

AP - 48

**ANNUAL
MONITORING REPORT**

YEAR(S):

2008



TETRA TECH

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March 13, 2009

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

Re: 2008 Annual Groundwater Summary Report & Project Status Report, Rice Operating Company, Justis Saltwater Disposal System (SWD) Jct. L-1, Unit L, Section 1, T-25-S, R-37-E, Lea County, New Mexico, NMOCD CASE #1R0423-0 (AP-48)

Mr. Jones:

Tetra Tech, inc. (Tetra Tech) submits the following 2008 Annual Groundwater Summary Report for the Rice Operating (ROC), Jct. L-1 site (AP-48), located in the Justis Salt Water disposal System. ROC is the service provider (agent) for the Justis Salt Water Disposal System and has no ownership of any portion of the pipeline, well or facility. The Justis SWD system is owned by a consortium of oil producers, system partners, who provide all operating capital on a percentage ownership/usage basis.

Background

As part of the RICE Operating Company (ROC) Junction Box Upgrade Workplan, the original Justis L-1 junction box was removed and replaced with a new water tight junction box located 50 feet south of the old box. Once the junction box was removed, evaluation of the surrounding and subsurface soils was initiated. Delineation was conducted with a backhoe. Chloride testing and PID field screening were performed at regular intervals. The final excavation measured 20 feet x 22 feet x 12 feet deep. PID concentrations were minimal and laboratory analysis confirmed TPH concentrations were well below NMOCD regulatory guidelines. Chloride concentrations, however, did not appear to decline with depth.

On 12/29/2003, a soil boring was placed into the center of the excavation and advanced to a depth of 80' below ground surface, encountering a saturated zone at 75'

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below ground surface. The borehole was plugged and a 1.5 foot thick clay barrier was placed into the excavation at 6 feet below ground surface. The remainder of the excavation was backfilled with excavated soils. No TPH impact to groundwater was indicated. On February 24, 2004, ROC submitted a Junction Box Disclosure Form to the NMOCD.

On June 15, 2004, Highlander submitted a work plan for a confirmation borehole and possible monitor well placement at the site. The NMOCD responded with requested revisions to the workplan and on November 3, 2004, Highlander submitted a revised workplan to address NMOCD concerns. The workplan was approved by the NMOCD on November 4, 2004. Highlander supervised the installation of Monitor Well (MW-1) on December 19, 2004. The well was purged and sampled on December 21, 2004. On January 14, 2005, Rice submitted a Notification of Groundwater Impact to the NMOCD. Groundwater has been sampled and analyzed on a quarterly basis. Traces of benzene and ethylbenzene found in the original sampling have not been evident in subsequent sampling events.

On May 5, 2005, Daniel Sanchez with the NMOCD requested a Rule 19, Stage I Abatement Plan for this site. On July 12, 2005 a Stage I Abatement Plan was submitted to the NMOCD. The Stage I Abatement Plan approval was received, dated February 23, 2006.

Stage 1 Abatement Plan

As part of the Stage 1 Abatement Plan two additional monitor wells were proposed for the site. These two monitor wells (MW-2 and MW-3) were installed on March 21, 2006. MW-2 was placed down-gradient of MW-1 and MW-3 was placed up-gradient. An oil well location and open reserve pit, were located up-gradient of MW-1, necessitating the placement of MW-3 up-gradient of the open reserve pit. The wells were developed and sampled on March 28, 2006. MW-3 exhibited apparent background chloride concentrations of 96 mg/L. The down-gradient monitor well (MW-2) displayed similar qualities to the monitor well placed at the removed junction box site (MW-1), with a chloride concentration of 564 mg/L and total dissolved solids of 1,730 mg/L. However, since the March 2006 sampling, monitor well MW-1 has had a significant increase in chlorides (up to 2,250 mg/L) and TDS (up to 7,305) while MW-2 has remained relatively stable.

Also as part of the Stage I Abatement Plan, a water well database search was performed to encompass a ½ mile radius around the site. The database search revealed one well in Section 1 and 3 wells in adjoining sections to this site. The field inspection revealed processing plant wells up-gradient of the site, one inaccessible well at the booster or compressor station (4/10 mile south) and one inactive domestic well with no access (1/2 mile south). An open reserve pit located 135' up-gradient was sampled and had a chloride concentration of 42,286 mg/L.

ROC submitted a report titled "Results of Stage 1 Implementation and Request for Suspension from Rule 19 Requirements", dated August 10, 2006 to the NMOCD. On



September 27, 2006, ROC received a response from the NMOCD. In a telephone conference with the NMOCD, it was discussed that the plan should be re-issued as a Stage 1/Stage 2 Abatement Plan for continued monitoring. Additionally, the NMOCD verbally approved the placement of one additional down-gradient monitoring well. As approved, on October 9, 2006, one additional monitor well (MW-4) was installed down-gradient and constructed according to EPA and industry standards.

A meeting was held with the NMOCD on February 21, 2007, to determine if chloride concentrations in monitor well MW-1 is from an offsite source. At that meeting, Wayne Price requested that an additional monitor well be installed. On April 17, 2007, monitor well MW-5 was installed between MW-1 and a reserve pit located up-gradient. The well was constructed according to EPA and industry standards.

Stage1/Stage2 Abatement Plan

On December 12, 2006, a Stage 1/Stage 2 Abatement Plan was submitted to the NMOCD. Based upon the results of the Stage 1 Abatement Plan implementation, it appeared that the water quality at the original junction box site is improving over time. The Stage 1/Stage 2 Plan proposed to continue to monitor all four wells on a quarterly basis to ensure continued improvement of groundwater quality.

As part of the Stage 1/Stage 2 Abatement Plan, a Corrective Action Plan (CAP) for final soil remediation was presented. In order to complete horizontal delineation of the soil impact, soil borings will be placed beyond the edges of the existing clay barrier and soil samples will be collected for field chloride testing. Once the results of the delineation are completed, the data will be evaluated to determine if further excavation and extension of clay barrier is warranted. If warranted, the site will be excavated down to a depth of approximately 6' and the existing clay barrier will be extended, prior to backfilling with excavated material. NMOCD approval of this Stage1/Stage2 Abatement Plan is pending. In an e-mail dated January 9, 2009, Edward J. Hansen of the NMOCD deemed the Stage 1/Stage 2 Abatement Plan administratively complete.

Monitor Well Sampling

The monitor wells were sampled on February 27, May 23, August 28, and December 17, 2008. Prior to sampling, the monitor wells were gauged and approximately three casing volumes of water were purged from the wells. The pump and associated tubing were decontaminated with a laboratory grade detergent and rinsed with deionized water. Cumulative water level measurements and purge volumes for the monitor wells are included in the Tables Section of this report.

The wells were also inspected for the presence of phase-separated hydrocarbons (PSH). Groundwater samples were collected as soon as possible after the groundwater returned to its static level. Groundwater samples were collected using clean disposable polyethylene bailers and disposable line. The samples were



transferred into labeled and preserved containers provided by the laboratory. The samples were delivered under proper chain-of-custody control to Cardinal Lab of Hobbs, New Mexico. The groundwater samples were analyzed for major anions by methods 310.1, 9253 and 375.4, cations by method 6010B, Total Dissolved Solids (TDS) by method 160.1, and Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) by method EPA 8021B. Copies of the laboratory reports are enclosed in Appendix A.

Monitor Well Sample Results

Monitor well MW-1, had elevated chlorides ranging from 2,150 mg/L to 3,000 mg/l throughout the year. Monitor well MW-5 located up-gradient of MW-1 has chloride concentrations that decreased from 1,180 mg/L in the third quarter to 416 mg/L in the last quarter of the year. The chloride and TDS concentrations in monitor wells MW-3 (up-gradient), and MW-4 (down-gradient) were below WQCC standards and remained relatively stable throughout the year. The chloride concentration in MW-2 has remained stable throughout the year and has ranged from 412 mg/L in the first quarter to 500 mg/L in the fourth quarter of 2008. All monitor wells were sampled on a quarterly basis.

In 2008, there were no BTEX constituents detected at or above reporting limits for any of the monitor wells. Cumulative analytical data is summarized in the Table Section of this report.

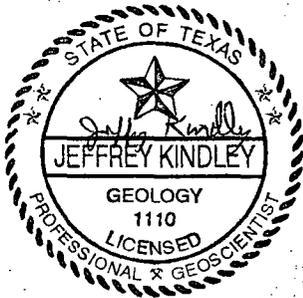
Conclusions

1. In 2008, there were no BTEX constituents at or above the New Mexico Water Quality Control Commission (WQCC) standards.
2. Chloride and total dissolved solid (TDS) concentrations have remained elevated and relatively stable in monitor wells MW-1, MW-2, and MW-5 with results ranging from 412 mg/L in MW-5 to 3,000 mg/L in MW-1. The chloride and TDS concentrations in monitor wells MW-3 and MW-4 were below the WQCC standards and remained relatively stable through the year. Based on the data, a closed reserve pit located between MW-3 and MW-5 may be contributing to chloride impact to groundwater.
3. Quarterly monitoring at this site will continue and an annual report will be prepared and submitted to the NMOCD in the first quarter of 2010.
4. In order to complete horizontal delineation of the soil impact, soil borings will be placed beyond the edges of the existing clay barrier and soil samples will be collected for field chloride testing. Once the results of the delineation are completed, the data will be evaluated to determine if further excavation and extension of clay barrier is warranted. If warranted, the site will be excavated down to a depth of approximately 6' and the existing clay barrier

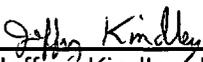


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will be extended, prior to backfilling with excavated material.



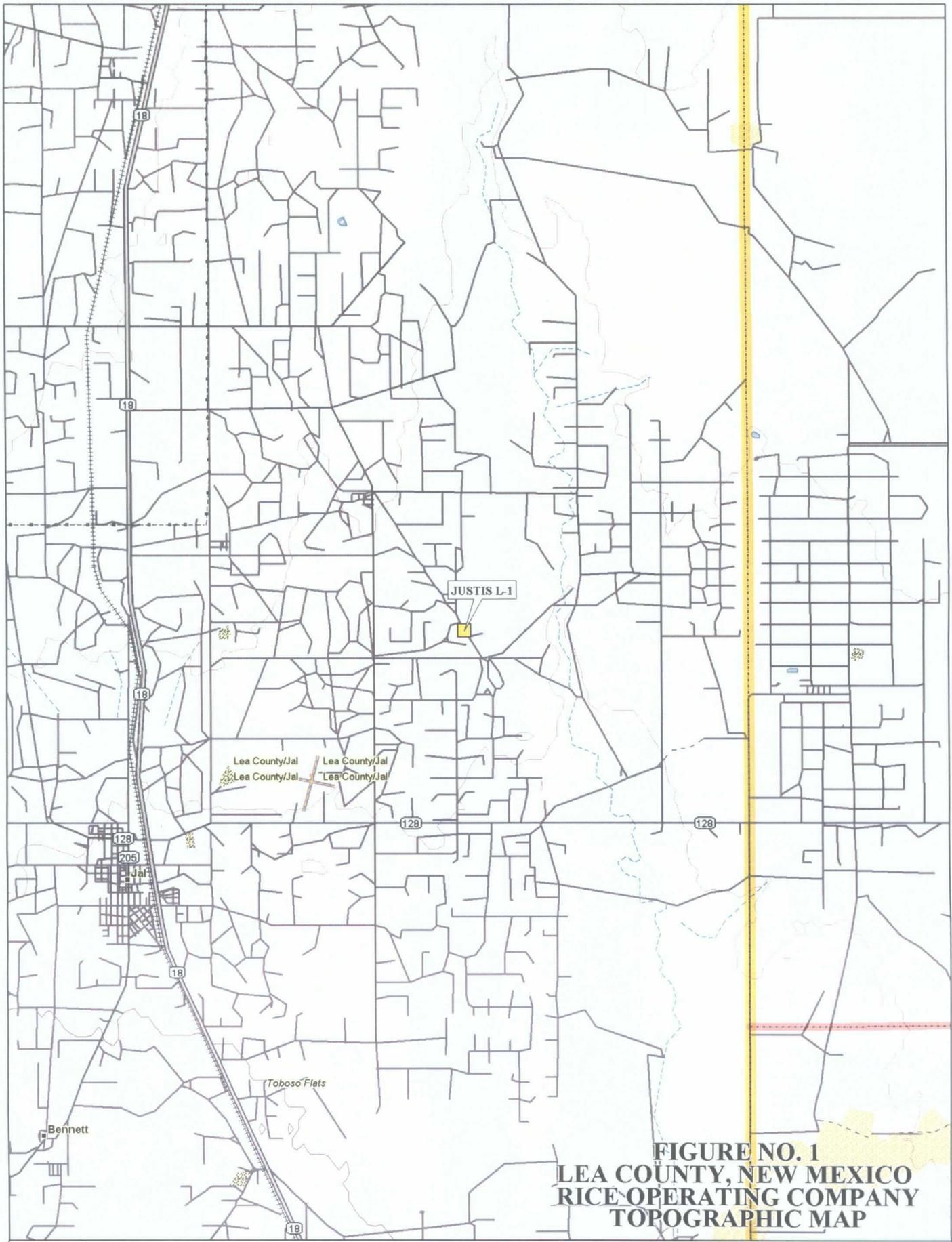
Respectfully Submitted,
Tetra Tech, Inc.



