulated VOCs (V2, V3)      |

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene  
Lab Director/Quality Manager

**Analytical Results For:**

Rice Operating Company  
 Hack Conder  
 112 W. Taylor  
 Hobbs NM, 88240  
 Fax To: (575) 397-1471

Received: 10/19/2010  
 Reported: 10/25/2010  
 Project Name: BD K-4 RELEASE  
 Project Number: NONE GIVEN  
 Project Location: T22S R37E SEC4K - LEA CTY., NM

Sampling Date: 10/15/2010  
 Sampling Type: Water  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: MONITOR WELL #1 (H021099-01)**

| BTEX 8021B     |        | mg/L            |            | Analyzed By: cms |       |            |               |     |           |  |
|----------------|--------|-----------------|------------|------------------|-------|------------|---------------|-----|-----------|--|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank     | BS    | % Recovery | True Value QC | RPD | Qualifier |  |
| Benzene*       | <0.001 | 0.001           | 10/22/2010 | ND               | 0.055 | 109        | 0.0500        |     |           |  |
| Toluene*       | <0.001 | 0.001           | 10/22/2010 | ND               | 0.051 | 103        | 0.0500        |     |           |  |
| Ethylbenzene*  | <0.001 | 0.001           | 10/22/2010 | ND               | 0.052 | 104        | 0.0500        |     |           |  |
| Total Xylenes* | <0.003 | 0.003           | 10/22/2010 | ND               | 0.161 | 107        | 0.150         |     |           |  |

Surrogate: 4-Bromofluorobenzene (PIL) 117 % 80-120

| Chloride, SM4500Cl-B |        | mg/L            |            | Analyzed By: HM |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 600    | 4.00            | 10/21/2010 | ND              | 108 | 108        | 100           | 3.77 |           |  |

| Sulfate 375.4 |        | mg/L            |            | Analyzed By: HM |      |            |               |      |           |  |
|---------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte       | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD  | Qualifier |  |
| Sulfate       | 125    | 10.0            | 10/20/2010 | ND              | 37.8 | 94.5       | 40.0          | 4.75 |           |  |

| TDS 160.1 |        | mg/L            |            | Analyzed By: HM |    |            |               |      |           |  |
|-----------|--------|-----------------|------------|-----------------|----|------------|---------------|------|-----------|--|
| Analyte   | Result | Reporting Limit | Analyzed   | Method Blank    | BS | % Recovery | True Value QC | RPD  | Qualifier |  |
| TDS       | 1460   | 5.00            | 10/20/2010 | ND              |    |            |               | 1.40 |           |  |

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Caley D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

Rice Operating Company  
 Hack Conder  
 112 W. Taylor  
 Hobbs NM, 88240  
 Fax To: (575) 397-1471

|                   |                                |                     |               |
|-------------------|--------------------------------|---------------------|---------------|
| Received:         | 10/19/2010                     | Sampling Date:      | 10/15/2010    |
| Reported:         | 10/25/2010                     | Sampling Type:      | Water         |
| Project Name:     | BD K-4 RELEASE                 | Sampling Condition: | Cool & Intact |
| Project Number:   | NONE GIVEN                     | Sample Received By: | Jodi Henson   |
| Project Location: | T22S R37E SEC4K - LEA CTY., NM |                     |               |

**Sample ID: MONITOR WELL #2 (H021099-02)**

| BTEX 8021B     |        | mg/L            |            | Analyzed By: cms |       |            |               |     |           |  |
|----------------|--------|-----------------|------------|------------------|-------|------------|---------------|-----|-----------|--|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank     | BS    | % Recovery | True Value QC | RPD | Qualifier |  |
| Benzene*       | <0.001 | 0.001           | 10/22/2010 | ND               | 0.055 | 109        | 0.0500        |     |           |  |
| Toluene*       | <0.001 | 0.001           | 10/22/2010 | ND               | 0.051 | 103        | 0.0500        |     |           |  |
| Ethylbenzene*  | <0.001 | 0.001           | 10/22/2010 | ND               | 0.052 | 104        | 0.0500        |     |           |  |
| Total Xylenes* | <0.003 | 0.003           | 10/22/2010 | ND               | 0.161 | 107        | 0.150         |     |           |  |

