

GW - 114

7/01

WORK PLANS

IRON TREATMENT

WORK PLAN
ZERO-VALENT IRON TREATMENT
PILOT STUDY
ARTESIA, NEW MEXICO

July 27, 2001

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1.0 INTRODUCTION

1.0 INTRODUCTION

Schlumberger Oilfield Services (Dowell) has been conducting remedial activities and monitoring of the facility in Artesia, New Mexico since 1988. Actions to remediate source areas at the site have included:

- Removal of underground storage tanks and impacted soils at the fuel island and wash bay.
- Installation and operation of SVE systems at the wash bay and maintenance shop.
- Demolition of the acid facility and warehouse along with excavation of impacted soils.

Dowell has also demonstrated that ground water conditions are conducive to the biodegradation of chlorocarbons and anaerobic degradation of residual hydrocarbons. Source removal and natural attenuation processes have succeeded in reducing the concentrations of both chlorocarbons and hydrocarbons in the ground water near the source areas. These results are presented in the "Annual Report, Schlumberger Oilfield Services, Artesia, New Mexico" dated January 13, 2000.

With the source areas removed and a continuation of natural attenuation processes, ground water at the site is being effectively remediated. However, to reduce the possibility of very low levels of these compounds from leaving the Dowell property, a pilot study for the injection of zero-valent iron (ZVI) near the property boundary is being proposed. The details of the ZVI pilot study are presented in this work plan.

2.0 EXISTING CONDITIONS

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2.1 Geology

Site investigations have been carried out on behalf of Dowell by Western Water Consultants, Inc. (WWC). Drilling at the site has reached a maximum depth of 68 feet below ground surface. All sediments encountered are Quaternary alluvial valley fill included in a unit locally referred to as the carbonate gravel unit which comprises a portion of the “shallow aquifer”. An underlying quartzose unit has not been encountered. The sediments beneath the facility consist of red clay, silty clay, and clay interbedded with thin (2-4 inch) white or pinkish-cream carbonate or caliche layers. Zones where carbonate/caliche layers are common may be identified from drill cores, but individual carbonate/caliche layers are difficult to trace laterally between even closely-spaced groundwater monitoring wells.

The water-bearing zones in this interval are the carbonate/caliche layers in which the permeability apparently has been enhanced by solution of carbonate minerals. Below the water table, many, but not all, of the carbonate/caliche layers are saturated, whereas the clays and silts appear only damp to moist. Zones of unsaturated carbonate/caliche below the water table are present irregularly. Carbonate/caliche zones above and below these dry zones are saturated.

The groundwater flow direction has been consistently to the northeast during the 10 years that monitoring has been conducted at the facility. A potentiometric map prepared from water-level data obtained in October, 2000, indicates that groundwater flow is toward the northeast (Figure 1). Water level data are presented in Table 1.

2.2 Constituent Status

The concentration and extent of dissolved-phase BTEX in groundwater has declined since 1990 (Figure 2). In October, 2000 BTEX constituents measured in wells on the facility ranged from a maximum of 3.302 mg/l in MW-3 to non-detectable levels in most other wells.

The concentration and extent of dissolved-phase chlorocarbons in groundwater has remained stable or declined since 1990 (Figure 3). Wells 18, 19, and 22 have shown slight increases since they were installed. Concentration range from 0.506 mg/l in Well 7 to nondetect in the perimeter wells. While the concentration of total chlorocarbons has remained stable, the

composition of the total mixture of constituents has changed through time indicating that biodegradation is occurring.

3.0 SYSTEM DESIGN

3.0 SYSTEM DESIGN

3.1 Purpose

The chlorocarbons and hydrocarbons in the ground water are being degraded biologically as demonstrated in previous report. This is a well suited remediation option for the site. While these processes are occurring, Dowell wants to reduce the possibility of these constituents leaving the property by advection or dispersion. Since of the constituents of concern are chlorinated hydrocarbons, the use of ZVI is being investigated to determine its effectiveness at this site.

3.2 System Concept

The initial reference to the use of metallic iron powder for the remediation was related to halogenated pesticides (Sweeny and Fischer, 1972). Sweeny published two additional articles on the reductive treatment of waste waters in 1981 (Sweeny, 1981 a,b). Although these articles indicated promising results, there is little additional literature available on the use of iron powder in the reduction of chlorinated hydrocarbons until 1987 (Vogel, et. al, 1987) followed by a series of articles published in Japan (Senzaki and Kamagai 1988 and 1989; Senzaki, 1991).

Gillham and O'Hannessin experimented with using a variety of metals including iron, zinc, aluminum, brass, copper, and stainless steel achieving the best results on ground water contaminated with chlorinated hydrocarbons using iron and zinc. As a result of this work, they proposed using metals for the in-situ remediation of ground water contaminated with chlorinated hydrocarbons. Research on the effective use of zero-valent iron (ZVI) to reduce chlorinated hydrocarbons has continued (Gillham and O'Hannessin, 1993 and 1994; Clausen, et. al, 1995).

Gillham and O'Hannessin's research indicated the degradation process of the reactive material is abiotic, with a first order reduction of the chlorinated hydrocarbon. The products of reaction are chloride (Cl^-), iron (Fe^{2+}), and non-chlorinated or less chlorinated hydrocarbons. In a nearly simultaneous reaction, iron is oxidized through the reduction of water with products of Fe^{2+} , H^+ , and OH^- . Hydrogen is also useful in reductive dechlorination, so a synergistic process may be occurring.

To determine the effectiveness of ZVI at this site, two test plots are proposed. First, ZVI will be injected upgradient of MW-22 in an area of higher concentrations. The effect of ZVI in

reducing these concentrations can then be monitored. Second, ZVI will be injected in an area of lower concentrations just upgradient of MW-26. This will allow for an evaluation of ZVI in reducing extremely low concentrations near the property boundary.

3.3 ZVI Design

To assess the efficiency and cost effectiveness of source area injection of ZVI in reducing chlorinated compounds in groundwater at the site, ZVI will be injected into an approximate 60 foot by 60 foot area in the vicinity of monitoring well MW-22 using direct push technology (DPT) drilling rig and a high pressure BioCl amendment pumping system. ZVI will be placed between 12 and 35 feet below ground surface (bgs) through DPT boreholes spaced within a grid approximately 15 feet apart. ZVI will be loaded at a rate of about 260 pounds per vertical foot at each injection location.

Prior to beginning injection of ZVI, a one-inch ID groundwater-monitoring well will be installed upgradient of the injection grid. This well and MW-22 will provide a means of monitoring the effects of the ZVI on groundwater contaminants.

The efficiency and cost effectiveness of utilizing injection technology and Zero-Valent Iron (ZVI) treat lower concentrations of dissolved phase chlorocarbon contaminants in groundwater will be evaluated along the eastern boundary of the Dowell property. ZVI will be injected into an approximate 60 foot by 60 foot area in the vicinity of monitoring well MW-26 using DPT drilling rig and a high pressure BioCl amendment pumping system (BAP). ZVI will be placed between 12 and 35 feet below ground surface (bgs) through 25 DPT boreholes spaced within a grid approximately 15 feet apart. ZVI will be loaded at a rate of about 330 pounds per vertical foot at each injection location.

Prior to beginning injection of ZVI, a one-inch ID groundwater-monitoring well will be installed upgradient of the injection grid. This well and MW-26 will provide a means of monitoring the effects of the ZVI on ground water contaminants. Fifteen foot, 0.010 inch slotted screens will be set between 10 and 25 feet bgs.

3.4 Water Quality Monitoring

Baseline sampling for geochemical and hydrological parameters will be conducted prior to injection of the ZVI to provide information on ambient conditions and contaminant concentrations before the introduction of the remedial amendment. Well casing elevations will be surveyed and static water levels measured. After purging and development of the well is completed, groundwater samples will be collected and analyzed. The monitoring program will employ low flow groundwater sampling techniques and include measurement of the following field/chemical parameters.

- VOCs, EPA 8260
- Field parameters: dissolved oxygen (DO), Oxidation-Reduction Potential (ORP), pH, temperature, and specific conductance.
- Inorganic parameters: total and dissolved iron, total and dissolved manganese, magnesium, nitrate, sulfate, total calcium carbonate and chloride.

4.0 OPERATION AND MONITORING

4.0 OPERATION AND MONITORING

4.1 Monitoring

Groundwater samples should be collected and analyzed on a monthly for three months to assess biodegradation and geochemical trends. The monitoring program will employ low flow ground water sampling techniques and include measurement of the following field/chemical parameters:

- All relevant contaminants (VOCs),
- Field parameters: dissolved oxygen (DO), Oxidation-Reduction Potential (ORP), pH, temperature, alkalinity, specific conductance and total dissolved solids;

Wells MW-22, MW-26 and the two new temporary wells will be monitored to evaluate the effectiveness of the ZVI.

5.0 REFERENCES

REFERENCES

- Clausen, J.L., Walt L. Richards, Nic E. Korte, Liyuan Liang. 1995. ORNL/MMES Research into remedial applications of zero-valence metals: 3) Removal of TCE, CIS-1,2-DCE, vinyl chloride, and technetium. Presented before the Division of Environmental Chemistry, American Chemical Society. April 2-7.
- Gillham, R.W. and S.F. O'Hannesin. 1992. Metal-catalyzed abiotic degradation of halogenated organic compounds. IAH Conference "Modern trends in hydrogeology," Hamilton, Ontario, May 10-13. pp. 94-103.
- Gillham, R.W. and S.F. O'Hannesin. 1994. Development of zero-valent iron as an in situ reactant for remediation of VOC-contaminated ground water. *Ground Water*. v.32, no. 5, page 844.
- Gillham; R.W. and S.F. O'Hannesin. 1994. Enhanced degradation of halogenated aliphatics by zero-valent iron. *Ground Water*. v.32, no. 6, pp. 958-967.
- Senzaki, T. and Y. Kumagai. 1988. Removal of chlorinated organic compounds from wastewater by reduction process: Treatment of 1,1,2,2-tetrachloroethane with iron powder. *Kogyo Yosui*. V. 357, pp. 2-7 (in Japanese).
- Senzaki, T. and Y. Kumagai. 1989. Removal of chlorinated organic compounds from wastewater by reduction process: II. Treatment of trichloroethylene with iron powder. *Kogyo Yosui*. V. 357, pp. 19-25 (in Japanese).
- Senzaki, T. 1991. Removal of chlorinated organic compounds from wastewater by reduction process III. Treatment of trichloroethylene with iron powder II. *Kogyo Yosui*. V. 391, pp. 29-35. (in Japanese).
- Sweeny, K.H. 1981 a. The reductive treatment of industrial wastewaters: I Process descriptions. American Institute of Chemical Engineers, Symposium Series, Water- 1980. Ed.L G.F. Bennett. 209, v. 77, 67-71.
- Sweeny, K.H. 1981 b. The reductive treatment of industrial wastewaters: II Process applications. American Institute of Chemical Engineers, Symposium Series, Water- 1980. Ed.: G.F. Bennett. 209, v. 77, 72-78.
- Sweeny, K.H. and J. R. Fischer. 1972. Reductive degradation of halogenated pesticides. U.S. Patent No. 3,640,821. February 8.
- Vogel, T.M., C.S. Criddle, and P.L. McCarty. 1987. Transformation of halogenated aliphatic compounds. *Environ. Sci. Technol.* V. 21, no. 8, pp. 722-736.

TABLES

TABLE 1. GROUND-WATER MEASUREMENTS AND ELEVATIONS,
SCHLUMBERGER OILFIELD SERVICES FACILITY, ARTESIA, NEW MEXICO.

| WELL NUMBER | DATE MEASURED | TOTAL WELL DEPTH (FT) | MEASURING POINT | MEASURING POINT ELEVATION* (ft) | DEPTH TO GROUND WATER (ft) | STATIC WATER ELEVATION (FT) | DIFFERENCE FROM PRIOR MEASUREMENT |
|-------------|---------------|-----------------------|-------------------|---------------------------------|----------------------------|-----------------------------|-----------------------------------|
| MW-1 | 01/23/91 | 30.00 | Protective Casing | 100.56 | 17.41 | 83.15 | |
| | 09/13/91 | | | | 16.04 | 84.52 | 1.37 |
| | 11/22/91 | | | | 14.50 | 86.06 | 1.54 |
| | 03/16/93 | | | | 13.72 | 86.84 | 0.78 |
| | 01/09/94 | | | | 14.62 | 85.94 | -0.90 |
| | 04/19/94 | | | | 14.48 | 86.08 | 0.14 |
| | 07/20/94 | | | | 14.38 | 86.18 | 0.10 |
| | 10/24/94 | | | | 14.73 | 85.83 | -0.35 |
| | 01/24/95 | | | | 14.20 | 86.36 | 0.53 |
| | 04/02/95 | | | | 14.37 | 86.19 | -0.17 |
| | 07/31/95 | | | | 14.76 | 85.80 | -0.39 |
| | 10/16/95 | | | | 14.64 | 85.92 | 0.12 |
| | 01/10/96 | | | | 14.59 | 85.97 | 0.05 |
| | 04/09/96 | | | | 14.77 | 85.79 | -0.18 |
| | 07/20/96 | | | | 15.84 | 84.72 | -1.07 |
| | 10/21/96 | | | | 14.07 | 86.49 | 1.77 |
| | 01/21/97 | | | | 13.24 | 87.32 | 0.83 |
| | 04/08/97 | | | | 12.97 | 87.59 | 0.27 |
| | 07/29/97 | | | | 13.87 | 86.69 | -0.90 |
| | 10/16/97 | | | | 12.26 | 88.30 | 1.61 |
| | 02/09/99 | | | | 14.34 | 86.22 | -2.08 |
| | 04/21/99 | | | | 13.91 | 86.65 | 0.43 |
| | 07/13/99 | | | | 11.70 | 88.86 | 2.21 |
| | 10/19/99 | | | | 13.22 | 87.34 | -1.52 |
| MW-2 | 01/23/91 | 30.00 | Protective Casing | 99.56 | 16.95 | 82.61 | |
| | 09/13/91 | | | | 15.01 | 84.55 | 1.94 |
| | 11/22/91 | | | | 13.76 | 85.80 | 1.25 |
| | 03/16/93 | | | | 13.16 | 86.40 | 0.60 |
| | 01/09/94 | | | | 13.91 | 85.65 | -0.75 |
| | 04/19/94 | | | | 13.80 | 85.76 | 0.11 |
| | 07/20/94 | | | | 13.65 | 85.91 | 0.15 |
| | 10/24/94 | | | | 13.88 | 85.68 | -0.23 |
| | 01/24/95 | | | | 13.41 | 86.15 | 0.47 |
| | 04/02/95 | | | | 13.67 | 85.89 | -0.26 |
| | 07/31/95 | | | | 13.81 | 85.75 | -0.14 |
| | 10/16/95 | | | | 13.78 | 85.78 | 0.03 |
| | 01/10/96 | | | | 13.80 | 85.76 | -0.02 |
| | 04/09/96 | | | | 13.98 | 85.58 | -0.18 |
| | 07/20/96 | | | | 14.92 | 84.64 | -0.94 |
| | 10/21/96 | | | | 13.15 | 86.41 | 1.77 |
| | 01/21/97 | | | | 12.41 | 87.15 | 0.74 |
| | 04/08/97 | | | | 12.21 | 87.35 | 0.20 |
| | 07/29/97 | | | | 13.15 | 86.41 | -0.94 |
| | 10/16/97 | | | | 11.63 | 87.93 | 1.52 |
| | 01/06/98 | | | | 10.92 | 88.64 | 0.71 |
| | 04/14/98 | | | | 11.02 | 88.54 | -0.10 |
| | 07/17/98 | | | | 13.03 | 86.53 | -2.01 |
| | 10/27/98 | | | | 13.61 | 85.95 | -0.58 |
| | 02/09/99 | | | | 13.69 | 85.87 | -0.08 |
| | 04/21/99 | | | | 13.24 | 86.32 | 0.45 |
| | 07/13/99 | | | | 11.05 | 88.51 | 2.19 |
| | 10/20/99 | | | | 12.59 | 86.97 | -1.54 |
| MW-3 | 01/23/91 | 30.00 | Protective Casing | 98.33 | 17.28 | 81.05 | |
| | 09/13/91 | | | | 14.66 | 83.87 | 2.62 |
| | 11/22/91 | | | | 13.63 | 84.70 | 1.03 |
| | 03/16/93 | | | | 12.89 | 85.44 | 0.74 |
| | 01/09/94 | | | | 13.66 | 84.67 | -0.77 |
| | 04/19/94 | | | | NM | NM | NM |
| | 07/20/94 | | | | 13.18 | 85.15 | na |
| | 10/24/94 | | | | 13.27 | 85.06 | -0.09 |
| | 01/24/95 | | | | 13.23 | 85.10 | 0.04 |
| | 04/02/95 | | | | 13.60 | 84.73 | -0.37 |
| | 07/31/95 | | | | 13.34 | 84.99 | 0.26 |

TABLE 1. GROUND-WATER MEASUREMENTS AND ELEVATIONS,
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| WELL NUMBER | DATE MEASURED | TOTAL WELL DEPTH (FT) | MEASURING POINT | MEASURING POINT ELEVATION* (ft) | DEPTH TO GROUND WATER (ft) | STATIC WATER ELEVATION (FT) | DIFFERENCE FROM PRIOR MEASUREMENT |
|-------------|---------------|-----------------------|-------------------|---------------------------------|----------------------------|-----------------------------|-----------------------------------|
| MW-3 Cont. | 10/16/95 | | | | 13.38 | 84.95 | -0.04 |
| | 01/10/96 | | | | 13.85 | 84.48 | -0.47 |
| | 04/09/96 | | | | 13.91 | 84.42 | -0.06 |
| | 07/20/96 | | | | 14.55 | 83.78 | -0.64 |
| | 10/21/96 | | | | 12.90 | 85.43 | 1.65 |
| | 01/21/97 | | | | 12.42 | 85.91 | 0.48 |
| | 04/08/97 | | | | 12.43 | 85.90 | -0.01 |
| | 07/29/97 | | | | 13.18 | 85.15 | -0.75 |
| | 10/16/97 | | | | 11.83 | 86.50 | 1.35 |
| | 01/06/98 | | | | 11.45 | 86.88 | 0.38 |
| | 04/14/98 | | | | 11.44 | 86.89 | 0.01 |
| | 07/17/98 | | | | 12.81 | 85.52 | -1.37 |
| | 10/27/98 | | | | 12.60 | 85.73 | 0.21 |
| | 02/09/99 | | | | 13.44 | 84.89 | -0.84 |
| | 04/21/99 | | | | 12.75 | 85.58 | 0.69 |
| | 07/13/99 | | | | 10.57 | 87.76 | 2.18 |
| | 10/20/99 | | | | 12.15 | 86.18 | -1.58 |
| MW-4 | 01/23/91 | 50.00 | Protective Casing | 103.18 | 20.17 | 83.01 | |
| | 09/13/91 | | | | 18.54 | 84.64 | 1.63 |
| | 11/22/91 | | | | 17.15 | 86.03 | 1.39 |
| | 03/16/93 | | | | 16.49 | 86.69 | 0.66 |
| | 01/09/94 | | | | 17.28 | 85.90 | -0.79 |
| | 04/19/94 | | | | 17.15 | 86.03 | 0.13 |
| | 07/20/94 | | | | 16.99 | 86.19 | 0.16 |
| | 10/24/94 | | | | 17.25 | 85.93 | -0.26 |
| | 01/24/95 | | | | 16.78 | 86.40 | 0.47 |
| | 04/02/95 | | | | 16.98 | 86.20 | -0.20 |
| | 07/31/95 | | | | 17.26 | 85.92 | -0.28 |
| | 10/16/95 | | | | 17.01 | 86.17 | 0.25 |
| | 01/10/96 | | | | 16.95 | 86.23 | 0.06 |
| | 04/09/96 | | | | 17.15 | 86.03 | -0.20 |
| | 07/20/96 | | | | 18.08 | 85.10 | -0.93 |
| | 10/21/96 | | | | 16.28 | 86.90 | 1.80 |
| | 01/21/97 | | | | 15.37 | 87.81 | 0.91 |
| | 04/08/97 | | | | 15.14 | 88.04 | 0.23 |
| | 07/29/97 | | | | 16.05 | 87.13 | -0.91 |
| | 10/16/97 | | | | 14.44 | 88.74 | 1.61 |
| | 01/06/98 | | | | 13.59 | 89.59 | 0.85 |
| | 04/14/98 | | | | 13.91 | 89.27 | -0.32 |
| | 07/17/98 | | | | 16.40 | 86.78 | -2.49 |
| | 10/27/98 | | | | 17.05 | 86.13 | -0.65 |
| | 02/09/99 | | | | 17.08 | 86.10 | -0.03 |
| | 04/21/99 | | | | 16.67 | 86.51 | 0.41 |
| | 07/13/99 | | | | 14.49 | 88.69 | 2.18 |
| | 10/20/99 | | | | 15.98 | 87.20 | -1.49 |
| MW-5 | 01/23/91 | 30.00 | Protective Casing | 99.87 | 17.20 | 82.67 | |
| | 09/13/91 | | | | 15.52 | 84.35 | 1.68 |
| | 11/22/91 | | | | 14.19 | 85.68 | 1.33 |
| | 03/16/93 | | | | 13.47 | 86.40 | 0.72 |
| | 01/09/94 | | | | 14.31 | 85.56 | -0.84 |
| | 04/19/94 | | | | 14.17 | 85.70 | 0.14 |
| | 07/20/94 | | | | 13.97 | 85.90 | 0.20 |
| | 10/24/94 | | | | 14.21 | 85.66 | -0.24 |
| | 01/24/95 | | | | 13.78 | 86.09 | 0.43 |
| | 04/02/95 | | | | 14.05 | 85.82 | -0.27 |
| | 07/31/95 | | | | 14.17 | 85.70 | -0.12 |
| | 10/16/95 | | | | 14.07 | 85.80 | 0.10 |
| | 01/10/96 | | | | 14.11 | 85.76 | -0.04 |
| | 04/09/96 | | | | 14.31 | 85.56 | -0.20 |
| | 07/20/96 | | | | 15.20 | 84.67 | -0.89 |
| | 10/21/96 | | | | 13.44 | 86.43 | 1.76 |
| | 01/21/97 | | | | 12.69 | 87.18 | 0.75 |
| | 04/08/97 | | | | 12.52 | 87.35 | 0.17 |
| | 07/29/97 | | | | 13.37 | 86.50 | -0.85 |
| | 10/16/97 | | | | 11.82 | 88.05 | 1.55 |