Jeffrey Kindley, P.G.
Senior Environmental Geologist

cc: Hack Conder – ROC, Edward Hansen – NMOCD
Enclosures: Figures, Tables, Laboratory Analysis

FIGURES



**FIGURE NO. 1
LEA COUNTY, NEW MEXICO
RICE OPERATING COMPANY
TOPOGRAPHIC MAP**

Scale 1 : 100,000
1" = 1.58 mi



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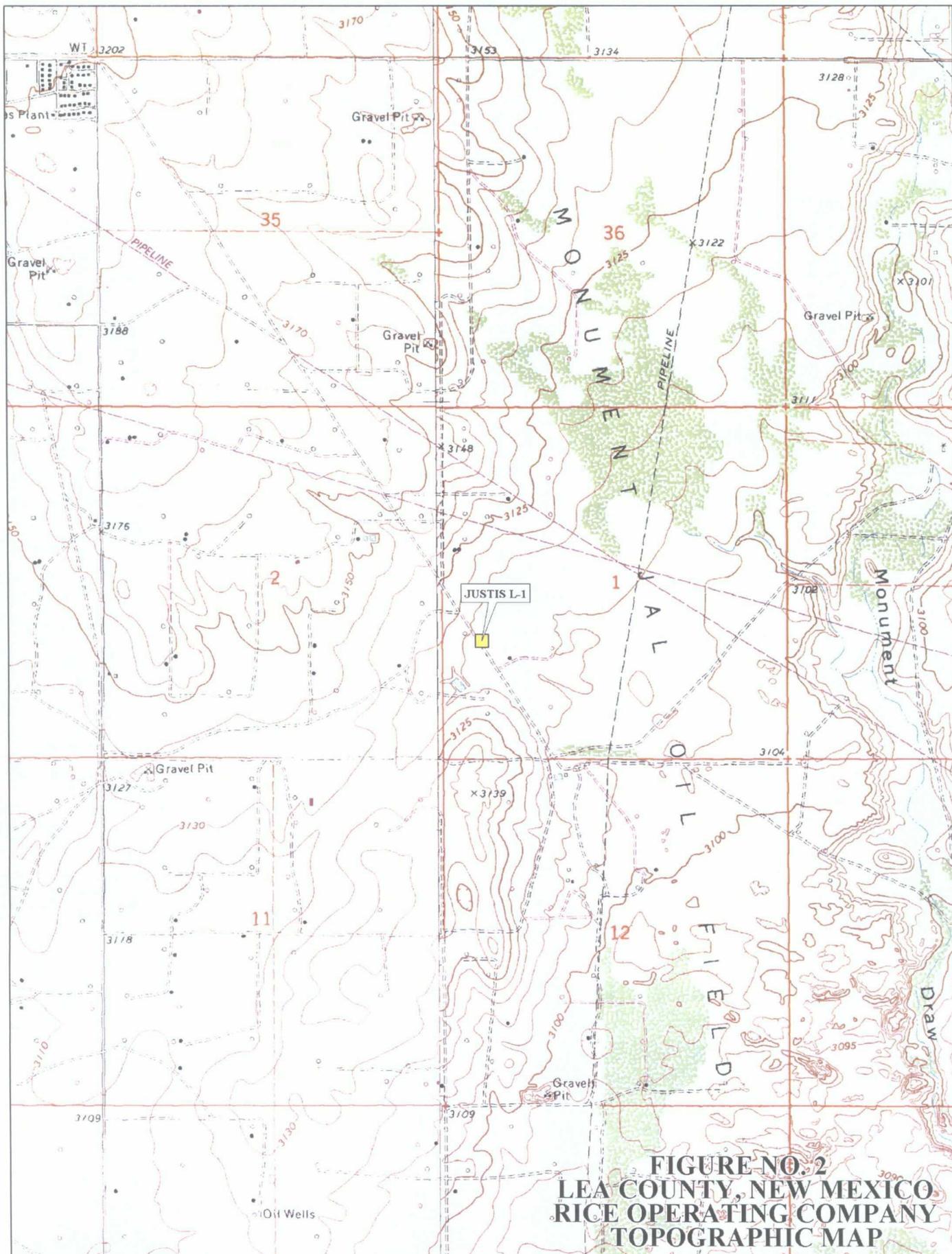
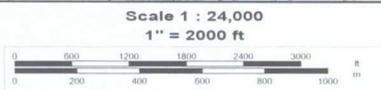


FIGURE NO. 2
LEA COUNTY, NEW MEXICO
RICE OPERATING COMPANY
TOPOGRAPHIC MAP



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www.delorme.com



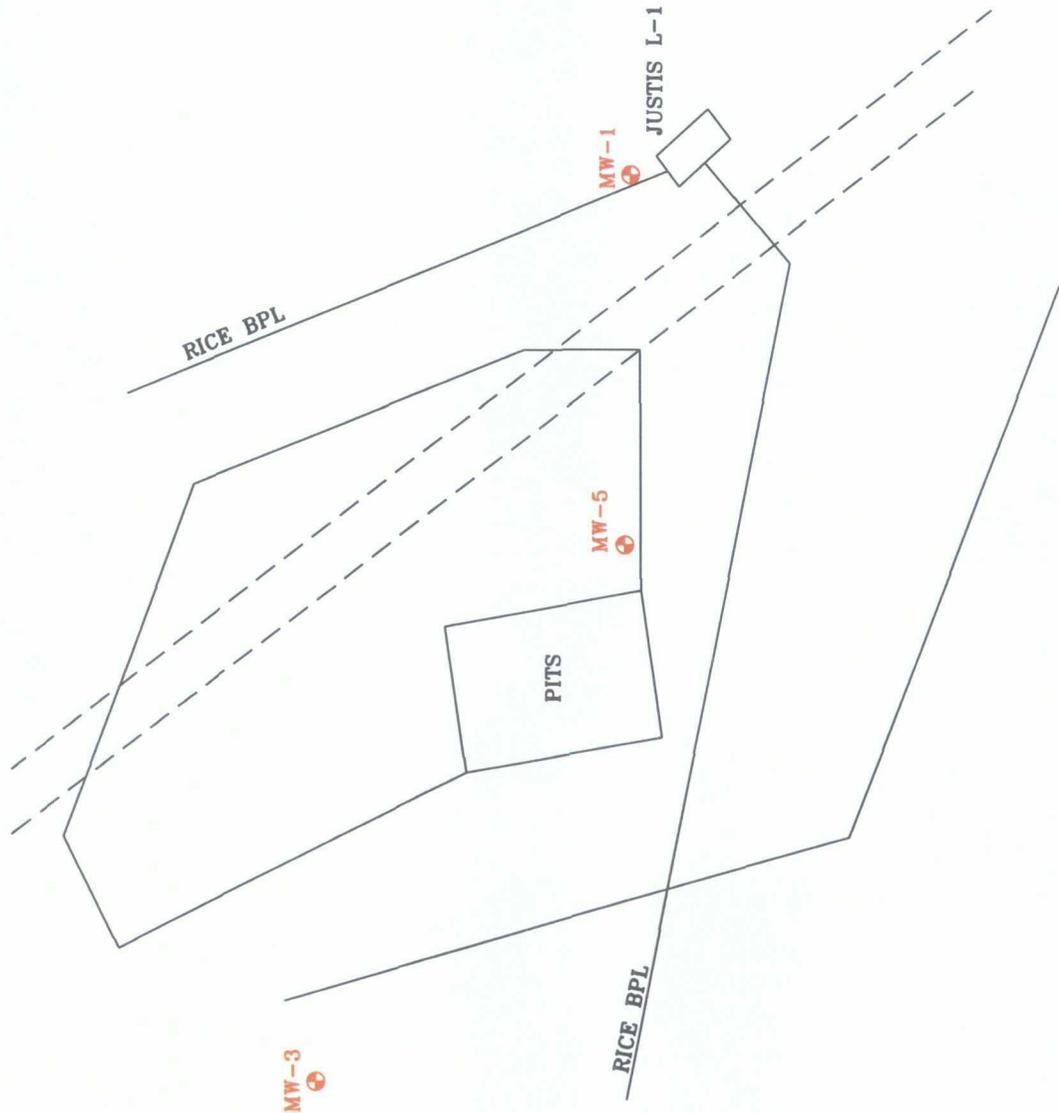


FIGURE NO. 3

LEA COUNTY, NEW MEXICO
RICE OPERATING COMPANY
JUSTIS L-1
SITE MAP
TETRA TECH, INC.
MIDLAND, TEXAS

DATE: 1/22/08
DWN. BY: RC
FILE: GWY-1483
SITE MAP



MONITOR WELL LOCATIONS

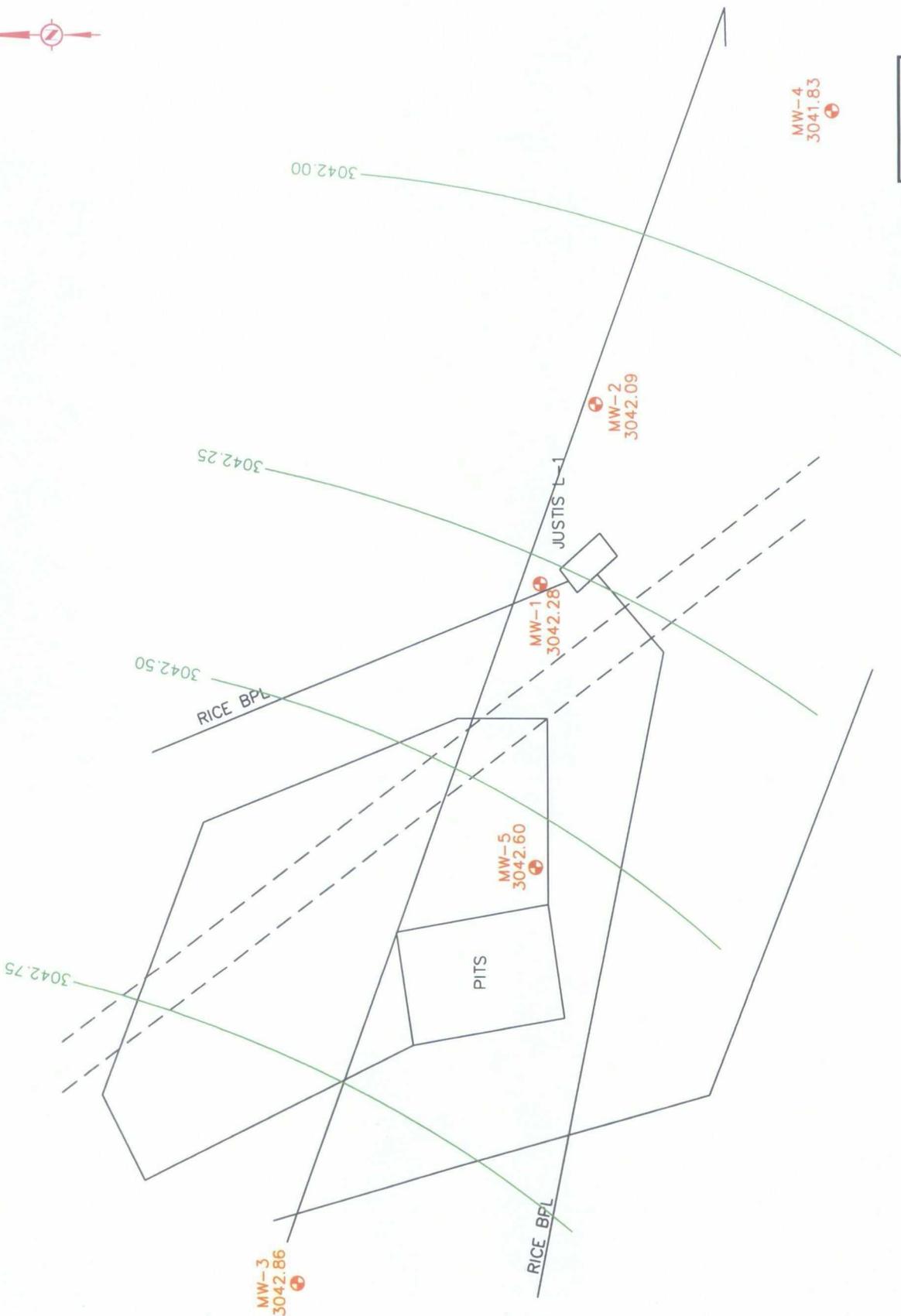
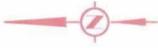


