

1R - 426-100

## REPORTS

DATE:

8/04/2004

BD 304 N-16A

1R0726-100

# DISCLOSURE REPORT

**RICE OPERATING COMPANY  
JUNCTION BOX DISCLOSURE REPORT**

**BOX LOCATION**

| SWD SYSTEM | JUNCTION | UNIT | SECTION | TOWNSHIP | RANGE | COUNTY | BOX DIMENSIONS - FEET |       |       |
|------------|----------|------|---------|----------|-------|--------|-----------------------|-------|-------|
| BD         | N-16 A   | N    | 16      | 21S      | 37E   | Lea    | Length                | Width | Depth |
|            |          |      |         |          |       |        | Moved 15 ft West      |       |       |

LAND TYPE: BLM \_\_\_\_\_ STATE X FEE LANDOWNER \_\_\_\_\_ OTHER \_\_\_\_\_

Depth to Groundwater 65 feet NMOCD SITE ASSESSMENT RANKING SCORE: 10

Date Started 4/16/2004 Date Completed 6/2/2004 OCD Witness No

Soil Excavated 400 cubic yards Excavation Length 30 Width 30 Depth 12 feet

Soil Disposed 0 cubic yards Offsite Facility n/a Location n/a

**FINAL ANALYTICAL RESULTS:** Sample Date 4/21/2004 Sample Depth 12 ft

Procure 5-point composite sample of bottom and 4-point composite sample of sidewalls. TPH and Chloride laboratory test results completed by using an approved lab and testing procedures pursuant to NMOCD guidelines.

**CHLORIDE FIELD TESTS**

| Sample Location   | PID ppm | GRO mg/kg | DRO mg/kg | Chloride mg/kg |
|-------------------|---------|-----------|-----------|----------------|
| 4-WALL COMP.      | 0.0     | <10.0     | <10.0     | 736            |
| BOTTOM COMP.      | 0.0     | <10.0     | <10.0     | 1420           |
| REMEDI. BACKFILL  | 0.0     | <10.0     | <10.0     | 608            |
| SOIL BORE @ 55 ft | XXX     | XXX       | XXX       | 176            |

| LOCATION         | DEPTH (ft) | ppm  |
|------------------|------------|------|
| Vertical         | 8          | 1006 |
| at junction      | 9          | 1328 |
|                  | 10         | 1081 |
|                  | 11         | 1335 |
|                  | 12         | 1641 |
| 15 ft East       | 8          | 1378 |
|                  | 9          | 1524 |
|                  | 10         | 2130 |
|                  | 11         | 2709 |
|                  | 12         | 3159 |
| 23 ft East       | 8          | 1306 |
|                  | 9          | 1298 |
|                  | 10         | 1919 |
|                  | 11         | 2084 |
|                  | 12         | 2157 |
| 4-wall comp.     | n/a        | 913  |
| bottom comp.     | 12         | 1400 |
| remedi. backfill | n/a        | 653  |
| Soil Bore        | 55         | 365  |

General Description of Remedial Action: This junction box was delineated using a backhoe while chloride field tests and PID field screenings were conducted at regular intervals.  
A decline in chloride concentrations with depth or breadth was not observed within the 30 x 30 x 12-ft-deep excavation. All PID readings were relatively low and TPH lab results confirmed concentrations well below NMOCD guidelines. The excavated soils were blended on site and then backfilled to 6 ft BGS. At 6 ft, a 1-ft compacted clay barrier was installed to inhibit further downward chloride migration. The remainder of the excavation was backfilled to the surface. On 6/2/2004, a hollow stem soil bore was initiated to further characterize chloride impact. Although a general decline in chloride was observed, results were not conclusive as moisture was encountered at approx. 40 ft to 60 ft (see graph). The borehole was plugged and sealed with bentonite (see bore log). A new watertight junction box was built 15 ft west of this site.