Surrogate: 4-Bromofluorobenzene (PIL) 102 % 80-120

| Chloride, SM4500Cl-B |        | mg/L            |            | Analyzed By: HM |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 116    | 4.00            | 10/21/2010 | ND              | 108 | 108        | 100           | 3.77 |           |  |

| Sulfate 375.4 |        | mg/L            |            | Analyzed By: HM |      |            |               |       |           |  |
|---------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte       | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD   | Qualifier |  |
| Sulfate       | 93.9   | 10.0            | 10/20/2010 | ND              | 36.8 | 92.0       | 40.0          | 0.319 |           |  |

| TDS 160.1 |        | mg/L            |            | Analyzed By: HM |    |            |               |      |           |  |
|-----------|--------|-----------------|------------|-----------------|----|------------|---------------|------|-----------|--|
| Analyte   | Result | Reporting Limit | Analyzed   | Method Blank    | BS | % Recovery | True Value QC | RPD  | Qualifier |  |
| TDS       | 609    | 5.00            | 10/20/2010 | ND              |    |            |               | 1.40 |           |  |

Cardinal Laboratories

\*=Accredited Analyte

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Caley D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

Rice Operating Company  
 Hack Conder  
 112 W. Taylor  
 Hobbs NM, 88240  
 Fax To: (575) 397-1471

Received: 10/19/2010  
 Reported: 10/25/2010  
 Project Name: BD K-4 RELEASE  
 Project Number: NONE GIVEN  
 Project Location: T22S R37E SEC4K - LEA CTY., NM

Sampling Date: 10/15/2010  
 Sampling Type: Water  
 Sampling Condition: Cool & Intact  
 Sample Received By: Jodi Henson

**Sample ID: MONITOR WELL #3 (H021099-03)**

| BTEX 8021B     |        | mg/L            |            | Analyzed By: cms |       |            |               |     |           |  |
|----------------|--------|-----------------|------------|------------------|-------|------------|---------------|-----|-----------|--|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank     | BS    | % Recovery | True Value QC | RPD | Qualifier |  |
| Benzene*       | <0.001 | 0.001           | 10/22/2010 | ND               | 0.055 | 109        | 0.0500        |     |           |  |
| Toluene*       | <0.001 | 0.001           | 10/22/2010 | ND               | 0.051 | 103        | 0.0500        |     |           |  |
| Ethylbenzene*  | <0.001 | 0.001           | 10/22/2010 | ND               | 0.052 | 104        | 0.0500        |     |           |  |
| Total Xylenes* | <0.003 | 0.003           | 10/22/2010 | ND               | 0.161 | 107        | 0.150         |     |           |  |

Surrogate: 4-Bromofluorobenzene (PIL) 102 % 80-120

| Chloride, SM4500Cl-B |        | mg/L            |            | Analyzed By: HM |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 188    | 4.00            | 10/21/2010 | ND              | 108 | 108        | 100           | 3.77 |           |  |

| Sulfate 375.4 |        | mg/L            |            | Analyzed By: HM |      |            |               |       |           |  |
|---------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte       | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD   | Qualifier |  |
| Sulfate       | 87.7   | 10.0            | 10/20/2010 | ND              | 36.8 | 92.0       | 40.0          | 0.319 |           |  |

| TDS 160.1 |        | mg/L            |            | Analyzed By: HM |    |            |               |      |           |  |
|-----------|--------|-----------------|------------|-----------------|----|------------|---------------|------|-----------|--|
| Analyte   | Result | Reporting Limit | Analyzed   | Method Blank    | BS | % Recovery | True Value QC | RPD  | Qualifier |  |
| TDS       | 675    | 5.00            | 10/20/2010 | ND              |    |            |               | 1.40 |           |  |

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Celey D. Keene, Lab Director/Quality Manager

### Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

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