FIGURE NO. 4

LEA COUNTY, NEW MEXICO
 RICE OPERATING COMPANY
 JUSTIS L-1
 GROUNDWATER GRADIENT MAP
 GAUGED ON 2/27/08
 TETRA TECH, INC.
 MIDLAND, TEXAS

OWN: BY:
 JU
 FILE: C:\RICE\3142
 SITE MAP



CONTOUR INTERVAL = 0.25'
 MONITOR WELL LOCATIONS

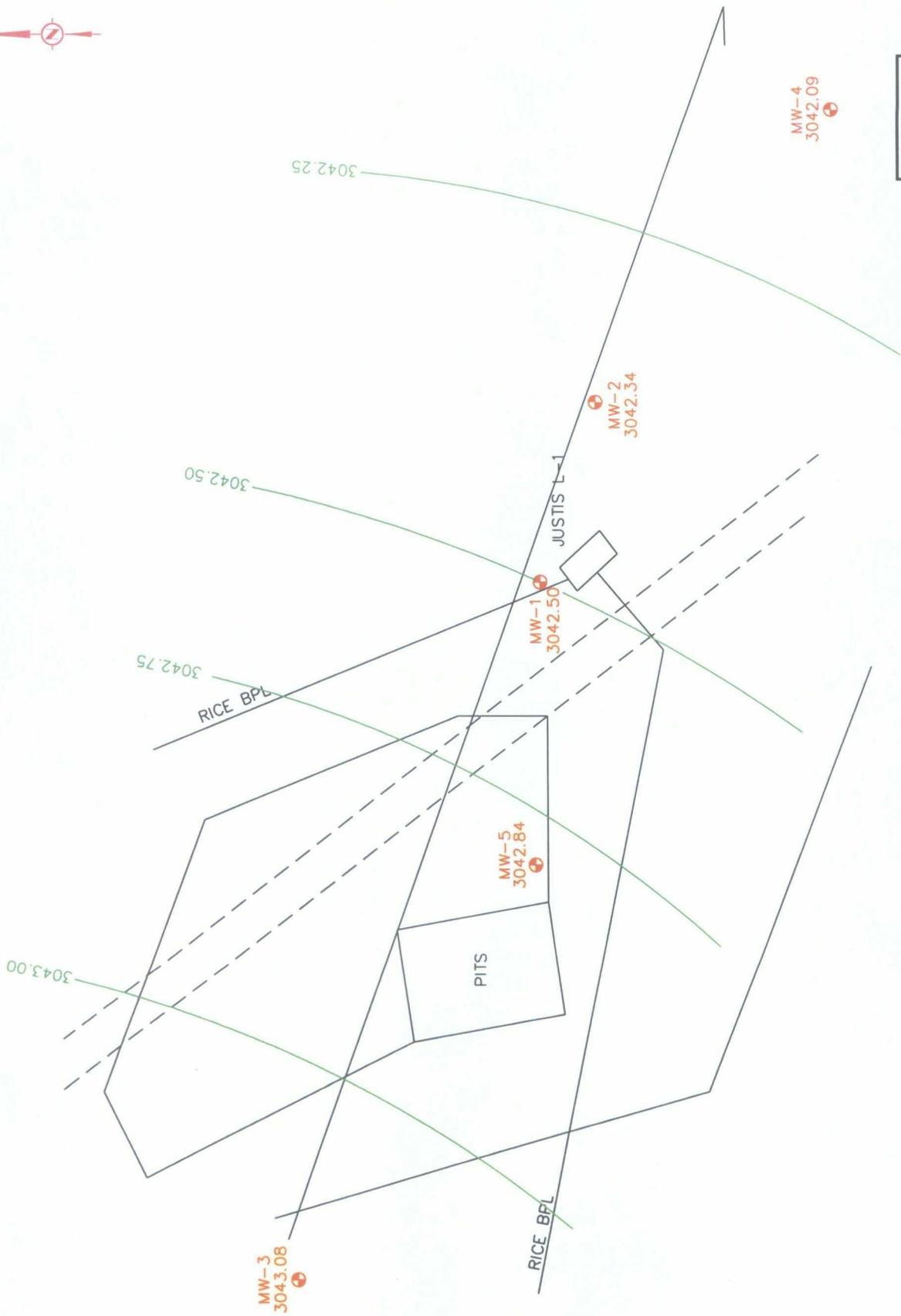


FIGURE NO. 5

LEA COUNTY, NEW MEXICO
 RICE OPERATING COMPANY
 JUSTIS L-1
 GROUNDWATER GRADIENT MAP
 GAUGED ON 5/23/08
 TETRA TECH, INC.
 MIDLAND, TEXAS

DWN BY:
 JJ
 FILE:
 GW080521-12
 SITE MAP



CONTOUR INTERVAL = 0.25
 ● MONITOR WELL LOCATIONS

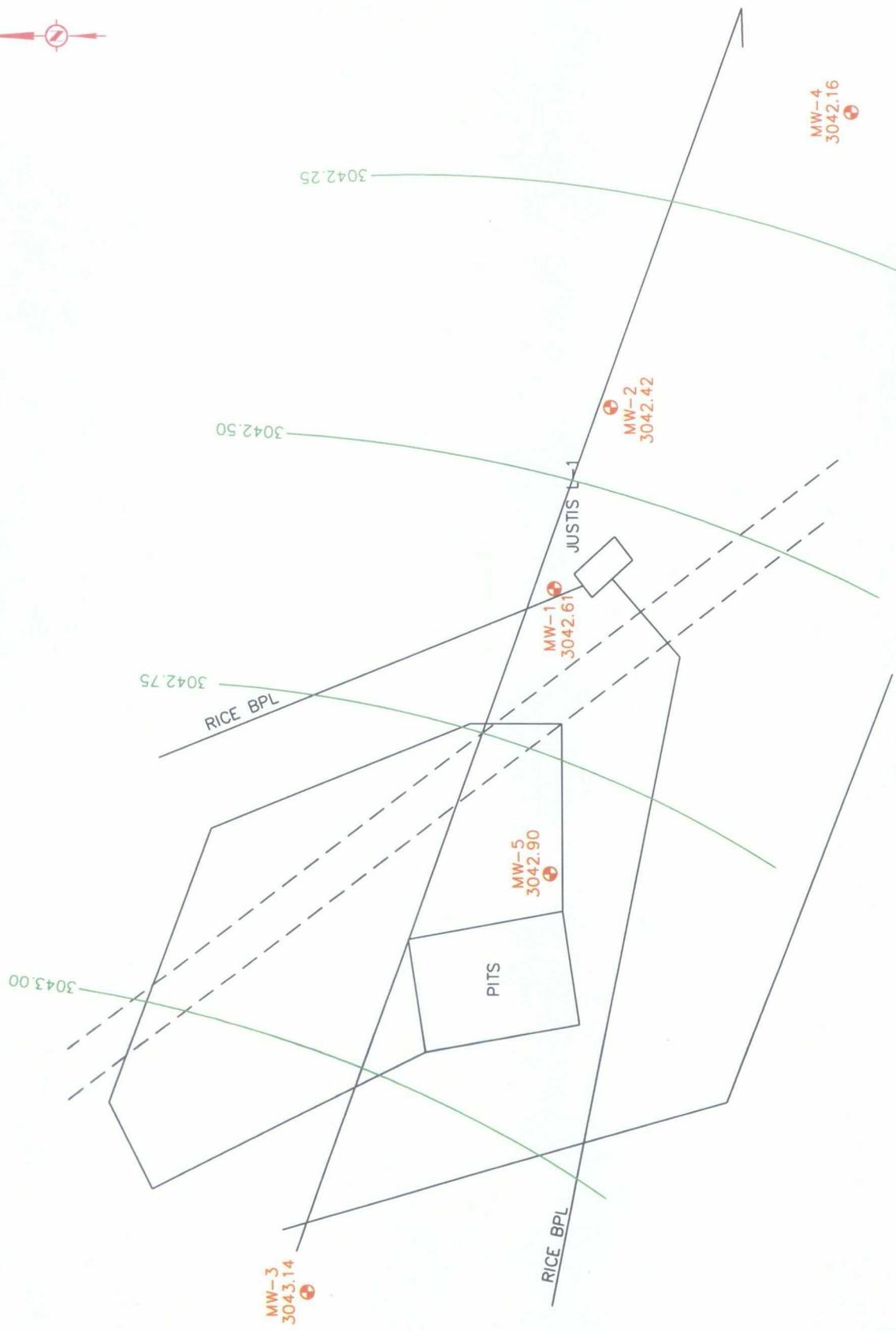


FIGURE NO. 6

LEA COUNTY, NEW MEXICO
 RICE OPERATING COMPANY
 JUSTIS L-1
 GROUNDWATER GRADIENT MAP
 GAUGED ON 8/28/08
 TETRA TECH, INC.
 MIDLAND, TEXAS