**ADDITIONAL EVALUATION IS LOW PRIORITY**

enclosures: chloride graph, photos, lab results, PID field screenings, clay test, bore log, diagram

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

SITE SUPERVISOR Joe Gatts SIGNATURE Joe Gatts COMPANY RICE Operating Company

REPORT ASSEMBLED BY Kristin Farris Pope SIGNATURE Kristin Farris Pope

DATE 8/4/2004 TITLE Project Scientist

**\* This site is a "DISCLOSURE." It will be placed on a prioritized list of similar sites for further consideration.**

# BD jct. N-16 'A'

unit 'N', Sec. 16, T21S, R37E



undisturbed junction box 11/5/2003



vertical delineation trench at junction box 4/16/2004



delineation 10 ft south of junction 4/16/2004



testing compacted clay 5/10/2004



# BD jct. N-16 'A'



soil bore; new junction box 15 ft west of the old one 6/2/2004



tilling disturbed surface

9/17/2004



seeding 9/17/2004



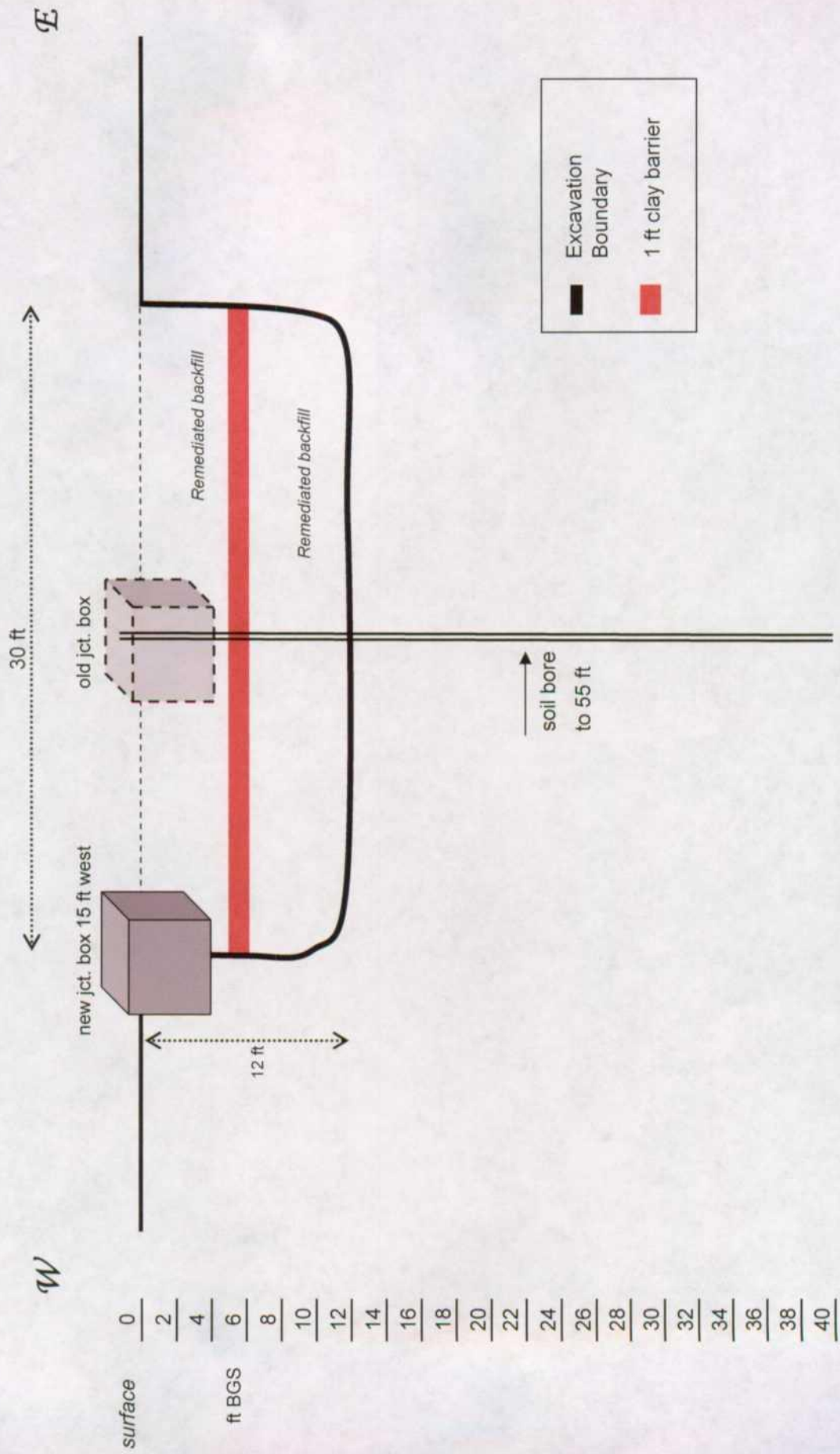
watering seed

9/17/2004

# BD jct. N-16 A

30 x 30 x 12 ft

Excavation Cross-Section



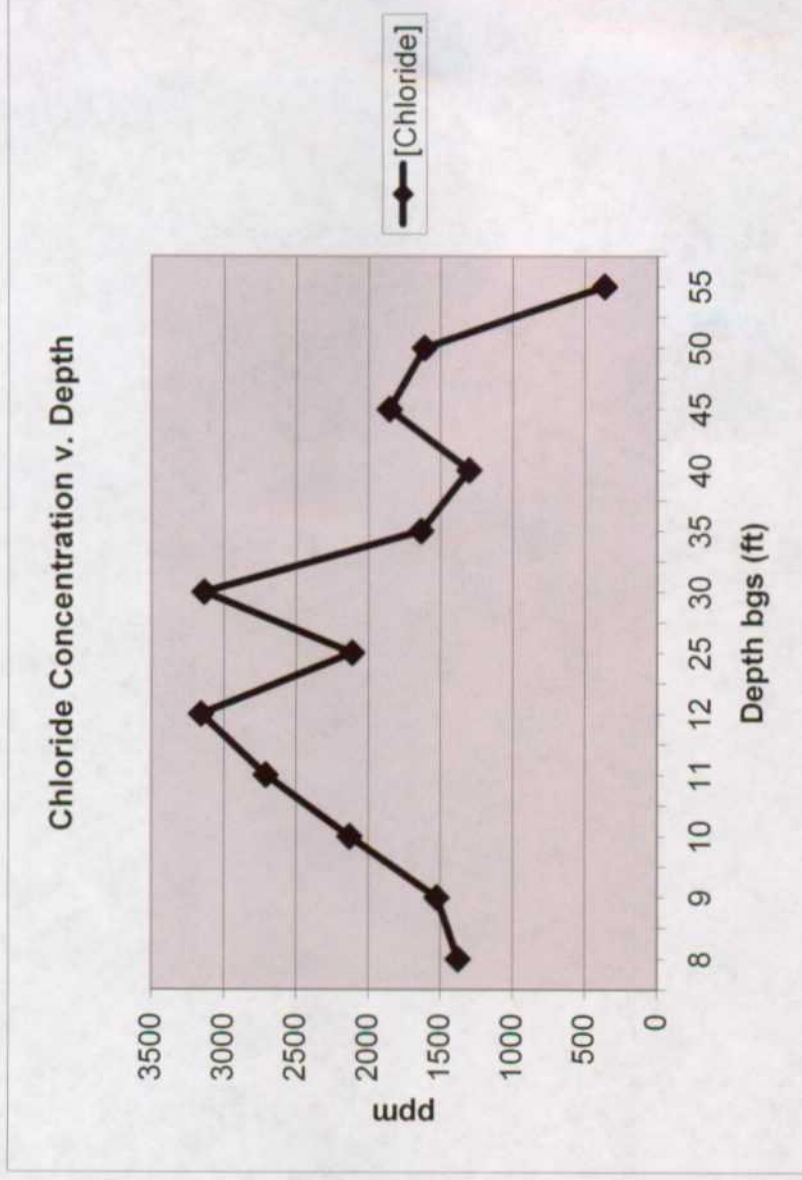


# BD N-16 A

T21S, R37E

15 ft East of Junction

| Depth bgs (ft) | [Cl <sup>-</sup> ] ppm |
|----------------|------------------------|
| 8              | 1378                   |
| 9              | 1524                   |
| 10             | 2130                   |
| 11             | 2709                   |
| 12             | 3159                   |
| 25             | 2113                   |
| 30             | 3135                   |
| 35             | 1635                   |
| 40             | 1302                   |
| 45             | 1854                   |
| 50             | 1612                   |
| 55             | 365                    |



Groundwater = 65 ft

# LOG OF SOIL BORE

Kristin Farris Pope  
