AP-75

~~1R-426-40~~

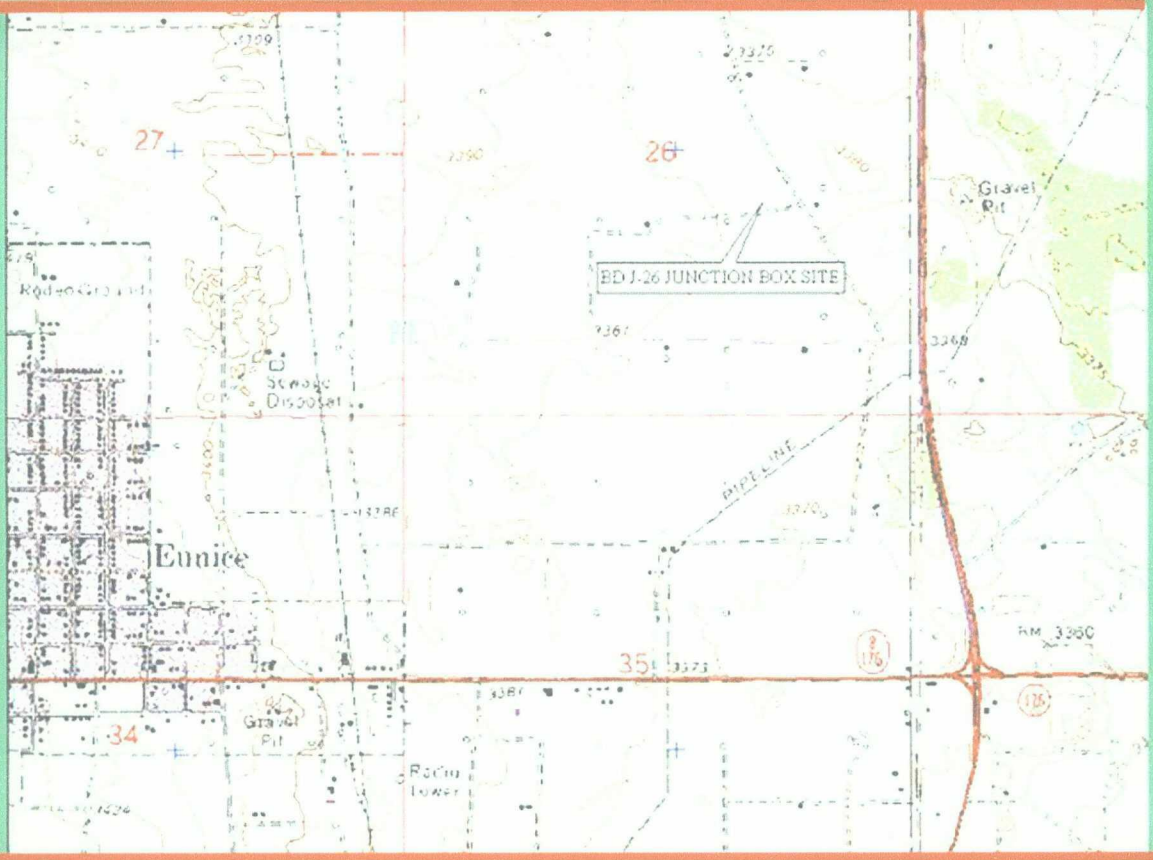
# Annual GW Mon. REPORTS

# DATE:

# 2005

January 6, 2005

# 2005 Annual Groundwater Monitoring Report




## J-26 Junction Box Site
## T21S, R37E, Section 26, Unit Letter J
## Lea County, New Mexico
## NMOCD Case # 1R0426-40

R. T. Hicks Consultants, Ltd.

901 Rio Grande Blvd. NW, Suite F-142, Albuquerque, New Mexico 87104

**R.T. HICKS CONSULTANTS, LTD.**
1909 Brunson Avenue ■ Midland, Texas 79701-6924 ■ 432.638.8740 ■ Fax: 413.403.9968

CERTIFIED MAIL
RETURN RECIEPT NO. 7099 3400 0017 1737 2381

January 6, 2006

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

RE: 2005 ANNUAL MONITORING WELL REPORT
BD J-26 JUNCTION BOX SITE
T21S-R37E-Section 26, Unit Letter J
NMOCD CASE # 1R0426-40

Mr. Price:

R. T. Hicks Consultants, Ltd takes this opportunity to submit the 2005 Annual Monitoring Well Report for the BD J-26 junction box site located in the Blinebry-Drinkard (BD) Salt Water Disposal (SWD) System. The Stage 1 Abatement Plan for this site was submitted to the NMOCD on December 5, 2005, and is administratively complete pending the on-going public notice procedures.

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

Thank you for your consideration concerning this annual summary of groundwater monitoring information. If you have any questions, do not hesitate to contact me at (432) 638-8740 or Kristin Farris Pope at (505) 393-9174.