DWN. BY:
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 SITE MAP



CONTOUR INTERVAL = 0.25'
 MONITOR WELL LOCATIONS

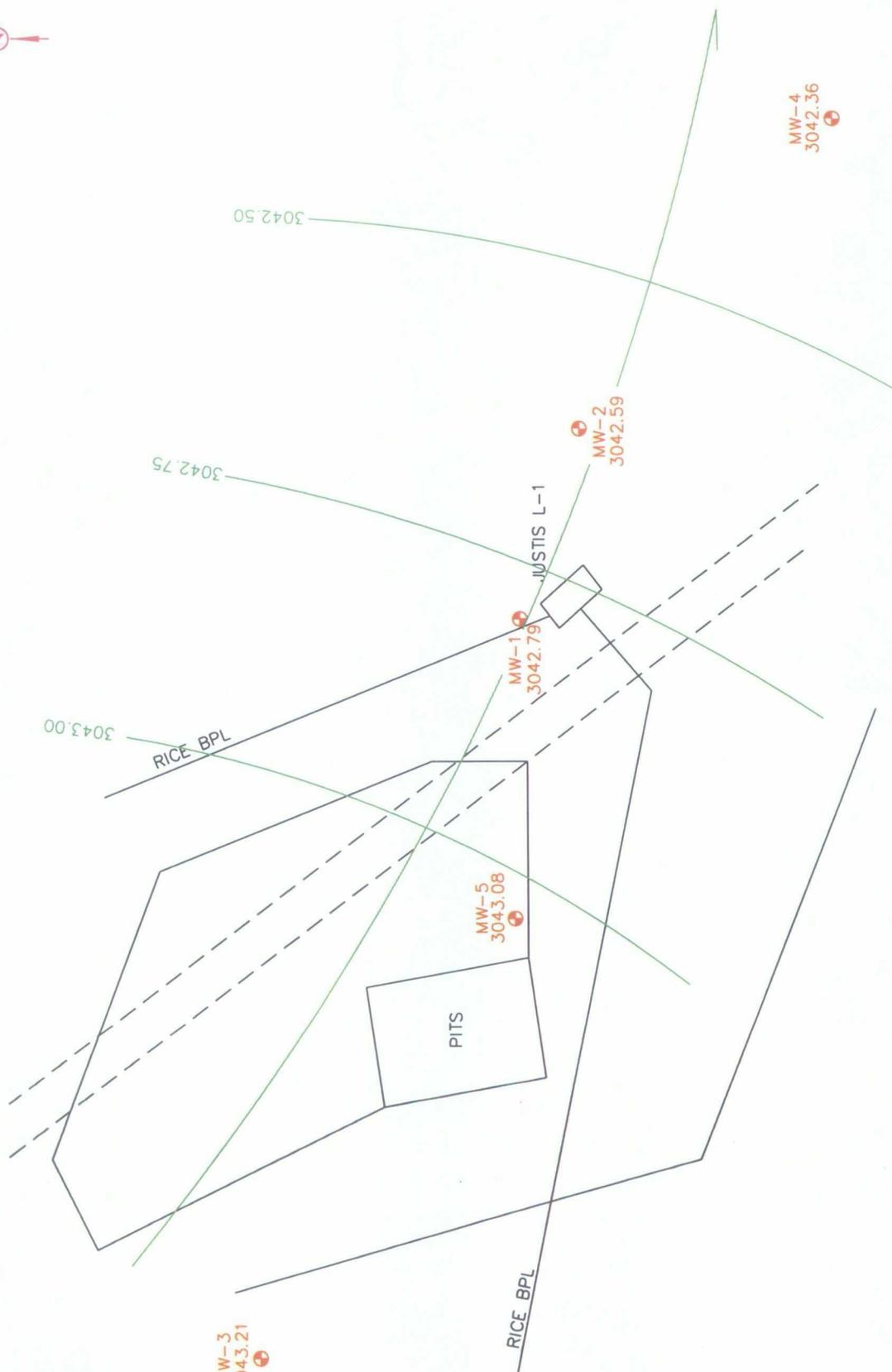


FIGURE NO. 7

LEA COUNTY, NEW MEXICO

RICE OPERATING COMPANY
JUSTIS L-1

GROUNDWATER GRADIENT MAP
GAUGED ON 12/17/08

TETRA TECH, INC.
MIDLAND, TEXAS

DWN. BY:
JJ
FILE:
C:\MSD\3142
SITE MAP



CONTOUR INTERVAL = 0.25'
● MONITOR WELL LOCATIONS

TABLES

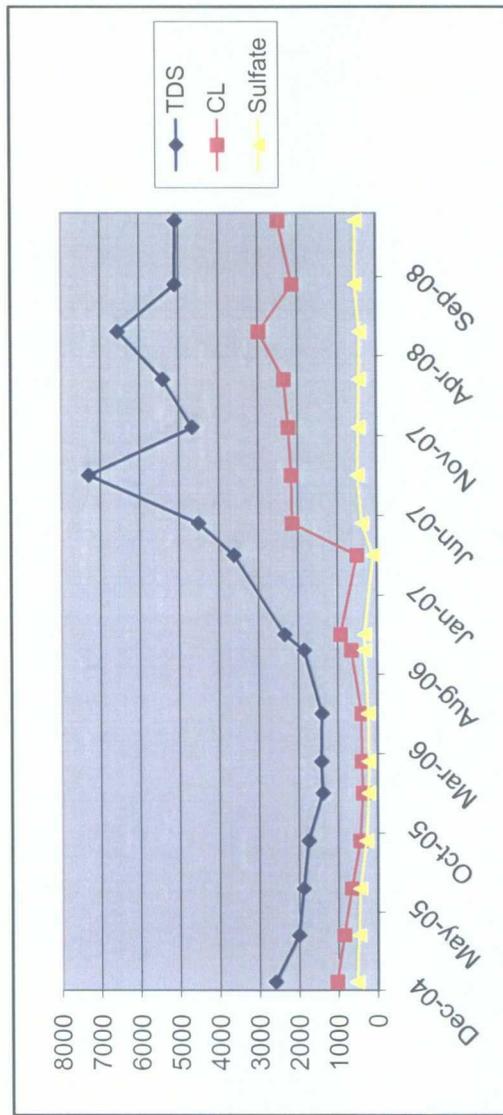
Rice Operating Company

Justis L-1

Lea County, New Mexico

| MW | Depth to Water | Total Depth | Well Volume | Volume Purged | Sample Date | Cl | TDS | Benzene | Toluene | Ethyl Benzene | Total Xylenes | Sulfate | Comments |
|----|----------------|-------------|-------------|---------------|-------------|------|------|----------|---------|---------------|---------------|---------|---------------|
| 1 | 78.43 | 92.00 | | 20 | 12/21/04 | 1060 | 2620 | 0.0158 | <0.001 | 0.00209 | <0.001 | 550 | |
| 1 | 78.19 | 92.00 | | 20 | 03/29/05 | 873 | 2020 | 0.000904 | <0.001 | <0.001 | <0.001 | 502 | |
| 1 | 78.11 | 92.00 | | 20 | 06/16/05 | 684 | 1900 | <0.001 | <0.001 | <0.001 | <0.001 | 468 | |
| 1 | 77.95 | 92.00 | | 2.5 | 09/15/05 | 464 | 1770 | <0.001 | <0.001 | <0.001 | <0.001 | 307 | |
| 1 | 77.80 | 92.00 | 2.30 | 8 | 12/05/05 | 390 | 1410 | <0.001 | <0.001 | <0.001 | 0.000666 | 245 | |
| 1 | 77.56 | 92.00 | 2.30 | 8 | 02/27/06 | 413 | 1440 | <0.001 | <0.001 | <0.001 | <0.001 | 236 | |
| 1 | 77.51 | 92.00 | 2.30 | 10 | 05/24/06 | 420 | 1430 | <0.001 | <0.001 | <0.001 | <0.001 | 246 | |
| 1 | 77.25 | 92.00 | 2.40 | 10 | 09/14/06 | 672 | 1870 | <0.001 | <0.001 | <0.001 | <0.001 | 339 | |
| 1 | 77.12 | 92.00 | 2.40 | 10 | 10/30/06 | 943 | 2360 | <0.001 | <0.001 | <0.001 | <0.001 | 339 | Clear no odor |
| 1 | 76.95 | 91.85 | 2.40 | 10 | 03/16/07 | 519 | 3630 | <0.001 | <0.001 | <0.001 | <0.001 | 112 | Clear no odor |
| 1 | 76.80 | 91.85 | 2.40 | 10 | 05/15/07 | 2160 | 4530 | <0.001 | <0.001 | <0.001 | <0.001 | 397 | Clear no odor |
| 1 | 76.48 | 91.85 | 2.50 | 10 | 08/29/07 | 2179 | 7305 | <0.002 | <0.002 | <0.002 | <0.006 | 500 | Clear no odor |
| 1 | 76.30 | 91.85 | 2.50 | 10 | 11/14/07 | 2250 | 4679 | <0.002 | <0.002 | <0.002 | <0.006 | 477 | Clear no odor |
| 1 | 76.10 | 91.83 | 2.50 | 10 | 02/27/08 | 2360 | 5420 | <0.002 | <0.002 | <0.002 | <0.006 | 455 | Clear no odor |
| 1 | 75.88 | 91.83 | 2.80 | 10 | 05/23/08 | 3000 | 6560 | <0.002 | <0.002 | <0.002 | <0.006 | 439 | Clear no odor |
| 1 | 75.77 | 91.83 | 2.60 | 10 | 08/28/08 | 2150 | 5110 | <0.001 | <0.001 | <0.001 | <0.003 | 550 | Clear no odor |
| 1 | 75.59 | 91.83 | 2.60 | 10 | 12/17/08 | 2500 | 5100 | <0.001 | <0.001 | <0.001 | <0.003 | 538 | Clear no odor |