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SCHLUMBERGER OILFIELD SERVICES FACILITY, ARTESIA, NEW MEXICO.**

| WELL NUMBER | DATE MEASURED | TOTAL WELL DEPTH (FT) | MEASURING POINT | MEASURING POINT ELEVATION* (ft) | DEPTH TO GROUND WATER (ft) | STATIC WATER ELEVATION (FT) | DIFFERENCE FROM PRIOR MEASUREMENT |
|-------------|---------------|-----------------------|-------------------|---------------------------------|----------------------------|-----------------------------|-----------------------------------|
| MW-5 Cont. | 01/06/98 | | | | 11.09 | 88.78 | 0.73 |
| | 04/14/98 | | | | 12.30 | 87.57 | -1.21 |
| | 07/17/98 | | | | 13.32 | 86.55 | -1.02 |
| | 10/27/98 | | | | 13.93 | 85.94 | -0.61 |
| | 02/09/99 | | | | 14.04 | 85.83 | -0.11 |
| | 04/21/99 | | | | 13.54 | 86.33 | 0.50 |
| | 07/13/99 | | | | 11.37 | 88.50 | 2.17 |
| | 10/20/99 | | | | 12.89 | 86.98 | -1.52 |
| MW-6 | 01/23/91 | 35.00 | Protective Casing | 100.84 | 19.59 | 81.25 | |
| | 09/13/91 | | | | 17.43 | 83.41 | 2.16 |
| | 11/21/91 | | | | 16.30 | 84.54 | 1.13 |
| | 03/16/93 | | | | 15.57 | 85.27 | 0.73 |
| | 01/09/94 | | | | 16.42 | 84.42 | -0.85 |
| | 04/19/94 | | | | 16.29 | 84.55 | 0.13 |
| | 07/19/94 | | | | 15.79 | 85.05 | 0.50 |
| | 10/24/94 | | | | 15.83 | 85.01 | -0.04 |
| | 01/24/95 | | | | 15.94 | 84.90 | -0.11 |
| | 04/02/95 | | | | 16.38 | 84.46 | -0.44 |
| | 07/31/95 | | | | 15.88 | 84.96 | 0.50 |
| | 10/16/95 | | | | 16.01 | 84.83 | -0.13 |
| | 01/10/96 | | | | 16.52 | 84.32 | -0.51 |
| | 04/09/96 | | | | 16.70 | 84.14 | -0.18 |
| | 07/21/96 | | | | 17.26 | 83.58 | -0.56 |
| | 10/21/96 | | | | 15.62 | 85.22 | 1.64 |
| | 01/21/97 | | | | 15.21 | 85.63 | 0.41 |
| | 04/08/97 | | | | 15.30 | 85.54 | -0.09 |
| | 07/29/97 | | | | 16.01 | 84.83 | -0.71 |
| | 10/16/97 | | | | 15.01 | 85.83 | 1.00 |
| | 01/06/98 | | | | 14.69 | 86.15 | 0.32 |
| | 04/14/98 | | | | 14.45 | 86.39 | 0.24 |
| | 07/17/98 | | | | 15.62 | 85.22 | -1.17 |
| | 10/27/98 | | | | 15.77 | 85.07 | -0.15 |
| | 02/09/99 | | | | 16.34 | 84.50 | -0.57 |
| | 04/21/99 | | | | 15.57 | 85.27 | 0.77 |
| | 07/13/99 | | | | 13.66 | 87.18 | 1.91 |
| | 10/19/99 | | | | 15.04 | 85.80 | -1.38 |
| MW-7 | 01/23/91 | 35.00 | Protective Casing | 100.23 | 19.01 | 81.22 | |
| | 09/13/91 | | | | 17.43 | 82.80 | 1.58 |
| | 11/21/91 | | | | 16.00 | 84.23 | 1.43 |
| | 03/16/93 | | | | 14.91 | 85.32 | 1.09 |
| | 01/09/94 | | | | 15.99 | 84.24 | -1.08 |
| | 04/19/94 | | | | 15.83 | 84.40 | 0.16 |
| | 07/19/94 | | | | 15.24 | 84.99 | 0.59 |
| | 10/24/94 | | | | 15.32 | 84.91 | -0.08 |
| | 01/24/95 | | | | 15.54 | 84.69 | -0.22 |
| | 04/02/95 | | | | 16.00 | 84.23 | -0.46 |
| | 07/31/95 | | | | 15.57 | 84.66 | 0.43 |
| | 10/16/95 | | | | 15.61 | 84.62 | -0.04 |
| | 01/10/96 | | | | 16.13 | 84.10 | -0.52 |
| | 04/09/96 | | | | 16.30 | 83.93 | -0.17 |
| | 07/21/96 | | | | 16.81 | 83.42 | -0.51 |
| | 10/21/96 | | | | 15.15 | 85.08 | 1.66 |
| | 01/21/97 | | | | 14.81 | 85.42 | 0.34 |
| | 04/08/97 | | | | 14.91 | 85.32 | -0.10 |
| | 07/29/97 | | | | 15.48 | 84.75 | -0.57 |
| | 10/16/97 | | | | 14.52 | 85.71 | 0.96 |
| | 01/06/98 | | | | 13.27 | 86.96 | 1.25 |
| | 04/14/98 | | | | 14.02 | 86.21 | -0.75 |
| | 07/17/98 | | | | 15.10 | 85.13 | -1.08 |
| | 10/27/98 | | | | 15.21 | 85.02 | -0.11 |
| | 02/09/99 | | | | 15.86 | 84.37 | -0.65 |
| | 04/21/99 | | | | 14.96 | 85.27 | 0.90 |
| | 07/13/99 | | | | 13.03 | 87.20 | 1.93 |
| | 10/19/99 | | | | 14.43 | 85.80 | -1.40 |

**TABLE 1. GROUND-WATER MEASUREMENTS AND ELEVATIONS,
SCHLUMBERGER OILFIELD SERVICES FACILITY, ARTESIA, NEW MEXICO.**

| WELL NUMBER | DATE MEASURED | TOTAL WELL DEPTH (FT) | MEASURING POINT | MEASURING POINT ELEVATION* (ft) | DEPTH TO GROUND WATER (ft) | STATIC WATER ELEVATION (FT) | DIFFERENCE FROM PRIOR MEASUREMENT |
|-------------|---------------|-----------------------|-------------------|---------------------------------|----------------------------|-----------------------------|-----------------------------------|
| MW-8 | 01/23/91 | 35.00 | Protective Casing | 101.47 | 20.16 | 81.31 | |
| | 09/13/91 | | | | 18.80 | 82.67 | 1.36 |
| | 11/21/91 | | | | 17.29 | 84.18 | 1.51 |
| | 03/16/93 | | | | 16.03 | 85.44 | 1.26 |
| | 01/09/94 | | | | 17.23 | 84.24 | -1.20 |
| | 04/19/94 | | | | 17.05 | 84.42 | 0.18 |
| | 07/19/94 | | | | 16.50 | 84.97 | 0.55 |
| | 10/24/94 | | | | 16.56 | 84.91 | -0.06 |
| | 01/24/95 | | | | 16.79 | 84.68 | -0.23 |
| | 04/02/95 | | | | 17.24 | 84.23 | -0.45 |
| | 07/31/95 | | | | 16.94 | 84.53 | 0.30 |
| | 10/16/95 | | | | 16.88 | 84.59 | 0.06 |
| | 01/10/96 | | | | 17.38 | 84.09 | -0.50 |
| | 04/09/96 | | | | 17.54 | 83.93 | -0.16 |
| | 07/21/96 | | | | 18.10 | 83.37 | -0.56 |
| | 10/21/96 | | | | 16.40 | 85.07 | 1.70 |
| | 11/22/96 | | | | 16.42 | 85.05 | -0.02 |
| | 01/21/97 | | | | 16.05 | 85.42 | 0.37 |
| | 04/08/97 | | | | 16.11 | 85.36 | -0.06 |
| | 07/29/97 | | | | 16.69 | 84.78 | -0.58 |
| | 10/16/97 | | | | 15.69 | 85.78 | 1.00 |
| | 01/06/98 | | | | 15.38 | 86.09 | 0.31 |
| | 04/14/98 | | | | 15.15 | 86.32 | 0.23 |
| | 07/17/98 | | | | 16.29 | 85.18 | -1.14 |
| | 10/27/98 | | | | 16.39 | 85.08 | -0.10 |
| | 02/09/99 | | | | 17.02 | 84.45 | -0.63 |
| | 04/21/99 | | | | 16.08 | 85.39 | 0.94 |
| | 07/13/99 | | | | 14.13 | 87.34 | 1.95 |
| | 10/19/99 | | | | 15.56 | 85.91 | -1.43 |
| MW-9 | 01/26/91 | 30.00 | Protective Casing | 102.18 | 20.08 | 82.10 | |
| | 09/13/91 | | | | 18.93 | 83.25 | 1.15 |
| | 11/21/91 | | | | 17.35 | 84.83 | 1.58 |
| | 03/16/93 | | | | 16.19 | 85.99 | 1.16 |
| | 01/09/94 | | | | 17.31 | 84.87 | -1.12 |
| | 04/19/94 | | | | 17.33 | 84.85 | -0.02 |
| | 07/19/94 | | | | 16.85 | 85.33 | 0.48 |
| | 10/24/94 | | | | 17.05 | 85.13 | -0.20 |
| | 01/24/95 | | | | 16.92 | 85.26 | 0.13 |
| | 04/02/95 | | | | 17.23 | 84.95 | -0.31 |
| | 07/31/95 | | | | 17.30 | 84.88 | -0.07 |
| | 10/16/95 | | | | 17.16 | 85.02 | 0.14 |
| | 01/10/96 | | | | 17.39 | 84.79 | -0.23 |
| | 04/09/96 | | | | 17.58 | 84.60 | -0.19 |
| | 07/21/96 | | | | 18.38 | 83.80 | -0.80 |
| | 10/21/96 | | | | 16.65 | 85.53 | 1.73 |
| | 01/21/97 | | | | 16.12 | 86.06 | 0.53 |
| | 04/08/97 | | | | 16.04 | 86.14 | 0.08 |
| | 07/29/97 | | | | 16.67 | 85.51 | -0.63 |
| | 10/16/97 | | | | 15.29 | 86.89 | 1.38 |
| | 01/06/98 | | | | 14.78 | 87.40 | 0.51 |
| | 04/14/98 | | | | 14.89 | 87.29 | -0.11 |
| | 07/17/98 | | | | 16.30 | 85.88 | -1.41 |
| | 10/27/98 | | | | 16.62 | 85.56 | -0.32 |
| | 02/09/99 | | | | 17.14 | 85.04 | -0.52 |
| | 04/21/99 | | | | 16.38 | 85.80 | 0.76 |
| | 07/13/99 | | | | 14.27 | 87.91 | 2.11 |
| | 10/19/99 | | | | 15.75 | 86.43 | -1.48 |
| MW-10 | 01/26/91 | 30.00 | Protective Casing | 101.34 | 19.68 | 81.66 | |
| | 09/13/91 | | | | 18.56 | 82.78 | 1.12 |
| | 11/21/91 | | | | 16.96 | 84.38 | 1.60 |
| | 03/16/93 | | | | 15.64 | 85.70 | 1.32 |
| | 01/09/94 | | | | 16.89 | 84.45 | -1.25 |
| | 04/19/94 | | | | 16.73 | 84.61 | 0.16 |
| | 07/19/94 | | | | 16.29 | 85.05 | 0.44 |
| | 10/24/94 | | | | 16.39 | 84.95 | -0.10 |

**TABLE 1. GROUND-WATER MEASUREMENTS AND ELEVATIONS,
SCHLUMBERGER OILFIELD SERVICES FACILITY, ARTESIA, NEW MEXICO.**

| WELL NUMBER | DATE MEASURED | TOTAL WELL DEPTH (FT) | MEASURING POINT | MEASURING POINT ELEVATION* (ft) | DEPTH TO GROUND WATER (ft) | STATIC WATER ELEVATION (FT) | DIFFERENCE FROM PRIOR MEASUREMENT |
|-------------|---------------|-----------------------|-------------------|---------------------------------|----------------------------|-----------------------------|-----------------------------------|
| MW-10 Cont. | 01/24/95 | | | | 16.48 | 84.86 | -0.09 |
| | 04/02/95 | | | | 16.88 | 84.46 | -0.40 |
| | 07/31/95 | | | | 16.82 | 84.52 | 0.06 |
| | 10/16/95 | | | | 16.65 | 84.69 | 0.17 |
| | 01/10/96 | | | | 17.01 | 84.33 | -0.36 |
| | 04/09/96 | | | | 17.20 | 84.14 | -0.19 |
| | 07/21/96 | | | | 17.85 | 83.49 | -0.65 |
| | 10/21/96 | | | | 16.13 | 85.21 | 1.72 |
| | 01/21/97 | | | | 15.73 | 85.61 | 0.40 |
| | 04/08/97 | | | | 15.70 | 85.64 | 0.03 |
| | 07/29/97 | | | | 16.28 | 85.06 | -0.58 |
| | 10/16/97 | | | | 15.16 | 86.18 | 1.12 |
| | 01/06/98 | | | | 14.74 | 86.60 | 0.42 |
| | 04/14/98 | | | | 14.65 | 86.69 | 0.09 |
| | 07/17/98 | | | | 15.90 | 85.44 | -1.25 |
| | 10/27/98 | | | | 16.04 | 85.30 | -0.14 |
| | 02/09/99 | | | | 16.61 | 84.73 | -0.57 |
| | 04/21/99 | | | | 15.68 | 85.66 | 0.93 |
| | 07/13/99 | | | | 13.68 | 87.66 | 2.00 |
| | 10/19/99 | | | | 15.15 | 86.19 | -1.47 |
| MW-11 | 01/26/91 | 30.00 | Protective Casing | 100.60 | 19.27 | 81.33 | |
| | 09/13/91 | | | | 17.81 | 82.79 | 1.46 |
| | 11/21/91 | | | | 16.35 | 84.25 | 1.46 |
| | 03/16/93 | | | | 15.20 | 85.40 | 1.15 |
| | 01/09/94 | | | | 16.31 | 84.29 | -1.11 |
| | 04/19/94 | | | | 16.17 | 84.43 | 0.14 |
| | 07/19/94 | | | | 15.63 | 84.97 | 0.54 |
| | 10/24/94 | | | | 15.72 | 84.88 | -0.09 |
| | 01/24/95 | | | | 15.89 | 84.71 | -0.17 |
| | 04/02/95 | | | | 16.33 | 84.27 | -0.44 |
| | 07/31/95 | | | | 16.03 | 84.57 | 0.30 |
| | 10/16/95 | | | | 16.00 | 84.60 | 0.03 |
| | 01/10/96 | | | | 16.45 | 84.15 | 0.45 |
| | 04/09/96 | | | | 16.62 | 83.98 | -0.17 |
| | 07/21/96 | | | | 17.21 | 83.39 | -0.59 |
| | 10/21/96 | | | | 15.52 | 85.08 | 1.69 |
| | 01/21/97 | | | | 15.15 | 85.45 | 0.37 |
| | 04/08/97 | | | | 15.19 | 85.41 | -0.04 |
| | 07/29/97 | | | | 15.78 | 84.82 | -0.59 |
| | 10/16/97 | | | | 14.75 | 85.85 | 1.03 |
| | 01/06/98 | | | | 14.44 | 86.16 | 0.31 |
| | 04/14/98 | | | | 14.22 | 86.38 | 0.22 |
| | 07/17/98 | | | | 15.41 | 85.19 | -1.19 |
| | 10/27/98 | | | | 15.50 | 85.10 | -0.09 |
| | 02/09/99 | | | | 16.11 | 84.49 | -0.61 |
| | 04/21/99 | | | | 15.21 | 85.39 | 0.90 |
| | 07/13/99 | | | | 13.25 | 87.35 | 1.96 |
| | 10/19/99 | | | | 14.68 | 85.92 | -1.43 |
| MW-12 | 01/26/91 | 34.00 | Protective Casing | 100.69 | 19.24 | 81.45 | |
| | 09/13/91 | | | | 17.59 | 83.10 | 1.65 |
| | 11/21/91 | | | | 16.21 | 84.48 | 1.38 |
| | 03/16/93 | | | | 15.22 | 85.47 | 0.99 |
| | 01/09/94 | | | | 16.25 | 84.44 | -1.03 |
| | 04/19/94 | | | | 16.13 | 84.56 | 0.12 |
| | 07/19/94 | | | | 15.63 | 85.06 | 0.50 |
| | 10/24/94 | | | | 15.73 | 84.96 | -0.10 |
| | 01/24/95 | | | | 15.80 | 84.89 | -0.07 |
| | 04/02/95 | | | | 16.23 | 84.46 | -0.43 |
| | 07/31/95 | | | | 15.96 | 84.73 | 0.27 |
| | 10/16/95 | | | | 15.93 | 84.76 | 0.03 |
| | 01/10/96 | | | | 16.35 | 84.34 | -0.42 |
| | 04/09/96 | | | | 16.52 | 84.17 | -0.17 |
| | 07/21/96 | | | | 17.15 | 83.54 | -0.63 |
| | 10/21/96 | | | | 15.48 | 85.21 | 1.67 |
| | 01/21/97 | | | | 15.04 | 85.65 | 0.44 |