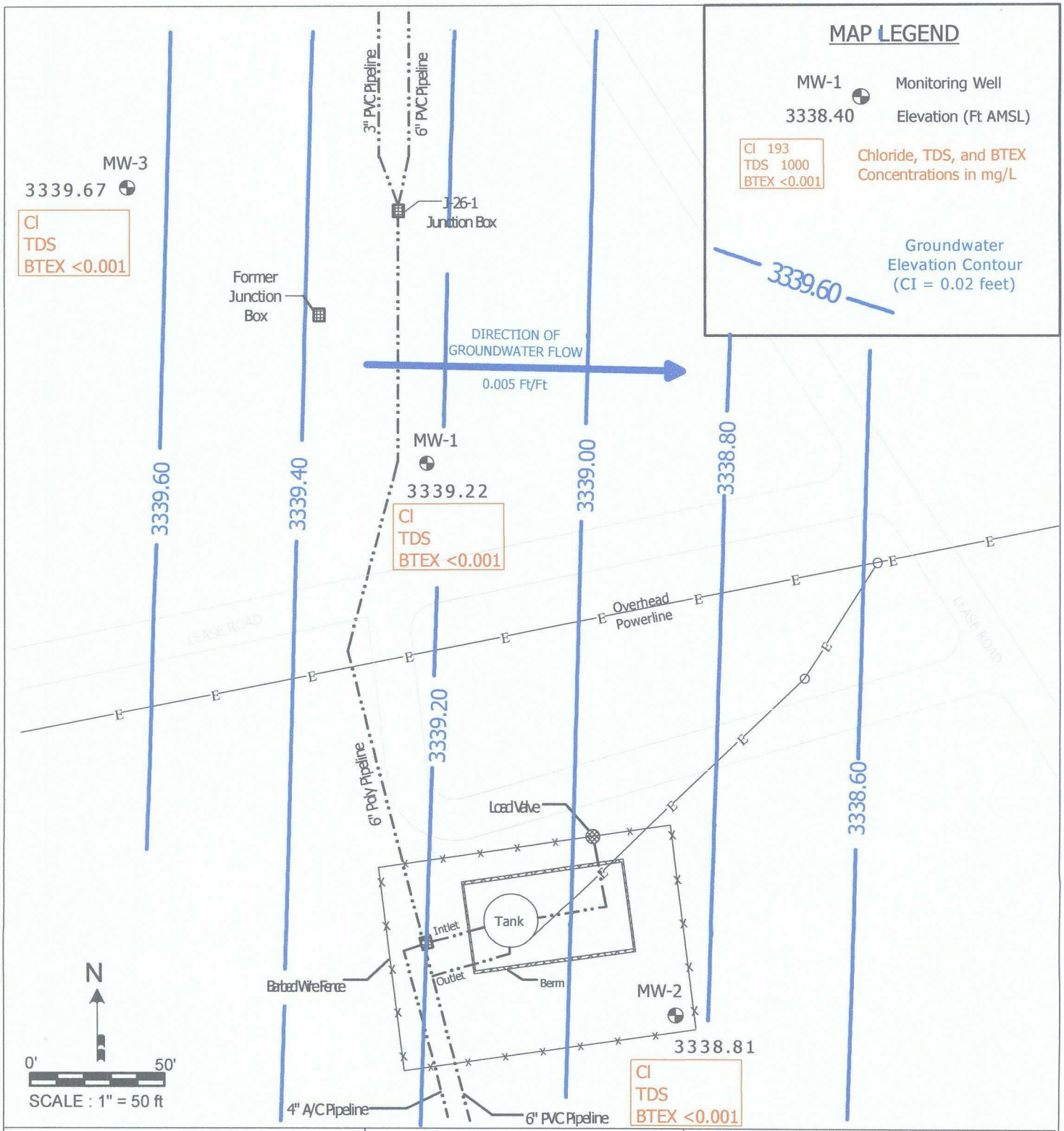
Sincerely,

Gilbert J. Van Deventer, REM, PG, NMCS
R. T. Hicks Consultants Ltd.

enclosures: Summary table & graphs, maps, well sample data forms, and laboratory reports