Rice Operating Company
Justis L-1
Lea County, New Mexico
MW-1



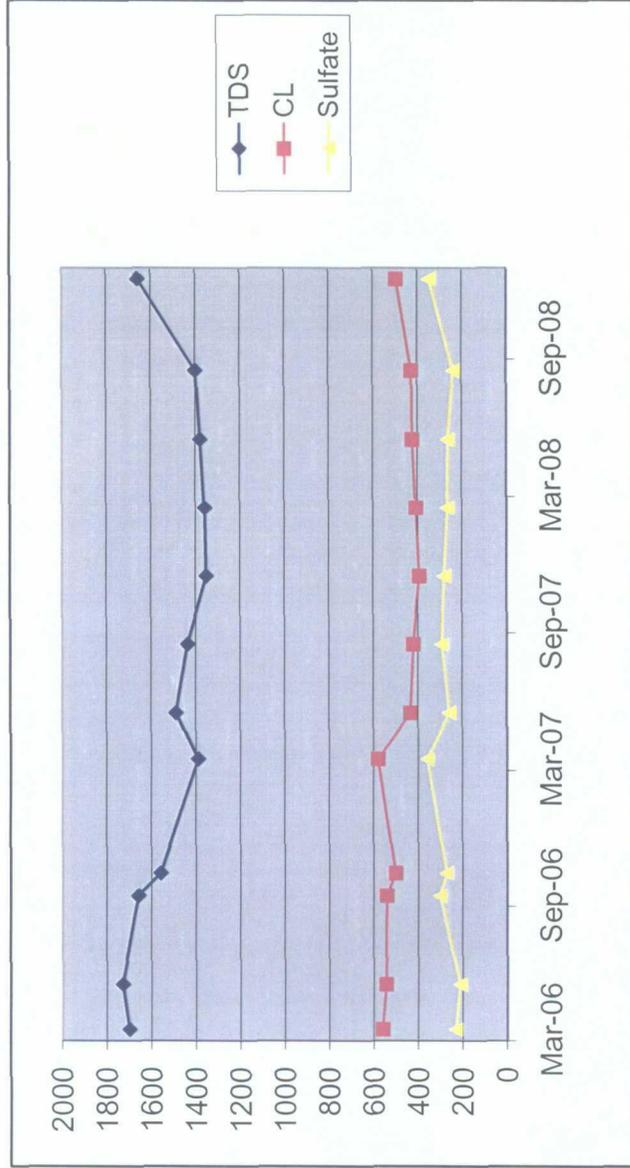
Rice Operating Company

Justis L-1

Lea County, New Mexico

| MW | Depth to Water | Total Depth | Well Volume | Volume Purged | Sample Date | Cl | TDS | Benzene | Toluene | Ethyl Benzene | Total Xylenes | Sulfate | Comments |
|----|----------------|-------------|-------------|---------------|-------------|-----|------|---------|---------|---------------|---------------|---------|---------------|
| 2 | 77.72 | 93.05 | 2.50 | 12 | 03/28/06 | 564 | 1700 | <0.001 | <0.001 | <0.001 | <0.001 | 233 | |
| 2 | 77.48 | 93.05 | 2.50 | 15 | 05/24/06 | 549 | 1730 | <0.001 | <0.001 | <0.001 | <0.001 | 215 | |
| 2 | 77.23 | 93.05 | 2.50 | 10 | 09/14/06 | 546 | 1660 | <0.001 | <0.001 | <0.001 | <0.001 | 306 | |
| 2 | 77.11 | 93.05 | 2.60 | 10 | 10/30/06 | 505 | 1560 | <0.001 | <0.001 | <0.001 | <0.001 | 275 | Clear no odor |
| 2 | 76.93 | 92.88 | 2.60 | 10 | 03/16/07 | 584 | 1392 | <0.001 | <0.001 | <0.001 | <0.001 | 362 | Clear no odor |
| 2 | 76.78 | 92.88 | 2.60 | 10 | 05/15/07 | 437 | 1490 | <0.001 | <0.001 | <0.001 | <0.001 | 262 | Clear no odor |
| 2 | 76.47 | 92.88 | 2.60 | 10 | 08/29/07 | 424 | 1438 | <0.002 | <0.002 | <0.002 | <0.006 | 295 | Clear no odor |
| 2 | 76.3 | 92.88 | 2.70 | 10 | 11/14/07 | 396 | 1353 | <0.002 | <0.002 | <0.002 | <0.006 | 283 | Clear no odor |
| 2 | 76.07 | 92.65 | 2.70 | 10 | 02/27/08 | 412 | 1360 | <0.002 | <0.002 | <0.002 | <0.006 | 269 | Clear no odor |
| 2 | 75.82 | 92.65 | 2.70 | 10 | 05/23/08 | 428 | 1380 | <0.002 | <0.002 | <0.002 | <0.006 | 267 | Clear no odor |
| 2 | 75.74 | 92.65 | 2.70 | 10 | 08/28/08 | 430 | 1400 | <0.001 | <0.001 | <0.001 | <0.003 | 240 | Clear no odor |
| 2 | 75.57 | 92.65 | 2.70 | 10 | 12/17/08 | 500 | 1660 | <0.001 | <0.001 | <0.001 | <0.003 | 351 | Clear no odor |

Rice Operating Company
Justis L-1
Lea County, New Mexico
MW-2



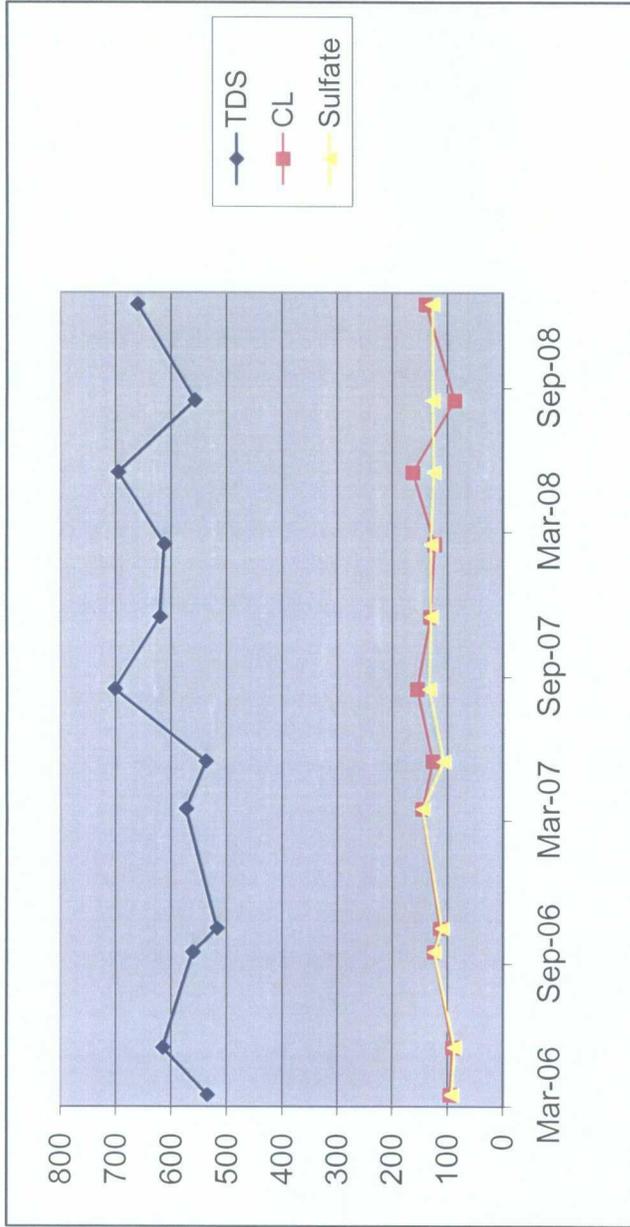
Rice Operating Company

Justis L-1

Lea County, New Mexico

| MW | Depth to Water | Total Depth | Well Volume | Volume Purged | Sample Date | Cl | TDS | Benzene | Toluene | Ethyl Benzene | Total Xylenes | Sulfate | Comments |
|----|----------------|-------------|-------------|---------------|-------------|------|-----|---------|---------|---------------|---------------|---------|---------------|
| 3 | 78.21 | 93.00 | 2.40 | 12 | 03/28/06 | 96.3 | 536 | <0.001 | <0.001 | <0.001 | <0.001 | 93.4 | |
| 3 | 77.99 | 93.00 | 2.40 | 10 | 05/24/06 | 91.4 | 616 | <0.001 | <0.001 | <0.001 | <0.001 | 88.3 | |
| 3 | 77.99 | 93.00 | 2.40 | 10 | 09/14/06 | 125 | 562 | <0.001 | <0.001 | <0.001 | <0.001 | 125 | |
| 3 | 77.61 | 93.00 | 2.50 | 10 | 10/30/06 | 114 | 518 | <0.001 | <0.001 | <0.001 | <0.001 | 111 | Clear no odor |
| 3 | 77.47 | 92.84 | 2.50 | 10 | 03/16/07 | 146 | 574 | <0.001 | <0.001 | <0.001 | <0.001 | 146 | Clear no odor |
| 3 | 77.30 | 92.84 | 2.50 | 10 | 05/15/07 | 128 | 538 | <0.001 | <0.001 | <0.001 | <0.001 | 108 | Clear no odor |
| 3 | 76.98 | 92.84 | 2.50 | 10 | 08/29/07 | 156 | 702 | <0.002 | <0.002 | <0.002 | <0.006 | 134 | Clear no odor |
| 3 | 76.84 | 92.84 | 2.60 | 10 | 11/14/07 | 132 | 621 | <0.002 | 0.002 | 0.003 | 0.007 | 131 | Clear no odor |
| 3 | 76.58 | 92.48 | 2.50 | 10 | 02/27/08 | 124 | 613 | <0.002 | <0.002 | <0.002 | <0.006 | 131 | Clear no odor |
| 3 | 76.36 | 92.48 | 2.60 | 10 | 05/23/08 | 164 | 696 | <0.002 | <0.002 | <0.002 | <0.006 | 126 | Clear no odor |
| 3 | 76.30 | 92.48 | 2.60 | 10 | 08/28/08 | 88 | 558 | <0.001 | <0.001 | <0.001 | <0.003 | 128 | Clear no odor |
| 3 | 76.23 | 92.48 | 2.60 | 10 | 12/17/08 | 140 | 661 | <0.001 | <0.001 | <0.001 | <0.003 | 128 | Clear no odor |