**TABLE 1. GROUND-WATER MEASUREMENTS AND ELEVATIONS,
SCHLUMBERGER OILFIELD SERVICES FACILITY, ARTESIA, NEW MEXICO.**

| WELL NUMBER | DATE MEASURED | TOTAL WELL DEPTH (Ft) | MEASURING POINT | MEASURING POINT ELEVATION* (ft) | DEPTH TO GROUND WATER (ft) | STATIC WATER ELEVATION (Ft) | DIFFERENCE FROM PRIOR MEASUREMENT |
|-------------|---------------|-----------------------|-------------------|---------------------------------|----------------------------|-----------------------------|-----------------------------------|
| MW-12 Cont. | 04/08/97 | | | | 15.10 | 85.59 | -0.06 |
| | 07/29/97 | | | | 15.73 | 84.96 | -0.63 |
| | 10/16/97 | | | | 14.57 | 86.12 | 1.16 |
| | 01/06/98 | | | | 14.22 | 86.47 | 0.35 |
| | 04/14/98 | | | | 14.09 | 86.60 | 0.13 |
| | 07/17/98 | | | | 15.35 | 85.34 | -1.26 |
| | 10/27/98 | | | | 15.36 | 85.33 | -0.01 |
| | 02/09/99 | | | | 16.00 | 84.69 | -0.64 |
| | 04/21/99 | | | | 15.19 | 85.50 | 0.81 |
| | 07/13/99 | | | | 13.12 | 87.57 | 2.07 |
| | 10/19/99 | | | | 14.63 | 86.06 | -1.51 |
| MW-13 | 09/13/91 | 45.00 | Protective Casing | 99.25 | 15.10 | 84.15 | |
| | 11/21/91 | | | | 13.95 | 85.30 | 1.15 |
| | 03/16/93 | | | | 13.22 | 86.03 | 0.73 |
| | 01/09/94 | | | | 14.03 | 85.22 | -0.81 |
| | 04/19/94 | | | | 13.90 | 85.35 | 0.13 |
| | 07/20/94 | | | | 13.70 | 85.55 | 0.20 |
| | 10/24/94 | | | | 13.86 | 85.39 | -0.16 |
| | 01/24/95 | | | | 13.56 | 85.69 | 0.30 |
| | 04/02/95 | | | | 13.87 | 85.38 | -0.31 |
| | 07/31/95 | | | | 13.84 | 85.41 | 0.03 |
| | 10/16/95 | | | | 13.83 | 85.42 | 0.01 |
| | 01/10/96 | | | | 14.02 | 85.23 | -0.19 |
| | 04/09/96 | | | | 14.20 | 85.05 | -0.18 |
| | 07/20/96 | | | | 15.04 | 84.21 | -0.84 |
| | 10/21/96 | | | | 13.31 | 85.94 | 1.73 |
| | 01/21/97 | | | | 12.70 | 86.55 | 0.61 |
| | 04/08/97 | | | | 12.48 | 86.77 | 0.22 |
| | 07/29/97 | | | | 13.43 | 85.82 | -0.95 |
| | 10/16/97 | | | | 12.02 | 87.23 | 1.41 |
| | 01/06/98 | | | | 11.44 | 87.81 | 0.58 |
| | 04/14/98 | | | | 11.50 | 87.75 | -0.06 |
| | 07/17/98 | | | | 13.10 | 86.15 | -1.60 |
| | 10/27/98 | | | | 13.58 | 85.67 | -0.48 |
| | 02/09/99 | | | | 13.81 | 85.44 | -0.23 |
| | 04/21/99 | | | | 13.22 | 86.03 | 0.59 |
| | 07/13/99 | | | | 11.08 | 88.17 | 2.14 |
| | 10/20/99 | | | | 12.64 | 86.61 | -1.56 |
| MW-14 | 09/13/91 | 35.00 | Protective Casing | 98.74 | 14.60 | 84.14 | |
| | 11/21/91 | | | | 13.61 | 85.13 | 0.99 |
| | 03/16/93 | | | | 13.00 | 85.74 | 0.61 |
| | 01/09/94 | | | | 13.71 | 85.03 | -0.71 |
| | 04/19/94 | | | | 13.63 | 85.11 | 0.08 |
| | 07/20/94 | | | | 13.39 | 85.35 | 0.24 |
| | 10/24/94 | | | | 13.48 | 85.26 | -0.09 |
| | 01/25/95 | | | | 13.26 | 85.48 | 0.22 |
| | 04/02/95 | | | | 13.61 | 85.13 | -0.35 |
| | 07/31/95 | | | | 13.44 | 85.30 | 0.17 |
| | 10/16/95 | | | | 13.52 | 85.22 | -0.08 |
| | 01/10/96 | | | | 13.76 | 84.98 | -0.24 |
| | 04/09/96 | | | | 13.96 | 84.78 | -0.20 |
| | 07/20/96 | | | | 14.74 | 84.00 | -0.78 |
| | 10/21/96 | | | | 13.03 | 85.71 | 1.71 |
| | 01/21/97 | | | | 12.47 | 86.27 | 0.56 |
| | 04/08/97 | | | | 12.44 | 86.30 | 0.03 |
| | 07/29/97 | | | | 13.30 | 85.44 | -0.86 |
| | 10/16/97 | | | | 11.93 | 86.81 | 1.37 |
| | 01/06/98 | | | | 11.46 | 87.28 | 0.47 |
| | 04/14/98 | | | | 11.48 | 87.26 | -0.02 |
| | 07/17/98 | | | | 12.94 | 85.80 | -1.46 |
| | 10/27/98 | | | | 13.25 | 85.49 | -0.31 |
| | 02/09/99 | | | | 13.59 | 85.15 | -0.34 |
| | 04/21/99 | | | | 12.96 | 85.78 | 0.63 |
| | 07/13/99 | | | | 10.85 | 87.89 | 2.11 |
| | 10/20/99 | | | | 12.42 | 86.32 | -1.57 |

**TABLE 1. GROUND-WATER MEASUREMENTS AND ELEVATIONS,
SCHLUMBERGER OILFIELD SERVICES FACILITY, ARTESIA, NEW MEXICO.**

| WELL NUMBER | DATE MEASURED | TOTAL WELL DEPTH (ft) | MEASURING POINT | MEASURING POINT ELEVATION* (ft) | DEPTH TO GROUND WATER (ft) | STATIC WATER ELEVATION (ft) | DIFFERENCE FROM PRIOR MEASUREMENT |
|-------------|---------------|-----------------------|-------------------|---------------------------------|----------------------------|-----------------------------|-----------------------------------|
| MW-15 | 09/13/91 | 34.00 | Protective Casing | 100.05 | 16.30 | 83.75 | |
| | 11/21/91 | | | | 15.01 | 85.04 | 1.29 |
| | 03/16/93 | | | | 13.95 | 86.10 | 1.06 |
| | 01/09/94 | | | | 14.91 | 85.14 | -0.96 |
| | 04/19/94 | | | | 14.80 | 85.25 | 0.11 |
| | 07/20/94 | | | | 14.56 | 85.49 | 0.24 |
| | 10/24/94 | | | | 14.73 | 85.32 | -0.17 |
| | ** | | | | 16.00 | 84.05 | -1.27 |
| | 01/24/95 | | | | 14.80 | 85.25 | 1.20 |
| | 04/02/95 | | | | 14.82 | 85.23 | -0.02 |
| | 07/31/95 | | | | 14.74 | 85.31 | 0.08 |
| | 10/16/95 | | | | 14.95 | 85.10 | -0.21 |
| | 01/10/96 | | | | 15.11 | 84.94 | -0.16 |
| | 04/09/96 | | | | 15.96 | 84.09 | -0.85 |
| | 07/20/96 | | | | 14.22 | 85.83 | 1.74 |
| | 10/21/96 | | | | 13.64 | 86.41 | 0.58 |
| | 01/21/97 | | | | 13.53 | 86.52 | 0.11 |
| | 04/08/97 | | | | 14.32 | 85.73 | -0.79 |
| | 07/29/97 | | | | 12.90 | 87.15 | 1.42 |
| | 10/16/97 | | | | 12.30 | 87.75 | 0.60 |
| | 01/06/98 | | | | 12.38 | 87.67 | -0.08 |
| | 04/14/98 | | | | 13.93 | 86.12 | -1.55 |
| | 07/17/98 | | | | 14.38 | 85.67 | -0.45 |
| | 10/27/98 | | | | 14.68 | 85.37 | -0.30 |
| | 02/09/99 | | | | 14.03 | 86.02 | 0.65 |
| | 04/21/99 | | | | 11.90 | 88.15 | 2.13 |
| | 07/13/99 | | | | 13.42 | 86.63 | -1.52 |
| | 10/20/99 | | | | | | |
| MW-17D | 04/02/95 | 19.00 | Protective Casing | 101.29 | 16.80 | 84.49 | |
| | 07/31/95 | | | | 16.48 | 84.81 | 0.32 |
| | 10/16/95 | | | | 16.51 | 84.78 | -0.03 |
| | 01/10/96 | | | | 16.90 | 84.39 | -0.39 |
| | 04/09/96 | | | | 17.10 | 84.19 | -0.20 |
| | 07/21/96 | | | | 17.70 | 83.59 | -0.60 |
| | 10/21/96 | | | | 16.02 | 85.27 | 1.68 |
| | 01/21/97 | | | | 15.60 | 85.69 | 0.42 |
| | 04/08/97 | | | | 15.64 | 85.65 | -0.04 |
| | 07/29/97 | | | | 16.32 | 84.97 | -0.68 |
| | 10/16/97 | | | | 15.11 | 86.18 | 1.21 |
| | 01/06/98 | | | | 14.80 | 86.49 | 0.31 |
| | 04/14/98 | | | | 14.68 | 86.61 | 0.12 |
| | 07/17/98 | | | | 15.92 | 85.37 | -1.24 |
| | 10/27/98 | | | | 15.95 | 85.34 | -0.03 |
| | 02/09/99 | | | | 16.63 | 84.66 | -0.68 |
| | 04/21/99 | | | | 15.82 | 85.47 | 0.81 |
| | 07/13/99 | | | | 13.77 | 87.52 | 2.05 |
| | 10/19/99 | | | | 15.32 | 85.97 | -1.55 |
| MW-17A | 04/02/95 | 26.00 | Protective Casing | 100.57 | 16.05 | 84.52 | |
| | 07/31/95 | | | | 15.75 | 84.82 | 0.30 |
| | 10/16/95 | | | | 15.77 | 84.80 | -0.02 |
| | 01/10/96 | | | | 16.18 | 84.39 | -0.41 |
| | 04/09/96 | | | | 16.37 | 84.20 | -0.19 |
| | 07/21/96 | | | | 16.98 | 83.59 | -0.61 |
| | 10/21/96 | | | | 15.30 | 85.27 | 1.68 |
| | 01/21/97 | | | | 14.88 | 85.69 | 0.42 |
| | 04/08/97 | | | | 14.92 | 85.65 | -0.04 |
| | 07/29/97 | | | | 15.59 | 84.98 | -0.67 |
| | 10/16/97 | | | | 14.41 | 86.16 | 1.18 |
| | 01/06/98 | | | | 14.09 | 86.48 | 0.32 |
| | 04/14/98 | | | | 13.95 | 86.62 | 0.14 |
| | 07/17/98 | | | | 15.20 | 85.37 | -1.25 |
| | 10/27/98 | | | | 15.23 | 85.34 | -0.03 |
| | 02/09/99 | | | | 15.88 | 84.69 | -0.65 |
| | 04/21/99 | | | | 15.10 | 85.47 | 0.78 |
| | 07/13/99 | | | | 13.02 | 87.55 | 2.08 |
| | 10/19/99 | | | | 14.54 | 86.03 | -1.52 |

TABLE 1. GROUND-WATER MEASUREMENTS AND ELEVATIONS,
SCHLUMBERGER OILFIELD SERVICES FACILITY, ARTESIA, NEW MEXICO.

| WELL NUMBER | DATE MEASURED | TOTAL WELL DEPTH (FT) | MEASURING POINT | MEASURING POINT ELEVATION* (FT) | DEPTH TO GROUND WATER (FT) | STATIC WATER ELEVATION (FT) | DIFFERENCE FROM PRIOR MEASUREMENT |
|-------------|---------------|-----------------------|-------------------|---------------------------------|----------------------------|-----------------------------|-----------------------------------|
| MW-17B | 04/02/95 | 34.00 | Protective Casing | 101.28 | 16.79 | 84.49 | |
| | 07/31/95 | | | 16.50 | 84.78 | | 0.29 |
| | 10/16/95 | | | 16.51 | 84.77 | | -0.01 |
| | 01/10/96 | | | 16.92 | 84.36 | | -0.41 |
| | 04/09/96 | | | 17.10 | 84.18 | | -0.18 |
| | 07/21/96 | | | 17.71 | 83.57 | | -0.61 |
| | 10/21/96 | | | 16.02 | 85.26 | | 1.69 |
| | 01/21/97 | | | 15.64 | 85.64 | | 0.38 |
| | 04/08/97 | | | 15.67 | 85.61 | | -0.03 |
| | 07/29/97 | | | 16.30 | 84.98 | | -0.63 |
| | 10/16/97 | | | 15.16 | 86.12 | | 1.14 |
| | 01/06/98 | | | 14.84 | 86.44 | | 0.32 |
| | 04/14/98 | | | 14.70 | 86.58 | | 0.14 |
| | 07/17/98 | | | 15.92 | 85.36 | | -1.22 |
| | 10/27/98 | | | 16.00 | 85.28 | | -0.08 |
| | 02/09/99 | | | 16.62 | 84.66 | | -0.62 |
| | 04/21/99 | | | 15.79 | 85.49 | | 0.83 |
| | 07/13/99 | | | 13.77 | 87.51 | | 2.02 |
| | 10/19/99 | | | 15.26 | 86.02 | | -1.49 |
| MW-17C | 04/02/95 | 61.00 | Protective Casing | 101.33 | 16.93 | 84.40 | |
| | 07/31/95 | | | 16.66 | 84.67 | | 0.27 |
| | 10/16/95 | | | 16.64 | 84.69 | | 0.02 |
| | 01/10/96 | | | 17.08 | 84.25 | | -0.44 |
| | 04/09/96 | | | 17.25 | 84.08 | | -0.17 |
| | 07/21/96 | | | 17.85 | 83.48 | | -0.60 |
| | 10/21/96 | | | 16.17 | 85.16 | | 1.68 |
| | 01/21/97 | | | 15.75 | 85.58 | | 0.42 |
| | 04/08/97 | | | 15.80 | 85.53 | | -0.05 |
| | 07/29/97 | | | 16.46 | 84.87 | | -0.66 |
| | 10/16/97 | | | 15.33 | 86.00 | | 1.13 |
| | 01/06/98 | | | 15.00 | 86.33 | | 0.33 |
| | 04/14/98 | | | 14.85 | 86.48 | | 0.15 |
| | 07/17/98 | | | 16.09 | 85.24 | | -1.24 |
| | 10/27/98 | | | 16.17 | 85.16 | | -0.08 |
| | 02/09/99 | | | 16.77 | 84.56 | | -0.60 |
| | 04/21/99 | | | 15.95 | 85.38 | | 0.82 |
| | 07/13/99 | | | 13.94 | 87.39 | | 2.01 |
| | 10/19/99 | | | 15.43 | 85.90 | | -1.49 |
| MW-18 | 04/02/95 | 28.00 | Protective Casing | 98.72 | 14.77 | 83.95 | |
| | 07/31/95 | | | 14.21 | 84.51 | | 0.56 |
| | 10/16/95 | | | 14.25 | 84.47 | | -0.04 |
| | 01/10/96 | | | 14.90 | 83.82 | | -0.65 |
| | 04/09/96 | | | 15.05 | 83.67 | | -0.15 |
| | 07/21/96 | | | 15.44 | 83.28 | | -0.39 |
| | 10/21/96 | | | 13.78 | 84.94 | | 1.66 |
| | 11/22/96 | | | 13.84 | 84.88 | | -0.06 |
| | 01/21/97 | | | 13.54 | 85.18 | | 0.30 |
| | 04/08/97 | | | 13.66 | 85.06 | | -0.12 |
| | 07/29/97 | | | 14.13 | 84.59 | | -0.47 |
| | 10/16/97 | | | 13.34 | 85.38 | | 0.79 |
| | 01/06/98 | | | 13.13 | 85.59 | | 0.21 |
| | 04/14/98 | | | 12.79 | 85.93 | | 0.34 |
| | 07/17/98 | | | 13.75 | 84.97 | | -0.96 |
| | 10/27/98 | | | 13.82 | 84.90 | | -0.07 |
| | 02/09/99 | | | 14.58 | 84.14 | | -0.76 |
| | 04/21/99 | | | 13.58 | 85.14 | | 1.00 |
| | 07/13/99 | | | 11.66 | 87.06 | | 1.92 |
| | 10/19/99 | | | 13.01 | 85.71 | | -1.35 |
| MW-19 | 04/02/95 | 28.00 | Protective Casing | 99.08 | 14.86 | 84.22 | |
| | 07/31/95 | | | 14.29 | 84.79 | | 0.57 |
| | 10/16/95 | | | 14.39 | 84.69 | | -0.10 |
| | 01/10/96 | | | 14.98 | 84.10 | | -0.59 |
| | 04/09/96 | | | 15.14 | 83.94 | | -0.16 |
| | 07/21/96 | | | 15.62 | 83.46 | | -0.48 |

**TABLE 1. GROUND-WATER MEASUREMENTS AND ELEVATIONS,
SCHLUMBERGER OILFIELD SERVICES FACILITY, ARTESIA, NEW MEXICO.**

| WELL NUMBER | DATE MEASURED | TOTAL WELL DEPTH (ft) | MEASURING POINT | MEASURING POINT ELEVATION* (ft) | DEPTH TO GROUND WATER (ft) | STATIC WATER ELEVATION (ft) | DIFFERENCE FROM PRIOR MEASUREMENT |
|-------------|---------------|-----------------------|-------------------|---------------------------------|----------------------------|-----------------------------|-----------------------------------|
| MW-19 Cont. | 10/21/96 | | | | 14.00 | 85.08 | 1.62 |
| | 11/22/96 | | | | 14.03 | 85.05 | -0.03 |
| | 01/21/97 | | | | 13.69 | 85.39 | 0.34 |
| | 04/08/97 | | | | 13.76 | 85.32 | -0.07 |
| | 07/29/97 | | | | 14.37 | 84.71 | -0.61 |
| | 10/16/97 | | | | 13.47 | 85.61 | 0.90 |
| | 01/06/98 | | | | 13.21 | 85.87 | 0.26 |
| | 04/14/98 | | | | 12.90 | 86.18 | 0.31 |
| | 07/17/98 | | | | 13.96 | 85.12 | -1.06 |
| | 10/27/98 | | | | 14.11 | 84.97 | -0.15 |
| | 02/09/99 | | | | 14.74 | 84.34 | -0.63 |
| | 04/21/99 | | | | 13.91 | 85.17 | 0.83 |
| | 07/13/99 | | | | 11.99 | 87.09 | 1.92 |
| | 10/19/99 | | | | 13.35 | 85.73 | -1.36 |
| MW-20 | 11/22/96 | 28.00 | Protective Casing | 101.09 | 16.28 | 84.81 | |
| | 01/21/97 | | | | 16.08 | 85.01 | 0.20 |
| | 04/08/97 | | | | 16.04 | 85.05 | 0.04 |
| | 07/29/97 | | | | 16.46 | 84.63 | -0.42 |
| | 10/16/97 | | | | 15.76 | 85.33 | 0.70 |
| | 01/06/98 | | | | 15.61 | 85.48 | 0.15 |
| | 04/14/98 | | | | 15.13 | 85.96 | 0.48 |
| | 07/17/98 | | | | 16.15 | 84.94 | -1.02 |
| | 10/27/98 | | | | 16.07 | 85.02 | 0.08 |
| | 02/09/99 | | | | 16.94 | 84.15 | -0.87 |
| | 04/21/99 | | | | 15.48 | 85.61 | 1.46 |
| | 07/13/99 | | | | 13.50 | 87.59 | 1.98 |
| | 10/19/99 | | | | 15.25 | 85.84 | -1.75 |
| MW-21 | 11/22/96 | 25.00 | Protective Casing | 98.88 | 14.36 | 84.52 | |
| | 01/21/97 | | | | 14.26 | 84.62 | 0.10 |
| | 04/08/97 | | | 98.89 | 14.41 | 84.48 | -0.14 |
| | 07/29/97 | | | | 14.54 | 84.35 | -0.13 |
| | 10/16/97 | | | | 14.18 | 84.71 | 0.36 |
| | 01/06/98 | | | | 14.17 | 84.72 | 0.01 |
| | 04/14/98 | | | | 13.60 | 85.29 | 0.57 |
| | 07/17/98 | | | | 14.21 | 84.68 | -0.61 |
| | 10/27/98 | | | | 14.22 | 84.67 | -0.01 |
| | 02/09/99 | | | | 15.29 | 83.60 | -1.07 |
| | 04/21/99 | | | | 13.94 | 84.95 | 1.35 |
| | 07/13/99 | | | | 12.03 | 86.86 | 1.91 |
| | 10/19/99 | | | | 13.41 | 85.48 | -1.38 |
| MW-22 | 11/22/96 | 24.50 | Protective Casing | 97.16 | 12.88 | 84.28 | |
| | 01/21/97 | | | | 12.94 | 84.22 | -0.06 |
| | 04/08/97 | | | 97.14 | 13.42 | 83.72 | -0.50 |
| | 07/29/97 | | | | 13.16 | 83.98 | 0.26 |
| | 10/16/97 | | | | 13.23 | 83.91 | -0.07 |
| | 01/06/98 | | | | 13.46 | 83.68 | -0.23 |
| | 04/14/98 | | | | 12.80 | 84.34 | 0.66 |
| | 07/17/98 | | | | 12.65 | 84.49 | 0.15 |
| | 10/27/98 | | | | 12.90 | 84.24 | -0.25 |
| | 02/09/99 | | | | 14.35 | 82.79 | -1.45 |
| | 04/21/99 | | | | 13.15 | 83.99 | 1.20 |
| | 07/13/99 | | | | 11.45 | 85.69 | 1.70 |
| | 10/19/99 | | | | 12.22 | 84.92 | -0.77 |
| MW-23 | 11/22/96 | 25.00 | Protective Casing | 97.33 | 12.72 | 84.61 | |
| | 01/21/97 | | | | 12.59 | 84.74 | 0.13 |
| | 04/08/97 | | | 97.30 | 13.07 | 84.23 | -0.51 |
| | 07/29/97 | | | | 13.14 | 84.16 | -0.07 |
| | 10/16/97 | | | | 13.06 | 84.24 | 0.08 |
| | 01/06/98 | | | | 13.13 | 84.17 | -0.07 |
| | 04/14/98 | | | | 12.52 | 84.78 | 0.61 |
| | 07/17/98 | | | | 12.64 | 84.66 | -0.12 |
| | 10/27/98 | | | | 12.84 | 84.46 | -0.20 |
| | 02/09/99 | | | | 14.16 | 83.14 | -1.32 |