cc: LBG, CDH, KFP, file

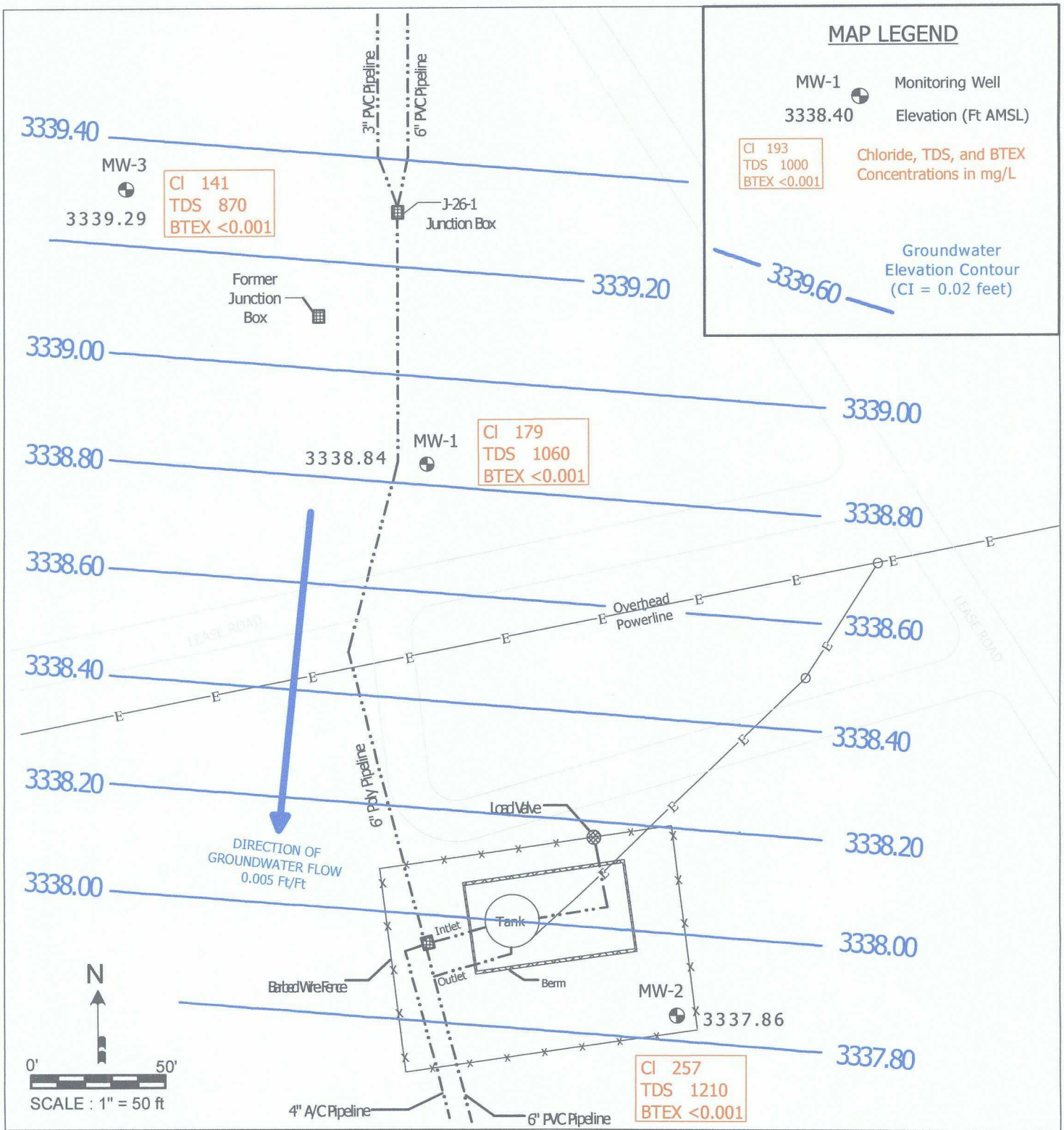
# MAPS




| | |
|---|---|
| R. T. HICKS CONSULTANTS, LTD.<br>1909 Brunson Ave., Midland TX 79701 | Client: Rice Operating Company<br>Site: J-26 Junction Box<br>Sampling Date: February 9, 2005<br>Approximate Scale: 1 inch = 50 ft |