Rice Operating Company
Justis L-1
Lea County, New Mexico
MW-3



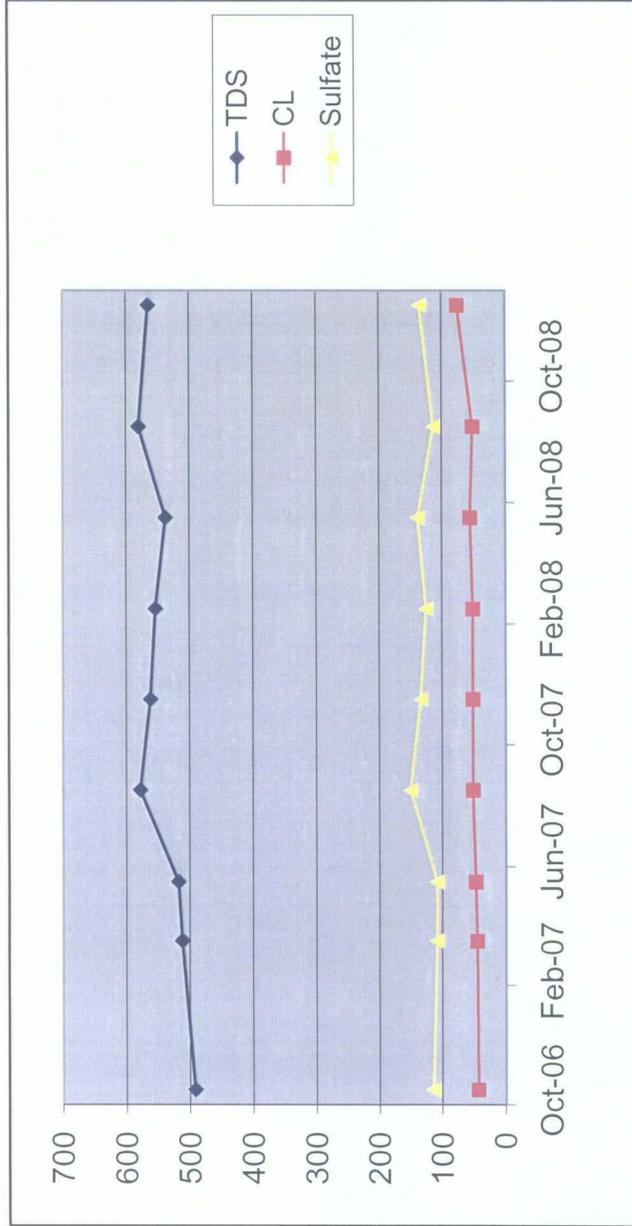
Rice Operating Company

Justis L-1

Lea County, New Mexico

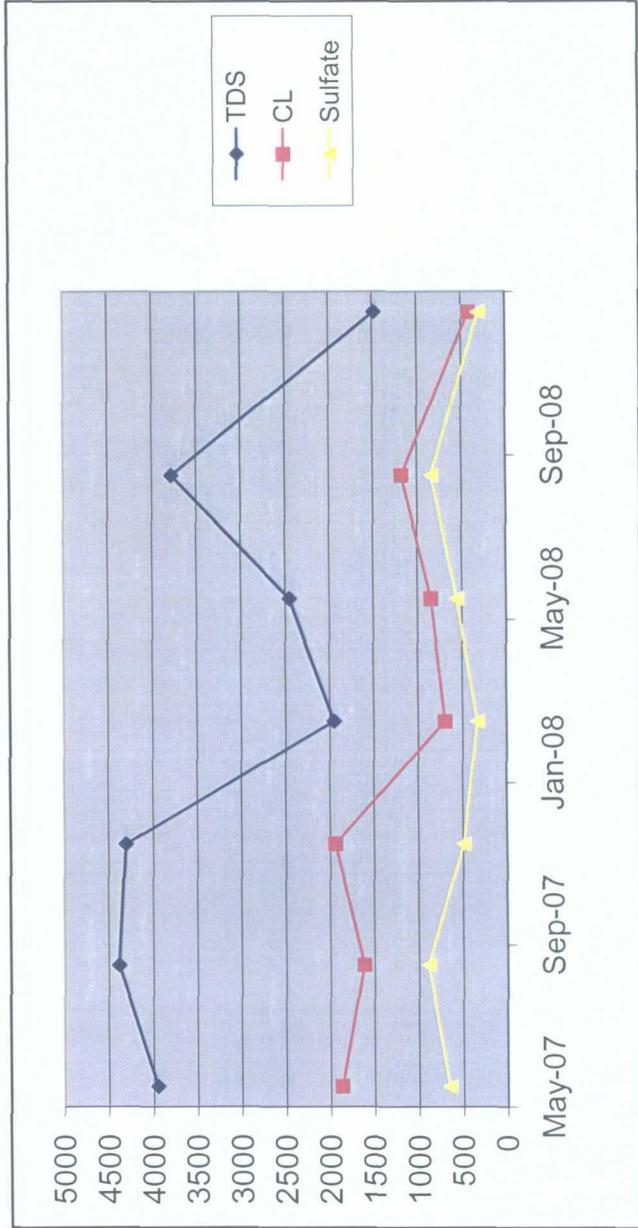
| MW | Depth to Water | Total Depth | Well Volume | Volume Purged | Sample Date | Cl | TDS | Benzene | Toluene | Ethyl Benzene | Total Xylenes | Sulfate | Comments |
|----|----------------|-------------|-------------|---------------|-------------|------|-----|---------|---------|---------------|---------------|---------|---------------|
| 4 | 78.44 | 91.24 | 2.00 | 10 | 10/30/06 | 44.2 | 492 | <0.001 | <0.001 | <0.001 | <0.001 | 115 | Clear no odor |
| 4 | 78.32 | 90.62 | 2.00 | 10 | 03/16/07 | 45.8 | 512 | <0.001 | <0.001 | <0.001 | <0.001 | 109 | Clear no odor |
| 4 | 78.11 | 90.62 | 2.00 | 8 | 05/15/07 | 48.0 | 518 | <0.001 | <0.001 | <0.001 | <0.001 | 109 | Clear no odor |
| 4 | 77.84 | 90.62 | 2.00 | 8 | 08/29/07 | 52.0 | 578 | <0.002 | <0.002 | <0.002 | <0.006 | 151 | Clear no odor |
| 4 | 77.67 | 90.62 | 2.10 | 8 | 11/14/07 | 52.0 | 562 | <0.002 | <0.002 | <0.002 | <0.006 | 135 | Clear no odor |
| 4 | 77.44 | 90.51 | 2.10 | 8 | 02/27/08 | 52.0 | 554 | <0.002 | <0.002 | <0.002 | <0.006 | 126 | Clear no odor |
| 4 | 77.18 | 90.51 | 2.10 | 8 | 05/23/08 | 56.0 | 538 | <0.002 | <0.002 | <0.002 | <0.006 | 139 | Clear no odor |
| 4 | 77.11 | 90.51 | 2.10 | 8 | 08/28/08 | 52.0 | 580 | <0.001 | <0.001 | <0.001 | <0.003 | 114 | Clear no odor |
| 4 | 76.91 | 90.51 | 2.20 | 8 | 12/17/08 | 76.0 | 565 | <0.001 | <0.001 | <0.001 | <0.003 | 136 | Clear no odor |

Rice Operating Company
Justis L-1
Lea County, New Mexico
MW-4



Rice Operating Company
 Justis L-1
 Lea County, New Mexico

| MW | Depth to Water | Total Depth | Well Volume | Volume Purged | Sample Date | Cl | TDS | Benzene | Toluene | Ethyl Benzene | Total Xylenes | Sulfate | Comments |
|----|----------------|-------------|-------------|---------------|-------------|------|------|---------|---------|---------------|---------------|---------|---------------|
| 5 | 75.94 | 87.20 | 1.80 | 8 | 05/15/07 | 1870 | 3950 | <0.001 | <0.001 | <0.001 | <0.001 | 655 | Clear no odor |
| 5 | 75.61 | 87.20 | 1.90 | 8 | 08/29/07 | 1619 | 4386 | <0.002 | <0.002 | <0.002 | <0.006 | 894 | Clear no odor |
| 5 | 75.44 | 87.20 | 1.90 | 8 | 11/14/07 | 1940 | 4306 | <0.002 | <0.002 | <0.002 | <0.006 | 490 | Clear no odor |
| 5 | 75.24 | 87.70 | 2.00 | 8 | 02/27/08 | 700 | 1950 | <0.002 | <0.002 | <0.002 | <0.006 | 333 | Clear no odor |
| 5 | 75.00 | 87.70 | 2.00 | 8 | 05/23/08 | 850 | 2450 | <0.002 | <0.002 | <0.002 | <0.006 | 560 | Clear no odor |
| 5 | 74.94 | 87.70 | 2.00 | 8 | 08/28/08 | 1180 | 3780 | <0.001 | <0.001 | <0.001 | <0.003 | 842 | Clear no odor |
| 5 | 74.76 | 87.70 | 2.10 | 8 | 12/17/08 | 416 | 1480 | <0.001 | <0.001 | <0.001 | <0.003 | 307 | Clear no odor |



**APPENDIX A
LABORATORY ANALYTICAL**



ARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: KRISTIN FARRIS-POPE
122 W. TAYLOR STREET
HOBBS, NM 88240
FAX TO: (575) 397-1471

Receiving Date: 02/29/08
Reporting Date: 03/05/08
Project Number: NOT GIVEN
Project Name: JUSTIS JUNCTION L-1 VENT
Project Location: T25S-R37E-SEC1 L-LEA COUNTY, NM

Sampling Date: 02/27/08
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: ML
Analyzed By: HM/KS

| LAB NUMBER SAMPLE ID | Na (mg/L) | Ca (mg/L) | Mg (mg/L) | K (mg/L) | Conductivity (μ S/cm) | T-Alkalinity (mgCaCO ₃ /L) |
|-----------------------------|--------------|--------------|--------------|-------------|-------------------------------|--|
| ANALYSIS DATE: | 03/05/08 | 03/04/08 | 03/04/08 | 03/05/08 | 03/03/08 | 03/03/08 |
| H14353-1 MONITOR WELL #1 | 519 | 698 | 282 | 9.95 | 7,930 | 248 |
| H14353-2 MONITOR WELL #2 | 276 | 129 | 40.3 | 6.10 | 2,130 | 236 |
| H14353-3 MONITOR WELL #3 | 68 | 83.8 | 29.0 | 5.28 | 927 | 172 |
| H14353-4 MONITOR WELL #4 | 64 | 73.2 | 28.2 | 5.04 | 825 | 240 |
| H14353-5 MONITOR WELL #5 | 355 | 190 | 67.8 | 4.74 | 3,070 | 200 |
| Quality Control | NR | 49.2 | 50.8 | 3.04 | 1,422 | NR |
| True Value QC | NR | 50.0 | 50.0 | 3.00 | 1,413 | NR |
| % Recovery | NR | 98.5 | 102 | 101 | 101 | NR |
| Relative Percent Difference | NR | 2.8 | < 0.1 | 6.7 | 0.3 | NR |

| | | | | | |
|----------|-------------|-----------|------|-------|-------|
| METHODS: | SM3500-Ca-D | 3500-Mg E | 8049 | 120.1 | 310.1 |
|----------|-------------|-----------|------|-------|-------|

| | Cl ⁻ (mg/L) | SO ₄ (mg/L) | CO ₃ (mg/L) | HCO ₃ (mg/L) | pH (s.u.) | TDS (mg/L) |
|-----------------------------|---------------------------|---------------------------|---------------------------|----------------------------|--------------|---------------|
| ANALYSIS DATE: | 03/03/08 | 03/04/08 | 03/03/08 | 03/03/08 | 03/03/08 | 03/03/08 |
| H14353-1 MONITOR WELL #1 | 2,360 | 455 | 0 | 302 | 6.98 | 5,420 |
| H14353-2 MONITOR WELL #2 | 412 | 269 | 0 | 288 | 7.59 | 1,360 |
| H14353-3 MONITOR WELL #3 | 124 | 131 | 0 | 210 | 7.75 | 613 |
| H14353-4 MONITOR WELL #4 | 52 | 126 | 0 | 293 | 7.65 | 554 |
| H14353-5 MONITOR WELL #5 | 700 | 333 | 0 | 244 | 7.45 | 1,950 |
| Quality Control | 510 | 24.9 | NR | 1000 | 7.07 | NR |
| True Value QC | 500 | 25.0 | NR | 1000 | 7.00 | NR |
| % Recovery | 102 | 99.5 | NR | 100 | 101 | NR |
| Relative Percent Difference | 4.0 | 8.2 | NR | < 0.1 | 0.7 | NR |

| | | | | | | |
|----------|-------------|-------|-------|-------|-------|-------|
| METHODS: | SM4500-Cl-B | 375.4 | 310.1 | 310.1 | 150.1 | 160.1 |
|----------|-------------|-------|-------|-------|-------|-------|

Kristin Suprioko
Chemist

03/05/08
Date

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ARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: KRISTIN FARRIS-POPE
122 W. TAYLOR
HOBBS, NM 88240
FAX TO: (575) 397-1471

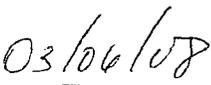
Receiving Date: 02/29/08
Reporting Date: 03/04/08
Project Number: NOT GIVEN
Project Name: JUSTIS JUNCTION L-1 VENT
Project Location: T25S-R37E-SEC1 L ~ LEA COUNTY, NM

Sampling Date: 02/27/08
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: ML
Analyzed By: BC

| LAB NUMBER | SAMPLE ID | BENZENE (mg/L) | TOLUENE (mg/L) | ETHYL BENZENE (mg/L) | TOTAL XYLENES (mg/L) |
|-----------------------------|-----------------|-------------------|-------------------|----------------------------|----------------------------|
| ANALYSIS DATE | | 02/29/08 | 02/29/08 | 02/29/08 | 02/29/08 |
| H14353-1 | MONITOR WELL #1 | <0.002 | <0.002 | <0.002 | <0.006 |
| H14353-2 | MONITOR WELL #2 | <0.002 | <0.002 | <0.002 | <0.006 |
| H14353-3 | MONITOR WELL #3 | <0.002 | <0.002 | <0.002 | <0.006 |
| H14353-4 | MONITOR WELL #4 | <0.002 | <0.002 | <0.002 | <0.006 |
| H14353-5 | MONITOR WELL #5 | <0.002 | <0.002 | <0.002 | <0.006 |
| Quality Control | | 0.096 | 0.105 | 0.099 | 0.282 |
| True Value QC | | 0.100 | 0.100 | 0.100 | 0.300 |
| % Recovery | | 96.0 | 105 | 99.3 | 95.2 |
| Relative Percent Difference | | 6.1 | 7.3 | 2.0 | 3.5 |

METHOD: EPA SW-846 8260


Cheryl D. Keane
Chemist


03/06/08
Date

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Cardinal Laboratories, Inc.

101 East Merland - Hobbs, New Mexico 88240
Tel (575) 393-2326 Fax (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # _____

ANALYSIS REQUEST
(Circle or Specify Method No.)