**TABLE 1. GROUND-WATER MEASUREMENTS AND ELEVATIONS,
SCHLUMBERGER OILFIELD SERVICES FACILITY, ARTESIA, NEW MEXICO.**

| WELL NUMBER | DATE MEASURED | TOTAL WELL DEPTH (ft) | MEASURING POINT | MEASURING POINT ELEVATION* (ft) | DEPTH TO GROUND WATER (ft) | STATIC WATER ELEVATION (ft) | DIFFERENCE FROM PRIOR MEASUREMENT |
|-------------|---------------|-----------------------|-------------------|---------------------------------|----------------------------|-----------------------------|-----------------------------------|
| MW-23 Cont. | 04/21/99 | | | | 13.25 | 84.05 | 0.91 |
| | 07/13/99 | | | | 11.55 | 85.75 | 1.70 |
| | 10/19/99 | | | | 12.39 | 84.91 | -0.84 |
| MW-24 | 11/22/96 | 27.00 | Protective Casing | 103.42 | 17.91 | 85.51 | |
| | 01/21/97 | | | | 17.56 | 85.86 | 0.35 |
| | 04/08/97 | | | 103.41 | 17.40 | 86.01 | 0.15 |
| | 07/29/97 | | | | 17.72 | 85.69 | -0.32 |
| | 10/16/97 | | | | 16.58 | 86.83 | 1.14 |
| | 01/06/98 | | | | 16.01 | 87.40 | 0.57 |
| | 04/14/98 | | | | 16.17 | 87.24 | -0.16 |
| | 07/17/98 | | | | 17.49 | 85.92 | -1.32 |
| | 10/27/98 | | | | 17.40 | 86.01 | 0.09 |
| | 02/09/99 | | | | 18.09 | 85.32 | -0.69 |
| | 04/21/99 | | | | 16.98 | 86.43 | 1.11 |
| | 07/13/99 | | | | 14.88 | 88.53 | 2.10 |
| | 10/19/99 | | | | 16.51 | 86.90 | -1.63 |
| MW-25 | 04/08/97 | 25.00 | Protective Casing | 97.64 | 14.23 | 83.41 | |
| | 07/29/97 | | | | 13.77 | 83.87 | 0.46 |
| | 10/16/97 | | | | 13.99 | 83.65 | -0.22 |
| | 01/06/98 | | | | 14.37 | 83.27 | -0.38 |
| | 04/14/98 | | | | 13.65 | 83.99 | 0.72 |
| | 07/17/98 | | | | 13.26 | 84.38 | 0.39 |
| | 10/27/98 | | | | 13.57 | 84.07 | -0.31 |
| | 02/09/99 | | | | 15.17 | 82.47 | -1.60 |
| | 04/21/99 | | | | 13.75 | 83.89 | 1.42 |
| | 07/13/99 | | | | 12.16 | 85.48 | 1.59 |
| | 10/19/99 | | | | 12.81 | 84.83 | -0.65 |
| MW-26 | 04/08/97 | 25.00 | Protective Casing | 96.11 | 13.06 | 83.05 | |
| | 07/29/97 | | | | 12.23 | 83.88 | 0.83 |
| | 10/16/97 | | | | 12.75 | 83.36 | -0.52 |
| | 01/06/98 | | | | 13.40 | 82.71 | -0.65 |
| | 04/14/98 | | | | 12.61 | 83.50 | 0.79 |
| | 07/17/98 | | | | 11.64 | 84.47 | 0.97 |
| | 10/27/98 | | | | 12.16 | 83.95 | -0.52 |
| | 02/09/99 | | | | 14.13 | 81.98 | -1.97 |
| | 04/21/99 | | | | 12.41 | 83.70 | 1.72 |
| | 07/13/99 | | | | 11.11 | 85.00 | 1.30 |
| | 10/19/99 | | | | 11.40 | 84.71 | -0.29 |
| MW-27 | 04/08/97 | 25.00 | Protective Casing | 96.17 | 13.06 | 83.11 | |
| | 07/29/97 | | | | 12.21 | 83.96 | 0.85 |
| | 10/16/97 | | | | 12.79 | 83.38 | -0.58 |
| | 01/06/98 | | | | 13.56 | 82.61 | -0.77 |
| | 04/14/98 | | | | 12.75 | 83.42 | 0.81 |
| | 07/17/98 | | | | 11.53 | 84.64 | 1.22 |
| | 10/27/98 | | | | 12.09 | 84.08 | -0.56 |
| | 02/09/99 | | | | 14.29 | 81.88 | -2.20 |
| | 04/21/99 | | | | 12.53 | 83.64 | 1.76 |
| | 07/13/99 | | | | 11.41 | 84.76 | 1.12 |
| | 10/19/99 | | | | 11.48 | 84.69 | -0.07 |
| MW-28 | 07/17/98 | 25.00 | Protective Casing | 97.93 | 14.32 | 83.61 | |
| | 10/27/98 | | | | 14.43 | 83.50 | -0.11 |
| | 02/09/99 | | | | 15.71 | 82.22 | -1.28 |
| | 04/21/99 | | | | 14.28 | 83.65 | 1.43 |
| | 07/13/99 | | | | 12.41 | 85.52 | 1.87 |
| | 10/19/99 | | | | 13.48 | 84.45 | -1.07 |

TABLE 1. GROUND-WATER MEASUREMENTS AND ELEVATIONS,
SCHLUMBERGER OILFIELD SERVICES FACILITY, ARTESIA, NEW MEXICO.

| WELL NUMBER | DATE MEASURED | TOTAL WELL DEPTH (FT) | MEASURING POINT | MEASURING POINT ELEVATION* (ft) | DEPTH TO GROUND WATER (ft) | STATIC WATER ELEVATION (FT) | DIFFERENCE FROM PRIOR MEASUREMENT |
|-------------|---------------|-----------------------|-------------------|---------------------------------|----------------------------|-----------------------------|-----------------------------------|
| MW-29 | 07/17/98 | 25.00 | Protective Casing | 97.04 | 14.07 | 82.97 | - |
| | 10/27/98 | | | | 14.36 | 82.68 | -0.29 |
| | 02/09/99 | | | | 15.83 | 81.21 | -1.47 |
| | 04/21/99 | | | | 14.48 | 82.56 | 1.35 |
| | 07/13/99 | | | | 12.84 | 84.20 | 1.64 |
| | 10/19/99 | | | | 13.35 | 83.69 | -0.51 |
| MW-30 | 07/17/98 | 25.00 | Protective Casing | 96.58 | 12.68 | 83.90 | - |
| | 10/27/98 | | | | 13.12 | 83.46 | -0.44 |
| | 02/09/99 | | | | 14.88 | 81.70 | -1.76 |
| | 04/21/99 | | | | 13.38 | 83.20 | 1.50 |
| | 07/13/99 | | | | 11.85 | 84.73 | 1.53 |
| | 10/19/99 | | | | 12.28 | 84.30 | -0.43 |

NOTES:

NM = not measured

* = measured from a temporary benchmark of arbitrary elevation = 100.00 feet.
Benchmark is located on the concrete right up against the east shop wall,
at the northeast corner of the shop.

** = water level measurement may be in error

TABLE 2. SUMMARY OF LABORATORY ANALYTICAL RESULTS - GROUND-WATER SAMPLES,
SCHLUMBERGER FACILITY, ARTESIA, NEW MEXICO

| WELL NUMBER | SAMPLE DATE | BENZENE (mg/L) | ETHYL-BENZENE (mg/L) | TOLUENE (mg/L) | XYLENES (mg/L) | 1,1-DCA (mg/L) | 1,2-DCA (mg/L) | 1,1-DCE (mg/L) | TCE (mg/L) | PCE (mg/L) |
|-------------|---------------|-------------------|-------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------|---------------|
| MWV-1 | 01/26/91 | 0.033 | ND(0.005) | 0.029 | 0.130 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 09/15/91 | ND(0.001) | ND(0.001) | 0.002 | 0.009 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 11/22/91 | 0.026 | ND(0.001) | 0.007 | 0.014 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 03/16/93 | 0.016 | ND(0.001) | ND(0.001) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.001) | ND(0.001) |
| | 01/10/94 | 0.006 | ND(0.001) | 0.001 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.001) | ND(0.001) |
| | 04/19/94 | 0.035 | ND(0.005) | 0.005 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 07/20/94 | 0.008 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 10/25/94 | 0.027 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 01/25/95 | 0.025 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 04/03/95 | ND(0.005) | ND(0.005) | 0.008 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 08/01/95 | 0.082 | ND(0.005) | 0.004 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 10/18/95 | 0.064 | ND(0.005) | 0.007 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 01/10/96 | 0.076 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 04/13/96 | 0.048 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 07/21/96 | 0.040 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 10/22/96 | 0.027 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 01/24/97 | 0.002 | ND(0.001) | 0.001 | ND(0.002) | ND(0.002) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 04/09/97 | 0.006 | ND(0.001) | 0.002 | ND(0.001) | ND(0.002) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 07/30/97 | 0.018 | ND(0.002) | 0.004 | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.002) |
| | 10/17/97 | 0.026 | ND(0.001) | 0.003 | ND(0.001) | ND(0.002) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 10/19/99 | ND(0.001) | 0.002 | 0.004 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| MWV-2 | 01/26/91 | 0.210 | 0.590 | 0.071 | 1.700 | 0.048 | ND(0.01) | ND(0.01) | ND(0.01) | 0.110 |
| | 01/26/91 dup. | 0.190 | 0.450 | 0.062 | 1.300 | 0.043 | ND(0.01) | ND(0.01) | ND(0.01) | 0.078 |
| | 09/15/91 | 0.120 | 0.050 | 0.006 | 0.690 | 0.100 | ND(0.005) | 0.005 | ND(0.005) | 0.150 |
| | 11/22/91 | 0.033 | ND(0.001) | 0.001 | 0.088 | 0.110 | ND(0.001) | 0.007 | ND(0.001) | 0.064 |
| | 03/16/93 | 0.019 | ND(0.001) | ND(0.001) | ND(0.005) | 0.060 | ND(0.001) | 0.002 | ND(0.001) | 0.028 |
| | 01/10/94 | 0.024 | ND(0.001) | 0.001 | ND(0.005) | 0.039 | ND(0.001) | ND(0.001) | ND(0.001) | 0.079 |
| | 04/19/94 | 0.045 | 0.004 | ND(0.005) | ND(0.005) | 0.028 | ND(0.005) | ND(0.005) | ND(0.005) | 0.048 |
| | 04/19/94 dup. | 0.043 | 0.005 | ND(0.005) | ND(0.005) | 0.030 | ND(0.005) | ND(0.005) | ND(0.005) | 0.052 |
| | 07/20/94 | 0.022 | ND(0.005) | ND(0.005) | ND(0.005) | 0.026 | ND(0.005) | ND(0.005) | ND(0.005) | 0.033 |
| | 10/25/94 | 0.045 | 0.008 | ND(0.005) | ND(0.005) | 0.030 | ND(0.005) | ND(0.005) | ND(0.005) | 0.021 |
| | 01/25/95 | 0.057 | 0.022 | ND(0.005) | ND(0.005) | 0.024 | ND(0.005) | ND(0.005) | ND(0.005) | 0.037 |
| | 04/03/95 | 0.050 | ND(0.005) | ND(0.005) | ND(0.005) | 0.026 | ND(0.005) | ND(0.005) | ND(0.005) | 0.079 |
| | 08/01/95 | 0.032 | 0.021 | ND(0.005) | ND(0.005) | 0.027 | ND(0.005) | ND(0.005) | ND(0.005) | 0.035 |
| | 10/18/95 | 0.078 | 0.040 | ND(0.005) | ND(0.005) | 0.015 | ND(0.005) | ND(0.005) | ND(0.005) | 0.021 |
| | 10/22/96 | 0.045 | 0.008 | ND(0.005) | ND(0.005) | 0.030 | ND(0.005) | ND(0.005) | ND(0.005) | 0.037 |
| | 01/18/95 dup. | 0.081 | 0.045 | ND(0.005) | ND(0.005) | 0.017 | ND(0.005) | ND(0.005) | ND(0.005) | 0.097 |
| | 01/11/96 | 0.220 | 0.200 | ND(0.005) | ND(0.005) | 0.010 | ND(0.005) | ND(0.005) | ND(0.005) | 0.260 |
| | 04/13/96 | 0.095 | 0.130 | ND(0.005) | 0.110 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.140 |
| | 07/21/96 | 0.092 | 0.079 | ND(0.005) | ND(0.005) | 0.027 | ND(0.005) | ND(0.005) | ND(0.005) | 0.061 |
| | # | 10/17/97 | 0.004 | 0.024 | ND(0.002) | ND(0.004) | 0.001 | ND(0.002) | ND(0.002) | 0.018 |
| | 10/28/98 | 0.002 | 0.035 | ND(0.002) | 0.012 | 0.031 | ND(0.002) | ND(0.002) | ND(0.002) | 0.054 |
| | 10/28/98 | ND(0.005) | 0.043 | ND(0.002) | ND(0.01) | 0.002 | ND(0.005) | ND(0.005) | ND(0.005) | 0.024 |
| | 04/09/97 | 0.015 | 0.029 | ND(0.004) | ND(0.004) | 0.003 | ND(0.002) | ND(0.002) | ND(0.002) | 0.061 |
| | 07/30/97 | 0.010 | 0.045 | ND(0.002) | ND(0.004) | 0.002 | ND(0.002) | ND(0.002) | ND(0.002) | 0.034 |
| | 10/17/97 | 0.004 | 0.024 | ND(0.002) | ND(0.004) | 0.001 | ND(0.002) | ND(0.002) | ND(0.002) | 0.050 |
| | 10/28/98 | ND(0.005) | 0.043 | ND(0.002) | ND(0.01) | 0.002 | ND(0.002) | ND(0.002) | ND(0.002) | 0.036 |
| | 04/12/99 | 0.001 | 0.026 | ND(0.002) | ND(0.001) | 0.003 | ND(0.001) | ND(0.001) | ND(0.001) | 0.054 |
| | 10/20/99 | ND(0.0025) | 0.038 | ND(0.005) | ND(0.0025) | 0.002 | ND(0.0025) | ND(0.0025) | ND(0.0025) | 0.054 |
| | 10/20/99 dup. | ND(0.005) | 0.035 | ND(0.01) | ND(0.005) | 0.002 | ND(0.005) | ND(0.005) | ND(0.005) | 0.054 |

TABLE 2. SUMMARY OF LABORATORY ANALYTICAL RESULTS - GROUND-WATER SAMPLES,
SCHLUMBERGER FACILITY, ARTESIA, NEW MEXICO

**TABLE 2. SUMMARY OF LABORATORY ANALYTICAL RESULTS - GROUND-WATER SAMPLES,
SCHLUMBERGER FACILITY, ARTESIA, NEW MEXICO**

| WELL NUMBER | SAMPLE DATE | BENZENE (mg/L) | ETHYL-BENZENE (mg/L) | TOLUENE (mg/L) | XYLENES (mg/L) | 1,1-DCA (mg/L) | 1,2-DCA (mg/L) | 1,1-DCE (mg/L) | 1,1,1-TCA (mg/L) | TCE (mg/L) | PCE (mg/L) |
|-------------|-------------|-------------------|-------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|---------------|---------------|
| MW-4 Cont. | 01/24/97 | ND(0.001) | ND(0.001) | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 04/09/97 | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.004) | ND(0.004) | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.002) |
| | 07/30/97 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.002) | ND(0.002) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 10/17/97 | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.004) | ND(0.004) | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.002) |
| | 10/28/98 | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.004) | ND(0.004) | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.002) |
| | 04/22/99 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.002) | ND(0.002) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 10/20/99 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.002) | ND(0.002) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| MW-5 | 01/26/91 | 0.014 | ND(0.001) | ND(0.001) | ND(0.005) | 0.004 | ND(0.001) | 0.002 | 0.001 | ND(0.001) | 0.010 |
| | 09/15/91 | ND(0.001) | 0.001 | ND(0.001) | ND(0.005) | 0.005 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | 0.018 |
| | 11/22/91 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.005) | 0.005 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | 0.018 |
| | 03/16/93 | 0.078 | 0.007 | ND(0.001) | ND(0.005) | 0.013 | ND(0.001) | 0.003 | ND(0.001) | ND(0.001) | 0.026 |
| | 01/10/94 | 0.025 | ND(0.001) | ND(0.001) | ND(0.005) | 0.008 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | 0.026 |
| | 04/19/94 | 0.070 | 0.011 | ND(0.005) | ND(0.005) | 0.008 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.002 |
| | 07/20/94 | 0.220 | 0.041 | ND(0.005) | ND(0.005) | 0.011 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.015 |
| | 07/20/94 | 0.320 | 0.076 | ND(0.005) | ND(0.005) | 0.007 | ND(0.005) | 0.026 | ND(0.005) | ND(0.005) | 0.025 |
| | 10/25/94 | 0.240 | 0.059 | ND(0.005) | ND(0.005) | 0.020 | ND(0.005) | 0.002 | ND(0.005) | ND(0.005) | 0.039 |
| | 01/25/95 | 0.460 | 0.130 | ND(0.005) | ND(0.005) | 0.023 | ND(0.005) | 0.002 | ND(0.005) | ND(0.005) | 0.043 |
| | 04/03/95 | 0.390 | 0.087 | ND(0.005) | ND(0.005) | 0.013 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.018 |
| | 08/01/95 | 0.170 | 0.082 | ND(0.005) | ND(0.005) | 0.011 | ND(0.005) | 0.002 | ND(0.005) | ND(0.005) | 0.015 |
| | 10/18/95 | 0.200 | 0.093 | ND(0.005) | ND(0.005) | 0.020 | ND(0.005) | 0.002 | ND(0.005) | ND(0.005) | 0.018 |
| | 01/11/96 | 0.078 | 0.012 | ND(0.005) | ND(0.005) | 0.005 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.021 |
| d4p. | 04/13/96 | 0.068 | 0.037 | ND(0.005) | ND(0.005) | 0.027 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.008 |
| | 07/21/96 | 0.092 | 0.057 | ND(0.005) | ND(0.005) | 0.013 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.025 |
| | 10/22/96 | 0.066 | 0.023 | ND(0.005) | ND(0.005) | 0.005 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.025 |
| | 01/24/97 | 0.031 | 0.025 | ND(0.001) | ND(0.001) | 0.011 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.020 |
| | 04/09/97 | 0.040 | 0.040 | ND(0.002) | ND(0.004) | 0.004 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.054 |
| | 07/30/97 | 0.018 | 0.044 | ND(0.002) | ND(0.004) | 0.002 | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.002) | 0.028 |
| | 10/17/97 | 0.016 | 0.048 | ND(0.002) | ND(0.004) | 0.007 | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.002) | 0.029 |
| | 10/28/98 | 0.006 | 0.009 | ND(0.002) | ND(0.004) | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.002) | 0.033 |
| | 10/20/99 | 0.012 | 0.008 | 0.002 | ND(0.002) | 0.003 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | 0.027 |
| | 01/26/91 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.005) | 0.007 | ND(0.001) | 0.170 | 0.007 | ND(0.001) | 0.083 |
| | 09/15/91 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.005) | 0.006 | ND(0.001) | 0.084 | ND(0.001) | ND(0.001) | 0.043 |
| | 11/22/91 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.005) | 0.005 | ND(0.001) | 0.064 | ND(0.001) | ND(0.001) | 0.035 |
| | 03/16/93 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.005) | 0.007 | ND(0.001) | 0.098 | 0.001 | ND(0.001) | 0.056 |
| d4p. | 01/10/94 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.005) | 0.017 | ND(0.001) | 0.140 | 0.002 | ND(0.001) | 0.120 |
| | 04/19/94 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.013 | ND(0.005) | 0.070 | 0.002 | ND(0.005) | 0.072 |
| | 07/20/94 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.009 | ND(0.005) | 0.098 | 0.001 | ND(0.005) | 0.065 |
| | 10/25/94 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.013 | ND(0.005) | 0.110 | 0.001 | ND(0.005) | 0.073 |
| | 01/25/95 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.012 | ND(0.005) | 0.079 | ND(0.005) | ND(0.005) | 0.059 |
| | 04/03/95 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.012 | ND(0.005) | 0.065 | ND(0.005) | ND(0.005) | 0.022 |
| | 08/01/95 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.015 | ND(0.005) | 0.074 | ND(0.005) | ND(0.005) | 0.057 |
| | 10/18/95 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.013 | ND(0.005) | 0.060 | ND(0.005) | ND(0.005) | 0.048 |
| | 01/11/96 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.005) | 0.013 | ND(0.005) | 0.051 | ND(0.005) | ND(0.005) | 0.030 |
| | 04/13/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.011 | ND(0.005) | 0.042 | ND(0.005) | ND(0.005) | 0.029 |
| | 07/22/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.012 | ND(0.005) | 0.047 | ND(0.005) | ND(0.005) | 0.021 |
| | 10/22/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.011 | ND(0.005) | 0.037 | ND(0.005) | ND(0.005) | 0.016 |
| | 01/24/97 | ND(0.001) | ND(0.001) | ND(0.002) | ND(0.002) | 0.010 | ND(0.001) | 0.041 | ND(0.005) | ND(0.005) | 0.016 |
| | 04/09/97 | ND(0.002) | ND(0.002) | ND(0.004) | ND(0.004) | 0.010 | ND(0.001) | 0.025 | ND(0.001) | ND(0.002) | 0.006 |