FIGURE 1A

LOCAL GROUNDWATER GRADIENT AND CHLORIDE/TDS CONCENTRATION MAP




R. T. HICKS CONSULTANTS, LTD.

1909 Brunson Ave., Midland TX 79701

Client: Rice Operating Company

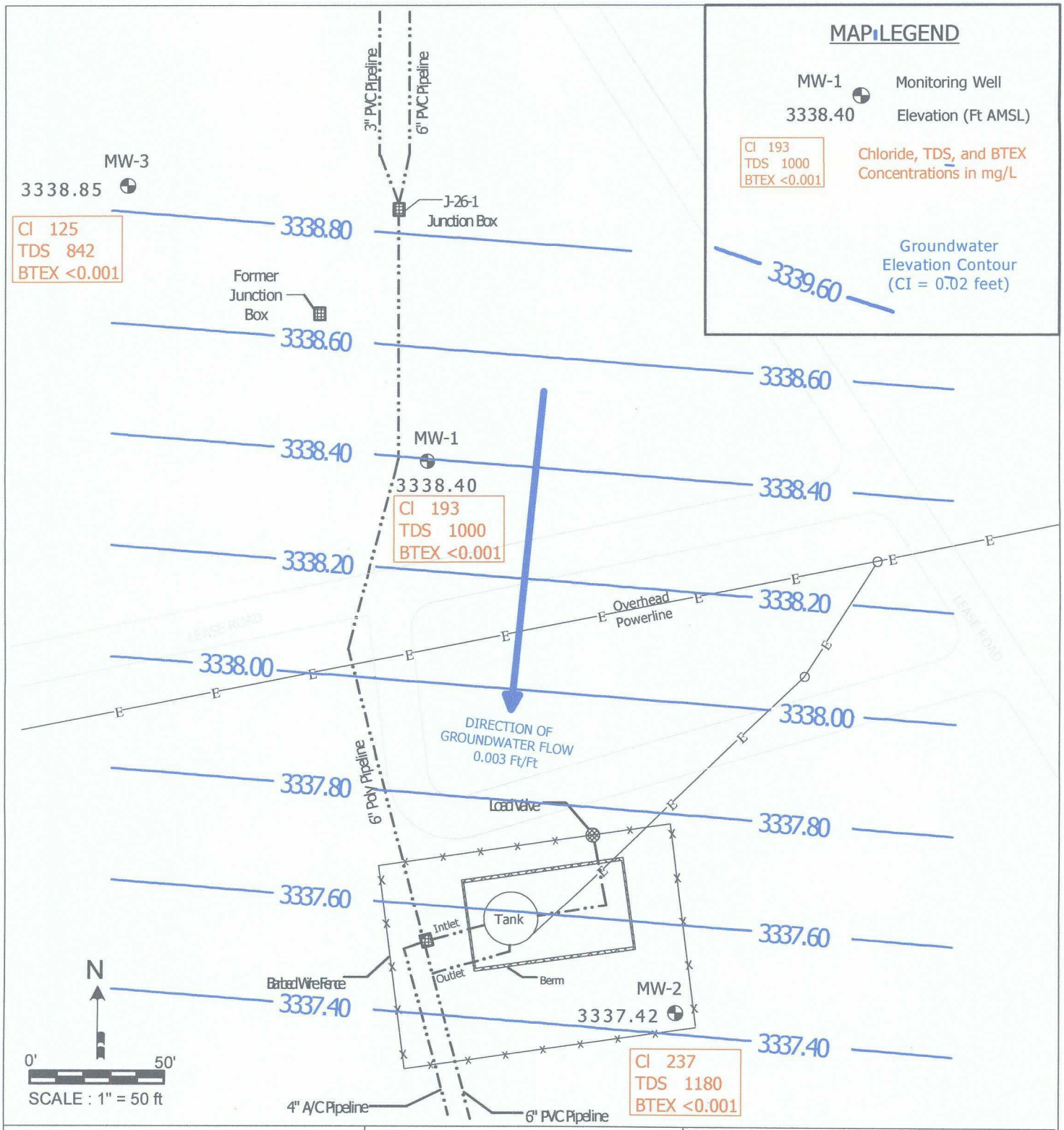
Site: J-26 Junction Box

Sampling Date: May 5, 2005

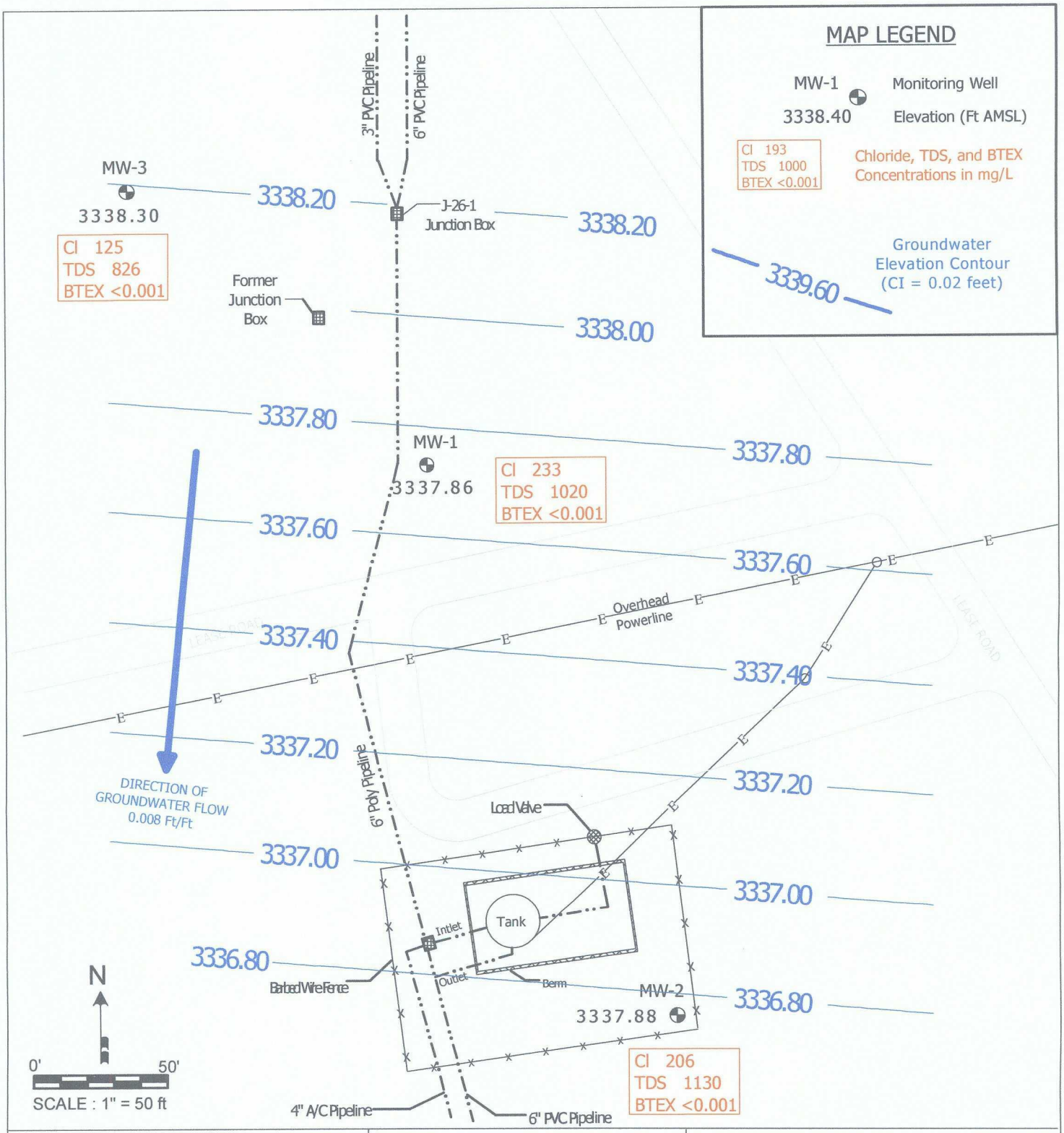
Approximate Scale: 1 inch = 50 ft

FIGURE 1B

LOCAL GROUNDWATER GRADIENT AND CHLORIDE/TDS CONCENTRATION MAP




| | | |
|---|---|---|
| R. T. HICKS CONSULTANTS, LTD.<br>1909 Brunson Ave., Midland TX 79701 | Client: Rice Operating Company<br>Site: J-26 Junction Box<br>Sampling Date: August 10, 2005<br>Approximate Scale: 1 inch = 50 ft | FIGURE 1C<br>LOCAL GROUNDWATER GRADIENT AND CHLORIDE/TDS CONCENTRATION MAP |




| | | |
|---|---|---|
| R. T. HICKS CONSULTANTS, LTD.<br>1909 Brunson Ave., Midland TX 79701 | Client: Rice Operating Company<br>Site: J-26 Junction Box<br>Sampling Date: November 7, 2005<br>Approximate Scale: 1 inch = 50 ft | FIGURE 1D<br>LOCAL GROUNDWATER GRADIENT AND CHLORIDE/TDS CONCENTRATION MAP |