Company Name: RICE Operating Company
Project Manager: Kristin Farris-Pope, Project Scientist
 Address: 122 W Taylor Street ~ Hobbs, New Mexico 88240
 Phone #: (575) 393-9174 Fax #: (575) 397-1471

Supplier Signature: *Rozanne Johnson* (575) 831-9310
Address: 225S-R37E-Sec1 L ~ Lea County - New Mexico
Project Name: Justis Junction L-1 Vent

| LAB # (LAB USE ONLY) | FIELD CODE | (G)rab or (C)omp | MATRIX | | | | PRESERVATIVE METHOD | | | | DATE (2008) | TIME |
|-------------------------|-----------------|------------------|--------|------|-----|--------|---------------------|------------------|--------------------|--------------------------------|-------------|------------|
| | | | WATER | SOIL | AIR | SLUDGE | HCL (2 40ml VOA) | HNO ₃ | NaHSO ₄ | H ₂ SO ₄ | | |
| H14353-1 | Monitor Well #1 | G | X | | | | | 2 | | | 1 | 2-27 13:30 |
| -2 | Monitor Well #2 | G | X | | | | | 2 | | | 1 | 2-27 11:15 |
| -3 | Monitor Well #3 | G | X | | | | | 2 | | | 1 | 2-27 9:25 |
| -4 | Monitor Well #4 | G | X | | | | | 2 | | | 1 | 2-27 10:20 |
| -5 | Monitor Well #5 | G | X | | | | | 2 | | | 1 | 2-27 12:30 |

Received by: *Rozanne Johnson* Date: 2/29/08 Time: 13:50
Received By: (Laboratory Staff) Date: 2/29/08 Time: 1:55p

Sample Condition: Cool Yes No Intact Yes No

Delivered By: (Circle One) Sampler UPS - Bus - Other:

Checked By: *MCJB* (Initials)

REMARKS:

Phone Results: Yes No
Fax Results: Yes No

Additional Fax Number:

Email Results to: kpope@riceswd.com
 lweinheimer@riceswd.com
 rozanne@valornet.com



ARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

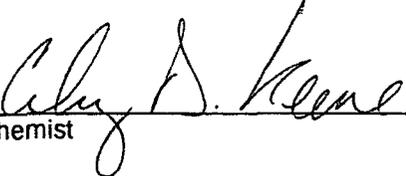
ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: KRISTIN FARRIS-POPE
122 W. TAYLOR ST.
HOBBS, NM 88240
FAX TO: (575) 397-1471

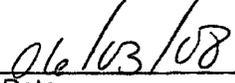
Receiving Date: 05/27/08
Reporting Date: 06/03/08
Project Number: NOT GIVEN
Project Name: JUSTIS JUNCTION L-1 VENT
Project Location: T25S-R37E-SEC1 L ~ LEA CO., NM

Sampling Date: 05/23/08
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: ML
Analyzed By: CK/BC
Analysis Date: 05/29/08 & 05/30/08

| LAB NUMBER | SAMPLE ID | BENZENE (mg/L) | TOLUENE (mg/L) | ETHYL BENZENE (mg/L) | TOTAL XYLENES (mg/L) |
|------------|-----------------------------|-------------------|-------------------|----------------------------|----------------------------|
| H14872-1 | MONITOR WELL #1 | <0.002 | <0.002 | <0.002 | <0.006 |
| H14872-2 | MONITOR WELL #2 | <0.002 | <0.002 | <0.002 | <0.006 |
| H14872-3 | MONITOR WELL #3 | <0.002 | <0.002 | <0.002 | <0.006 |
| H14872-4 | MONITOR WELL #4 | <0.002 | <0.002 | <0.002 | <0.006 |
| H14872-5 | MONITOR WELL #5 | <0.002 | <0.002 | <0.002 | <0.006 |
| | | | | | |
| | | | | | |
| | Quality Control | 0.090 | 0.084 | 0.097 | 0.310 |
| | True Value QC | 0.100 | 0.100 | 0.100 | 0.300 |
| | % Recovery | 90.3 | 84.4 | 97.1 | 103 |
| | Relative Percent Difference | 6.4 | 3.5 | 6.6 | 10.1 |

METHOD: EPA SW-846 8260B


Cherly S. Keene
Chemist


Date

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ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: KRISTIN FARRIS-POPE
122 W. TAYLOR STREET
HOBBS, NM 88240
FAX TO: (575) 397-1471

Receiving Date: 05/27/08
Reporting Date: 05/30/08
Project Number: NOT GIVEN
Project Name: JUSTIS JUNCTION L-1 VENT
Project Location: T25S-R37E-SEC1 L-LEA COUNTY, NM

Sampling Date: 05/23/08
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: ML
Analyzed By: HM/KS

| LAB NUMBER | SAMPLE ID | Na (mg/L) | Ca (mg/L) | Mg (mg/L) | K (mg/L) | Conductivity (uS/cm) | T-Alkalinity (mgCaCO ₃ /L) |
|-----------------------------|-----------------|--------------|--------------|--------------|-------------|-------------------------|--|
| ANALYSIS DATE: | | 05/30/08 | 05/29/08 | 05/29/08 | 05/29/08 | 05/28/08 | 05/28/08 |
| H14872-1 | MONITOR WELL #1 | 782 | 778 | 311 | 11.0 | 8,990 | 256 |
| H14872-2 | MONITOR WELL #2 | 269 | 136 | 42 | 6.36 | 2,120 | 224 |
| H14872-3 | MONITOR WELL #3 | 71 | 96 | 31 | 4.08 | 1,010 | 164 |
| H14872-4 | MONITOR WELL #4 | 73 | 77 | 25 | 3.89 | 783 | 236 |
| H14872-5 | MONITOR WELL #5 | 564 | 192 | 70 | 4.14 | 3,700 | 220 |
| Quality Control | | NR | 48.1 | 51.0 | 2.73 | 1,402 | NR |
| True Value QC | | NR | 50.0 | 50.0 | 3.00 | 1,413 | NR |
| % Recovery | | NR | 96.2 | 102 | 91.0 | 99.2 | NR |
| Relative Percent Difference | | NR | 8.0 | < 0.1 | 9.4 | 1.8 | NR |

| | | | | | |
|----------|-------------|-----------|------|-------|-------|
| METHODS: | SM3500-Ca-D | 3500-Mg E | 8049 | 120.1 | 310.1 |
|----------|-------------|-----------|------|-------|-------|

| LAB NUMBER | SAMPLE ID | Cl (mg/L) | SO ₄ (mg/L) | CO ₃ (mg/L) | HCO ₃ (mg/L) | pH (s.u.) | TDS (mg/L) |
|-----------------------------|-----------------|--------------|---------------------------|---------------------------|----------------------------|--------------|---------------|
| ANALYSIS DATE: | | 05/28/08 | 05/30/08 | 05/28/08 | 05/28/08 | 05/28/08 | 05/28/08 |
| H14872-1 | MONITOR WELL #1 | 3,000 | 439 | 0 | 312 | 6.69 | 6,560 |
| H14872-2 | MONITOR WELL #2 | 428 | 267 | 0 | 273 | 7.29 | 1,380 |
| H14872-3 | MONITOR WELL #3 | 164 | 126 | 0 | 200 | 7.42 | 696 |
| H14872-4 | MONITOR WELL #4 | 56 | 139 | 0 | 288 | 7.35 | 538 |
| H14872-5 | MONITOR WELL #5 | 850 | 560 | 0 | 268 | 7.23 | 2,450 |
| Quality Control | | 510 | 43.3 | NR | 1000 | 7.04 | NR |
| True Value QC | | 500 | 40.0 | NR | 1000 | 7.00 | NR |
| % Recovery | | 102 | 108 | NR | 100 | 100 | NR |
| Relative Percent Difference | | < 0.1 | 0.9 | NR | 2.4 | 0.3 | NR |

| | | | | | | |
|----------|-------------|-------|-------|-------|-------|-------|
| METHODS: | SM4500-Cl-B | 375.4 | 310.1 | 310.1 | 150.1 | 160.1 |
|----------|-------------|-------|-------|-------|-------|-------|

Kristin Dupont
Chemist

05/30/08
Date

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Cardinal Laboratories, Inc.

101 East Mainland - Hobbs, New Mexico 88240
 Tel (575) 393-2326
 Fax (575) 393-2476

Company Name: RICE Operating Company
Project Manager: Kristin Farris-Pope, Project Scientist
 Address: (Street, City, Zip) 122 W Taylor Street - Hobbs, New Mexico 88240
 Phone #: (575) 393-9174
 Fax #: (575) 393-9174

BILL TO Company: RICE Operating Company
 Address: (Street, City, Zip) 122 W Taylor Street - Hobbs, New Mexico 88240
 Phone #: (575) 393-9174
 Fax #: (575) 397-1471

Project Name: Justis Junction L-1 Vent
Project Location: T25S-R37E-Sec1 L ~ Lea County - New Mexico
 Sampler Signature: Rozanne Johnson (575) 631-9310
 Fax #: rozanne@valornet.com

| LAB # (LAB USE ONLY) | FIELD CODE | (G)rab or (C)omp | PRESERVATIVE METHOD | | | | | DATE (2008) | TIME |
|-------------------------|-----------------|------------------|---------------------|------------------|------------------|--------------------|--------------------|-------------|------|
| | | | MATRIX | HCL (2.40ml VOA) | HNO ₃ | NaHSO ₄ | ICE (1-Liter HDPE) | | |
| H14872-1 | Monitor Well #1 | G 3 X | | 2 | | | 1 | 5-23 13:30 | |
| -2 | Monitor Well #2 | G 3 X | | 2 | | | 1 | 5-23 12:36 | |
| -3 | Monitor Well #3 | G 3 X | | 2 | | | 1 | 5-23 10:45 | |
| -4 | Monitor Well #4 | G 3 X | | 2 | | | 1 | 5-23 11:40 | |
| -5 | Monitor Well #5 | G 3 X | | 2 | | | 1 | 5-23 14:26 | |

Relinquished by: Rozanne Johnson 5-27-08 11:10
Date: 5/27/08
Time: 11:10
Received by: [Signature] 5/27/08 11:10
Date: 5/27/08
Time: 11:10

Delivered By: (Circle One) Sampler - UPS - Bus - Other:
Sample Condition: Cool Yes No, Intact Yes No
Checked By: [Signature] (Initials)
REMARKS:

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # _____

ANALYSIS REQUEST (Circle or Specify Method No.)

| Method No. | GC/MS Vol. 8260B/624 | GC/MS Semi Vol. 8270C/625 | PCB's 8082/608 | Pesticides 8081A/608 | BOD, TSS, pH | Moisture Content | Cations (Ca, Mg, Na, K) | Anions (Cl, SO ₄ , CO ₃ , HCO ₃) | Total Dissolved Solids | Chlorides |
|--|----------------------|---------------------------|----------------|----------------------|--------------|------------------|-------------------------|--|------------------------|-----------|
| TPH 418.1/TX1005 / TX1005 Extended (C35) | | | | | | | | | | |
| PAH 8270C | | | | | | | | | | |
| Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 | | | | | | | | | | |
| TCLP Metals Ag As Ba Cd Cr Pb Se Hg | | | | | | | | | | |
| TCLP Volatiles | | | | | | | | | | |
| TCLP Semi Volatiles | | | | | | | | | | |
| TCLP Pesticides | | | | | | | | | | |
| RCI | | | | | | | | | | |
| GC/MS Vol. 8260B/624 | | | | | | | | | | |
| GC/MS Semi Vol. 8270C/625 | | | | | | | | | | |
| PCB's 8082/608 | | | | | | | | | | |
| Pesticides 8081A/608 | | | | | | | | | | |
| BOD, TSS, pH | | | | | | | | | | |
| Moisture Content | | | | | | | | | | |
| Cations (Ca, Mg, Na, K) | X | X | X | X | X | X | X | X | X | X |
| Anions (Cl, SO ₄ , CO ₃ , HCO ₃) | X | X | X | X | X | X | X | X | X | X |
| Total Dissolved Solids | X | X | X | X | X | X | X | X | X | X |
| Chlorides | | | | | | | | | | |

Phone Results: Yes No
 Fax Results: Yes No
 Additional Fax Number: _____

REMARKS:
 Email Results to: kpope@riceswd.com
 iweinheimer@riceswd.com
 rozanne@valornet.com



ARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: HACK CONDER
122 W. TAYLOR STREET
HOBBS, NM 88240
FAX TO: (575) 397-1471

Receiving Date: 08/29/08
Reporting Date: 09/04/08
Project Number: NOT GIVEN
Project Name: JUSTIS JUNCTION L-1 VENT
Project Location: T25S-R37E-SEC1 L-LEA CO., NM