TABLE 2. SUMMARY OF LABORATORY ANALYTICAL RESULTS - GROUND-WATER SAMPLES,
SCHLUMBERGER FACILITY, ARTESIA, NEW MEXICO

| WELL NUMBER | SAMPLE DATE | BENZENE (mg/L) | ETHYL-BENZENE (mg/L) | TOLUENE (mg/L) | XYLENES (mg/L) | T, 1-DCE (mg/L) | 1,2-DCA (mg/L) | 1,1,1-TCA (mg/L) | TCE (mg/L) | PCE (mg/L) |
|-------------|-------------|-------------------|-------------------------|-------------------|-------------------|--------------------|-------------------|---------------------|---------------|---------------|
| MW 6 Cont. | 07/30/97 | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.004) | 0.006 | ND(0.002) | 0.016 | ND(0.002) | 0.008 |
| | 10/17/97 | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.004) | 0.011 | ND(0.002) | 0.023 | ND(0.002) | 0.007 |
| | 10/28/98 | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.004) | 0.007 | ND(0.002) | 0.016 | ND(0.002) | 0.008 |
| | 10/19/99 | ND(0.001) | ND(0.001) | ND(0.002) | ND(0.001) | 0.010 | ND(0.001) | 0.024 | ND(0.001) | 0.010 |
| MW 7 | 01/26/91 | 0.006 | ND(0.001) | ND(0.001) | ND(0.005) | 0.021 | ND(0.001) | 0.260 | 0.010 | 0.068 |
| | 09/15/91 | 0.009 | ND(0.001) | ND(0.001) | ND(0.005) | 0.038 | ND(0.001) | 0.320 | 0.005 | 0.069 |
| dup. | 09/15/91 | 0.009 | ND(0.001) | ND(0.001) | ND(0.005) | 0.034 | ND(0.001) | 0.310 | 0.006 | 0.069 |
| | 11/22/91 | 0.009 | ND(0.005) | ND(0.005) | ND(0.025) | 0.035 | ND(0.005) | 0.360 | ND(0.005) | 0.280 |
| | 03/16/93 | 0.007 | ND(0.001) | ND(0.001) | ND(0.005) | 0.027 | ND(0.001) | 0.280 | 0.002 | 0.053 |
| | 01/10/94 | 0.005 | ND(0.001) | ND(0.001) | ND(0.005) | 0.023 | ND(0.001) | 0.210 | 0.004 | 0.050 |
| | 04/19/94 | 0.007 | ND(0.005) | ND(0.005) | ND(0.005) | 0.021 | ND(0.005) | 0.120 | 0.003 | 0.046 |
| | 07/20/94 | 0.006 | ND(0.005) | ND(0.005) | ND(0.005) | 0.018 | ND(0.005) | 0.220 | 0.003 | 0.038 |
| | 10/25/94 | 0.007 | ND(0.005) | ND(0.005) | ND(0.005) | 0.033 | ND(0.005) | 0.230 | 0.003 | 0.040 |
| dup. | 10/25/94 | 0.006 | ND(0.025) | ND(0.025) | ND(0.025) | 0.026 | ND(0.025) | 0.200 | 0.002 | 0.050 |
| | 01/25/95 | 0.005 | ND(0.005) | ND(0.005) | ND(0.005) | 0.027 | ND(0.005) | 0.210 | 0.002 | 0.045 |
| | 04/03/95 | 0.006 | ND(0.005) | ND(0.005) | ND(0.005) | 0.029 | ND(0.005) | 0.290 | 0.002 | 0.041 |
| | 08/01/95 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.038 | ND(0.005) | 0.300 | 0.003 | 0.030 |
| | 10/18/95 | 0.005 | ND(0.005) | ND(0.005) | ND(0.005) | 0.024 | ND(0.005) | 0.300 | 0.002 | 0.026 |
| | 01/11/96 | 0.006 | ND(0.005) | ND(0.005) | ND(0.005) | 0.027 | ND(0.005) | 0.260 | 0.002 | 0.023 |
| | 04/13/96 | 0.006 | ND(0.005) | ND(0.005) | ND(0.005) | 0.027 | ND(0.005) | 0.210 | 0.002 | 0.020 |
| | 07/22/96 | 0.006 | ND(0.005) | ND(0.005) | ND(0.005) | 0.029 | ND(0.005) | 0.290 | 0.002 | 0.020 |
| | 10/22/96 | ND(0.010) | ND(0.010) | ND(0.010) | ND(0.010) | 0.038 | ND(0.005) | 0.300 | 0.003 | 0.020 |
| | 10/22/96 | ND(0.010) | ND(0.010) | ND(0.010) | ND(0.010) | 0.028 | ND(0.005) | 0.350 | 0.001 | 0.020 |
| | 01/24/97 | 0.005 | ND(0.005) | ND(0.005) | ND(0.005) | 0.024 | ND(0.005) | 0.300 | 0.002 | 0.019 |
| | 04/09/97 | 0.005 | ND(0.005) | ND(0.005) | ND(0.005) | 0.027 | ND(0.005) | 0.260 | 0.002 | 0.018 |
| | 07/30/97 | 0.005 | ND(0.010) | ND(0.010) | ND(0.020) | 0.027 | ND(0.005) | 0.370 | 0.003 | 0.020 |
| | 10/17/97 | 0.005 | ND(0.010) | ND(0.010) | ND(0.020) | 0.029 | ND(0.005) | 0.280 | 0.003 | 0.019 |
| | 10/28/98 | 0.004 | ND(0.010) | ND(0.010) | ND(0.020) | 0.029 | ND(0.010) | 0.255 | 0.003 | 0.019 |
| | 04/22/99 | 0.005 | ND(0.005) | ND(0.005) | ND(0.010) | 0.024 | ND(0.010) | 0.193 | 0.026 | 0.019 |
| | 10/19/99 | ND(0.005) | ND(0.005) | ND(0.010) | ND(0.010) | 0.034 | ND(0.005) | 0.255 | 0.031 | 0.025 |
| | | | | | | ND(0.005) | 0.184 | ND(0.005) | 0.043 | 0.027 |
| | | | | | | | ND(0.005) | 0.184 | ND(0.005) | 0.045 |
| MW 8 | 01/26/91 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | 0.005 | ND(0.001) | 0.015 | 0.004 | 0.003 |
| | 09/15/91 | 0.007 | ND(0.001) | ND(0.001) | ND(0.001) | 0.017 | ND(0.001) | 0.101 | 0.007 | 0.039 |
| | 11/22/91 | 0.004 | ND(0.001) | ND(0.001) | ND(0.001) | 0.020 | ND(0.001) | 0.087 | 0.003 | 0.045 |
| | 03/16/93 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | 0.004 | ND(0.001) | 0.054 | 0.005 | 0.033 |
| | 01/10/94 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | 0.004 | ND(0.001) | 0.054 | 0.004 | 0.030 |
| dup. | 01/10/94 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | 0.005 | ND(0.001) | 0.073 | 0.004 | 0.028 |
| | 04/19/94 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.004 | ND(0.005) | 0.039 | 0.004 | 0.027 |
| | 07/20/94 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.004 | ND(0.005) | 0.069 | 0.005 | 0.026 |
| | 10/25/94 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.008 | ND(0.005) | 0.082 | 0.006 | 0.026 |
| | 01/25/95 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.007 | ND(0.005) | 0.076 | 0.006 | 0.025 |
| | 04/03/95 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.006 | ND(0.005) | 0.074 | 0.008 | 0.022 |
| | 08/01/95 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.015 | ND(0.005) | 0.110 | 0.005 | 0.020 |
| | 10/18/95 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.009 | ND(0.005) | 0.081 | 0.005 | 0.017 |
| | 10/22/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.020 | ND(0.005) | 0.150 | 0.005 | 0.023 |
| | 01/11/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.019 | ND(0.005) | 0.140 | 0.005 | 0.020 |
| | 04/13/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.007 | ND(0.005) | 0.099 | 0.005 | 0.017 |
| dup. | 10/22/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.006 | ND(0.005) | 0.087 | 0.005 | 0.016 |
| | 10/22/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.022 | ND(0.005) | 0.150 | 0.010 | 0.035 |
| | 01/24/97 | 0.001 | ND(0.001) | ND(0.001) | ND(0.001) | 0.019 | ND(0.001) | 0.140 | 0.005 | 0.035 |
| dup. | 01/24/97 | 0.001 | ND(0.001) | ND(0.001) | ND(0.001) | 0.001 | ND(0.001) | 0.081 | 0.002 | 0.017 |
| | | | | | | 0.017 | ND(0.002) | 0.088 | 0.002 | 0.014 |

TABLE 2. SUMMARY OF LABORATORY ANALYTICAL RESULTS - GROUND-WATER SAMPLES,
SCHLUMBERGER FACILITY, ARTESIA, NEW MEXICO

| WELL NUMBER | SAMPLE DATE | BENZENE (mg/L) | ETHYL-BENZENE (mg/L) | TOLUENE (mg/L) | XYLENES (mg/L) | 1,1-DCA (mg/L) | 1,2-DCA (mg/L) | 1,1,1-TCA (mg/L) | TCE (mg/L) | PCE (mg/L) |
|-------------|-------------|----------------|----------------------|----------------|----------------|----------------|----------------|------------------|------------|------------|
| MW-8 Cont. | 04/09/97 | 0.001 | ND(0.002) | ND(0.004) | 0.015 | ND(0.002) | 0.097 | ND(0.002) | 0.019 | 0.028 |
| | 07/30/97 | 0.001 | ND(0.002) | ND(0.002) | 0.012 | ND(0.002) | 0.105 | ND(0.002) | 0.015 | 0.048 |
| dup. | 07/30/97 | ND(0.002) | ND(0.002) | ND(0.004) | 0.011 | ND(0.002) | 0.106 | ND(0.002) | 0.015 | 0.055 |
| | 10/17/97 | 0.001 | ND(0.002) | ND(0.004) | 0.010 | ND(0.002) | 0.104 | ND(0.002) | 0.010 | 0.026 |
| | 10/28/98 | ND(0.005) | ND(0.005) | ND(0.010) | 0.003 | ND(0.005) | 0.111 | ND(0.005) | ND(0.005) | 0.010 |
| dup. | 10/28/98 | ND(0.01) | ND(0.01) | ND(0.02) | 0.003 | ND(0.01) | 0.128 | ND(0.01) | ND(0.01) | 0.009 |
| | 04/22/99 | ND(0.0025) | ND(0.0025) | ND(0.005) | ND(0.0025) | ND(0.0025) | 0.152 | ND(0.0025) | ND(0.0025) | 0.007 |
| | 10/19/99 | ND(0.0025) | ND(0.0025) | ND(0.005) | ND(0.0025) | ND(0.0025) | 0.135 | ND(0.0025) | ND(0.0025) | 0.002 |
| MW-9 | | | | | | | | | | |
| | 01/26/91 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.005) | 0.022 | ND(0.001) | 0.002 | ND(0.001) | 0.001 |
| | 09/15/91 | 0.002 | 0.032 | ND(0.001) | ND(0.005) | 0.035 | ND(0.001) | 0.002 | ND(0.001) | ND(0.001) |
| | 11/22/91 | 0.004 | 0.170 | ND(0.001) | ND(0.005) | 0.029 | ND(0.001) | 0.002 | ND(0.001) | 0.001 |
| | 03/16/93 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.005) | 0.012 | ND(0.001) | 0.001 | ND(0.001) | ND(0.001) |
| | 01/10/94 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.005) | 0.012 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 04/19/94 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.010 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 07/20/94 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.007 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 10/25/94 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.017 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 01/25/95 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.014 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 04/03/95 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.014 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 08/01/95 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.015 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 10/18/95 | ND(0.005) | 0.016 | ND(0.005) | ND(0.005) | 0.022 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 01/10/96 | ND(0.005) | 0.032 | ND(0.005) | ND(0.005) | 0.017 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 04/13/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.020 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| # | 07/22/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.020 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 10/22/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.021 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 01/24/97 | 0.007 | ND(0.001) | ND(0.001) | ND(0.002) | 0.024 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 04/09/97 | 0.001 | ND(0.001) | ND(0.001) | ND(0.001) | 0.019 | ND(0.001) | 0.002 | ND(0.001) | 0.001 |
| | 07/30/97 | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.004) | 0.022 | ND(0.001) | 0.002 | ND(0.001) | 0.002 |
| | 10/17/97 | ND(0.001) | ND(0.001) | ND(0.002) | ND(0.002) | 0.020 | ND(0.002) | 0.001 | ND(0.002) | 0.001 |
| | 10/28/98 | ND(0.002) | ND(0.002) | ND(0.004) | ND(0.004) | 0.018 | ND(0.001) | 0.001 | ND(0.001) | 0.001 |
| | 10/19/99 | ND(0.001) | ND(0.001) | ND(0.002) | ND(0.002) | 0.005 | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.002) |
| | | | | | 0.004 | ND(0.001) | 0.001 | ND(0.001) | ND(0.001) | ND(0.001) |
| MW-10 | 01/26/91 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.005) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 09/15/91 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.005) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 11/22/91 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.005) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 03/16/93 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.005) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 01/10/94 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.005) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 04/19/94 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 07/20/94 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 10/25/94 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 01/25/95 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| dup. | 01/10/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 04/13/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 07/22/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 08/01/95 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 10/18/95 | ND(0.005) | ND(0.002) | ND(0.002) | ND(0.004) | 0.005 | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.002) |
| | 10/28/98 | ND(0.002) | ND(0.001) | ND(0.001) | ND(0.002) | 0.004 | ND(0.001) | 0.001 | ND(0.001) | ND(0.001) |
| | 10/19/99 | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.002) | 0.004 | ND(0.001) | 0.001 | ND(0.001) | ND(0.001) |
| MW-10 | 01/26/91 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.005) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 09/15/91 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.005) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 11/22/91 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.005) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 03/16/93 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.005) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 01/10/94 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.005) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 04/19/94 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 07/20/94 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 10/25/94 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 01/25/95 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| dup. | 01/10/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 04/13/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 07/22/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 08/01/95 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) |
| | 10/18/95 | ND(0.005) | ND(0.010) | ND(0.010) | ND(0.010) | ND(0.010) | ND(0.010) | ND(0.010) | ND(0.010) | ND(0.010) |
| | 10/28/98 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.002) | 0.007 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 10/19/99 | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.002) | 0.001 | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.002) |
| | | | | | 0.001 | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.002) |

TABLE 2. SUMMARY OF LABORATORY ANALYTICAL RESULTS - GROUND-WATER SAMPLES,
SCHLUMBERGER FACILITY, ARTESIA, NEW MEXICO

| WELL NUMBER | SAMPLE DATE | BENZENE (mg/L) | ETHYL-BENZENE (mg/L) | TOLUENE (mg/L) | XYLENES (mg/L) | 1,1-DCA (mg/L) | 1,2-DCA (mg/L) | 1,1-DCE (mg/L) | TCE (mg/L) | PCE (mg/L) |
|-------------|-------------|----------------|----------------------|----------------|----------------|----------------|----------------|----------------|------------|------------|
| MW-10 Cont. | 07/30/97 | ND(0.005) | ND(0.005) | ND(0.010) | ND(0.005) | ND(0.005) | ND(0.005) | 0.156 | 0.004 | ND(0.005) |
| | 10/17/97 | ND(0.010) | ND(0.010) | ND(0.010) | ND(0.010) | ND(0.020) | ND(0.010) | 0.196 | 0.004 | ND(0.010) |
| | 10/28/98 | ND(0.010) | ND(0.010) | ND(0.010) | ND(0.001) | ND(0.002) | ND(0.010) | 0.111 | ND(0.010) | ND(0.010) |
| | 04/22/99 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.002) | ND(0.001) | ND(0.001) | 0.098 | 0.001 | ND(0.001) |
| | 10/19/99 | ND(0.0025) | ND(0.0025) | ND(0.002) | ND(0.005) | ND(0.0025) | ND(0.0025) | 0.080 | ND(0.0025) | ND(0.0025) |
| MW-11 | 01/26/91 | 0.010 | ND(0.005) | ND(0.005) | ND(0.025) | 0.045 | ND(0.005) | 0.310 | ND(0.005) | 0.140 |
| | 09/15/91 | 0.056 | ND(0.011) | ND(0.001) | ND(0.005) | 0.068 | ND(0.001) | 0.470 | 0.017 | 0.360 |
| | 11/22/91 | 0.048 | ND(0.011) | ND(0.001) | ND(0.005) | 0.052 | ND(0.001) | 0.390 | 0.018 | 0.330 |
| | 03/16/93 | 0.005 | ND(0.001) | ND(0.001) | ND(0.005) | 0.040 | ND(0.001) | 0.220 | 0.004 | 0.320 |
| | 01/10/94 | 0.005 | ND(0.001) | ND(0.001) | ND(0.005) | 0.042 | ND(0.001) | 0.250 | ND(0.001) | 0.160 |
| | 04/19/94 | 0.009 | ND(0.005) | ND(0.005) | ND(0.005) | 0.042 | ND(0.005) | 0.170 | 0.006 | 0.320 |
| | 07/20/94 | ND(0.025) | ND(0.025) | ND(0.025) | ND(0.025) | 0.057 | ND(0.025) | 0.460 | 0.010 | 0.170 |
| | 10/25/94 | 0.009 | ND(0.005) | ND(0.005) | ND(0.005) | 0.067 | ND(0.005) | 0.220 | 0.010 | 0.360 |
| | 01/25/95 | 0.012 | ND(0.005) | ND(0.005) | ND(0.005) | 0.072 | ND(0.005) | 0.240 | 0.014 | 0.300 |
| | 04/03/95 | 0.009 | ND(0.005) | ND(0.005) | ND(0.005) | 0.062 | ND(0.005) | 0.410 | 0.013 | 0.360 |
| dup. | 08/01/95 | 0.007 | ND(0.005) | ND(0.005) | ND(0.005) | 0.050 | ND(0.005) | 0.360 | 0.014 | 0.430 |
| | 08/01/95 | 0.007 | ND(0.005) | ND(0.005) | ND(0.005) | 0.051 | ND(0.005) | 0.310 | 0.0063 | 0.330 |
| | 10/18/95 | 0.005 | ND(0.005) | ND(0.005) | ND(0.005) | 0.043 | ND(0.005) | 0.270 | 0.015 | 0.340 |
| | 01/11/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.033 | ND(0.005) | 0.230 | 0.011 | 0.330 |
| | 04/13/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.050 | ND(0.005) | 0.240 | 0.020 | 0.230 |
| | 07/22/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.035 | ND(0.005) | 0.200 | 0.008 | 0.260 |
| | 10/22/96 | ND(0.010) | ND(0.010) | ND(0.010) | ND(0.010) | 0.034 | ND(0.010) | 0.230 | 0.015 | 0.340 |
| | 01/24/97 | 0.002 | ND(0.001) | ND(0.001) | ND(0.002) | 0.029 | ND(0.001) | 0.157 | 0.0057 | 0.330 |
| | 04/09/97 | 0.002 | ND(0.002) | ND(0.004) | ND(0.004) | 0.033 | ND(0.002) | 0.128 | 0.011 | 0.310 |
| | 07/30/97 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.010) | 0.032 | ND(0.005) | 0.102 | 0.006 | 0.230 |
| dup. | 10/17/97 | 0.003 | ND(0.010) | ND(0.010) | ND(0.010) | 0.048 | ND(0.010) | 0.142 | 0.005 | 0.170 |
| | 01/07/98 | 0.004 | ND(0.010) | ND(0.010) | ND(0.020) | 0.054 | ND(0.010) | 0.145 | 0.031 | 0.143 |
| | 04/15/98 | ND(0.010) | ND(0.010) | ND(0.010) | ND(0.020) | 0.061 | ND(0.010) | 0.155 | 0.0053 | 0.143 |
| | 07/18/98 | ND(0.010) | ND(0.010) | ND(0.010) | ND(0.020) | 0.059 | ND(0.010) | 0.130 | 0.020 | 0.180 |
| | 10/28/98 | ND(0.010) | ND(0.010) | ND(0.010) | ND(0.020) | 0.071 | ND(0.010) | 0.120 | 0.064 | 0.151 |
| | 02/09/99 | 0.004 | ND(0.001) | ND(0.001) | ND(0.002) | 0.070 | ND(0.010) | 0.110 | 0.065 | 0.129 |
| | 02/09/99 | 0.004 | ND(0.001) | ND(0.001) | ND(0.002) | 0.083 | ND(0.010) | 0.130 | 0.002 | 0.212 |
| | 04/22/99 | 0.004 | ND(0.0025) | ND(0.0025) | ND(0.005) | 0.090 | ND(0.0025) | 0.143 | 0.002 | 0.180 |
| | 07/13/99 | 0.004 | ND(0.0025) | ND(0.0025) | ND(0.005) | 0.069 | ND(0.0025) | 0.123 | 0.007 | 0.149 |
| | 10/19/99 | 0.003 | ND(0.0025) | ND(0.0025) | ND(0.005) | 0.059 | ND(0.0025) | 0.116 | 0.067 | 0.117 |
| MW-12 | 01/26/91 | 0.260 | 0.950 | 0.230 | 4.500 | 0.140 | ND(0.025) | 0.057 | 0.073 | 0.042 |
| | 09/15/91 | 0.150 | 0.620 | 0.630 | 2.290 | 0.120 | ND(0.001) | 0.300 | 0.110 | 0.061 |
| | 11/22/91 | 0.110 | 0.430 | 0.034 | 0.810 | 0.110 | 0.002 | 0.240 | 0.100 | 0.260 |
| | 03/16/93 | 0.160 | 0.800 | 0.014 | 1.000 | 0.120 | ND(0.001) | 0.039 | 0.055 | 0.051 |
| | 01/10/94 | 0.160 | 0.870 | 0.026 | 0.990 | 0.150 | ND(0.01) | 0.075 | 0.053 | 0.024 |
| | 04/19/94 | 0.110 | 0.110 | 0.049 | 0.250 | 0.110 | 0.002 | 0.064 | 0.073 | 0.033 |
| | 07/20/94 | 0.160 | 0.720 | 0.071 | 0.610 | 0.150 | ND(0.025) | 0.073 | 0.073 | 0.022 |
| | 10/25/94 | 0.096 | 0.660 | ND(0.025) | 0.100 | 0.160 | ND(0.025) | 0.085 | ND(0.025) | 0.120 |
| | 01/25/95 | 0.160 | 0.680 | 0.008 | 0.600 | 0.190 | ND(0.005) | 0.120 | 0.095 | 0.015 |
| | 04/25/95 | 0.140 | 0.850 | 0.075 | 0.850 | 0.150 | ND(0.005) | 0.090 | 0.076 | 0.069 |
| dup. | 04/03/95 | 0.150 | 0.790 | 0.200 | 1.100 | 0.160 | ND(0.005) | 0.110 | 0.062 | 0.053 |
| | 08/01/95 | 0.130 | 0.700 | 0.280 | 1.400 | 0.170 | ND(0.025) | 0.150 | 0.096 | 0.056 |
| | 10/18/95 | 0.140 | 0.990 | 0.360 | 2.030 | 0.170 | ND(0.005) | 0.100 | 0.098 | 0.059 |