# TABLE AND GRAPHS

**Table 1**
**Summary of Groundwater Sampling Results**
**BD J-26 Junction Box**

| Monitoring Well | Sample Date | Depth to Groundwater (feet BTOC) | Groundwater Elevation (feet AMSL) | Chloride (mg/L) | TDS (mg/L) | Benzene (mg/L) | Toluene (mg/L) | Ethylbenzene (mg/L) | Xylene (mg/L) |
|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 10/29/02 | 43.02 | 3332.82 | **4520** | **9020** | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 02/28/03 | 42.33 | 3333.51 | **3470** | **6870** | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 06/05/03 | 43.00 | 3332.84 | **1460** | **3280** | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 08/22/03 | 43.72 | 3332.12 | **957** | **2620** | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 10/30/03 | 43.91 | 3331.93 | **620** | **2040** | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 02/18/04 | 43.70 | 3332.14 | **478** | **1630** | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 05/05/04 | 40.80 | 3335.04 | **390** | **1440** | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 07/08/04 | 40.80 | 3335.04 | 230 | **1140** | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 08/10/04 | 37.02 | 3338.82 | 195 | **1080** | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 11/09/04 | 36.61 | 3339.23 | 177 | **1100** | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 02/09/05 | 36.62 | 3339.22 | 179 | **1090** | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 05/05/05 | 37.00 | 3338.84 | 179 | **1060** | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 08/13/05 | 37.56 | 3338.28 | 193 | **1000** | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 11/07/05 | 37.98 | 3337.86 | 233 | **1020** | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| MW-2 | 08/22/03 | 43.99 | 3331.33 | 239 | **1180** | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 10/30/03 | 44.17 | 3331.15 | 239 | **1240** | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 02/18/04 | 43.91 | 3331.41 | 221 | **1150** | < 0.001 | 0.001 | < 0.001 | < 0.001 |
| | 05/05/04 | 40.98 | 3334.34 | 204 | **1060** | < 0.001 | 0.001 | < 0.001 | < 0.001 |
| | 08/10/04 | 37.14 | 3338.18 | 230 | **1120** | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 11/09/04 | 36.99 | 3338.33 | 230 | **1120** | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 02/09/05 | 37.03 | 3338.29 | **294** | **1220** | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 05/06/05 | 37.46 | 3337.86 | **257** | **1210** | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 08/13/05 | 38.02 | 3337.30 | 237 | **1180** | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 11/07/05 | 38.44 | 3336.88 | 206 | **1130** | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| MW-3 | 08/22/03 | 43.06 | 3332.79 | 160 | 904 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 10/30/03 | 43.28 | 3332.57 | 168 | **1070** | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 02/18/04 | 43.03 | 3332.82 | 160 | 862 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 05/05/04 | 40.04 | 3335.81 | 160 | 891 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 08/10/04 | 36.55 | 3339.30 | 164 | 941 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 11/09/04 | 36.22 | 3339.63 | 142 | **1160** | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 02/09/05 | 36.17 | 3339.68 | 138 | **1010** | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 05/06/05 | 36.56 | 3339.29 | 141 | 870 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 08/13/05 | 37.12 | 3338.73 | 125 | 842 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| | 11/07/05 | 37.55 | 3338.30 | 125 | 826 | < 0.001 | < 0.001 | < 0.001 | < 0.001 |
| WQCC Standards | | | | 250 | 1000 | 0.01 | 0.75 | 0.75 | 0.62 |

Total Dissolved Soilds (TDS), chloride, and BTEX concentrations listed in milligrams per liter (mg/L)
Analyses performed by Cardinal Labs, Hobbs, NM (1995-1998) and Environmental Lab of Texas, Odessa, TX (1999-2003).
Values in boldface type indicate concentrations exceed New Mexico Water Quality Commission (WQCC) standards.
AMSL - Above Mean Sea Level; BTOC - Below Top of Casing
Elevations and state plane coordinates surveyed by Basin Surveys, Hobbs, NM.

# WELL SAMPLE DATA SHEETS

# WELL SAMPLING DATA FORM

CLIENT: RICE *Operating Company* WELL ID: MW-1

SYSTEM: Blinebry-Drinkard System DATE: 02/09/05

SITE LOCATION: J-26 Junction Box SAMPLER: Gil Van Deventer

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☑ Alconox ☑ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☐ Surface Discharge ☐ Drums ☑ Disposal Facility

TOTAL DEPTH OF WELL: 52.85 Feet

DEPTH TO WATER: 36.62 Feet

HEIGHT OF WATER COLUMN: 16.23 Feet — 7.9 Minimum gallons to purge 3 well volumes

WELL DIAMETER: 2.0 Inch — 8 Actual Gallons purged

| TIME | VOLUME PURGED | TEMP. °C | COND. mS/cm | pH | | | PHYSICAL APPEARANCE AND REMARKS |
|---|---|---|---|---|---|---|---|
| 13:41 | 0 | | | | | | Begin bailing |
| 13:45 | 2 | 19.5 | 1.53 | 8.09 | | | |
| 13:49 | 4 | 19.5 | 1.54 | 7.99 | | | |
| 13:53 | 6 | 19.4 | 1.55 | 7.88 | | | |
| 13:57 | 8 | 19.4 | 1.55 | 7.90 | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | 13:58 | Collected sample |
| | | | | | | | BTEX (2-40 ml VOA) |
| | | | | | | | Major ions/TDS (1-500 ml plastic) |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| 0:16 | :Total Time (hr:min) | | 8 | :Total Vol (gal) | | 0.50 | :Average Flow Rate (gal/min) |

COMMENTS: Delivered samples to Environmental Lab of Texas for BTEX, Major Ion and TDS analyses.

Hanna Model 98130 used to obtain pH, conductivity, and temperature measurements.

# WELL SAMPLING DATA FORM

CLIENT: RICE *Operating Company* WELL ID: MW-2

SYSTEM: Blinebry-Drinkard System DATE: 02/09/05

SITE LOCATION: J-26 Junction Box SAMPLER: Gil Van Deventer

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☑ Alconox ☑ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☐ Surface Discharge ☐ Drums ☑ Disposal Facility

TOTAL DEPTH OF WELL: 58.60 Feet

DEPTH TO WATER: 37.03 Feet

HEIGHT OF WATER COLUMN: 21.57 Feet — 10.6 Minimum gallons to purge 3 well volumes

WELL DIAMETER: 2.0 Inch — 10 Actual Gallons purged

| TIME | VOLUME PURGED | TEMP. °C | COND. mS/cm | pH | | | PHYSICAL APPEARANCE AND REMARKS |
|---|---|---|---|---|---|---|---|
| 14:15 | 0 | | | | | | Begin bailing |
| 14:20 | 2 | 19.2 | 1.91 | 7.41 | | | |
| 14:24 | 4 | 18.8 | 1.92 | 7.42 | | | |
| 14:29 | 6 | 18.9 | 1.79 | 7.40 | | | |
| 14:33 | 8 | 19.1 | 1.87 | 7.39 | | | |
| 14:37 | 10 | 19.0 | 1.91 | 7.41 | | | |
| | | | | | | 14:39 | Collected sample |
| | | | | | | | BTEX (2-40 ml VOA) |
| | | | | | | | Major ions/TDS (1-500 ml plastic) |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| 0:22 | :Total Time (hr:min) | | 10 | :Total Vol (gal) | | 0.45 | :Average Flow Rate (gal/min) |

COMMENTS: Delivered samples to Environmental Lab of Texas for BTEX, Major Ion and TDS analyses.