RICE Operating Company

|                         |  |                                     |  |                      |  |                        |  |                 |  |
|-------------------------|--|-------------------------------------|--|----------------------|--|------------------------|--|-----------------|--|
| <b>Logger:</b>          |  | Drew Parker, Mort Bates             |  | <b>Client:</b>       |  | RICE Operating Company |  | <b>Well ID:</b> |  |
| <b>Driller:</b>         |  | Atkins Engineering Associates, Inc. |  |                      |  |                        |  | <b>SB-1</b>     |  |
| <b>Drilling Method:</b> |  | Hollow Stem Auger                   |  | <b>Project Name:</b> |  |                        |  |                 |  |
| <b>Start Date:</b>      |  | 6/2/2004                            |  |                      |  |                        |  |                 |  |
| <b>End Date:</b>        |  | 6/2/2004                            |  | <b>Location:</b>     |  |                        |  |                 |  |
| <b>Notes:</b>           |  | TD = 60 ft                          |  | Groundwater = 65 ft  |  | BD SWD System          |  |                 |  |
|                         |  |                                     |  |                      |  | Sec. 16, T21S, R37E    |  |                 |  |
|                         |  |                                     |  |                      |  | Lea County, NM         |  |                 |  |

| Depth<br>(feet) | Split Spoon |     | Description  | Lithology | bore hole   | Additional Notes |
|-----------------|-------------|-----|--|-----------|---|------------------|
|                 | chloride    | PID |  |           |   |                  |