TABLE 2. SUMMARY OF LABORATORY ANALYTICAL RESULTS - GROUND-WATER SAMPLES,
SCHLUMBERGER FACILITY, ARTESIA, NEW MEXICO

| WELL NUMBER | SAMPLE DATE | BENZENE (mg/L) | ETHYL-BENZENE (mg/L) | TOLUENE (mg/L) | XYLENES (mg/L) | 1,1-DCA (mg/L) | 1,2-DCA (mg/L) | 1,1-DCE (mg/L) | 1,1,1-TCA (mg/L) | TCE (mg/L) | PCE (mg/L) |
|--------------|-------------|-------------------|-------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|---------------|---------------|
| MWV-12 Cont. | 01/11/96 | 0.100 | 0.680 | 0.180 | 1.840 | 0.140 | ND(0.005) | 0.097 | 0.059 | 0.060 | 0.048 |
| # | 04/13/96 | 0.098 | 0.620 | 0.180 | 0.690 | 0.150 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.023 |
| # | 07/22/96 | 0.130 | 0.920 | 0.310 | 1.790 | 0.160 | ND(0.005) | 0.087 | 0.170 | 0.045 | 0.046 |
| | 10/22/96 | ND(0.1) | 0.830 | 0.190 | 1.800 | 0.190 | ND(0.1) | ND(0.1) | ND(0.1) | ND(0.1) | ND(0.1) |
| 01/24/97 | 0.093 | 0.822 | 0.133 | 1.738 | 0.162 | ND(0.010) | 0.046 | 0.060 | 0.037 | 0.039 | |
| | 04/09/97 | 0.086 | 0.920 | 0.138 | 1.869 | 0.159 | ND(0.020) | 0.040 | 0.051 | 0.046 | 0.039 |
| dup. | 04/09/97 | 0.079 | 0.855 | 0.129 | 1.837 | 0.159 | ND(0.010) | 0.040 | 0.054 | 0.047 | 0.039 |
| MWV-12 Cont. | 07/30/97 | 0.090 | 0.969 | 0.127 | 2.294 | 0.136 | ND(0.020) | 0.035 | 0.062 | 0.036 | 0.043 |
| | 10/17/97 | 0.178 | 1.290 | 0.853 | 5.540 | 0.185 | ND(0.050) | 0.061 | 0.186 | ND(0.050) | 0.045 |
| | 10/28/98 | 0.064 | 1.150 | ND(0.1) | 0.745 | 0.141 | ND(0.1) | ND(0.1) | ND(0.1) | ND(0.1) | ND(0.1) |
| | 04/22/99 | 0.075 | 1.150 | ND(0.025) | 0.612 | 0.171 | ND(0.025) | 0.031 | 0.040 | 0.034 | 0.034 |
| | 04/22/99 | 0.063 | 0.953 | 0.008 | 0.546 | 0.140 | ND(0.005) | 0.017 | 0.039 | 0.022 | 0.017 |
| | 10/19/99 | 0.051 | 1.090 | ND(0.005) | 0.176 | 0.207 | ND(0.025) | 0.017 | ND(0.025) | ND(0.025) | ND(0.025) |
| dup. | 10/19/99 | 0.049 | 1.100 | ND(0.025) | 0.151 | 0.208 | ND(0.025) | 0.017 | ND(0.025) | ND(0.025) | ND(0.025) |
| MWV-13 | 09/15/91 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.005) | 0.030 | 0.002 | 0.038 | 0.005 | 0.004 | 0.240 |
| | 11/22/91 | 0.430 | ND(0.001) | ND(0.001) | ND(0.005) | 0.016 | 0.001 | 0.025 | 0.002 | 0.002 | 0.110 |
| | 03/16/93 | 0.033 | ND(0.001) | ND(0.001) | ND(0.005) | 0.013 | ND(0.001) | 0.014 | ND(0.001) | 0.002 | 0.062 |
| dup. | 03/16/93 | 0.034 | ND(0.001) | ND(0.001) | ND(0.005) | 0.013 | ND(0.001) | 0.015 | ND(0.001) | 0.002 | |
| | 01/10/94 | 0.022 | ND(0.001) | ND(0.001) | ND(0.005) | 0.016 | ND(0.001) | 0.007 | ND(0.001) | 0.003 | 0.066 |
| | 04/19/94 | 0.013 | ND(0.005) | ND(0.005) | ND(0.005) | 0.011 | 0.001 | ND(0.005) | 0.003 | 0.055 | |
| | 07/20/94 | 0.016 | ND(0.005) | ND(0.005) | ND(0.005) | 0.016 | 0.001 | ND(0.005) | 0.005 | 0.032 | |
| | 10/25/94 | 0.011 | ND(0.005) | ND(0.005) | ND(0.005) | 0.013 | ND(0.005) | 0.004 | ND(0.005) | 0.004 | 0.034 |
| | 01/22/95 | 0.008 | ND(0.005) | ND(0.005) | ND(0.005) | 0.015 | ND(0.005) | 0.002 | ND(0.005) | 0.005 | 0.040 |
| | 04/03/95 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.013 | ND(0.005) | ND(0.005) | ND(0.005) | 0.029 | |
| | 08/01/95 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.017 | ND(0.005) | ND(0.005) | ND(0.005) | 0.022 | |
| | 10/18/95 | 0.003 | ND(0.005) | ND(0.005) | ND(0.005) | 0.015 | ND(0.005) | ND(0.005) | ND(0.005) | 0.025 | |
| | 01/11/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.015 | ND(0.005) | ND(0.005) | ND(0.005) | 0.015 | |
| | 04/13/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.015 | ND(0.005) | ND(0.005) | ND(0.005) | 0.011 | |
| | 07/21/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.009 | ND(0.005) | ND(0.005) | ND(0.005) | 0.013 | |
| | 10/22/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.007 | ND(0.005) | ND(0.005) | ND(0.005) | 0.010 | |
| | 01/24/97 | 0.001 | ND(0.001) | ND(0.001) | ND(0.002) | 0.005 | 0.001 | ND(0.001) | 0.003 | 0.003 | |
| | 04/09/97 | 0.001 | ND(0.001) | ND(0.001) | ND(0.002) | 0.004 | ND(0.001) | 0.001 | ND(0.001) | 0.005 | |
| dup. | 04/09/97 | 0.002 | ND(0.001) | ND(0.001) | ND(0.002) | 0.005 | ND(0.001) | 0.001 | ND(0.001) | 0.006 | |
| | 07/30/97 | 0.001 | ND(0.001) | ND(0.001) | ND(0.002) | 0.004 | ND(0.001) | ND(0.001) | ND(0.001) | 0.007 | |
| | 10/17/97 | 0.001 | ND(0.001) | ND(0.001) | ND(0.002) | 0.003 | ND(0.001) | ND(0.001) | ND(0.001) | 0.007 | |
| dup. | 10/17/97 | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.004) | 0.003 | ND(0.002) | ND(0.002) | ND(0.002) | 0.006 | |
| | 01/07/98 | 0.001 | ND(0.001) | ND(0.001) | ND(0.002) | 0.004 | ND(0.001) | ND(0.001) | ND(0.001) | 0.006 | 0.007 |
| | 04/15/98 | 0.001 | ND(0.001) | ND(0.001) | ND(0.002) | 0.003 | ND(0.001) | ND(0.001) | ND(0.001) | 0.008 | 0.011 |
| | 07/18/98 | 0.001 | ND(0.001) | ND(0.001) | ND(0.002) | 0.005 | ND(0.001) | ND(0.001) | ND(0.001) | 0.007 | 0.009 |
| | 10/28/98 | 0.001 | ND(0.001) | ND(0.001) | ND(0.002) | 0.003 | ND(0.001) | ND(0.001) | ND(0.001) | 0.010 | 0.016 |
| | 02/09/99 | 0.002 | ND(0.001) | ND(0.001) | ND(0.002) | 0.007 | ND(0.001) | ND(0.001) | ND(0.001) | 0.009 | 0.015 |
| | 04/22/99 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.002) | 0.003 | ND(0.001) | ND(0.001) | ND(0.001) | 0.019 | 0.026 |
| | 07/13/99 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.002) | 0.003 | ND(0.001) | ND(0.001) | ND(0.001) | 0.008 | 0.009 |
| | 10/20/99 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.002) | 0.003 | ND(0.001) | ND(0.001) | ND(0.001) | 0.006 | 0.008 |
| MWV-14 | 09/15/91 | 0.022 | ND(0.001) | ND(0.005) | 0.130 | 0.002 | 0.300 | 0.014 | 0.002 | 0.002 | |
| | 11/22/91 | 0.002 | ND(0.001) | ND(0.005) | 0.140 | 0.002 | 0.310 | 0.009 | 0.002 | 0.002 | 0.460 |
| dup. | 11/22/91 | ND(0.001) | ND(0.001) | ND(0.005) | 0.110 | 0.002 | 0.320 | 0.010 | 0.002 | 0.002 | 0.400 |
| | 03/16/93 | 0.020 | ND(0.001) | ND(0.005) | 0.080 | 0.001 | 0.160 | 0.004 | 0.001 | 0.002 | 0.440 |
| | 01/10/94 | 0.011 | ND(0.001) | ND(0.005) | 0.057 | 0.001 | 0.100 | 0.003 | 0.001 | 0.002 | 0.300 |

TABLE 2. SUMMARY OF LABORATORY ANALYTICAL RESULTS - GROUND-WATER SAMPLES,
SCHLUMBERGER FACILITY, ARTESIA, NEW MEXICO

TABLE 2. SUMMARY OF LABORATORY ANALYTICAL RESULTS - GROUND-WATER SAMPLES,
SCHLUMBERGER FACILITY, ARTESIA, NEW MEXICO

| WELL NUMBER | SAMPLE DATE | BENZENE (mg/L) | ETHYL-BENZENE (mg/L) | TOLUENE (mg/L) | XYLEMES (mg/L) | 1,1-DCA (mg/L) | 1,2-DCA (mg/L) | 1,1,1-TCA (mg/L) | TCE (mg/L) | PCE (mg/L) |
|--------------|-------------|-------------------|-------------------------|-------------------|-------------------|-------------------|-------------------|---------------------|---------------|---------------|
| MW-17D Cont. | 07/22/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.077 | ND(0.005) | 0.053 | 0.009 | 0.060 |
| 10/22/96 | 0.097 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.066 | ND(0.005) | 0.041 | ND(0.005) | 0.037 |
| 01/24/97 | 0.004 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.002) | 0.052 | 0.001 | 0.023 | 0.004 | 0.059 |
| 04/09/97 | 0.003 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.002) | 0.030 | ND(0.001) | 0.020 | 0.003 | 0.033 |
| 07/30/97 | 0.003 | ND(0.002) | ND(0.002) | ND(0.004) | ND(0.002) | 0.029 | ND(0.002) | 0.013 | 0.002 | 0.022 |
| 10/17/97 | 0.004 | ND(0.002) | ND(0.002) | ND(0.004) | ND(0.002) | 0.056 | ND(0.002) | 0.015 | 0.007 | 0.028 |
| 10/28/98 | 0.006 | ND(0.005) | ND(0.005) | ND(0.01) | ND(0.005) | 0.050 | ND(0.005) | 0.009 | ND(0.005) | 0.018 |
| 10/19/99 | 0.005 | ND(0.0025) | ND(0.0025) | ND(0.005) | ND(0.0025) | 0.091 | ND(0.0025) | 0.010 | ND(0.0025) | 0.011 |
| MW-17A | 04/03/95 | 0.009 | ND(0.005) | ND(0.005) | ND(0.005) | 0.079 | ND(0.005) | 0.061 | 0.029 | 0.025 |
| 08/01/95 | 0.010 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.085 | ND(0.005) | 0.075 | 0.025 | 0.066 |
| 10/18/95 | 0.009 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.073 | ND(0.005) | 0.059 | 0.019 | 0.037 |
| 01/11/96 | 0.010 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.078 | ND(0.005) | 0.059 | 0.019 | 0.041 |
| 04/13/96 | 0.009 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.077 | ND(0.005) | 0.068 | 0.019 | 0.042 |
| # | 07/22/96 | 0.006 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.075 | ND(0.005) | 0.069 | ND(0.005) |
| 10/22/96 | 0.006 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.076 | ND(0.005) | 0.069 | 0.012 | 0.051 |
| 01/24/97 | 0.006 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | 0.069 | ND(0.005) | 0.058 | ND(0.005) | 0.050 |
| 04/09/97 | 0.007 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | 0.058 | ND(0.001) | 0.044 | 0.007 | 0.049 |
| 07/30/97 | 0.004 | ND(0.005) | ND(0.005) | ND(0.010) | ND(0.010) | 0.065 | ND(0.001) | 0.051 | 0.008 | 0.051 |
| 10/17/97 | 0.006 | ND(0.005) | ND(0.005) | ND(0.010) | ND(0.010) | 0.051 | ND(0.005) | 0.045 | 0.004 | 0.062 |
| 10/28/98 | 0.009 | ND(0.005) | ND(0.005) | ND(0.010) | ND(0.010) | 0.079 | ND(0.005) | 0.050 | 0.003 | 0.053 |
| 10/19/99 | 0.005 | ND(0.0025) | ND(0.0025) | ND(0.005) | ND(0.005) | 0.134 | ND(0.0025) | 0.018 | ND(0.005) | 0.044 |
| MW-17B | 04/03/95 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.036 | ND(0.005) | 0.180 | 0.019 | ND(0.005) |
| , | 08/01/95 | 0.006 | ND(0.005) | ND(0.005) | ND(0.005) | 0.040 | ND(0.005) | 0.190 | 0.020 | 0.026 |
| dup. | 08/01/95 | 0.008 | ND(0.005) | ND(0.005) | ND(0.005) | 0.049 | ND(0.005) | 0.250 | 0.023 | 0.180 |
| , | 10/18/95 | 0.006 | ND(0.005) | ND(0.005) | ND(0.005) | 0.046 | ND(0.005) | 0.210 | 0.014 | 0.320 |
| 01/11/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.034 | ND(0.005) | 0.170 | 0.016 | 0.370 |
| 04/13/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.030 | ND(0.005) | 0.160 | ND(0.005) | 0.190 |
| 07/22/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.030 | ND(0.005) | 0.150 | ND(0.005) | 0.270 |
| 07/22/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.030 | ND(0.005) | 0.150 | 0.016 | 0.250 |
| dup. | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.038 | ND(0.01) | 0.190 | ND(0.01) | 0.030 |
| 10/22/96 | ND(0.01) | ND(0.001) | ND(0.001) | ND(0.002) | ND(0.002) | 0.038 | ND(0.01) | 0.110 | 0.008 | 0.250 |
| 01/24/97 | 0.002 | ND(0.002) | ND(0.002) | ND(0.005) | ND(0.005) | 0.035 | ND(0.001) | 0.115 | 0.005 | 0.070 |
| 04/09/97 | 0.004 | ND(0.005) | ND(0.005) | ND(0.010) | ND(0.010) | 0.026 | ND(0.005) | 0.080 | 0.004 | 0.132 |
| 07/30/97 | ND(0.005) | ND(0.005) | ND(0.01) | ND(0.01) | ND(0.02) | 0.053 | ND(0.01) | 0.193 | ND(0.01) | 0.017 |
| 10/17/97 | ND(0.01) | ND(0.01) | ND(0.01) | ND(0.02) | ND(0.005) | 0.073 | ND(0.01) | 0.072 | ND(0.01) | 0.027 |
| 10/28/98 | ND(0.01) | ND(0.01) | ND(0.02) | ND(0.025) | ND(0.005) | 0.143 | ND(0.0025) | 0.053 | ND(0.01) | 0.045 |
| 10/19/99 | 0.005 | 0.012 | 0.012 | ND(0.005) | ND(0.005) | 0.143 | ND(0.0025) | 0.053 | ND(0.01) | 0.051 |
| MW-17C | 04/03/95 | 0.032 | 0.060 | 0.005 | 0.054 | 0.058 | ND(0.005) | 0.099 | ND(0.005) | 0.091 |
| 2nd | * | 0.034 | 0.034 | 0.057 | ND(0.005) | 0.045 | ND(0.005) | 0.110 | ND(0.005) | 0.013 |
| * | 08/01/95 | 0.022 | 0.047 | ND(0.005) | ND(0.005) | 0.073 | ND(0.005) | 0.140 | ND(0.005) | 0.095 |
| * | 10/18/95 | 0.019 | 0.026 | ND(0.005) | ND(0.005) | 0.063 | 0.003 | 0.120 | ND(0.005) | 0.017 |
| * | 01/11/96 | 0.020 | 0.035 | ND(0.005) | ND(0.005) | 0.058 | ND(0.005) | 0.120 | ND(0.005) | 0.012 |
| * | 04/13/96 | 0.011 | 0.009 | ND(0.005) | ND(0.005) | 0.057 | ND(0.005) | 0.130 | ND(0.005) | 0.024 |
| # | 07/22/96 | 0.016 | ND(0.005) | ND(0.005) | ND(0.005) | 0.058 | ND(0.005) | 0.130 | ND(0.005) | 0.015 |
| * | 10/22/96 | 0.015 | ND(0.005) | ND(0.005) | ND(0.005) | 0.045 | ND(0.005) | 0.130 | ND(0.005) | 0.013 |
| * | 01/24/97 | 0.009 | ND(0.001) | ND(0.001) | ND(0.002) | 0.051 | ND(0.005) | 0.120 | ND(0.005) | 0.014 |
| * | 04/09/97 | 0.011 | ND(0.002) | ND(0.002) | ND(0.004) | 0.049 | ND(0.001) | 0.099 | ND(0.001) | 0.012 |
| 07/30/97 | 0.010 | ND(0.005) | ND(0.005) | ND(0.010) | ND(0.010) | 0.043 | ND(0.005) | 0.093 | ND(0.005) | 0.008 |