Hanna Model 98130 used to obtain pH, conductivity, and temperature measurements.

# WELL SAMPLING DATA FORM

CLIENT: RICE *Operating Company* WELL ID: MW-3

SYSTEM: Blinebry-Drinkard System DATE: 02/09/05

SITE LOCATION: J-26 Junction Box SAMPLER: Gil Van Deventer

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☑ Alconox ☑ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☐ Surface Discharge ☐ Drums ☑ Disposal Facility

TOTAL DEPTH OF WELL: 60.00 Feet

DEPTH TO WATER: 36.17 Feet

HEIGHT OF WATER COLUMN: 23.83 Feet

WELL DIAMETER: 2.0 Inch

11.7 Minimum gallons to purge 3 well volumes

10 Actual Gallons purged

| TIME | VOLUME PURGED | TEMP. °C | COND. mS/cm | pH | | | PHYSICAL APPEARANCE AND REMARKS |
|---|---|---|---|---|---|---|---|
| 12:56 | 0 | | | | | | Begin bailing |
| 13:04 | 2 | 18.0 | 0.88 | 7.55 | | | |
| 13:08 | 4 | 18.5 | 1.16 | 7.44 | | | |
| 13:12 | 6 | 18.4 | 1.20 | 7.43 | | | |
| 13:16 | 8 | 18.4 | 1.21 | 7.43 | | | |
| 13:20 | 10 | 18.4 | 1.21 | 7.46 | | | |
| | | | | | | 13:21 | Collected sample |
| | | | | | | | BTEX (2-40 ml VOA) |
| | | | | | | | Major ions/TDS (1-500 ml plastic) |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| 0:24 | :Total Time (hr:min) | | 10 | :Total Vol (gal) | | 0.42 | :Average Flow Rate (gal/min) |

COMMENTS: Delivered samples to Environmental Lab of Texas for BTEX, Major Ion and TDS analyses.

Hanna Model 98130 used to obtain pH, conductivity, and temperature measurements.

# WELL SAMPLING DATA FORM

CLIENT: RICE *Operating Company* WELL ID: MW-1

SYSTEM: Blinebry-Drinkard System DATE: 05/04/05

SITE LOCATION: J-26 Junction Box SAMPLER: Gil Van Deventer

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☑ Alconox ☑ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☐ Surface Discharge ☐ Drums ☑ Disposal Facility

TOTAL DEPTH OF WELL: 52.85 Feet

DEPTH TO WATER: 37.00 Feet

HEIGHT OF WATER COLUMN: 15.85 Feet — 7.8 Minimum gallons to purge 3 well volumes

WELL DIAMETER: 2.0 Inch — 8 Actual Gallons purged

| TIME | VOLUME PURGED | TEMP. °C | COND. mS/cm | pH | | | PHYSICAL APPEARANCE AND REMARKS |
|---|---|---|---|---|---|---|---|
| 14:43 | 0 | | | | | | Begin bailing |
| 14:47 | 2 | 19.6 | 1.53 | 6.58 | | | |
| 15:08 | 4 | 19.6 | 1.53 | 6.82 | | | |
| 15:10 | 6 | 19.5 | 1.53 | 6.83 | | | |
| 15:14 | 8 | 18.5 | 1.51 | 6.80 | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | 15:25 | Collected sample |
| | | | | | | | BTEX (2-40 ml VOA) |
| | | | | | | | Major ions/TDS (1-500 ml plastic) |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| 0:31 | :Total Time (hr:min) | | 8 | :Total Vol (gal) | | 0.26 | :Average Flow Rate (gal/min) |

COMMENTS: Delivered samples to Environmental Lab of Texas for BTEX, Major Ion and TDS analyses.

Hanna Model 98130 used to obtain pH, conductivity, and temperature measurements.

# WELL SAMPLING DATA FORM

CLIENT: RICE *Operating Company* WELL ID: MW-2

SYSTEM: Blinebry-Drinkard System DATE: 05/05/05

SITE LOCATION: J-26 Junction Box SAMPLER: Gil Van Deventer

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☑ Alconox ☑ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☐ Surface Discharge ☐ Drums ☑ Disposal Facility

TOTAL DEPTH OF WELL: 58.60 Feet

DEPTH TO WATER: 37.46 Feet

HEIGHT OF WATER COLUMN: 21.14 Feet — 10.3 Minimum gallons to purge 3 well volumes

WELL DIAMETER: 2.0 Inch — 10 Actual Gallons purged

| TIME | VOLUME PURGED | TEMP. °C | COND. mS/cm | pH | | | PHYSICAL APPEARANCE AND REMARKS |
|---|---|---|---|---|---|---|---|
| 12:29 | 0 | | | | | | *Begin bailing* |
| 12:32 | 2 | 19.8 | 1.70 | 6.63 | | | |
| 12:36 | 4 | 19.7 | 1.73 | 6.60 | | | |
| 12:40 | 6 | 19.5 | 1.76 | 6.67 | | | |
| 12:44 | 8 | 19.4 | 1.75 | 6.62 | | | |
| 12:48 | 10 | 19.3 | 1.75 | 6.61 | | | |
| | | | | | | 12:50 | Collected sample |
| | | | | | | | BTEX (2-40 ml VOA) |
| | | | | | | | Major ions/TDS (1-500 ml plastic) |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| 0:19 | :Total Time (hr:min) | | 10 | :Total Vol (gal) | | 0.53 | :Average Flow Rate (gal/min) |

COMMENTS: Delivered samples to Environmental Lab of Texas for BTEX, Major Ion and TDS analyses.

Hanna Model 98130 used to obtain pH, conductivity, and temperature measurements.