| 0.0             |             |     | 0 - 20 ft<br>CLAYEY SAND w/CALICHE<br>loose, tan, dry          |           | 3 ft of bentonite seal                                |                  |
| 5.0             |             |     |  |           |   |                  |
| 10.0            |             |     |  |           |   |                  |
| 15.0            |             |     |  |           |   |                  |
| 20.0            |             |     |  |           |   |                  |
| 25.0            | 2113        | 9.0 | 20 - 27 ft<br>SILTY GRAVELS w/SILTY SANDS<br>loose, brown, dry |           | remainder of bore hole backfilled with drill cuttings |                  |
| 30.0            | 3135        | 2.7 | 27 - 32 ft CLAYEY GRAVELS<br>loose, tan, dry                   |           |   |                  |
| 35.0            | 1635        | 3.3 | 32 -37 ft CALICHE firm, white, dry                             |           |   |                  |
| 40.0            | 1302        | 2.7 | 37 - 42 ft CLAYEY SAND loose, tan, damp                        |           |   |                  |
| 45.0            | 1854        | 3.3 | 42 - 53 ft<br>CLAYEY SAND<br>loose, tan to brown, damp         |           |   |                  |
| 50.0            | 1612        | 0.1 |  |           |   |                  |
| 55.0            | 365         | 0.0 | 53 - 60 ft<br>SILTY SAND<br>loose, red, moist                  |           |   | lab = 176 ppm Cl |
| 60.0            |             |     |  |           |   |                  |





# ARDINAL LABORATORIES

PHONE (325) 873-7001 • 2111 BEECHWOOD • ABILENE, TX 79803

PHONE (505) 383-2328 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
RICE OPERATING CO.  
ATTN: JOE GATTS  
122 W. TAYLOR  
HOBBS, NM 88240  
FAX TO:

Receiving Date: 04/21/04  
Reporting Date: 04/22/04  
Project Number: NOT GIVEN  
Project Name: N-16  
Project Location: BD

Sampling Date: 04/21/04  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: GP  
Analyzed By: BC/AH

| LAB NUMBER | SAMPLE ID | GRO   | DRO   | Cl*     |
|------------|-----------|---|---|---------|
|            |           | (C <sub>6</sub> -C <sub>10</sub> )<br>(mg/Kg) | (>C <sub>10</sub> -C <sub>28</sub> )<br>(mg/Kg) | (mg/Kg) |

| ANALYSIS DATE               | 04/21/04 | 04/21/04 | 04/22/04 |
|-----------------------------|----------|----------|----------|
| H8625-1 BOTT. COMP. AT 12'  | <10.0    | <10.0    | 1420     |
| H8625-2 4 WALL COMP         | <10.0    | <10.0    | 736      |
| H8625-3 REMD. BACKFILL      | <10.0    | <10.0    | 608      |
|                             |          |          |          |
| Quality Control             | 777      | 736      | 1000     |
| True Value QC               | 800      | 800      | 1000     |
| % Recovery                  | 97.2     | 92.0     | 100      |
| Relative Percent Difference | 2.6      | 0.4      | 5.0      |

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl: Std. Methods 4500-Cl<sup>B</sup>

\*Analyses performed on 1:4 w.v aqueous extracts.

*Russell A. Coyle*  
Chemist

4/22/04  
Date

H8625.XLS

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(915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

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[illegible]

4. Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476.

SOIL BORE



**ARDINAL  
LABORATORIES**

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 FARIS  
122 W. TAYLOR  
HOBBS, NM 88240  
FAX TO: (505) 397-1471**

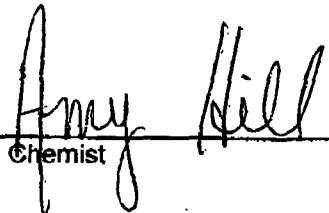
Receiving Date: 06/14/04  
Reporting Date: 06/15/04  
Project Number: NOT GIVEN  
Project Name: N-16 SOIL BORE  
Project Location: B-D N-16

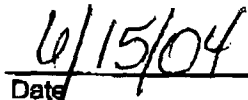
Analysis Date: 06/15/04  
Sampling Date: 06/02/04  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: BC  
Analyzed By: AH

| LAB NUMBER                  | SAMPLE ID    | Cl <sup>-</sup><br>(mg/Kg) |
|-----------------------------|--------------|----------------------------|
| H8823-1                     | N-16 55' BGS | 176                        |
|                             |              |                            |
|                             |              |                            |
|                             |              |                            |
|                             |              |                            |
|                             |              |                            |
| Quality Control             |              | 1020                       |
| True Value QC               |              | 1000                       |
| % Recovery                  |              | 102                        |
| Relative Percent Difference |              | 1.0                        |

|                          |                        |
|--------------------------|------------------------|
| METHOD: Standard Methods | 4500-Cl <sup>-</sup> B |
|--------------------------|------------------------|

Note: Analysis performed on a 1:4 w:v aqueous extract.

  
Chemist

  
Date

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(915) 673-7001 Fax (915) 673-7020 (505) 393-2328 Fax (505) 393-2478

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| ANALYSIS REQUEST                    |   |
|-------------------------------------|---|
| Company Name: <b>RINE Operating</b> | Project Manager: <b>Kristin Farris</b>                      |
| Address: <b>122 W. Taylor</b>       | State: <b>NM</b> Zip: <b>88240</b>                          |
| City: <b>Hobbs</b>                  | Phone #: <b>(505) 398-9174</b> Fax #: <b>(505) 397-1471</b> |
| Project #: _____                    | Project Owner: _____  |
| Project Name: <b>N-16 Soil Bore</b> | Project Location: <b>B-0 N-16</b>                           |
| Sampler Name: <b>K. Farris</b>      | Lab I.D.:   |
| ON LAB USE ONLY                     | Lab I.D.:   |
| Matrix:                             | Sample I.D.:  |
| PRESETV                             | DATE  |
| OTHER:                              | TIME  |
| ACID/BASE                           | 6-2-04  |
| OTHER:                              | 5:00PM  |
| SLUDGE                              |   |
| CRUDE OIL                           |   |
| BOIL                                |   |
| WASTEWATER                          |   |
| GROUNDWATER                         |   |
| CONTAINERS                          |   |
| (G)RAB OR (COM)                     |   |
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# RICE OPERATING COMPANY