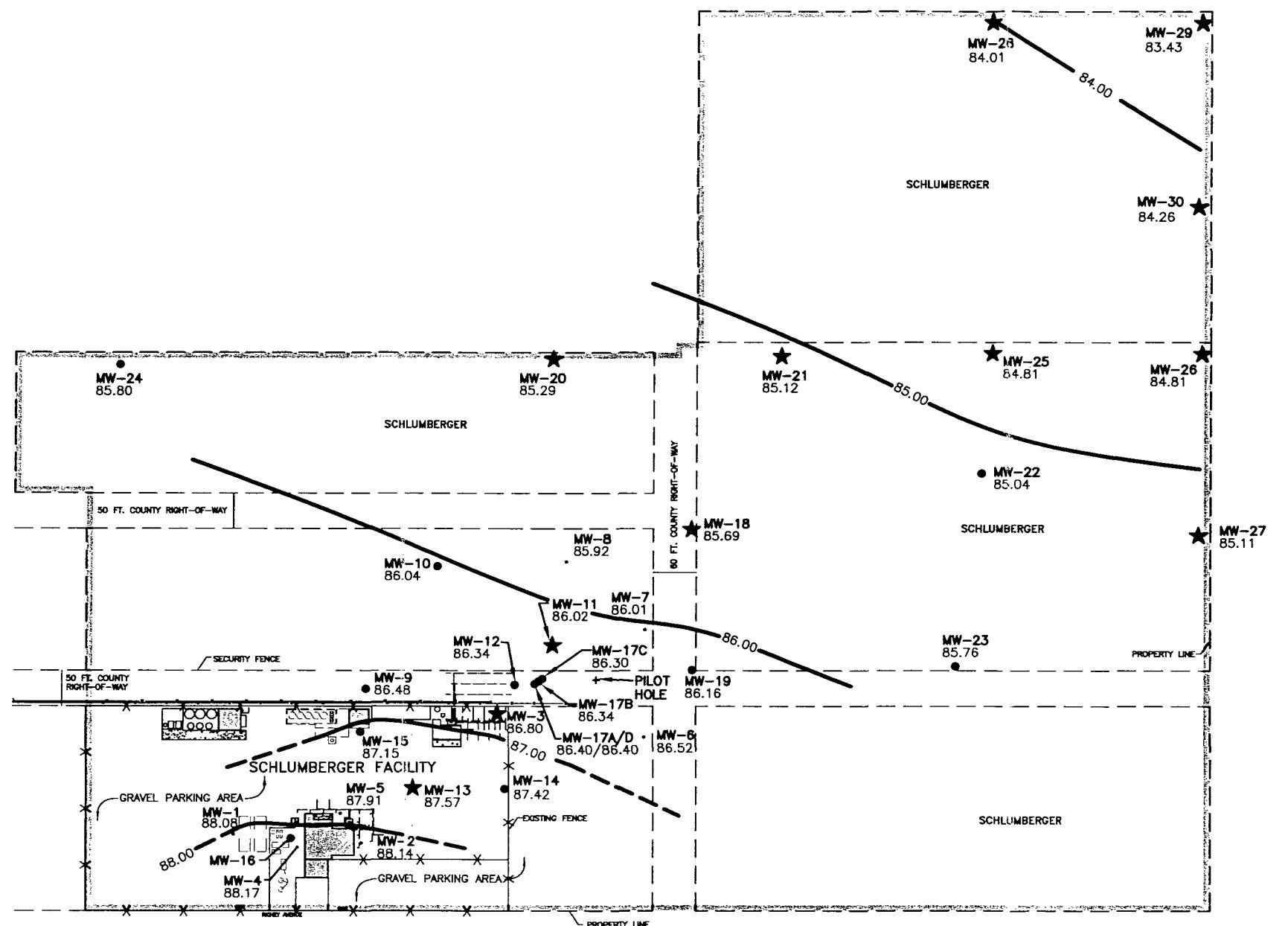
TABLE 2. SUMMARY OF LABORATORY ANALYTICAL RESULTS - GROUND-WATER SAMPLES,
SCHLUMBERGER FACILITY, ARTESIA, NEW MEXICO

| WELL NUMBER | SAMPLE DATE | BENZENE (mg/L) | ETHYL-BENZENE (mg/L) | TOLUENE (mg/L) | XYLENES (mg/L) | 1,1-DCA (mg/L) | 1,2-DCA (mg/L) | 1,1-DCE (mg/L) | 1,1,1-TCA (mg/L) | TCE (mg/L) | PCE (mg/L) |
|--------------|-------------|----------------|----------------------|----------------|----------------|----------------|----------------|----------------|------------------|------------|------------|
| MW-17C Cont. | 10/17/97 | 0.031 | ND(0.01) | ND(0.01) | ND(0.02) | 0.065 | 0.003 | 0.115 | ND(0.01) | 0.086 | 0.013 |
| | 10/28/98 | 0.011 | ND(0.01) | ND(0.01) | ND(0.02) | 0.050 | ND(0.01) | 0.105 | ND(0.01) | 0.110 | 0.018 |
| | 10/19/99 | 0.023 | ND(0.0025) | 0.002 | ND(0.005) | 0.080 | 0.003 | 0.160 | ND(0.0025) | 0.119 | 0.040 |
| MW-18 | 04/03/95 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.017 | ND(0.005) | 0.093 | ND(0.005) | 0.034 | 0.071 |
| | 08/01/95 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.024 | ND(0.005) | 0.170 | ND(0.005) | 0.039 | 0.087 |
| | 10/18/95 | 0.003 | ND(0.005) | ND(0.005) | ND(0.005) | 0.018 | ND(0.005) | 0.150 | ND(0.005) | 0.042 | 0.130 |
| | 01/11/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.017 | ND(0.005) | 0.130 | ND(0.005) | 0.037 | 0.097 |
| | 04/13/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.016 | ND(0.005) | 0.170 | ND(0.005) | 0.034 | 0.120 |
| | 04/13/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.018 | ND(0.005) | 0.200 | ND(0.005) | 0.043 | 0.110 |
| | 07/22/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.020 | ND(0.005) | 0.170 | ND(0.005) | 0.043 | 0.120 |
| | 10/22/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.020 | ND(0.005) | 0.190 | ND(0.005) | 0.042 | 0.120 |
| | 01/24/97 | 0.003 | ND(0.001) | ND(0.001) | ND(0.002) | 0.024 | 0.001 | 0.180 | ND(0.005) | 0.047 | 0.097 |
| | 04/09/97 | 0.003 | ND(0.001) | ND(0.001) | ND(0.002) | 0.022 | 0.001 | 0.155 | ND(0.002) | 0.044 | 0.116 |
| | 07/30/97 | 0.002 | ND(0.002) | ND(0.002) | ND(0.004) | 0.020 | ND(0.002) | 0.140 | ND(0.001) | 0.044 | 0.121 |
| | 10/17/97 | 0.002 | ND(0.01) | ND(0.01) | ND(0.02) | 0.028 | ND(0.01) | 0.157 | ND(0.01) | 0.044 | 0.071 |
| | 01/07/98 | 0.002 | ND(0.01) | ND(0.01) | ND(0.02) | 0.029 | ND(0.01) | 0.163 | ND(0.01) | 0.054 | 0.133 |
| | 04/15/98 | ND(0.01) | ND(0.01) | ND(0.01) | ND(0.02) | 0.029 | ND(0.01) | 0.155 | ND(0.01) | 0.053 | 0.145 |
| | 07/18/98 | ND(0.01) | ND(0.01) | ND(0.01) | ND(0.02) | 0.030 | ND(0.01) | 0.146 | ND(0.01) | 0.052 | 0.151 |
| | 10/28/98 | ND(0.01) | ND(0.01) | ND(0.01) | ND(0.02) | 0.028 | ND(0.01) | 0.142 | ND(0.01) | 0.052 | 0.149 |
| | 02/09/99 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.01) | 0.030 | ND(0.005) | 0.143 | ND(0.005) | 0.052 | 0.148 |
| | 04/22/99 | 0.002 | ND(0.0025) | ND(0.0025) | ND(0.005) | 0.031 | ND(0.0025) | 0.135 | ND(0.0025) | 0.045 | 0.121 |
| | 07/14/99 | 0.002 | ND(0.0025) | ND(0.0025) | ND(0.005) | 0.028 | ND(0.0025) | 0.127 | ND(0.0025) | 0.042 | 0.120 |
| | 10/19/99 | 0.002 | ND(0.0025) | ND(0.0025) | ND(0.005) | 0.034 | ND(0.0025) | 0.149 | ND(0.0025) | 0.049 | 0.128 |
| MW-19 | 04/03/95 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.011 | ND(0.005) | 0.150 | ND(0.005) | ND(0.005) | 0.110 |
| | 08/01/95 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.014 | ND(0.005) | 0.170 | ND(0.005) | ND(0.005) | 0.140 |
| | 10/18/95 | 0.002 | ND(0.005) | ND(0.005) | ND(0.005) | 0.010 | ND(0.005) | 0.170 | ND(0.005) | 0.004 | 0.150 |
| | 01/11/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.010 | ND(0.005) | 0.110 | ND(0.005) | ND(0.005) | 0.100 |
| | 04/13/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.009 | ND(0.005) | 0.150 | ND(0.005) | ND(0.005) | 0.100 |
| | 07/22/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.008 | ND(0.005) | 0.130 | ND(0.005) | ND(0.005) | 0.110 |
| | 10/22/96 | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.005) | 0.009 | ND(0.001) | 0.122 | ND(0.005) | 0.003 | 0.093 |
| | 01/24/97 | 0.001 | ND(0.001) | ND(0.001) | ND(0.002) | 0.010 | ND(0.001) | 0.116 | ND(0.002) | 0.004 | 0.087 |
| | 04/09/97 | 0.002 | ND(0.002) | ND(0.002) | ND(0.004) | 0.009 | ND(0.002) | 0.116 | ND(0.002) | 0.005 | 0.096 |
| | 07/30/97 | 0.002 | ND(0.001) | ND(0.001) | ND(0.002) | 0.010 | ND(0.001) | 0.124 | ND(0.001) | 0.007 | 0.066 |
| | 10/17/97 | 0.003 | ND(0.001) | ND(0.001) | ND(0.002) | 0.017 | ND(0.001) | 0.167 | ND(0.001) | 0.009 | 0.150 |
| | 10/28/98 | ND(0.01) | ND(0.0025) | ND(0.0025) | ND(0.005) | 0.023 | ND(0.0025) | 0.212 | ND(0.0025) | 0.009 | 0.182 |
| | 04/22/99 | 0.003 | ND(0.005) | ND(0.005) | ND(0.01) | 0.029 | ND(0.005) | 0.236 | ND(0.005) | 0.010 | 0.203 |
| | 10/19/99 | 0.004 | ND(0.005) | ND(0.005) | ND(0.01) | 0.029 | ND(0.005) | 0.236 | ND(0.005) | ND(0.005) | ND(0.005) |
| MW-20 | 11/20/96 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 01/24/97 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.002) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 04/09/97 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.002) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 07/30/97 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.002) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 10/17/97 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.002) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 01/07/98 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 04/15/98 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 07/18/98 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.002) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 10/28/98 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.002) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |
| | 02/09/99 | ND(0.0005) | ND(0.0005) | ND(0.0005) | ND(0.001) | ND(0.0005) | ND(0.0005) | ND(0.0005) | ND(0.0005) | ND(0.0005) | ND(0.0005) |
| | 04/22/99 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.002) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) |

TABLE 2. SUMMARY OF LABORATORY ANALYTICAL RESULTS - GROUND-WATER SAMPLES,
SCHLUMBERGER FACILITY, ARTESIA, NEW MEXICO

TABLE 2. SUMMARY OF LABORATORY ANALYTICAL RESULTS - GROUND-WATER SAMPLES,
SCHLUMBERGER FACILITY, ARTESIA, NEW MEXICO

FIGURES



EXPLANATION

- MW-12 WWC MONITORING WELL LOCATION, IDENTIFICATION, AND POTENTIOMETRIC SURFACE
- MW-6 REED AND ASSOCIATES MONITORING WELL LOCATION, IDENTIFICATION, AND POTENTIOMETRIC SURFACE
- ★ MONITORING WELLS TO BE SAMPLED QUARTERLY
- 86.00 POTENTIOMETRIC SURFACE CONTOUR (DASHED WHERE INFERRED)
- TEMPORARY BENCH MARK
- AIR PIPING
- SVE EXTRACTION WELL

0 200 FT.
SCALE

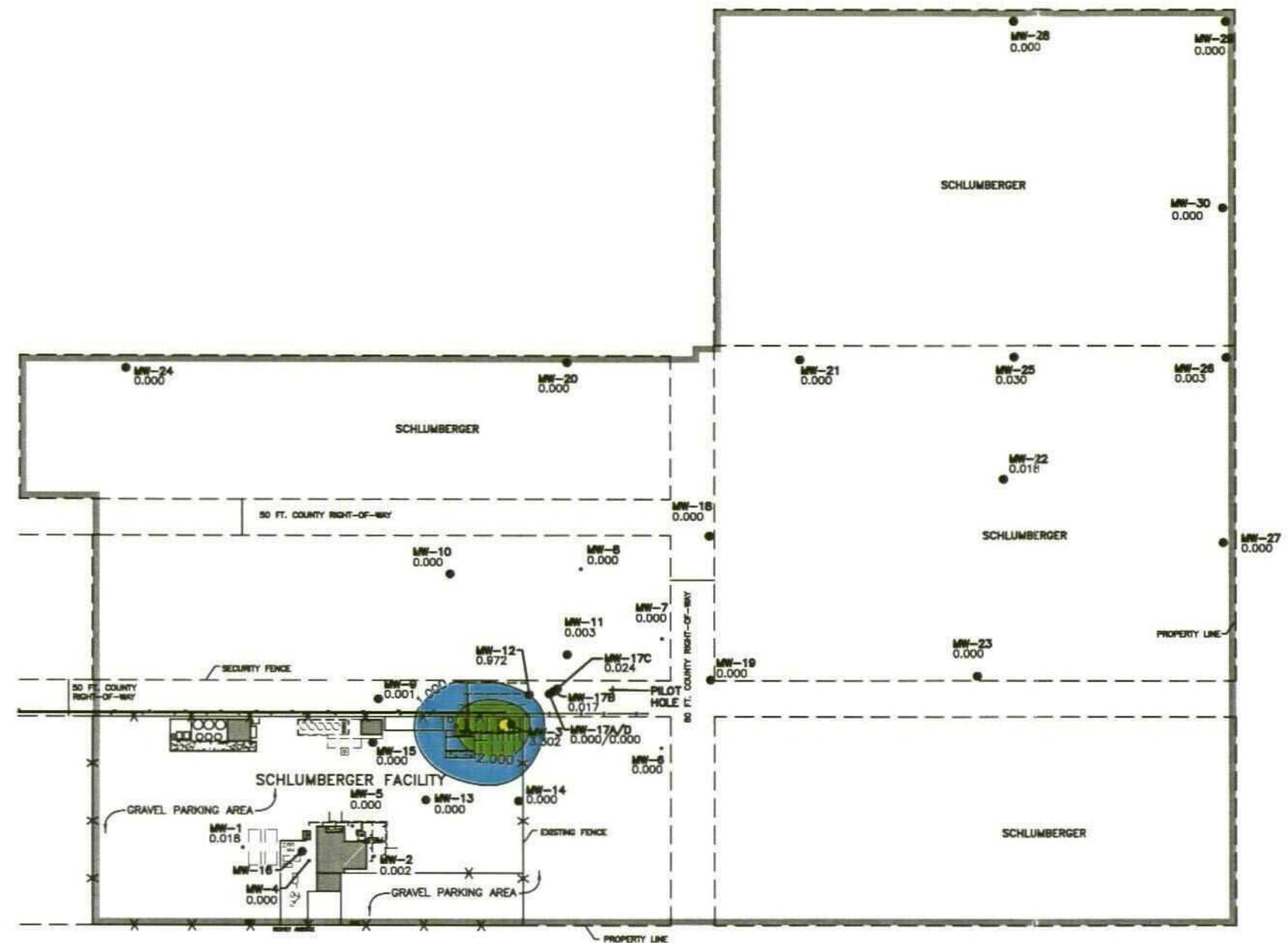
BASE MAP MODIFIED FROM REED & ASSOCIATES

FIGURE 1
SITE MAP WITH
POTENTIOMETRIC SURFACE
(10/19/00)

SCHLUMBERGER OILFIELD SERVICES
ARTESIA, NEW MEXICO



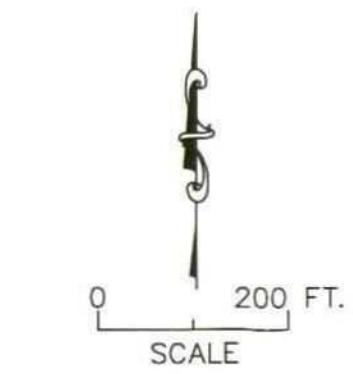
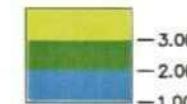
Civil Environmental Mining Water Resources



EXPLANATION

- MW-12 1.895 WWC MONITORING WELL LOCATION AND IDENTIFICATION
ISOCONCENTRATION FOR TOTAL BTEX
- MW-6 ND REED AND ASSOCIATES MONITORING WELL LOCATION AND IDENTIFICATION
ISOCONCENTRATION FOR TOTAL BTEX
- TM TEMPORARY BENCH MARK
- AIR PIPING
- SVE EXTRACTION WELL

ISOCONCENTRATION FOR TOTAL BTEX

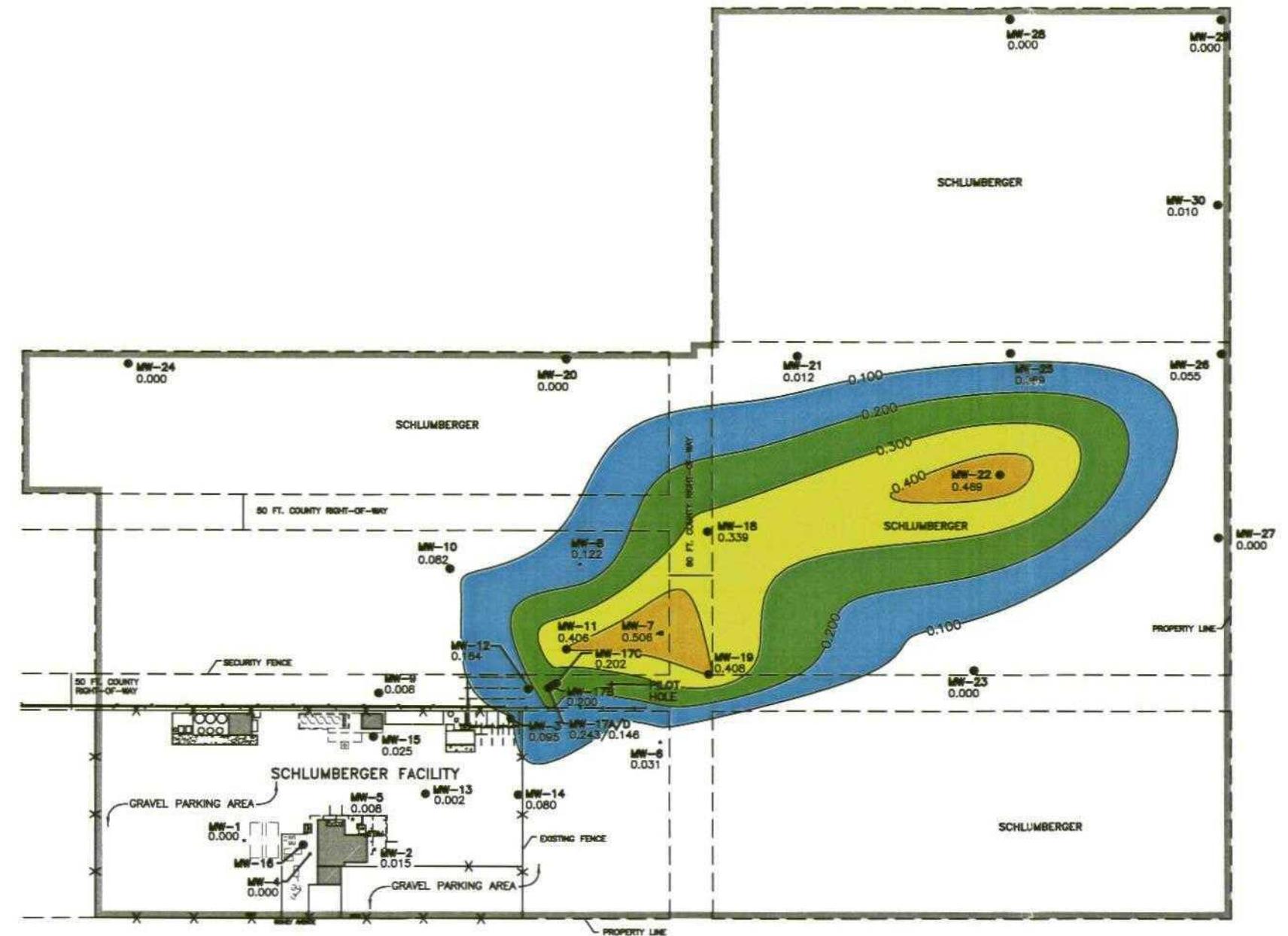


BASE MAP MODIFIED FROM REED & ASSOCIATES

FIGURE 2
ISOCONCENTRATION MAP FOR
TOTAL BTEX
(10/19/00)