Sampling Date: 08/28/08
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: CK
Analyzed By: HM/TR

| LAB NUMBE SAMPLE ID | Na (mg/L) | Ca (mg/L) | Mg (mg/L) | K (mg/L) | Conductivity (μ S/cm) | T-Alkalinity (mgCaCO ₃ /L) |
|-----------------------------|--------------|--------------|--------------|-------------|-------------------------------|--|
| ANALYSIS DATE: | 09/03/08 | 09/03/08 | 09/03/08 | 09/03/08 | 09/02/08 | 09/02/08 |
| H15844-1 MONITOR WELL #1 | 552 | 633 | 262 | 15.4 | 6,410 | 280 |
| H15844-2 MONITOR WELL #2 | 238 | 128 | 53.5 | 5.4 | 1,960 | 208 |
| H15844-3 MONITOR WELL #3 | 60 | 72.1 | 29.2 | 4.8 | 740 | 180 |
| H15844-4 MONITOR WELL #4 | 56 | 64.1 | 34.0 | 7.8 | 715 | 240 |
| H15844-5 MONITOR WELL #5 | 927 | 184 | 82.6 | 5.8 | 5,070 | 284 |
| Quality Control | NR | 48.1 | 48.6 | 2.98 | 1,410 | NR |
| True Value QC | NR | 50.0 | 50.0 | 3.00 | 1,410 | NR |
| % Recovery | NR | 96.2 | 97.2 | 99.3 | 99.6 | NR |
| Relative Percent Difference | NR | 8.0 | <0.1 | 8.7 | 0.1 | NR |

| | | | | | |
|----------|-------------|-----------|------|-------|-------|
| METHODS: | SM3500-Ca-D | 3500-Mg E | 8049 | 120.1 | 310.1 |
|----------|-------------|-----------|------|-------|-------|

| | Cl (mg/L) | SO ₄ (mg/L) | CO ₃ (mg/L) | HCO ₃ (mg/L) | pH (s.u.) | TDS (mg/L) |
|-----------------------------|--------------|---------------------------|---------------------------|----------------------------|--------------|---------------|
| ANALYSIS DATE: | 09/02/08 | 09/02/08 | 09/02/08 | 09/02/08 | 09/02/08 | 09/02/08 |
| H15844-1 MONITOR WELL #1 | 2,150 | 550 | 0 | 342 | 6.77 | 5,110 |
| H15844-2 MONITOR WELL #2 | 430 | 240 | 0 | 254 | 7.20 | 1,400 |
| H15844-3 MONITOR WELL #3 | 88 | 128 | 0 | 220 | 7.41 | 558 |
| H15844-4 MONITOR WELL #4 | 52 | 114 | 0 | 293 | 7.26 | 580 |
| H15844-5 MONITOR WELL #5 | 1,180 | 842 | 0 | 346 | 7.12 | 3,780 |
| Quality Control | 500 | 43.5 | NR | 1000 | 7.01 | NR |
| True Value QC | 500 | 40.0 | NR | 1000 | 7.00 | NR |
| % Recovery | 100 | 109 | NR | 100 | 100 | NR |
| Relative Percent Difference | < 0.1 | 3.4 | NR | 1.2 | 0.6 | NR |

| | | | | | | |
|----------|-------------|-------|-------|-------|-------|-------|
| METHODS: | SM4500-Cl-B | 375.4 | 310.1 | 310.1 | 150.1 | 160.1 |
|----------|-------------|-------|-------|-------|-------|-------|

Lore S. Meyers

Chemist

09-08-08

Date

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Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # _____

101 East Marland - Hobbs, New Mexico 88240
 Tel (575) 393-2328 Fax (575) 393-2476

Company Name: **RICE Operating Company** RO# _____
 Project Manager: **Hack Conder**
 Address: (Street, City, Zip) **122 W Taylor Street ~ Hobbs, New Mexico 88240**
 Phone #: (575) 393-9174 Fax #: (575) 397-1471
 Address: (Street, City, Zip) **122 W Taylor Street ~ Hobbs, New Mexico 88240**
 Phone #: (575) 393-9174 Fax #: (575) 397-1471

Project #: **(575) 393-9174** Project Name: **Justis Junction L-1 Vent**
 Project Location: **T25S-R37E-Sec 1 L ~ Lea County - New Mexico**
 Sampler Signature: *[Signature]* Rosanne Johnson (575) 651-8310
 rozanne@valornet.com

| LAB # (LAB USE ONLY) H15844 | FIELD CODE | (G)rab or (C)omp | MATRIX | | | PRESERVATIVE METHOD | | | | DATE (2008) | TIME |
|-----------------------------------|-----------------|------------------|--------|-----|--------|---------------------|------------------|--------------------|--------------------------------|-------------|-------|
| | | | WATER | AIR | SLUDGE | HCL (2.4ml VOA) | HNO ₃ | NaHSO ₄ | H ₂ SO ₄ | | |
| 1 | Monitor Well #1 | G | X | | | 2 | | | 1 | 8-28 | 13:20 |
| 2 | Monitor Well #2 | G | X | | | 2 | | | 1 | 8-28 | 12:35 |
| 3 | Monitor Well #3 | G | X | | | 2 | | | 1 | 8-28 | 10:45 |
| 4 | Monitor Well #4 | G | X | | | 2 | | | 1 | 8-28 | 11:35 |
| 5 | Monitor Well #5 | G | X | | | 2 | | | 1 | 8-28 | 14:15 |

Requested by: *[Signature]* Date: 8-29-08 Time: 8:20
 Received by: *[Signature]* Date: 8-29-08 Time: 8:21
 Requested by: *[Signature]* Date: 8-29-08 Time: 8:20
 Received by: *[Signature]* Date: 8-29-08 Time: 16:20
 Delivered by: *[Signature]* Date: 8-29-08 Time: 16:20
 Sample Condition: Yes No Intact
 Checked by: *[Signature]* (Initials) *[Initials]*

ANALYSIS REQUEST (Circle or Specify Method No.)

| Method | Yes | No |
|--|-----|----|
| TPH 418.1/TX1005 / TX1005 Extended (C35) | X | |
| PAH 8270C | | |
| Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 | | |
| TCLP Metals Ag As Ba Cd Cr Pb Se Hg | | |
| TCLP Volatiles | | |
| TCLP Semi Volatiles | | |
| TCLP Pesticides | | |
| RCI | | |
| GC/MS Vol. 8260B/624 | | |
| GC/MS Semi. Vol. 8270C/625 | | |
| PCBs: 8082/608 | | |
| Pesticides 8081A/608 | | |
| BOD, TSS, pH | | |
| Moisture Content | | |
| Cations (Ca, Mg, Na, K) | X | |
| Anions (Cl, SO ₄ , CO ₃ , HCO ₃) | X | |
| Total Dissolved Solids | X | |
| Chlorides | | |

REMARKS:

Phone Results: Yes No
 Fax Results: Yes No
 Additional Fax Number: _____

Email Results to: hconder@riceswd.com
 lweinhelmer@riceswd.com
 rozanne@valornet.com

Sampler - UPS - Bus - Other: Other



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PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: HACK CONDER
122 W. TAYLOR STREET
HOBBS, NM 88240
FAX TO: (575) 397-1471

Receiving Date: 12/18/08
Reporting Date: 12/23/08
Project Number: NOT GIVEN
Project Name: JUSTIS JUNCTION L-1 VENT
Project Location: T25S-R37E-SEC1 L ~ LEA CO., NM

Sampling Date: 12/17/08
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: ML
Analyzed By: TR

| LAB NUMBER | SAMPLE ID | Na (mg/L) | Ca (mg/L) | Mg (mg/L) | K (mg/L) | Conductivity (μ S/cm) | T-Alkalinity (mgCaCO ₃ /L) |
|-----------------------------|-----------------|--------------|--------------|--------------|-------------|-------------------------------|--|
| ANALYSIS DATE: | | 12/23/08 | 12/23/08 | 12/23/08 | 12/22/08 | 12/19/08 | 12/19/08 |
| H16551-1 | MONITOR WELL #1 | 662 | 681 | 292 | 10.5 | 6,710 | 276 |
| H16551-2 | MONITOR WELL #2 | 293 | 164 | 55.9 | 7.8 | 2,270 | 216 |
| H16551-3 | MONITOR WELL #3 | 81 | 80.2 | 29.2 | 5.0 | 893 | 172 |
| H16551-4 | MONITOR WELL #4 | 70 | 68.9 | 23.3 | 4.4 | 752 | 176 |
| H16551-5 | MONITOR WELL #5 | 278 | 120 | 48.6 | 3.4 | 1,960 | 204 |
| Quality Control | | NR | 48.1 | 51.0 | 2.80 | 14,223 | NR |
| True Value QC | | NR | 50.0 | 50.0 | 3.00 | 1,413 | NR |
| % Recovery | | NR | 96.2 | 102 | 93.3 | 101 | NR |
| Relative Percent Difference | | NR | <0.1 | <0.1 | 2.8 | 0.2 | NR |

| | | | | | |
|----------|-------------|-----------|------|-------|-------|
| METHODS: | SM3500-Ca-D | 3500-Mg E | 8049 | 120.1 | 310.1 |
|----------|-------------|-----------|------|-------|-------|

| LAB NUMBER | SAMPLE ID | Cl (mg/L) | SO ₄ (mg/L) | CO ₃ (mg/L) | HCO ₃ (mg/L) | pH (s.u.) | TDS (mg/L) |
|-----------------------------|-----------------|--------------|---------------------------|---------------------------|----------------------------|--------------|---------------|
| ANALYSIS DATE: | | 12/22/08 | 12/22/08 | 12/19/08 | 12/19/08 | 12/19/08 | 12/22/08 |
| H16551-1 | MONITOR WELL #1 | 2,500 | 538 | 0 | 337 | 6.81 | 5,100 |
| H16551-2 | MONITOR WELL #2 | 500 | 351 | 0 | 264 | 7.26 | 1,660 |
| H16551-3 | MONITOR WELL #3 | 140 | 128 | 0 | 210 | 7.49 | 661 |
| H16551-4 | MONITOR WELL #4 | 76 | 136 | 0 | 215 | 7.53 | 565 |
| H16551-5 | MONITOR WELL #5 | 416 | 307 | 0 | 249 | 7.49 | 1,480 |
| Quality Control | | 500 | 43.5 | NR | 1000 | 7.07 | NR |
| True Value QC | | 500 | 40.0 | NR | 1000 | 7.00 | NR |
| % Recovery | | 100 | 109 | NR | 100 | 101 | NR |
| Relative Percent Difference | | <0.1 | 3.5 | NR | <0.1 | 0.4 | NR |

| | | | | | | |
|----------|-------------|-------|-------|-------|-------|-------|
| METHODS: | SM4500-Cl-B | 375.4 | 310.1 | 310.1 | 150.1 | 160.1 |
|----------|-------------|-------|-------|-------|-------|-------|



Chemist

12-24-08

Date

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ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
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HOBBS, NM 88240
FAX TO: (575) 397-1471

Receiving Date: 12/18/08
Reporting Date: 12/23/08
Project Number: NOT GIVEN
Project Name: JUSTIS JUNCTION L-1 VENT
Project Location: T25S-R37E-SEC1 L~ LEA CO., NM

Sampling Date: 12/17/08
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: ML
Analyzed By: ZL

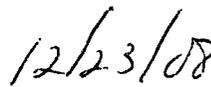
| LAB NUMBER | SAMPLE ID | BENZENE (mg/L) | TOLUENE (mg/L) | ETHYL BENZENE (mg/L) | TOTAL XYLENES (mg/L) |
|------------|-----------------------------|-------------------|-------------------|----------------------------|----------------------------|
| | ANALYSIS DATE | 12/22/08 | 12/22/08 | 12/22/08 | 12/22/08 |
| H16551-1 | MONITOR WELL #1 | <0.001 | <0.001 | <0.001 | <0.003 |
| H16551-2 | MONITOR WELL #2 | <0.001 | <0.001 | <0.001 | <0.003 |
| H16551-3 | MONITOR WELL #3 | <0.001 | <0.001 | <0.001 | <0.003 |
| H16551-4 | MONITOR WELL #4 | <0.001 | <0.001 | <0.001 | <0.003 |
| H16551-5 | MONITOR WELL #5 | <0.001 | <0.001 | <0.001 | <0.003 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | Quality Control | 0.045 | 0.046 | 0.046 | 0.141 |
| | True Value QC | 0.050 | 0.050 | 0.050 | 0.150 |
| | % Recovery | 90.0 | 92.0 | 92.0 | 94.0 |
| | Relative Percent Difference | 2.7 | 5.9 | 7.0 | 7.4 |

METHOD: EPA SW-846 8021B

TEXAS NELAP CERTIFICATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE,
AND TOTAL XYLENES.



Chemist



Date

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