# WELL SAMPLING DATA FORM

CLIENT: RICE *Operating Company* WELL ID: MW-3

SYSTEM: Blinebry-Drinkard System DATE: 05/05/05

SITE LOCATION: J-26 Junction Box SAMPLER: Gil Van Deventer

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☑ Alconox ☑ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☐ Surface Discharge ☐ Drums ☑ Disposal Facility

TOTAL DEPTH OF WELL: 60.00 Feet

DEPTH TO WATER: 36.56 Feet

HEIGHT OF WATER COLUMN: 23.44 Feet

WELL DIAMETER: 2.0 Inch

11.5 Minimum gallons to purge 3 well volumes

10 Actual Gallons purged

| TIME | VOLUME PURGED | TEMP. °C | COND. mS/cm | pH | | | PHYSICAL APPEARANCE AND REMARKS |
|---|---|---|---|---|---|---|---|
| 13:04 | 0 | | | | | | Begin bailing |
| 13:07 | 2 | 19.7 | 0.97 | 6.77 | | | |
| 13:11 | 4 | 19.4 | 1.10 | 6.72 | | | |
| 13:14 | 6 | 19.4 | 1.19 | 6.72 | | | |
| 13:17 | 8 | 19.3 | 1.19 | 6.70 | | | |
| 13:20 | 10 | 19.2 | 1.19 | 6.68 | | | |
| | | | | | | 13:21 | Collected sample |
| | | | | | | | BTEX (2-40 ml VOA) |
| | | | | | | | Major ions/TDS (1-500 ml plastic) |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| 0:16 | :Total Time (hr:min) | | 10 | :Total Vol (gal) | | 0.62 | :Average Flow Rate (gal/min) |

COMMENTS: Delivered samples to Environmental Lab of Texas for BTEX, Major Ion and TDS analyses.

Hanna Model 98130 used to obtain pH, conductivity, and temperature measurements.

# WELL SAMPLING DATA FORM

CLIENT: RICE *Operating Company* WELL ID: MW-1

SYSTEM: Blinebry-Drinkard System DATE: 08/10/05

SITE LOCATION: J-26 Junction Box SAMPLER: Gil Van Deventer

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☑ Alconox ☑ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☐ Surface Discharge ☐ Drums ☑ Disposal Facility

TOTAL DEPTH OF WELL: 52.85 Feet

DEPTH TO WATER: 37.56 Feet

HEIGHT OF WATER COLUMN: 15.29 Feet

WELL DIAMETER: 2.0 Inch

7.5 Minimum gallons to purge 3 well volumes

10 Actual Gallons purged

| TIME | VOLUME PURGED | TEMP. °F | COND. mS/cm | pH | | | PHYSICAL APPEARANCE AND REMARKS |
|---|---|---|---|---|---|---|---|
| 14:55 | 0 | | | | | | Begin bailing |
| 14:58 | 2 | 73.1 | 1.61 | 7.76 | | | |
| 15:01 | 4 | 70.5 | 1.59 | 7.55 | | | |
| 15:06 | 6 | 70.3 | 1.61 | 7.49 | | | |
| 15:09 | 8 | 69.9 | 1.61 | 7.43 | | | |
| 15:12 | 10 | 70.0 | 1.6 | 7.42 | | | |
| | | | | | | | |
| | | | | | | 15:15 | Collected sample |
| | | | | | | | BTEX (2-40 ml VOA) |
| | | | | | | | Major ions/TDS (1-500 ml plastic) |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| 0:17 | :Total Time (hr:min) | | 10 | :Total Vol (gal) | | 0.59 | :Average Flow Rate (gal/min) |

COMMENTS: Delivered samples to Environmental Lab of Texas for BTEX, Major Ion and TDS analyses.

Hanna Model 98130 used to obtain pH, conductivity, and temperature measurements.

# WELL SAMPLING DATA FORM

CLIENT: RICE *Operating Company* WELL ID: MW-2

SYSTEM: Blinebry-Drinkard System DATE: 08/10/05

SITE LOCATION: J-26 Junction Box SAMPLER: Gil Van Deventer

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☑ Alconox ☑ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☐ Surface Discharge ☐ Drums ☑ Disposal Facility

TOTAL DEPTH OF WELL: 58.60 Feet

DEPTH TO WATER: 38.02 Feet

HEIGHT OF WATER COLUMN: 20.58 Feet

WELL DIAMETER: 2.0 Inch

10.1 Minimum gallons to purge 3 well volumes

10 Actual Gallons purged

| TIME | VOLUME PURGED | TEMP. °F | COND. mS/cm | pH | | | PHYSICAL APPEARANCE AND REMARKS |
|---|---|---|---|---|---|---|---|
| 15:27 | 0 | | | | | | Begin bailing |
| 15:32 | 2 | 73.0 | 1.82 | 7.32 | | | |
| 15:37 | 4 | 70.3 | 1.80 | 7.38 | | | |
| 15:47 | 6 | 71.0 | 1.80 | 7.50 | | | |
| 15:51 | 8 | 69.1 | 1.80 | 7.40 | | | |
| 15:53 | 10 | 69.4 | 1.84 | 7.37 | | | |
| | | | | | | 15:55 | Collected sample |
| | | | | | | | BTEX (2-40 ml VOA) |
| | | | | | | | Major ions/TDS (1-500 ml plastic) |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| 0:26 | :Total Time (hr:min) | | 10 | :Total Vol (gal) | | 0.38 | :Average Flow Rate (gal/min) |

COMMENTS: Delivered samples to Environmental Lab of Texas for BTEX, Major Ion and TDS analyses.

Hanna Model 98130 used to obtain pH, conductivity, and temperature measurements.