SCHLUMBERGER OILFIELD SERVICES
ARTESIA, NEW MEXICO

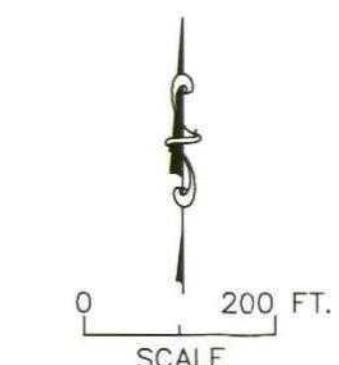
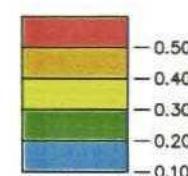
W W C Engineering
Civil Environmental Mining Water Resources



EXPLANATION

- MW-12 1.895 WWC MONITORING WELL LOCATION AND IDENTIFICATION
ISOCONCENTRATION FOR TOTAL HALOCARBONS
- MW-6 ND REED AND ASSOCIATES MONITORING WELL LOCATION AND IDENTIFICATION
ISOCONCENTRATION FOR TOTAL HALOCARBONS
- MW-3 TEMPORARY BENCH MARK
- AIR PIPING
- SVE EXTRACTION WELL

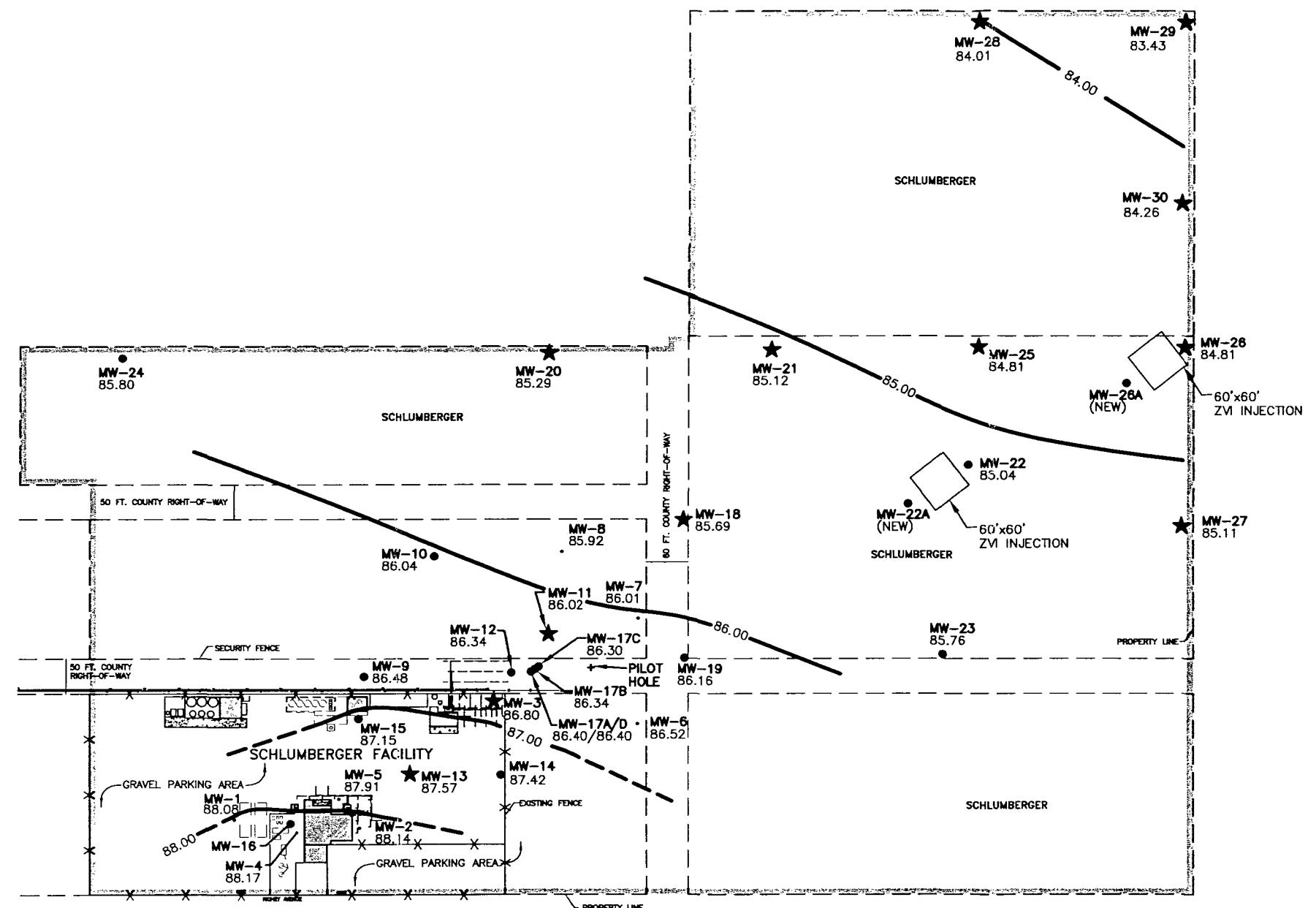
ISOCONCENTRATION FOR TOTAL HALOCARBONS



BASE MAP MODIFIED FROM REED & ASSOCIATES

FIGURE 3
ISOCONCENTRATION MAP FOR
TOTAL HALOCARBONS
(10/19/00)

SCHLUMBERGER OILFIELD SERVICES
ARTESIA, NEW MEXICO



EXPLANATION

- MW-12 WWC MONITORING WELL LOCATION, IDENTIFICATION, AND POTENTIOMETRIC SURFACE
- MW-6 REED AND ASSOCIATES MONITORING WELL LOCATION, IDENTIFICATION, AND POTENTIOMETRIC SURFACE
- ★ MONITORING WELLS TO BE SAMPLED QUARTERLY
- 86.00 POTENTIOMETRIC SURFACE CONTOUR (DASHED WHERE INFERRED)
- TEMPORARY BENCH MARK
- - - AIR PIPING
- SVE EXTRACTION WELL

0 200 FT.
SCALE

BASE MAP MODIFIED FROM REED & ASSOCIATES

FIGURE 4

ZVI INJECTION

SCHLUMBERGER OILFIELD SERVICES
ARTESIA, NEW MEXICO

WWC Engineering

Civil Environmental Mining Water Resources

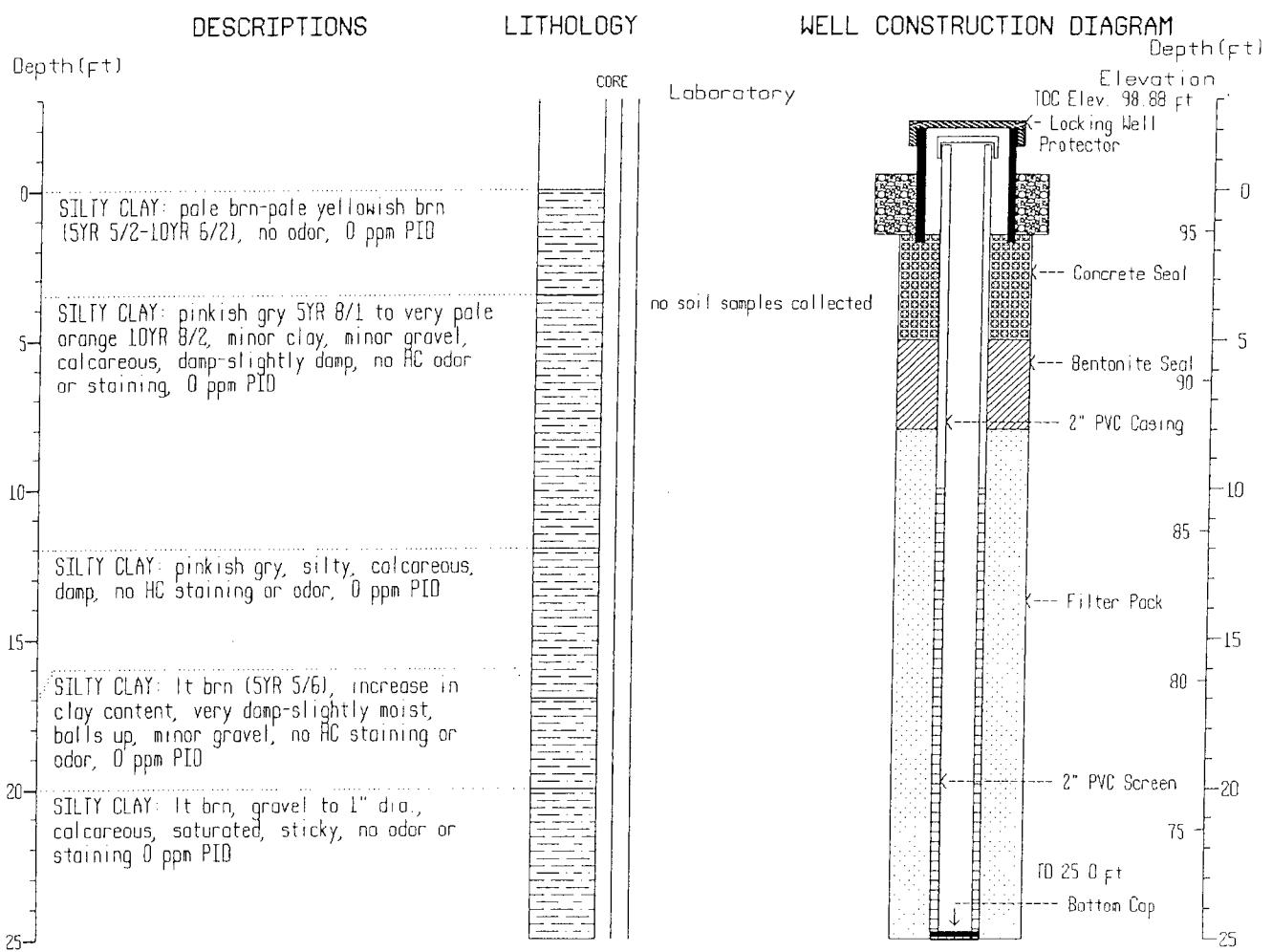
APPENDIX A

WELL LOGS

MONITORING WELL MW-25

LOCATION: Dowell Schlumberger, Artesia, New Mexico
 North of MW-22
 T17S, R26E, Sec 4, SE 1/4, SW 1/4
 LOG: Western Water Consultants Inc. (Kevin Mattson)
 DRILLER: Scarborough Drilling (Lane Scarborough)
 STATE ENGINEER NO: NA
 INSTALLATION DATE: March 3, 1997

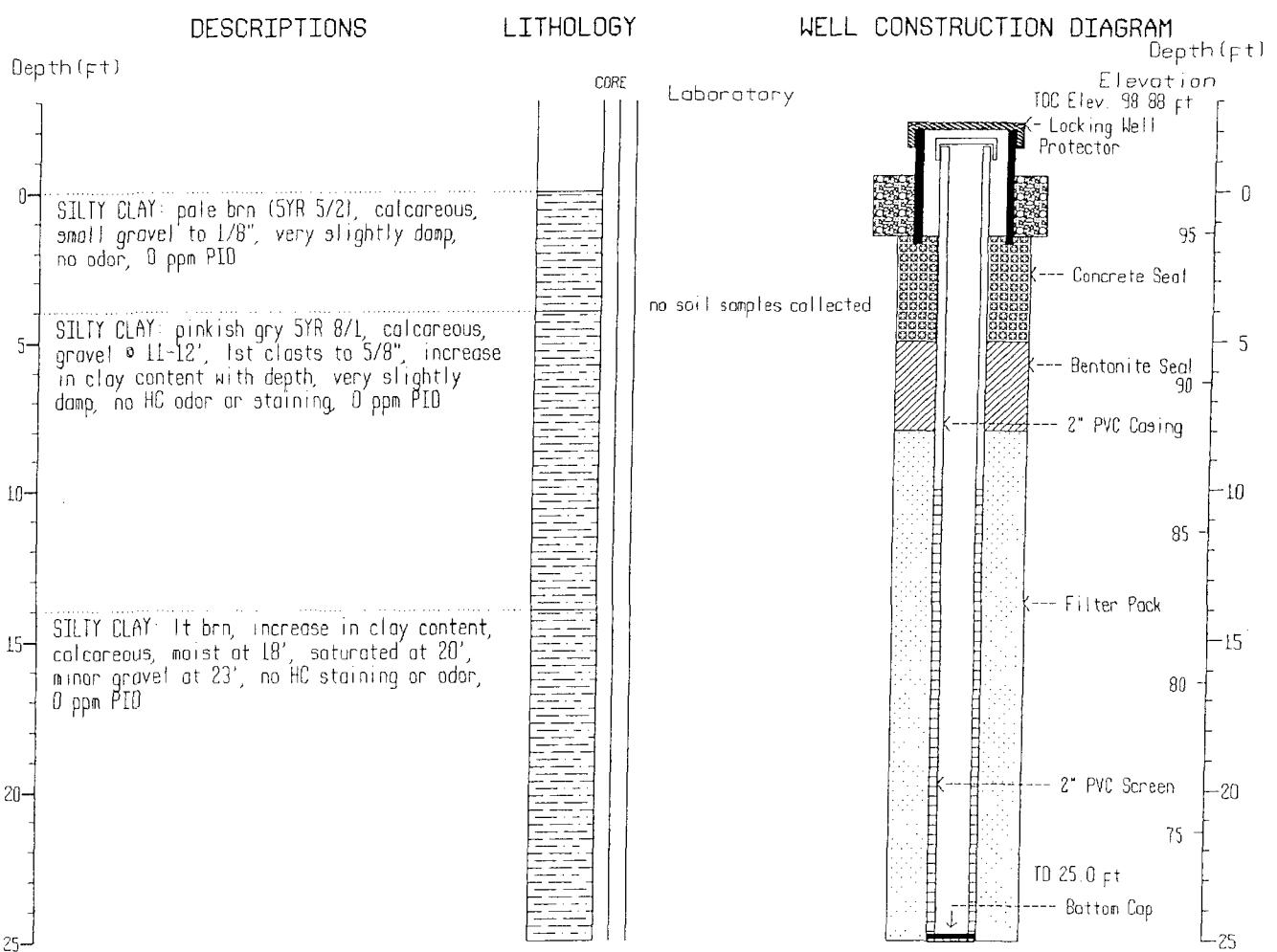
WELL OWNER: Dowell Schlumberger Inc. (JN 90-125)
 DRILLING METHOD: Air Rotary, 5 0" OD
 CASING: 2" Dia. Flush Joint Sch. 40 PVC
 SCREEN: Slotted Casing; 0.020 Inch Slots
 FILTER PACK: 8/16 Mesh Silica Sand
 WATER TABLE ELEVATION: NA
 (Reference Datum: Arbitrary = 100.00 feet)



MONITORING WELL MW-26

LOCATION: Dowell Schlumberger, Artesia, New Mexico
 Very northeast corner of property
 T17S, R26E, Sec 9, SE 1/4, SW 1/4
 LOG: Western Water Consultants Inc. (Kevin Mattson)
 DRILLER: Scarborough Drilling (Lane Scarborough)
 STATE ENGINEER NO: NA
 INSTALLATION DATE: March 3, 1997

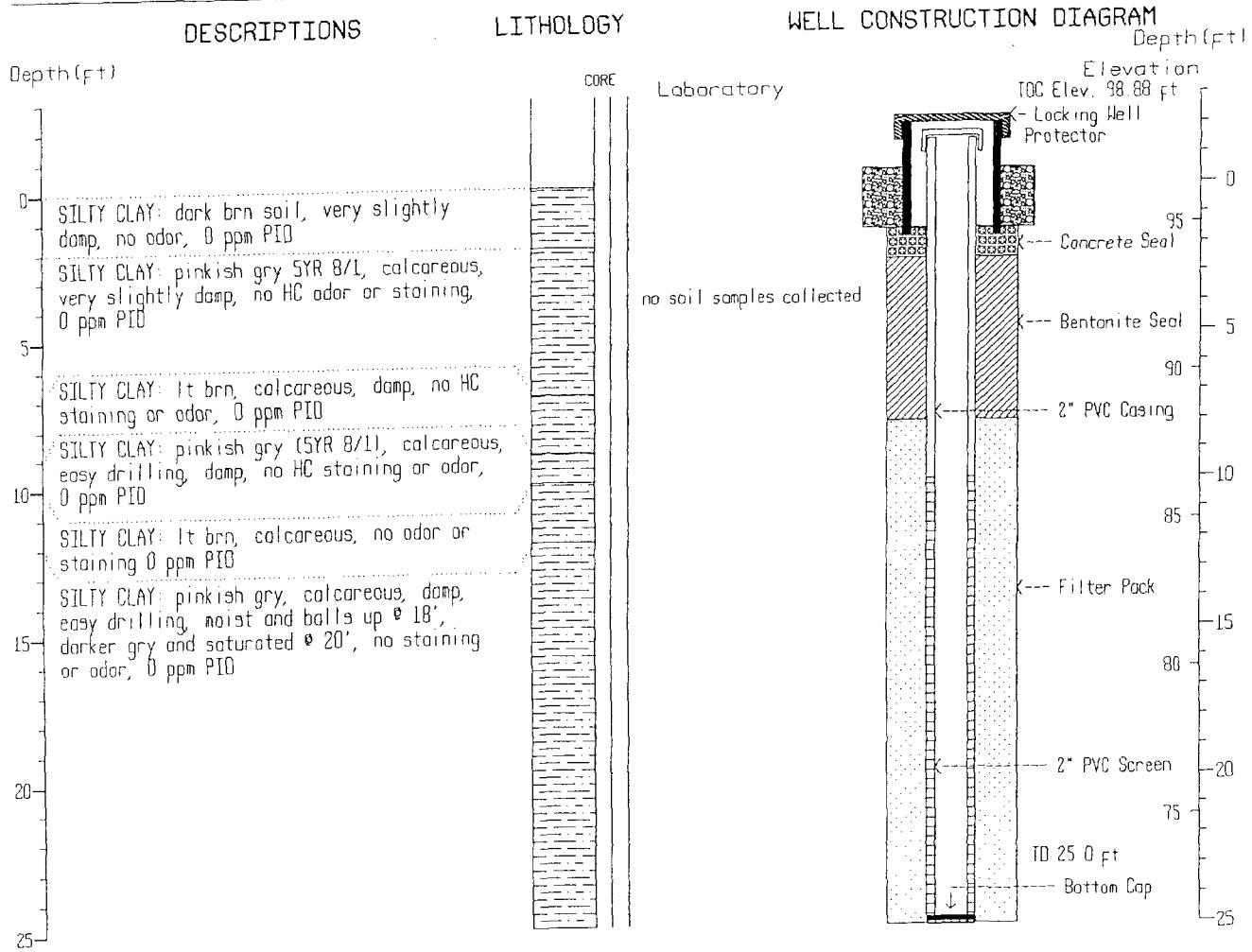
WELL OWNER: Dowell Schlumberger Inc. (JN 90-125)
 DRILLING METHOD: Air Rotary, 5 0" OD
 CASING: 2" Dia. Flush Joint Sch 40 PVC
 SCREEN: Slotted Casing; 0.020 Inch Slots
 FILTER PACK: 8/16 Mesh Silica Sand
 WATER TABLE ELEVATION: NA
 (Reference Datum: Arbitrary = 100.00 feet)



MONITORING WELL MW-27

LOCATION: Dowell Schlumberger, Artesia, New Mexico
 Along the east property line near the northeast corner
 T17S, R26E, Sec 9, SE 1/4, SW 1/4
 LOG: Western Water Consultants Inc. (Kevin Mattson)
 DRILLER: Scarborough Drilling (Lone Scarborough)
 STATE ENGINEER NO.: NA
 INSTALLATION DATE: March 3, 1997

WELL OWNER: Dowell Schlumberger Inc (JN 90-125)
 DRILLING METHOD: Air Rotary, 5.0" OD
 CASING: 2" Dia. Flush Joint Sch. 40 PVC
 SCREEN: Slotted Casing; 0.020 Inch Slots
 FILTER PACK: 8/16 Mesh Silica Sand
 WATER TABLE ELEVATION: NA
 (Reference Datum: Arbitrary = 100.00 feet)



MONITORING WELL MW-28

LOCATION: Dowell Schlumberger, Artesia, New Mexico
 Along property line fence north of MW-25
 T17S, R26E, Sec 4, NE 1/4, SW 1/4
 LOG: Western Water Consultants Inc (Kevin Mattson)
 DRILLER: Scarborough Drilling (Lane Scarborough)
 STATE ENGINEER NO: NA
 INSTALLATION DATE: April 19, 1998

WELL OWNER: Dowell Schlumberger Inc (JN 90-125)
 DRILLING METHOD: Air Rotary, S 1/4" DD
 CASING: 2" Dia Flush Joint Sch 40 PVC
 SCREEN: Slotted Casing, 0.020 Inch Slots
 FILTER PACK: 8/16 Mesh Silica Sand
 WATER TABLE ELEVATION: NA
 (Reference Datum: Arbitrary = 100.00 feet)