122 WEST TAYLOR

HOBBS, NEW MEXICO 88240

PHONE: (505) 393-9174 FAX: (505) 397-1471

## VOC FIELD TEST REPORT FORM

MINI RAE PLUS CLASSIC PHOTOIONIZATION GAS DETECTOR

MODEL NO: PGM 761S

SERIAL NO: 104412

CALIBRATION GAS

GAS COMPOSITION: ISOBUTYLENE

100 PPM

AIR

BALANCE

LOT NO: 02-22-30

FILL DATE: 5/20/03

EXP. DATE: 11/20/04

ACCURACY: + or - 2%

METER READING

ACCURACY: 99.8

| SYSTEM    | JUNCTION    | UNIT     | SECTION   | TOWNSHIP  | RANGE     |
|-----------|-------------|----------|-----------|-----------|-----------|
| <u>BD</u> | <u>N-16</u> | <u>N</u> | <u>16</u> | <u>21</u> | <u>37</u> |

| SAMPLE                | PID RESULT | SAMPLE | PID RESULT |
|-----------------------|------------|--------|------------|
| <u>4 WALL Comp.</u>   | <u>0</u>   |        |            |
| <u>Both. Comp</u>     | <u>0</u>   |        |            |
| <u>Remd. Backfill</u> | <u>0</u>   |        |            |
| <u>N. WALL</u>        | <u>0</u>   |        |            |
| <u>S. WALL</u>        | <u>0</u>   |        |            |
| <u>E. WALL</u>        | <u>0</u>   |        |            |
| <u>W. WALL</u>        | <u>0</u>   |        |            |
|                       |            |        |            |
|                       |            |        |            |
|                       |            |        |            |
|                       |            |        |            |
|                       |            |        |            |
|                       |            |        |            |

I certify that I have calibrated the above instrument in accordance to the manufacture operation manual.

Joe Smith  
Signature

4/21/04  
Date



LABORATORY TEST REPORT  
**PETTIGREW & ASSOCIATES, P.A.**  
1110 N. GRIMES  
HOBBS, NM 88240  
(505) 393-9827



DEBRA P. HICKS, P.E./L.S.I.  
WILLIAM M. HICKS, III, P.E./P.S.

**To:** Rice Operating  
Attn: Carolyn Haynes  
122 W. Taylor  
Hobbs, NM 88240

**Material:** Red Clay

**Test Method:** ASTM: D 2922

**Project:** BD N - 16

**Date of Test:** May 10, 2004

**Depth:** Finished Subgrade

| Test No. | Location                               | Dry Density<br>% Maximum | % Moisture | Depth |
|----------|--|--------------------------|------------|-------|
| SG-1     | Pit - 20' W. & 10' S. of the NE Corner | 103.1                    | 13.9       |       |

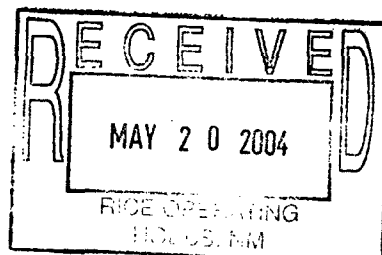
**Control Density:** 109.5  
ASTM: D 698

**Optimum Moisture:** 16.6%

**Required Compaction:** 95%

**Lab No.:** 04 6434-6435

**Copies To:** Rice



PETTIGREW & ASSOCIATES

BY  S.E.T.