# WELL SAMPLING DATA FORM

CLIENT: RICE *Operating Company* WELL ID: MW-3

SYSTEM: Blinebry-Drinkard System DATE: 08/10/05

SITE LOCATION: J-26 Junction Box SAMPLER: Gil Van Deventer

PURGING METHOD: ☑ Hand Bailed ☐ Pump If Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DESCRIBE EQUIPMENT DECONTAMINATION METHOD BEFORE SAMPLING THE WELL:

☑ Gloves ☑ Alconox ☑ Distilled Water Rinse ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☐ Surface Discharge ☐ Drums ☑ Disposal Facility

TOTAL DEPTH OF WELL: 60.00 Feet

DEPTH TO WATER: 37.12 Feet

HEIGHT OF WATER COLUMN: 22.88 Feet — 11.2 Minimum gallons to purge 3 well volumes

WELL DIAMETER: 2.0 Inch — 10 Actual Gallons purged

| TIME | VOLUME PURGED | TEMP. °F | COND. mS/cm | pH | | | PHYSICAL APPEARANCE AND REMARKS |
|---|---|---|---|---|---|---|---|
| 16:17 | 0 | | | | | | Begin bailing |
| 16:19 | 2 | 72.5 | 1.19 | 7.60 | | | |
| 16:23 | 4 | 69.0 | 1.21 | 7.43 | | | |
| 16:30 | 6 | 68.6 | 1.26 | 7.41 | | | |
| 16:34 | 8 | 68.2 | 1.28 | 7.39 | | | |
| 16:37 | 10 | 67.6 | 1.27 | 7.36 | | | |
| | | | | | | 16:43 | Collected sample |
| | | | | | | | BTEX (2-40 ml VOA) |
| | | | | | | | Major ions/TDS (1-500 ml plastic) |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| 0:20 | :Total Time (hr:min) | | 10 | :Total Vol (gal) | | 0.50 | :Average Flow Rate (gal/min) |

COMMENTS: Delivered samples to Environmental Lab of Texas for BTEX, Major Ion and TDS analyses.

Hanna Model 98130 used to obtain pH, conductivity, and temperature measurements.

# WELL SAMPLING DATA FORM

CLIENT: RICE *Operating Company* WELL ID: MW-1

SYSTEM: BD DATE: November 7, 2005

SITE LOCATION: J-26 Junction Box SAMPLER: Rozanne Johnson

PURGING METHOD: ☑ Hand Bailed ☐ Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☐ On-site Drum ☐ Drums ☑ SWD Disposal Facility

TOTAL DEPTH OF WELL: 52.70 Feet

DEPTH TO WATER: 37.98 Feet

HEIGHT OF WATER COLUMN: 14.72 Feet

WELL VOLUME: 2.4 Gal.

2 In. Well Diameter

8 Gallons purged prior to sampling

| TIME | TEMP. °C | COND. mS/cm | pH | PHYSICAL APPEARANCE AND REMARKS |
|---|---|---|---|---|
| 10:45 | 20.5 | 1.67 | 7.51 | Clear with no odor. |
| | | | | Samples Collected |
| | | | | BTEX (2-40ml VOA) |
| | | | | Major Ions/TDS (1-1000ml Plastic) |
| | | | | |
| | | | | |
| | | | | |
| 0:00 :Total Time (hr:min) | | :Average Flow Rate (gal/min) | | |

Comments

Myron Model 6P instrument used to obtain pH, conductivity, and temperature measurements.

Delivered samples to Environmental Lab of Texas for BTEX, Major Ions and TDS analysis.

# WELL SAMPLING DATA FORM

CLIENT: RICE *Operating Company* WELL ID: MW-2

SYSTEM: BD DATE: November 7, 2005

SITE LOCATION: J-26 Junction Box SAMPLER: Rozanne Johnson

PURGING METHOD: ☑ Hand Bailed ☐ Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☐ On-site Drum ☐ Drums ☑ SWD Disposal Facility

TOTAL DEPTH OF WELL: 58.50 Feet

DEPTH TO WATER: 37.44 Feet

HEIGHT OF WATER COLUMN: 21.06 Feet

WELL VOLUME: 3.4 Gal.

2 In. Well Diameter

12 Gallons purged prior to sampling

| TIME | TEMP. °C | COND. mS/cm | pH | PHYSICAL APPEARANCE AND REMARKS |
|---|---|---|---|---|
| 12:55 | 21.9 | 1.78 | 7.44 | Clear with no odor. |
| | | | | Samples Collected |
| | | | | BTEX (2-40ml VOA) |
| | | | | Major Ions/TDS (1-1000ml Plastic) |
| | | | | |
| | | | | |
| | | | | |
| 0:00 :Total Time (hr:min) | | #DIV/0! :Average Flow Rate (gal/min) | | |

Comments

Myron Model 6P instrument used to obtain pH, conductivity, and temperature measurements.

Delivered samples to Environmental Lab of Texas for BTEX, Major Ions and TDS analysis.

# WELL SAMPLING DATA FORM

CLIENT: RICE *Operating Company* WELL ID: MW-3

SYSTEM: BD DATE: November 7, 2005

SITE LOCATION: J-26 Junction Box SAMPLER: Rozanne Johnson

PURGING METHOD: ☑ Hand Bailed ☐ Pump, Type: _____

SAMPLING METHOD: ☑ Disposable Bailer ☐ Direct from Discharge Hose ☐ Other: _____

DISPOSAL METHOD OF PURGE WATER: ☐ On-site Drum ☐ Drums ☑ SWD Disposal Facility

TOTAL DEPTH OF WELL: 60.10 Feet

DEPTH TO WATER: 37.55 Feet

HEIGHT OF WATER COLUMN: 22.55 Feet 2 In. Well Diameter

WELL VOLUME: 3.6 Gal. 11 Gallons purged prior to sampling

| TIME | TEMP. °C | COND. mS/cm | pH | PHYSICAL APPEARANCE AND REMARKS |
|---|---|---|---|---|
| 11:40 | 20.1 | 1.25 | 7.49 | Clear with no odor. |
| | | | | Samples Collected |
| | | | | BTEX (2-40ml VOA) |
| | | | | Major Ions/TDS (1-1000ml Plastic) |
| | | | | |
| | | | | |
| | | | | |
| 0:00 :Total Time (hr:min) | | :Average Flow Rate (gal/min) | | |

Comments

Myron Model 6P instrument used to obtain pH, conductivity, and temperature measurements.

Delivered samples to Environmental Lab of Texas for BTEX, Major Ions and TDS analysis.

# LABORATORY REPORTS

# AND

# CHAIN OF CUSTODY DOCUMENTATION

**(See attached compact disk for this information)**